

Novell NetWare[®] 6.5 Support Pack 1.1

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SUPPORT PACK README

January 16, 2004



Novell[®]

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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; 5,652,854; 5,671,414; 5,677,851; 5,692,129; 5,701,459; 5,717,912; 5,758,069; 5,758,344; 5,781,724; 5,781,733; 5,784,560; 5,787,439; 5,818,936; 5,828,882; 5,832,274; 5,832,275; 5,832,483; 5,832,487; 5,859,978; 5,870,561; 5,870,739; 5,873,079; 5,878,415; 5,884,304; 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; 5,956,718; 5,956,745; 5,964,872; 5,974,474; 5,983,223; 5,983,234; 5,987,471; 5,991,810; 6,002,398; 6,014,667; 6,016,499; 6,023,586; 6,029,247; 6,052,724; 6,061,726; 6,061,740; 6,061,743; 6,065,017; 6,081,774; 6,081,814; 6,094,672; 6,098,090; 6,105,062; 6,105,069; 6,105,132; 6,115,039; 6,119,122; 6,144,959; 6,151,688; 6,157,925; 6,167,393; 6,173,289; 6,216,123; 6,219,652; 6,233,859; 6,247,149; 6,269,391; 6,286,010; 6,308,181; 6,314,520; 6,324,670; 6,338,112; 6,345,266; 6,353,898; 6,424,976; 6,466,944; 6,477,583; 6,477,648; 6,484,186; 6,496,865; 6,510,450; 6,516,325; 6,519,610; 6,532,451; 6,532,491; 6,539,381; 6,560,615; 6,567,873; 6,578,035; 6,591,397; 6,609,158; 6,615,350; 6,629,105; 6,629,132; 6,647,408; 6,651,242 & RE37,178. Patents Pending.

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NetWare 6.5 Support Pack 1 Readme
[December 19, 2003](#)

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About This Guide

This document provides information on known issues for NetWare[®] 6.5 Support Pack 1. The issues are divided into sections based on product features. Use the Table of Contents or the online Search feature to locate the information you need.

For information about additional issues discovered after the initial release, access the [Novell[®] KnowledgeBase](http://support.novell.com/search) (<http://support.novell.com/search>) and locate TID# 10088335.

Changes included in NetWare 6.5 Support Pack 1.1

Novell has found an issue in NetWare 6.5 Support Pack 1 when using NSS volumes with compression. Although the original compressed files are not affected at the source server, the compressed files copied to a destination NetWare 6.5 Server with Support Pack 1 can become corrupted. This issue should affect only a minimum number of customers, but we wanted to make this information widely available.

The following updates were made in the NetWare 6.5 Support Pack 1.1 release:

1. The following NSS files were updated:

sys\system\checkvis.nlm	6,797	01-08-2004 1:23 pm
startup\comn.nss	507,788	01-14-2004 9:30 pm
sys\system\compfix.nlm	12,471	01-14-2004 9:32 pm
sys\system\dmprtrust.nlm	4,270	01-08-2004 1:25 pm
startup\scan.nlm	22,212	01-08-2004 1:22 pm
sys\system\vcu.nlm	15,886	01-15-2004 10:50 pm

2. The Support Pack entry in products.dat has been changed to:
SPACK 6.5.1 v1.1 Support Pack for NetWare 6.5

This change was incorporated in the following files, which are used during installation, but are not copied to the server:

install\zip\server.zip	2,327,423	01-15-04 10:12 am
sp\install\silent.ics	97,356	01-15-04 10:17 am

3. Read_me.txt and read_me.htm (on the Overlay CD) and the nw65sp1.txt files in the Support Pack for all languages were updated with a new title and date:

NetWare 6.5 Support Pack 1.1
January 2004

If you have deployed NetWare 6.5 without Support Pack 1 or NetWare 6.5 Support Pack 1.1, you do not need to apply the updates.

If you have deployed NetWare 6.5 Support Pack 1 already, you should re-install using NetWare 6.5 Support Pack 1.1 or download and apply the updated files. For more information, see TID 2967857 (<http://support.novell.com/cgi-bin/search/searchtid.cgi?/2967857.htm>).

Additional Documentation

For complete information on setting up and using NetWare 6.5 and for updated NetWare 6.5 Support Pack 1 documentation, see the [NetWare 6.5 online documentation \(http://www.novell.com/documentation/lg/nw65\)](http://www.novell.com/documentation/lg/nw65).

Documentation Conventions

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

A trademark symbol (® , ™ , etc.) denotes a Novell trademark. An asterisk (*) denotes a third-party trademark.

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

1

General Information

Overview

This Support Pack contains updates for components contained in the NetWare® 6.5 product. The purpose of this Support Pack is to provide a bundle of fixes that have all been tested together. These files have undergone component testing, core OS testing, internationalization testing, and integration testing with other Novell® products.

Install the NetWare Support Pack before installing other Novell product support packs like GroupWise and BorderManager. These Support Packs are included with the Consolidated Support Pack, or they can be downloaded individually from <http://support.novell.com/tools/csp>.

The NetWare 6.5 Support Pack is also available as an Overlay .iso image. The Overlay image allows you to install NetWare 6.5 and NetWare 6.5 Support Pack 1 simultaneously. You can also upgrade from a previous version of NetWare.

IMPORTANT: Do not install individual files from the Support Pack and do not use the Overlay to update an existing NetWare 6.5 Server to NetWare 6.5 Support Pack 1. Novell has not tested and does not support these implementations.

The Support Pack is available as follows:

- ♦ **NetWare 6.5 Support Pack 1:** This contains updates for NetWare and its associated products. The Support Pack must be applied to an existing NetWare 6.5 server.

You can download the Support Pack from the [Product Updates Web site \(http://support.novell.com/cgi-bin/search/searchtid.cgi?/2967719.htm\)](http://support.novell.com/cgi-bin/search/searchtid.cgi?/2967719.htm).

- ♦ **NetWare 6.5 OS Overlay CD:** This is an ISO image that contains a NetWare 6.5 Operating System CD updated with the Support Pack and should be used in conjunction with the NetWare 6.5 Products Overlay CD. After using the ISO image to create a CD, you can install a new server or upgrade NetWare 4.x, 5.x, or NetWare 6.0 servers.

You can download the NetWare 6.5 OS Overlay CD from the [Product Updates Web site \(http://support.novell.com/cgi-bin/search/searchtid.cgi?/2967720.htm\)](http://support.novell.com/cgi-bin/search/searchtid.cgi?/2967720.htm)

- ♦ **NetWare 6.5 Products Overlay CD:** This is an ISO image that contains a NetWare 6.5 ProductsCD updated with the Support Pack and should be used in conjunction with the NetWare 6.5 OS Overlay CD. After using the ISO image to create a CD, you can install a new server or upgrade NetWare 4.x, 5.x, or NetWare 6.0 servers.

You can download the NetWare 6.5 Products Overlay CD from the [Product Updates Web site \(http://support.novell.com/cgi-bin/search/searchtid.cgi?/2967721.htm\)](http://support.novell.com/cgi-bin/search/searchtid.cgi?/2967721.htm).

For information on the latest Support Pack issues since the release of the Support Pack, see the [NetWare 6.5 Support Pack 1 Readme Addendum \(http://support.novell.com/cgi-bin/search/searchtid.cgi?/10088335.htm\)](http://support.novell.com/cgi-bin/search/searchtid.cgi?/10088335.htm).

Product Documentation Updates

The documentation on the CD that ships with the NetWare 6.5 package is current as of July 1, 2003. For updated NetWare 6.5 Support Pack 1 documentation, see the [NetWare 6.5 online documentation \(http://www.novell.com/documentation/lg/nw65\)](http://www.novell.com/documentation/lg/nw65).

Browser Support in NetWare 6.5 Support Pack 1

NetWare's Web browser-based administration utilities and end-user interfaces can now be accessed from a broader range of Web browsers, including Galeon (Ximian[®] XD2 desktops), Mozilla (Red hat* and SuSE* Gnome desktops), and Safari* (Macintosh*). For more information, see “Supported Web Browsers” in the *NetWare 6.5 Administration Overview*.

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Additional Documentation and Readmes

The following sources provide information about NetWare® 6.5 and this Support Pack:

- ◆ Product Documentation: [NetWare 6.5 online documentation \(http://www.novell.com/documentation/lg/nw65/index.html\)](http://www.novell.com/documentation/lg/nw65/index.html)
- ◆ Latest Support Pack issues since the release of the Support Pack: [NetWare 6.5 Support Pack 1 Readme Addendum \(http://support.novell.com/cgi-bin/search/searchtid.cgi?/10088335.htm\)](http://support.novell.com/cgi-bin/search/searchtid.cgi?/10088335.htm)

Novell Software License Agreement

The Novell® End User License Agreement is presented to the user as part of the Installation/Upgrade process. HTML versions of the Novell End User License Agreement can also be found on the Support Pack Overlay CD in the License directory.

Novell Certificate Server, NICI, and NMAS

See the *Security Services Readme* (http://www.novell.com/documentation/lg/nmas23/readme/security_readme.html) located with the *Certificate Server 2.7 online documentation* (<http://www.novell.com/documentation/lg/crt27>).

Novell Client for Windows 95/98 and Novell Client for Windows NT/2000/XP

See the *Readme* (<http://www.novell.com/documentation/lg/noclienu/index.html>) located with the Novell Client™ online documentation.

Novell eDirectory 8.7.3 for NetWare

See the *Readme* (<http://www.novell.com/documentation/lg/edir873/readme/netware/nwreadme.txt>) located with the *eDirectory™ 8.7.3 online documentation* (<http://www.novell.com/documentation/beta/edir873/index.html>).

Novell eGuide 2.1.2

See the *Readme* (http://www.novell.com/documentation/lg/eguide212/readme/eguide_readme.html) located with the *Novell eGuide 2.1.2 online documentation* (<http://www.novell.com/documentation/lg/eguide212/index.html>).

Novell iFolder 2.1

See the Readme located with the [Novell iFolder® online documentation \(http://www.novell.com/documentation/lg/ifolder21/index.html\)](http://www.novell.com/documentation/lg/ifolder21/index.html).

Novell iManager

See the iManager 2.0.2 Readme included with the [Novell iManager online documentation \(http://www.novell.com/documentation/lg/imanager20/readme/imanager_readme202.html\)](http://www.novell.com/documentation/lg/imanager20/readme/imanager_readme202.html).

Novell JVM 1.4.2 for NetWare

See the [Readme \(http://www.novell.com/documentation/lg/jvm142/index.html?treeitl.html\)](http://www.novell.com/documentation/lg/jvm142/index.html?treeitl.html) included with the Novell JVM* 1.4.2 for NetWare online documentation.

Novell Nterprise Branch Office

See the [Readme \(http://www.novell.com/documentation/lg/nbo/index.html?page=/documentation/lg/nbo/readme/data/agfitbb.html\)](http://www.novell.com/documentation/lg/nbo/index.html?page=/documentation/lg/nbo/readme/data/agfitbb.html) located with the Nterprise™ Branch Office™ online documentation (<http://www.novell.com/documentation/lg/nbo>).

Beans for Novell Services

The following Beans for Novell Services are included with NetWare 6.5. Additional Readme information is located on the [Novell Developer Web site \(http://developer.novell.com\)](http://developer.novell.com).

- ◆ [LDAP Beans \(http://developer.novell.com/ndk/readme/bns_ldap.html\)](http://developer.novell.com/ndk/readme/bns_ldap.html)
- ◆ [LDAP Command Beans \(http://developer.novell.com/ndk/readme/bns_ldapcmd.html\)](http://developer.novell.com/ndk/readme/bns_ldapcmd.html)
- ◆ [Novell Nsure™ UDDI Command Beans \(http://developer.novell.com/ndk/readme/bns_uddicmd.html\)](http://developer.novell.com/ndk/readme/bns_uddicmd.html)
- ◆ [SecretStore Command Beans \(http://developer.novell.com/ndk/readme/bns_sscmd.html\)](http://developer.novell.com/ndk/readme/bns_sscmd.html)
- ◆ [Security Command Beans \(http://developer.novell.com/ndk/readme/bns_seccmd.html\)](http://developer.novell.com/ndk/readme/bns_seccmd.html)
- ◆ [WebDAV Command Beans \(http://developer.novell.com/ndk/readme/bns_wdvcmd.html\)](http://developer.novell.com/ndk/readme/bns_wdvcmd.html)

Samples for Novell LDAP Command Beans and Security Command Beans

- ◆ The JSP samples for Novell LDAP Command Beans and Security Command Beans are shipped with the respective Beans. These samples can be accessed from the server welcome page. The samples have a dependency on Apache and Tomcat and, therefore, can be configured automatically only if the Apache or Tomcat pattern is selected during the NetWare server install.

In all other cases, install Apache and Tomcat, do one of the following, and then restart Apache and Tomcat:

- ◆ Perform a post install for Beans for Novell Services.
- ◆ Include the following line at the end of httpd.conf (Apache configuration file):

```
Include sys:/tomcat/4/conf/beans-apache.conf
```


To access samples, do one of the following:

- ◆ Go to the NetWare server Welcome page, then click J2EE/Web Services > Beans for Novell Services.
- ◆ In a browser, go to <http://server/ecb/index.html>, where *server* is the DNS name or IP address of the NetWare 6.5 server.

3

Support Pack What's New and Fixes

The following features and fixes are included in NetWare 6.5 Support Pack 1.

General Information

- ◆ Broader support for Web-based interfaces: NetWare's Web browser-based administration utilities and end-user interfaces can now be accessed from a broader range of Web browsers, including Galeon (Ximian XD2 desktops), Mozilla (Red hat and SuSE Gnome desktops), and Safari (Macintosh). For more information, see “Supported Web Browsers” in the *NetWare 6.5 Administration Overview*.
- ◆ Improved Virtual Office (v 1.0.1)
- ◆ Recent versions of Open Source components including Apache 2.0.48, MySQL* 4.0.16, and Tomcat 4.1.28
- ◆ Java* Virtual Machine (JVM) 1.4.2
- ◆ exteNd™ Application Server 5.1
- ◆ Novell iManager 2.0.2 (including the Plug-in Studio for customization and new functionality for managing clustering, archiving, and versioning)
- ◆ eDirectory™ 8.7.3
- ◆ Software RAID 5 Support
- ◆ Updated LAN and Storage drivers from Hewlett Packard*, Qlogic*, Promise Technology*, LSI, Quantum*, IBM*, Ami*, and Broadcom)
- ◆ Improved backup performance
- ◆ Novell Client™ 4.9 Support Pack 1
- ◆ The server operating system has automated mounting of USB drives, added a maintenance mode during the boot process, enhanced support for core dumps after an abend, and added the inventory and purgevolume console commands so you can schedule these task through NetWare Remote Manager.

3rd Party Drivers

- ◆ Fixed issue where ibmtrpo.lan driver abends when unloaded.
- ◆ Fixed issue where pools and volumes dismount when doing a scan using an LSIMPTNW.HAM driver.
- ◆ Fixed issue where printer agent is hung when gateway does not request data after opening a print job.
- ◆ Fixed issue where SBD driver will not load with IBM's expansion chassis attached.
- ◆ Fixed issue where IDE CD ROM, when ejected to remove CD Media at the end of an install, pulls the tray back in.

- ◆ Fixed issue where Broadcom adapters cannot communicate using the 802.3 frame type.

Installation/Upgrade

- ◆ Fixed a problem where the temporary directory NWINST.TMP was not being removed at the end of the install.
- ◆ Added an option during a new install to use NetWare as the Boot OS instead of Caldera DOS (overlay install only).
- ◆ Fixed a system hang condition during the OS install.
- ◆ Fixed issue where install hangs at server name screen, if an empty USB floppy drive is attached.
- ◆ Fixed issue where NWDeploy.exe does not launch properly when low on disk space.
- ◆ Fixed file overwrite issue on remote upgrades.
- ◆ Fixed issue where driver not auto-loading as expected after PCI Hot-Plug hot-add.
- ◆ Fixed issue where pop-up window did not show contents until touched or moved with mouse pointer.
- ◆ Fixed issue where the last server installed changes the users environment language attribute.

Migration Wizard 7.0

- ◆ The file copy procedure is faster because of multithreading in determining file sizes while the file copy is running (the copy procedure and the file size determination occur simultaneously).
- ◆ The transfer of NCI keys during the migration can now be accomplished across the wire.
- ◆ A listing of created folders, dropped volumes, and dropped folders is now displayed during the verification stage of the migration.
- ◆ ZENworks[®] for Servers information can now be updated during the migration process.
- ◆ For more information, see “What's New” in the [NetWare Migration Wizard 7.0 Administration Guide](#).

Server Consolidation 2.6

Server Consolidation have made the following changes:

- ◆ Exclude specific file types or filenames from the copy process (for example, copy all of the data from a volume except for any .mp3 files).
- ◆ Automatically compare file information between the source and destination after the copy process completes to validate the integrity of the file copy. This includes the option of doing a detailed binary (byte-by-byte) comparison.
- ◆ Check for sufficient disk space on the destination server before beginning the file copy.
- ◆ Disable login on the source server during the copy process.
- ◆ Specify a default server and home directory path for any new users you create on the destination server.
- ◆ Copy an expanded list of user attributes when creating users.

For more detailed information, see “What's New” in the Overview chapter of the [Novell Server Consolidation Utility 2.6 Administration Guide](#).

iFolder 2.1.2

Novell iFolder[®] 2.1.2 is available in NetWare 6.5 Support Pack 1. This version is an upgrade that addresses several minor defects reported by iFolder 2.1.1 (NetWare 6.5) customers.

J2EE

- ◆ Fixed issue where silverinit.ncf does not sync passwords with jBrokerMQ's msgsvc.properties.
- ◆ jBrokerMQ's port is not managed by the IP address management framework.
- ◆ Fixed issue where losing the cursor on the exteNd Application Server configuration screens.

JAVA

- ◆ Fixed issue where after testing video driver Proliant ML/DL G2 Servers, ATI Rage XL, 8MB, loose control of mouse.
- ◆ Fixed loader Hang after ICEWM remote window manager error.

Libraries

- ◆ Fixed issue where Migration Wizard required NCI client or you receive a "ccsw32.dll file not found error".
- ◆ Fixed issue where Mkdir and unlink calls were not working correctly.

MySQL

- ◆ MySQL version is refreshed (4.0.16).
- ◆ Mysqldhotcopy is now available on NetWare.
- ◆ Fixed issue where MySQLcheck fails to come up with -u and -p options.
- ◆ Fixed issue where MySQL dump cannot take user name and passwords as input from the user.
- ◆ Fixed issue where MySQLimport fails to take user name and passwords as inputs.
- ◆ Fixed issue where MySQL test suite accepted illegal parameters as tests.

NFAP for Macintosh

- ◆ Fixed -50 error copying files within same Netware volume.
- ◆ Fixed -50 error saving files with BBEdit.
- ◆ Fixed -50 error saving files with Dreamweaver.
- ◆ Fixed failure to save files via Appleworks...creates 0 byte file.
- ◆ Fixed file corruption saving WORD X documents.
- ◆ Fixed open file handles during file system browse.
- ◆ Fixed failure to open Mac School modules (byte range locking issue with NSS).

NFAP - CIFS

- ◆ Fixed CIFS login queues to be first-in/first-out rather than last-in/first-out.
Fixed abend problem related to incorrect header processing on large file writes.
Added support for bad password user caching to better deal with intruder lockout problems.

Copied fixes from NW6 CIFS codebase related to abend problems reported by customers.

Fixed LSMCIFS2 so that it returns error when grace login count goes to 0 with Universal Password enabled.

Fixed abend problem related to file pointer not being initialized in the SMB_QUERY_FILE_ALL_INFO request code path.

Fixed browsing problems associated with up advertising server-type WFW_SERVER.

Fixed code in the CreateFile path to handle non-null terminated Unicode file paths.

Fixed CIFS cluster problem where virtual servers were not being advertised correctly.

Added code to send path to make sure we do not free send buffers until all send ECBs are returned to CIFS.

Increase the length of time we try to read configuration information from eDirectory before timing out and reverting to using CIFS.CFG file.

Fixed CIFS to allow up to 80 character share names.

Fixed abend problem related to older clients sending malformed Browse Host Announcements.

Fixed abend related to clients accessing a share after the user connection has been logged out.

Fixed code in eDirectory read share path to handle Unicode path characters that have been incorrectly mapped.

Fixed NetShareEnum request processing code to not abend in certain cases when just a few shares were enabled.

Added code to force CIFS to default to DFS-disabled. iManager is required to enable CIFS DFS support.

Fixed problem in CIFSPROX +NO_DUPLICATES handling code.

NFAP - AFP

- ◆ Fixed expired password handling code when using Universal Password.
- Added user auto-provisioning code required by Novell Branch Office.
- Added code to improve login performance.
- Added code to return correct error codes related to password policy when using Universal Password.
- Fixed problem related to file handles being left open after closing a resource fork.
- Fixed abend related to Winsock callback function not setting thread ID.
- Added code in startup eDirectory access code to retry longer before timing out.
- Fixed problem in AFP cluster code.
- Fixed problem with FPEXchange where file IDs were not being exchanged correctly.
- Fixed problem in Unicode-to-byte translation code.
- Fixed AFPOpenFork request code to return correct error message on deny conflict error.
- Fixed abend related to non null-terminated string when logging in from OS 9 clients.

NFAP for UNIX

You can now use iManager to migrate UNIX users and groups, set the Directory Access mode, and also modify NIS server settings.

NetWare Remote Manager (NRM)

- ◆ Added several reports and utilities for server groups in NRM (right click on the server groups map).
- ◆ Added columns for NCP Requests and Reads/Writes per connection on the Connection Listing page in NRM.
- ◆ Added links to view or directly edit startup.ncf and autoexec.ncf, on the Reports/Log Files page, and the ability to customize this list with other files specified by the user.
- ◆ Added direct links to each of the server console screens via NRM.
- ◆ Added a separate Server Health item tracking available space on Volume SYS, independent of the other server volumes.
- ◆ Added a listing of Security Equivalences to each Connection, on the details page for the connection.
- ◆ Added a link to Clear a connection from the main Connections listing page.
- ◆ Added ability to specify eDirectory context(s) login (on Config page).
- ◆ All reports e-mailed by NRM now send the reports as e-mail attachments, instead of including the report in the body of the message.
- ◆ Added sequence indicator to the listing of module load Search paths, matching what's displayed by the SEARCH console command.
- ◆ Additional detail provided on the LAN/disk Adapter information page.
- ◆ Re-organized and cleaned up the layout of the Volume Information page.
- ◆ Added Sort option to the columns on the Disk Space Usage page.
- ◆ Added console command equivalents for the Volume Inventory function and the Purge feature, allowing them to be scheduled at a user-defined time.
- ◆ Fixed a display problem in the Health Statistics Trend graphs.
- ◆ Fixed issue where NRM only listened on one IP address, if server is multi-homed.
- ◆ Added ability to sort by any column on the Disk Space Usage screen.
- ◆ Fixed memory allocation problem during NRM login authentication.
- ◆ Fixed an issue preventing the creation of users with double-byte characters in the name, via the Tree Walker.
- ◆ Added support for receiving server reports as attachments from the mail notification.
- ◆ Added access to each of the dynamic console screens as well as the HTML.
- ◆ Added contextless login support.
- ◆ Additional connection page sorting and information about connection.
- ◆ Increased visibility of modules that do not have dependant NLM™ programs from the List Modules page.
- ◆ Added Disk and LAN adapter information.

- ◆ Added available disk space information for volume sys:.
- ◆ Added functionality for editing text files on local partitions and support for saving files with ANSI or UTF-8 encoding.
- ◆ Added easier access to configuration files and the ability to customize access to these files.
- ◆ Added the ability to sort disk space usage information and add user space restrictions.
- ◆ For more information, see “What's New” in the *NetWare 6.5 NetWare Remote Manager Administration Guide*.

Novell Archive and Version Services 2.0

- ◆ NetWare 6.5 Support Pack 1 installs Novell Archive and Version Services 2.0 by default as part of the Basic install; however, the service does not run until or unless you configure and start it. Novell Archive and Version Services 2.0 differs from Novell Archive and Version Services 1.0 (NetWare 6.5) in the method used to organize and host file versions. This change does not affect new archive servers configured with NetWare 6.5 Support Pack 1. However, if you have existing archive servers, after you install Support Pack 1, you must upgrade the old archive databases to the revised storage format and modify exiting jobs before starting the ArkManager service. For more information, see “[Upgrading an Archive Database Using ArkUpgrade](#)” in the *Novell Archive and Version Services 2.0 Administration Guide for NetWare 6.5*.
- ◆ The iManager plug-in for Archive / Version Management now includes a Configuration task. The Configuration page lets you view archive server information, configure default job settings, and configure individual jobs for your archive server. The initial XML file you set up before configuring your archive server now requires only minimal XML interaction. For more information, see “[Configuring Jobs in iManager](#)” in the *Novell Archive and Version Services 2.0 Administration Guide for NetWare 6.5*.
- ◆ Beginning with NetWare 6.5 Support Pack 1, configuration files for Novell Archive and Version Services 2.0 reside in the sys:\arkManager directory. If you install Support Pack 1 on an existing archive server (Novell Archive and Version Services 1.0 on NetWare 6.5), your existing arkConfig.xml file remains unchanged in the sys:\etc directory. Refer to the old arkConfig.xml file when updating the existing archive server for use with Novell Archive and Version Services 2.0. For more information, see “[Installing and Upgrading Archive and Version Services](#)” in the *Novell Archive and Version Services 2.0 Administration Guide for NetWare 6.5*.

Novell Client

For a list of fixes for the Novell Client, see TID on the 10087831 [Support Web site \(http://support.novell.com/cgi-bin/search/searchtid.cgi?/10087831.htm\)](http://support.novell.com/cgi-bin/search/searchtid.cgi?/10087831.htm).

Novell Cluster Services

- ◆ Fixed Abend in CLSTRLIB.NLM.
- ◆ Fixed issue when adding new volume in a pool resource. See NOVL87089 on support.novell.com.
- ◆ An iManager plug-in for Novell Cluster Services is now included with NetWare 6.5 Support Pack 1. With the browser-based iManager plug-in, you can configure, manage, and monitor your cluster. iManager also lets you remotely manager your cluster. For more information, see the *Novell Cluster Services 1.7 Administration Guide*.

Novell Storage Services (NSS)

- ◆ Fixed issue of appending an NFS name space on NSS volumes.
- ◆ Fixed issue where intermittent error codes in nssmu when manipulating pools, partitions, etc.
- ◆ Fixed issue of updating NDS from NSS Management creates non cluster volume objects.
- ◆ Fixed ESC button in NSSMU.
- ◆ Fixed issue where NSS incorrectly reports Effective Rights. See NOVL90748 on support.novell.com.

OpenSSH

- ◆ All versions of the SSH Daemon (SSHD) prior to OpenSSH version 3.7.1 contain buffer management errors. It is unclear as to whether these errors create a security risk. As a precaution, we have applied a patch released by the OpenSSH community to this release (version 3.6.1p1).
- ◆ For more information about this issue, see <http://www.openssh.com/txt/buffer.adv>.

Operating System

- ◆ Fixed issue where NetWare 6.5 would not install on a Pentium M machine (Centrino chipset).
- ◆ Fixed issue preventing NetWare 6.5 loading on a machine based on the Prescott processor.
- ◆ Fixed several possible causes of server abend (page fault) when server is going down.
- ◆ Added debugger commands RESTART and RESET, do re-boot the server from the NetWare internal debugger.
- ◆ Added the option to Reboot the server upon Exit ("X") from the Abend screen (prompt "reboot the server? y/n").
- ◆ Added F8 option when server boots, to confirm loading of modules as server comes up.
- ◆ Options to save Abend.log from the debugger, specifying an alternate name of your choice, as well as the debug session contents (Debug.log) and the logger screen contents (see debugger commands L, LD, and LL).
- ◆ Added basic file system access commands at the server console when in "maintenance mode" (DIR, COPY, etc.).
- ◆ Added support for recognizing USB storage devices plugged in to the server while in the debugger.
- ◆ Fixed various memory leaks.
- ◆ Fixed issue where server abends when entering an invalid category using the SET command. See NOVL93510 at support.novell.com.
- ◆ Updated console command help on the Emergency Console, to list only the commands valid at the Emergency Console (instead of the complete list of console commands).
- ◆ Removed reference to DOS in the search path listings (server console and NRM).
- ◆ Fixed Abend in EDIT.NLM.
- ◆ NILE.NLM fixes the mutual authentication problem when NILE is in ssl client mode.

Platform Support Modules (PSM)

- ◆ Fixed issue where power events not being initialized at ACPIDRV.PSM load time on selected machines.
- ◆ Fixed CPU HOG in ACPIDRV on shutdown.
- ◆ Fixed issue where unloading acpicmgr.nlm causes server to abend.
- ◆ Fixed a spinlock deadlock condition in ACPIDRV.PSM.

Scripting

- ◆ Fixed issue where cgi2perl.nlm fails to handle script names which include dashes
- ◆ Fixed issue where the Mail functionality will not work if the SMTP Server Name is specified instead of the IP address for the SMTP variable under the [mail function] section in php.ini file.
- ◆ Fixed issue where the Perl extension to access components through UCS was named UCSExt in Perl 5.003.
- ◆ Fixed issue where the Perl system("nlmname") has to be used without the load prefix to load an NLM.
- ◆ Fixed issue where the SYN_TIME NDS attribute returns a string value, but Perl sends double value while setting such attributes representing seconds since 1970.
- ◆ Fixed issue where setting alias to a directory other than sys:/perl/web might result in non-execution of scripts.
- ◆ Fixed issue where the cgi2perl buffer overflows when executed from NetWare Enterprise Web server.
- ◆ Fixed issue related to values returned by gethostbyname and getserverbyport.
- ◆ Fixed issue where Perl2UCS extension does not support octet string attributes, password expiration interval and date/time.
- ◆ Fixed issue where Binmode functionality is not supported.
- ◆ Fixed issue where SNMP feature was not working.
- ◆ Fixed the unload issues related to mod_perl 2.0.
- ◆ Fixed some issues related to Net::FTP, Net::Ping, and Net::Telnet modules.
- ◆ Added standard CGI interface (Perlcgi.nlm) for Apache 2.0 in addition to mod_perl 2.0.
- ◆ Added dependent modules such as SCRCB and NWSEC.
- ◆ Added the perl module, ucsext.pm for backward compatibility of scripts.

Storage

- ◆ Fixed issue of appending an NFS name space on NSS volumes.
- ◆ Fixed issue where intermittent error codes in nssmu when manipulating pools, partitions, etc. Fixed issue of updating NDS from NSS Management creates non cluster volume objects.
- ◆ Fixed ESC button in NSSMU.
- ◆ Fixed issue where NSS incorrectly reports Effective Rights. See NOVL90748 on support.novell.com.
- ◆ Fixed issue where Compression did not commit on users that have Disk space limited.

- ◆ Fixed an abend in CIOSSHIM.NLM.
- ◆ Fixed issue with dismounting a Virtual USB mass storage device.
- ◆ Fixed issue where SYS POOL deactivates when trying to expand pool.
- ◆ Fixed issue where after a crash cluster node ends up with server.exe deleted.
- ◆ Fixed issue where console command CWD abended the server in FATFS if an invalid path was specified.
- ◆ Fixed Page fault abend in fatfs.nlm when removing USB floppy drive.
- ◆ Fixed multiple issues with non-legacy floppy systems.
- ◆ Changed the default setting for the parameter Auto LFVMount to ON (instead of OFF). This allows for automatic recognition and mounting of USB storage devices, without having to use the LFVMOUNT console command.
- ◆ Fixed system hangs when initialization fails with storage drivers for SYS volume.
- ◆ Fixed issue where disconnecting an active virtual media floppy generates a CIOS error message on the logger screen.
- ◆ Fixed an abend condition in FATFS.NLM.
- ◆ Fixed issue where more than one USB floppy is supported at one time.
- ◆ Improved access to floppy drive and local storage devices via FATFS.
- ◆ Increased robustness of the FAT partition checking ability of FATFS; more types of errors and corruptions are handled and corrected than in previous release.

Storage Management Services (SMS)

- ◆ During configuration, SMDR can listen to multiple IP addresses instead of only default IP address.
- ◆ SMDR can use SLP discovery or SAP discovery or name resolution through host files, in specific order to locate other SMDRs.
- ◆ Fixed issue where TSAFS abends when backing up deep directory structures (over 100 levels deep)
- ◆ Fixed issue where Sparse file on Legacy volumes sometimes do not restore correctly using Backup Exec.

TCP/IP

- ◆ Fixed Abend in inetcfg.
Fixed Abend in aio.nlm with Power Chute software.
Fixed issue where the ODI API Ctl100_GetProtocolStringForBoard not working properly.
Fixed issue where config doesn't list multiple IPs for a single port by developing a new command line utility, Ifconfig.
Fixed ABEND executing code in BSDSOCK on down after running client stress (NSTest).
Fixed issue where Inetcfg ABENDS after transferring load TCPIP information from AUTOEXEC.NCF.
Fixed ABEND in AIO.NLM with Power Chute software.

Fixed issue where Path MTU Discovery does not always work with IP Load Sharing or Load Balancing.

Virtual Office

- ◆ Fixed issue where change password gadget window did not close when password is successfully changed.
- ◆ Fixed issue where calendar gadget needs to span the whole page.
- ◆ Fixed issue where company news gadget titlebar changes size when minimized.
- ◆ Fixed issue where reduced email gadget has old refresh icon.
- ◆ Fixed issue where shortcut gadget for mail does not correctly parse the %username% macro for exchange gadget
- ◆ Fixed issue where alt tags did not display in mozilla.
- ◆ Fixed Virtual Team properties news check box.
- ◆ Fixed issue where Virtual Team owner could remove team membership creating orphaned team.
- ◆ Fixed issue where email notification of new discussion post has incorrect return link.
- ◆ Added context-sensitive help to iManager plug-ins.
- ◆ Updated and improved help file.
- ◆ Added admin ability to enable change password page (on by default).
- ◆ Added WebSearch interface.
- ◆ Added Admin ability to enable WebSearch interface.
- ◆ Enhanced Team files interface, included ability to create directories.
- ◆ Improved Team calendar interface.
- ◆ Improved Personal WebPage look.
- ◆ Improved Team WebPage look.

XTier

- ◆ Fixed Abends after port number is taken off of the url in Remote Manager.
- ◆ Fixed issue where AP2WEBUP gives public symbol errors when ncpl.nlm is not loaded.

4

Interoperability Issues

Novell Products Supported on NetWare 6.5 Support Pack 1

Upgrades and new installations of the following Novell® products are supported on NetWare® 6.5 Support Pack 1:

- ◆ DirXML® 1.1a
- ◆ Novell iFolder 2.x
- ◆ GroupWise® 6.0 Support Pack 3

The WebAccess servlet is supported only on an upgrade. Support for the WebAccess servlet on a new installation will be available with GroupWise 6.0 Support Pack 4.

- ◆ GroupWise 6.5 Support Pack 1
- ◆ NetMail™ 3.1
- ◆ Nenterprise™ Branch Office™ 1.0
- ◆ SecureLogin 3.0.4
- ◆ ZENworks® for Desktops 4.01/ZENworks for Desktops 4 Support Pack 1

You will need to apply the latest ZENworks for Desktops support pack and updates in order to have this support. See [the ZENworks for Desktops Readme \(http://www.novell.com/documentation/lg/zdpr/readme/readme-zfd401-nw65update.html\)](http://www.novell.com/documentation/lg/zdpr/readme/readme-zfd401-nw65update.html) for information about obtaining the update and other information about using ZENworks for Desktops with NetWare 6.5.

- ◆ ZENworks for Servers 3.02/ZENworks for Servers 3 Support Pack 2

You will need to apply the latest ZENworks for Servers update in order to have this support. See [the ZENworks for Servers Readme \(http://www.novell.com/documentation/lg/zfs302/readme/readme_zfs302_update_nw65.html\)](http://www.novell.com/documentation/lg/zfs302/readme/readme_zfs302_update_nw65.html) for information about obtaining the update and other information about using ZENworks for Servers with NetWare 6.5.

- ◆ exteNd 5.0 Suite

exteNd 5.0 Suite uses the existing install of AppServer and JBroker from NetWare 5.6 Support Pack 1, and installs Composer 5.0 and Director 5.0.

NOTE: Director 5.0 requires MySQL 4.1.1 which is not supported on NetWare. In order to use Director 5.0 with MySQL, MySQL 4.1.1 must be installed on another platform, and Director 5.0 must be configured to point to MySQL.

Novell Products Not Supported on NetWare 6.5 Support Pack 1

Upgrades and new installations of the following Novell products are not supported on NetWare 6.5 Support Pack 1. Products marked with a double asterisk will be supported on NetWare 6.5 in their next release.

- ◆ BorderManager® 3.7**
- ◆ exteNd™ Director Standard Edition 4.1**
- ◆ GroupWise 5.5
- ◆ GroupWise Snap-ins for ConsoleOne®
- ◆ iChain® 2.1 Support Pack 1**
- ◆ iChain 2.2
- ◆ ManageWise® 2.7
- ◆ ZENworks for Desktops 3.2 Support Pack 2
- ◆ ZENworks for Handhelds 5.1**
- ◆ ZENworks OnDemand Services™ 2.0

Third-Party Issues

For a description of third-party issues with NetWare 6.5, see [Chapter 25, “Third-Party Adapters, Drivers, and Applications,”](#) on page 71.

ZENworks for Desktops Management Agent and NetIdentity Agent Not Compatible

Coexistence of the ZENworks for Desktops Agent and NetIdentity client is not supported in this release. Upgrading to the NetIdentity client from the ZENworks for Desktops Management Agent is also not supported.

The ZENworks for Desktops Management Agent links into the browser installed on the workstation. It also installs supporting files to provide ZENworks for Desktops functionality whether using the MidTier or Novell Client™. When the Agent is installed on the workstation and Internet Explorer is used to access NetIdentity-enabled Web services such as Virtual Office or iManager on NetWare 6.5, the browser will crash during or after authenticating to the Web service. To resolve this, download the latest updates for ZENworks.

NetWare 6.5 Upgrade after GroupWise WebAccess Installation

When you upgrade to NetWare 6.5 on a server where GroupWise WebAccess is installed, the NetWare 6.5 installation program updates the WebAccess configuration files (webacc.cfg, spellchk.cfg, and webpub.cfg in the novell\webaccess directory at the root of the Web server). It changes Tomcat 3.3 references to Tomcat 4.

For example, it changes references to the Tomcat\33 directory to the Tomcat\4 directory. However, it does not make changes to the WebAccess objects in the eDirectory™ tree because there is no convenient way to determine where the WebAccess objects are located in the tree. Therefore, you must manually change the Tomcat version information on the WebAccess objects.

IMPORTANT: If you do not manually update the Tomcat information on the WebAccess objects and you subsequently edit the WebAccess configuration information in ConsoleOne, ConsoleOne will overwrite the configuration files that were updated by the NetWare 6.5 installation program with obsolete Tomcat information and WebAccess will stop working.

- 1** In ConsoleOne, browse to and right-click the WebAccess Application object (GroupWiseWebAccess), then click Properties.
- 2** Click Application > Templates.
- 3** In the Template Path field, change Tomcat\33 to Tomcat\4, and then click OK.
- 4** Right-click the Speller Application object (NovellSpeller), then click Properties.

- 5** Click Application > Environment.
- 6** In the Template Path field, change Tomcat\33 to Tomcat\4, and then click OK.
- 7** If you have installed WebPublisher, right-click the WebPublisher Application object (GroupWiseWebPublisher), and then click Properties.
- 8** Click Application > Templates.
- 9** In the Template Path field, change Tomcat\33 to Tomcat\4, and then click OK.

5

Installation/Upgrade

For complete instructions on installing NetWare® 6.5, see the *NetWare 6.5 Overview and Installation Guide*.

Interoperability with Other Novell Products

For a description of interoperability issues between this release and other Novell products, see **Chapter 4, “Interoperability Issues,”** on page 21.

-609 Missing Mandatory Error When Installing NetWare 6.5

There is an issue when installing NetWare 6.5 into a replica ring containing NDS® 7.x that results in a failed install with the error -609 `Missing Mandatory`.

This issue is resolved with NDS 7.62b. NDS 7.62b has been tested only on NetWare 5.1. Because NetWare 5.0 is a discontinued product (for more information on Novell's support life cycle, go to the [Novell Products Support Lifecycle Web page \(http://support.novell.com/lifecycle\)](http://support.novell.com/lifecycle)), NDS 7.62b has not been thoroughly tested on NetWare 5.0. Novell has performed very limited testing on NDS 7.62b running NetWare 5.0 for *upgrade purposes only*. Novell will support, on a limited basis, NDS 7.62b running on Netware 5.0 while upgrading to Netware 6.5. If outstanding issues outside of the upgrade arise that are specific to the NetWare 5.0 operating system, upgrading the NetWare 5.0 server to NetWare 5.1 will be required in order to resolve the issue.

Novell Server Consolidation Utility Information

For additional issues related to the Novell® Server Consolidation Utility, see the Readme located with the [Novell Server Consolidation online documentation \(http://www.novell.com/documentation/lg/servercon20\)](http://www.novell.com/documentation/lg/servercon20).

iMonitor Link after an Upgrade from NetWare 5.1

After an upgrade from NetWare 5.1 to NetWare 6.5, the iMonitor link on the NetWare 6.5 Welcome pages might be broken. To work around this, go to `https:\ServerDNSname:8009`.

6

Apache Web Server on NetWare

Remote Upgrades

If during a remote upgrade you accept the defaults for the LDAP server (specifically, Require TLS for Simple Binds), the Apache2 Admin Server will not get configured properly.

There are three ways to resolve this issue:

1. Uncheck the Require TLS for Simple Binds check box during installation.
2. Give administrative rights to additional users by adding their User objects to the apchadmn-Administrators group.
3. Run a local post-install of the Apache2 Admin Server from the server GUI; the configuration issues will be fixed automatically.

When Upgrading a Server Running Apache Web Server 1.03

When upgrading a NetWare[®] server that is running Apache 1.03, NetWare 6.5 disables version 1.03. As long as Apache 2.0 is selected during the install, the install transitions Novell[®] software that is dependent on Apache to use Apache 2.0.

If you have other programs configured to use Apache 1.03, we recommend that you reconfigure them to use Apache 2.

Preventing Potentially Large mod_jk Log File

Extremely high traffic volumes on the Tomcat Servlet Container can cause the mod_jk log file to grow large enough to consume the hard drive space on your server's sys: volume.

To prevent this potential problem, you can disable the log file by doing the following:

- 1 Open the sys:\apache2\conf\httpd.conf file and locate the following lines:

```
JkLogFile "logs/mod_jk.log"  
  
JkLogLevel error
```

- 2 Add a Pound sign (#) to the beginning of each of these lines to comment them out.
- 3 Restart the Apache Web server by entering **ap2webrs** at the NetWare console.
- 4 (Optional) Delete the sys:\apache2\logs\mod_jk.log file, especially if it is considerably large in size.

7

DirXML Starter Pack

Authentication Problems during Installation

If you experience authentication problems during the installation, and if you are certain your authentication information is correct, you should ensure that the NCP™ packet signature level is not set to 3. If the parameter value is set to 3, you will see a -864 error in DSTrace. You should set the value to 1, reboot your computer, run the installation program, then set the value back to 3 to maintain the same security level.

NCP packet signatures determine the level of enhanced security support. Enhanced security includes the use of a message digest algorithm and a per-connection/per-request session state. The values are as follows:

0 = disabled

1 = enabled

2 = preferred

3 = required

Setting this parameter to 2 or 3 increases security, but decreases performance.

Installation from a Non-CD Source

When you use NWCONFIG and run the installation program from a non-CD source, you must use an 8.3 file naming convention. If the installation directory path contains a long name, the path gets truncated and you might encounter any of the following symptoms during installation: failure to open source files, failure to extend the schema, or failure to update the ConsoleOne® snap-ins.

To resolve this, you should change the directory pathname to an 8.3 file format (for example, from `sys:install\dxl_starter_pack` to `sys:install\dirxmlsp`)

Exporting Driver Configurations

Exporting a driver's or driver set's configuration preserves all of its rules, style sheets, and parameter settings in a single XML file that can be imported if driver restoration is necessary or if the current configuration represents the best starting point for a future configuration. Depending on the amount of configuration information associated with a driver or driver set, this process can take several minutes or longer. Also, drivers with large schema definitions might also take several minutes to export.

If you click Finish and close the Export Wizard before you have clicked Save As or copied the XML text, then all export information, including any prompt strings you entered, is lost.

8

DNS/DHCP

Named.nlm error

When you load the named.nlm after installing or upgrading the DNS/DHCP Services in NetWare 6.5 SP1, you might encounter the following error message:

```
error: errno2result.c:121: unexpected error:  
error: unable to convert error to isc_result: 0: Error 0
```

This message can be ignored.

9

ConsoleOne 1.3.6

Using ConsoleOne to Manage NetWare 4 Servers

In order to use ConsoleOne® to manage a tree containing NetWare® 4 servers (NDS® v 6.17), IPX™ must be installed on the management client. Even if ConsoleOne is run from a NetWare box via a mapped drive on the client, the client machine that ConsoleOne is running on must be able to connect natively via IPX.

ConsoleOne Installation during a Remote Upgrade

ConsoleOne 1.3.6 might fail to install on the server during a remote upgrade using nwdeploy.exe. If this happens, use any of the post-install methods to install ConsoleOne on the server.

Menu Keyboard Navigation Indicators Are Not Displayed

When running ConsoleOne on some versions of Windows, the accelerator key indicators for menu items might not be displayed. This is due to a defect in the Sun* JRE 1.4.1_01 that ConsoleOne uses when running on the Windows platform. To resolve this, configure Windows, in the Display Control Panel, to not hide keyboard navigation indicators.

Using the Alt Key to Enter International Characters

Using the Alt+number keys to type international characters when naming objects in ConsoleOne causes the characters to display incorrectly. The workaround for this is to use an international keyboard or to copy the extended characters from Notepad or another Windows application into the ConsoleOne text field. Manually upgrading your JRE to version 1.4.1_02 will also fix this problem.

Novell Client Versions Required for ConsoleOne 1.3.6

ConsoleOne errors might be encountered during authentication and password modification operations when running on a Windows workstation with an older version of the Novell Client™ software. ConsoleOne 1.3.6 on Windows requires one of the following:

- ◆ Novell Client for Windows 95/98 version 3.4 or later
- ◆ Novell Client for Windows NT/2000/XP version 4.9 or later

10 exteNd

This section includes know issues about the following:

- ♦ [exteNd Application Server \(page 35\)](#)
- ♦ [exteNd Workbench \(page 42\)](#)

exteNd Application Server

For complete information on using the Novell® exteNd™ Application Server, see the online help included with the software or the [exteNd Application Server 5.0 online documentation \(http://www.novell.com/documentation/lg/extend5/index.html\)](http://www.novell.com/documentation/lg/extend5/index.html).

Setting the Port Number

The port number (83) is not changed via IPManagement in NetWare® Remote Manager. Instead, you can change the port number either by using the Server Management Console (SMC) or by editing the httpd.props file directly.

Version Number Typo on Install Screen

The descriptive text on one of the install screens shows version 5.0 instead of 5.1 for the Application Server. This is just a typo; version 5.1 is installed.

Message When Displaying SMC Help

If you request help while running the SMC locally on NetWare, you'll get a script error message from the NetWare browser when the help displays. You can ignore this message and proceed to use the help.

Support Pack Only Install Omits help.props File

The 5.1 Application Server uses a new file named help.props to specify where help files are located. If you do a Support Pack 1 only install, the help.props file is omitted and SMC help doesn't display. (This problem does not occur if you do a full overlay install.) You can solve this problem by creating the help.props file yourself in the exteNd Docs directory and including the following text:

```
help.base.url = sys:/exteNd/
```

Performance Considerations with Console Output

The console screen for the Novell exteNd Application Server displays when you select exteNd Application Server from the Current Screens list on the NetWare system console. Displaying the application server's console reduces performance as messages are written to the screen. To optimize performance, keep the application server's console closed as much as possible; in other

words, as soon as you're finished using it to investigate a message or problem, press Ctrl+Esc to exit (and return to the Current Screens list).

To improve performance on those occasions when you need to display the application server's console, use the Server Management Console (SMC) to turn off any messages you don't require.

If significant output is going to the application server's console, the steps above might not be adequate to ensure good performance. You might need to direct that output to the NetWare Logger Screen instead of the application server's console. To do this, use the `-nomonitor` option when you start `silverserver`.

Heap Size and Application Server Performance

If you experience response-time problems, you might need to increase the memory heap size for the Novell exteNd Application Server. This can occur in the following situations:

- ◆ A large number of the browser clients are connected (this number varies depending on your application and hardware configuration)
- ◆ The application requires more memory to run

The default heap size is 256 MB (shown as 335544320 for the reserved heap). Slow or no response for the application server occurs when the committed heap grows to over 250 MB and is not released. If the committed heap continually stays over 250 MB, then a larger heap is required.

To view the heap size, use the `java -showmemory<id>` command. To increase the heap size, restart the application server with the new size specified on the command line. For example:

```
silverserver +Xmx400M
```

Restarting the Novell exteNd Application Server from the SMC

With NetWare 6.5, when you use the Restart button in the SMC, the application server shuts down but doesn't start up again. In this case, you need to restart the application server manually from the NetWare console; use the `silverserver` command and include any startup options that you normally run the application server with.

Setting the Maximum Number of Client Connections in SMC (Connection Tab)

Make sure that the maximum number of client connections is set appropriately for your machine and its RAM. Each client results in the creation of a Java thread. By default, each thread is allocated a stack size of 262,144 bytes (256k bytes). Each stack is created in physical RAM memory.

For example, if the number of clients is specified at 250, then the amount of physical memory required when the exteNd Application Server is active is 65,536,000 bytes (62.5 MB). The formula in bytes is $256 \times 1024 \times \textit{number of clients}$.

You also need to consider the value for dynamically allocated client connections, which the system requires to be equal to or greater than the maximum number of client connections. The potential number of active threads can be this number. Therefore, the amount of physical memory potentially used for the stack space should be based off this number.

The number of active threads is always at least the maximum number of client connections specified. The number of active threads can grow to the number of dynamically allocated client connections.

Setting the maximum number of client connections higher than needed uses extra physical memory. This doesn't happen with the setting for dynamically allocated client connections (because threads are not allocated unless used).

When the Java Virtual Machine (JVM) allocates a new thread and physical memory is not available for thread creation, then the JVM aborts the application and returns a -4 (out of memory) error. The application server will not run when there is not enough physical memory available to allocate threads.

If the number of clients specified is too high and the application server won't start (because of the failure to allocate physical memory), the solution is to reinitialize the database. The configuration parameters are stored in the database during the initialization process. The SilverInit.ncf command file is provided to reinitialize the system.

Limitation on Upgrades from NetWare 5.1

Upgrading from NetWare 5.1 won't succeed because of problems installing MySQL (which is required by the application server). In this scenario, MySQL is installed on the traditional file system volume sys:, but it works only on an NSS volume. As a result, both MySQL and the application server fail. For more information, see “When Upgrading from NetWare 5.1 and Installing MySQL and the Novell exteNd Application Server” in [Chapter 12, “MySQL for NetWare,” on page 45](#).

Preparing to Use a Remote MySQL Database as SilverMaster

The application server installation on NetWare asks you to specify a database to be used as SilverMaster (which will contain the application server's system information). You can specify a remote MySQL database, if appropriate, but you must first make sure that database is properly configured.

The application server installation automatically takes care of that configuration when the target MySQL database is on the local machine or on a remote machine in the same application server cluster. For any other remote MySQL database, you must perform the following configuration steps manually.

- 1** On the remote MySQL server, edit `sys:/etc/my.cnf` (the path is different on Windows and Linux*).

- 1a** Add the following lines:

```
innodb_data_file_path=ibdata1:10M:autoextend
innodb_mirrored_log_groups=1
innodb_log_files_in_group=2
innodb_log_file_size=5M
innodb_log_buffer_size=1M
innodb_flush_log_at_trx_commit=0
innodb_log_archive=0
innodb_buffer_pool_size=8M
innodb_additional_mem_pool_size=1M
innodb_file_io_threads=4
innodb_lock_wait_timeout=50
```

- 1b** Make `key_buffer` at least 16 MB.
- 1c** Make `max_allowed_packet` at least 5 MB.
- 1d** Comment out `skip-innodb` (change it to `#skip-innodb`).
- 2** Restart MySQL.
- 3** Execute the following commands at the remote MySQL server (replacing *password* with a password of your choice):
 - 3a** `create database SilverMaster50`
 - 3b** `use SilverMaster50`
 - 3c** `grant all on SilverMaster50.* to appserver@'%' identified by 'password'`
 - 3d** `grant all on SilverMaster50.* to appserver@localhost identified by 'password'`
 - 3e** `create database jBrokerMQ`
 - 3f** `use jBrokerMQ`
 - 3g** `grant all on jBrokerMQ.* to appserver@'%' identified by 'password'`
 - 3h** `grant all on jBrokerMQ.* to appserver@localhost identified by 'password'`
- 4** Proceed with the installation of the application server on NetWare.

When prompted, specify the remote MySQL hostname and make sure Execute SilverMasterInit is checked.

Downloading SilverJ2EEClient from the Application Server

SilverJ2EEClient is the J2EE* application client container for the Novell exteNd Application Server. To install SilverJ2EEClient on a client machine, you can download the appropriate SilverJ2EEClient installer from the application server, if you have set up these installers on the application server. If your application server is running on NetWare, you should sidestep Apache (default port 80) for this download and specify port 83 in the download URL to access the application server directly. This ensures an efficient download (by avoiding a memory usage issue that currently exists in the application server's Apache WSI module).

Here are the resulting download URLs to use for the SilverJ2EEClient installer (depending on your target client machine):

- ◆ Windows client:

`http://servername:83/SilverStream/SilverJ2EEClientInstall/SilverJ2EEClientInstall.exe`

NOTE: In some cases, Internet Explorer might strip the `.exe` extension from this filename when saving it. If so, you will need to add `.exe` to the filename yourself.

- ◆ Solaris* client:

`http://servername:83/SilverStream/SilverJ2EEClientInstall/SilverJ2EEClientInstallSolaris.sh`

- ◆ Linux client:

`http://servername:83/SilverStream/SilverJ2EEClientInstall/SilverJ2EEClientInstallLinux.sh`

Updating exteNd MP JMS Configuration after SilverMasterInit

If you execute SilverMasterInit and specify a new password (different from the one you used when installing the application server), that new password is not automatically added to the exteNd MP

JMS configuration file. Edit the following file and set msgsvc.jdbc.password to your new password:

```
sys:\extend\MP\lib\msgsvc.properties
```

Port Conflict for exteNd JMS Configuration

The port number in the exteNd MP JMS configuration file is not managed by the IP Address Management framework. If there's a conflict with port 53506, edit the following file and set the port number manually:

```
sys:\extend\MP\lib\msgsvc.properties
```

exteNd Workbench

For complete information on using Novell exteNd Workbench™, see the online help available with the software or the [exteNd Workbench 4.1.1 online documentation \(http://www.novell.com/documentation/lg/workbench41/index.html\)](http://www.novell.com/documentation/lg/workbench41/index.html).

Status of the Samples

The samples (exteNdCodeExamples_1_3 and Petstore1.3_01) included with Novell exteNd Workbench 4.1.1 are obsolete and no longer verified to work with exteNd Application Server 5.1 or the exteNd Client tools supplied with NetWare 6.5 Support Pack 1.

11

iSCSI for NetWare

Known Issues

- ◆ After executing the LIST DEVICES command at the server console, there might be a delay before the device list is displayed.
- ◆ Occasional slow performance or dropped iSCSI connection problems might occur with certain router, switch, and hub configurations.

These network configurations might require that SACK (Selective ACK) be turned off for the TCP/IP stack running on the initiator. You can do this at the NetWare[®] server console by entering

```
set tcp sack option=off
```


12 MySQL for NetWare

Upgrading from NetWare 5.1 and Installing MySQL

After installing MySQL, if the MySQL server does not load and displays either of the following messages:

```
Either the data directory does not exist or is not on an NSS volume  
or
```

```
Error : No database found in the data directory
```

then, to bring up MySQL successfully, complete the following:

- 1 Make sure that `datadir` value in `sys:\etc\my.cnf` is pointing to a valid NSS volume.

For example: `datadir=nssvol:/mysql/data`, where `nssvol` is a NSS volume.

- 2 At the NetWare console, enter the following commands:

```
mysql_install_db
```

This creates the grant tables without any password for the root user.

```
mysqld_safe
```

```
perl sys:\mysql\scripts\mysql_secure_installation.pl
```

This runs the `mysql_secure_installation.pl` Perl script, which lets you configure security for MySQL.

Performance Notes

The performance of MySQL version 4.0.16 varies when compared to that of 4.0.13a build.

The performance of `SELECT` and `INSERT` operations have improved in this release whereas `CREATE` and `DROP` operations are degraded.

Username and Password When Using phpMyAdmin

When you access phpMyAdmin from the Web Manager home page (on port 2200), you are prompted for a username and password. You need to supply the MySQL username and password that were set during install.

Using MySQLHotCopy

Make sure to use only the forward slash (/) when specifying pathnames using `mysqlhotcopy`.

13

NetWare Web Search Server

Web Search Synchronization Can Cause Not_Logged_In Connections to Keep Growing

By default, Web Search requires administrator authentication when processing Synchronization requests. However, the initial release of NetWare® 6.5 does not release the Not_Logged_In connections that appear in the Connections link in NetWare Remote Manager (NRM).

To resolve this issue, open NRM and click Clear All Not Logged In Connections to clear them. Alternatively, set the Require Admin Authorization When Receiving Cluster Data option in the Global Synchronization Settings page of Web Search Manager to No.

Duplicate Indexes

When using Web Search's new Synchronization feature, a duplicate index could be created in the indexes list. In turn, this causes duplicate hits to appear on the search results page.

To resolve this issue, delete one of the duplicate index entries using Web Search Manager.

Authentication Methods for Rights-Based Searches

In prior releases of Web Search, the basic authentication method was used for getting users' credentials when performing rights-based searches. This method depended on a user's own Web browser login dialog box.

Web Search for NetWare 6.5 continues to support this legacy authentication method for logging in. However, when using this method, the logout feature does not work.

Web Search's new mechanism for getting user credentials is form-based. This means that administrators have complete control over the appearance and behavior of the login fields. We strongly recommend modifying any existing templates that still depend on the legacy authentication method to use the new form-based login method. For an example of how to do this, see the SignIn.html template.

An alternative solution is to use a shorter auto-logout time in the security settings of Web Search Manager.

Using Double-Byte Characters with Usernames and Passwords

Web Search does not yet support double-byte characters for usernames and passwords when logging in. This applies to both client and administrator logins.

14 Novell Cluster Services

For detailed information on configuring different products and components with Novell® Cluster Services™, see the *Novell Cluster Services 1.7 Resource Configuration Guide*.

Cluster Node Fails to Auto-Start after Installation

If Cluster Services (clstrlib.nlm) does not automatically start on a node immediately after installation, start it manually by entering the ldncs command at the server console.

ConsoleOne Required to Create Home Directories on Virtual Servers

Home directories currently cannot be created on cluster-enabled volumes (virtual servers) using iManager. You must use ConsoleOne® to create home directories on cluster-enabled volumes.

Create NSS Pools and Volumes on RAID Devices from Same Server Node in Clustered Solutions

In a clustered solution using Novell Cluster Services, if you use software RAID 0 or RAID 5 devices on shared disks, you must create a pool and volume on that RAID device from the same server node before that pool can be migrated.

Unload Cluster Services Software When Servicing Shared Storage

If you need to power down or recycle your shared storage system, you must unload Cluster Services software prior to doing so. You can unload the software using the uldncs command at the server console of each cluster server.

15 Novell Native File Access Protocols

The Novell® Native File Access Protocols issues are divided into the following sections:

- ♦ “General Issues” on page 51
- ♦ “Macintosh/AFP Issues” on page 51
- ♦ “Windows/CIFS Issues” on page 51

General Issues

Disabling the Software

To disable CIFS and AFP, see “Enabling and Disabling CIFS and AFP” in the *NetWare 6.5 Native File Access Protocols Guide*.

To disable NFS, complete the following steps on each server running NFS:

- 1 Run `nfsstop` at the server console.
- 2 Remove the `NFSSTART` line from the `autoexec.ncf` file.

Macintosh/AFP Issues

Do Not Use File or Folder Names Longer Than 98 Characters

Any folder that contains a file or folder name that is longer than 98 characters will cause the enumeration of that folder to fail, and the contents of that folder will not be displayed.

Windows/CIFS Issues

Configuration File Option Not Supported

In previous releases, the configuration setting for Unicode* was displayed and changeable in ConsoleOne®. In NetWare 6.5, this option is still displayed in ConsoleOne, but it is enabled by default and cannot be disabled. Checking or unchecking the check box has no effect.

CIFS Login Fails in Domain Mode with Windows 2003 Server

Windows 2003 Server performs SMB signing by default. Because CIFS does not do SMB signing, pass through authentication requests from a NetWare CIFS server to a Windows 2003 server fails.

To correct this problem, SMB signing must be disabled in the Windows Domain Controller Local Security Policy. This policy is applied in LSDOU order (Local, Site, Domain, then OU containers in hierarchical descending order). Because of this, more than one policy might need to be modified

depending on which policies have the policy items enabled, disabled, or undefined (with attention to policy blocking and block override).

The following policies require modification on a default Windows 2003 installation:

- ◆ Local Security Policy (domain controller)
- ◆ Default Domain Policy
- ◆ Default Domain Controllers Policy

To modify a policy on a Windows 2003 Server:

- 1** Click Start > Programs > Administration Tools.
- 2** Click *desired policy* > Local Policies > Security Options.
- 3** Change the policy to the following values:

Microsoft network server: Digitally Sign Communications (always) = Disabled

Network security: LAN Manager Authentication Level = Send LM & NTLM (use NTLMc2 session security if negotiated).

16

Novell NetDrive 4.1

WebDAV Support

Novell® NetDrive 4.1 supports secure HTTP (HTTPS) for WebDAV *only* on Windows NT 4/2000 and Windows XP workstations.

Using the NetDrive Client behind a Firewall Regulated by BorderManager

If your Novell NetDrive client is behind a firewall regulated by a BorderManager® server that is configured for FTP proxy and authentication, NetDrive cannot map a network drive via FTP to any servers that reside outside the firewall. To solve this problem, disable the FTP proxy authentication on the BorderManager server.

17

Novell NetStorage

DNS Name Required for NetStorage iManager Plug-in

You must use the DNS name of the NetStorage server when accessing the NetStorage iManager plug-in. If you use the IP address of the NetStorage server, you will receive a Service Not Available error.

If the NetStorage server does not have a DNS name, you must install the server using the server IP address as its DNS name.

NetStorage and iManager Required to Be on Same Server

In order to use iManager to manage NetStorage, iManager must be installed on the same server as NetStorage.

If you do not have iManager installed on the same server as NetStorage, you can do either of the following:

- ◆ Install iManager on each server where NetStorage is installed and point your browser to the IP address or URL of that server when you want to make NetStorage changes.
- ◆ Contact NetStorage directly from your browser and do not use iManager.

Not all NetStorage configuration options can be performed using this method. For example, you cannot create Storage Location objects using this method. The URL for this method is *http://ip address or DNS name of server/oneNet/nsadmin*.

User File Access Link in iManager to Access NetStorage Configuration

The link in iManager to make NetStorage configuration changes and to create Storage Location objects has changed from NetStorage to File Access.

18

Novell Archive and Version Services

This section discusses known issues for Novell® Archive and Version Services.

Log File Displays Messages Improperly If Server Language Changed

If you start Novell Archive and Version Services in one language and later change the server language, the ArkManager log file displays messages improperly.

To avoid this problem:

- 1 Stop ArkManager by entering the following line at the command prompt:

```
arkstop
```

- 2 Change the language on the server.

- 3 Delete all of the existing ArkManager log files. The seven files are generally found as `sys:\arkManager\arkx.log`, where *x* is a number from 0 to 6. Each log file contains a single day's messages.

- 4 Start ArkManager by entering the following line at the command prompt:

```
arkstart
```

When ArkManager starts up again, it will create new log files using the correct date format.

ArkSQL and MySQL

Novell Archive and Version Services 2.0 (NetWare® 6.5 Support Pack 1) uses a MySQL server to organize and host file versions in the archive database. The `sys:\arkManager\ArkSQL.cnf` file is the configuration information for ArkManager's MySQL instance on the MySQL server.

For known issues about MySQL on NetWare 6.5 Support Pack 1 and later, see [Chapter 12, "MySQL for NetWare,"](#) on page 45.

ArkSQL and ArkUpgrade

Because the data storage format used in Novell Archive and Version Services 2.0 (NetWare® 6.5 Support Pack 1) differs from the format used in Novell Archive and Version Services 1.0 (NetWare 6.5), you must convert your existing archive database to the new format as part of the upgrade process. For information, see ["Upgrading an Archive Database Using ArkUpgrade"](#) in the *Novell Archive and Version Services 2.0 Administration Guide for NetWare 6.5*.

19

Novell TCP/IP

Fault Tolerance

- ◆ Fault tolerance is supported on ODI™ compliant drivers, such as CE100B, IBMFE, PCNTNW, 3C90XC, and N100.
- ◆ Fault tolerance does not work for multicast applications. When the NIC which contains the multicast group address information goes down, the multicast group address information is not transferred to the other members in the group. For example, applications like SLP will not work when the associated NIC goes down.

Per-Packet Load Balancing

- ◆ To maintain communication, the card properties (such as checksum, offloading, and support) should be the same.
- ◆ All cards on the same network should be grouped; otherwise, the packet will also reach an ungrouped member.

Virtual IP

- ◆ Virtual IP currently works only in an environment configured for RIP-based routing.
- ◆ Virtual IP will not work with applications that time out before the Routing Expiration Time Out Interval. Therefore, the applications will not get a chance to switch to the next-best hop for the route. For example, NCP™ and GroupWise® applications will time out before the routing expiration takes place and they will need to re-establish their connections.

Web-based TCP/IP Configuration

The following configurations are not supported in the Web-based TCPIP configuration (nirman.nlm) through NetWare® Remote Manager (NRM):

- ◆ User-specified protocol (NIC Teaming)
- ◆ BOOTP
- ◆ EGP
- ◆ SNMP

NOTE: Click the Configure TCPIP link in the left pane of the NRM main page to access the Web-based TCP/IP configuration utility.

NIC Teaming

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

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.

After the network configuration of the server is complete, we recommend that you back up the netinfo.cfg, netinfo.chk, and tcpip.cfg files located in sys:\etc. Then, in case of corruption, you can restore from the backed-up configuration.

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

Supernetting

- ◆ After a server is configured as a router (forwarding enabled), it cannot be configured with a supernet mask. Therefore, if a server is configured with a supernet mask, forwarding is disabled.

If the mask is changed to a nonsupernet mask and the system is reinitialized, the INETCFG protocol configuration indicates that forwarding is enabled, even though it is not. To re-enable forwarding, you will need to make an explicit configuration change in INETCFG.

To verify the status of forwarding, check the Forwarding policy page in TCPCON.

Pragmatic General Multicast (PGM)

- ◆ PGM is a reliable multicast transport protocol that works on a multicast-enabled network. Therefore, the network from the PGM sender to all the PGM receivers should be multicast enabled. If there are any routers on the path between the sender and the receivers, multicast forwarding must also be enabled in them.

Ipflt.nlm

- ◆ If more than one board is bound to the same IP address, the filter should be configured for all boards; otherwise, filtering will take place only for the configured member.

Iptrace.nlm

- ◆ The iptrace.nlm program will not be able to display the information of traces where destination addresses and intermediate hops do not respond to the source.

Routecon.nlm

- ◆ Currently, the routecon monitor option is not supported.

20 Nsure Audit

- ◆ When upgrading Nsure™ Audit, if the server becomes unresponsive after you receive a message stating that AUDIT is being unloaded, you must restart your server and then unload AUDITNW before restarting the Support Pack installation.

21

OpenSSH on NetWare

Error Reported during Remote Upgrade

If you perform a remote upgrade, OpenSSH will report an error trying to configure the product. To fix the configuration problems, edit `sys:\etc\ssh\sshd_config` and update the default <Your-Context> tag with the admin user's context. You will also need to add users who you want to have rights to administer OpenSSH to the `sshadm-Administrators` group.

A local (from the GUI on the server) post-install of the OpenSSH product will also correct the configuration issues.

OpenSSH Security Vulnerability Patch Applied to This Release

All versions of the SSH Daemon (SSHD) prior to OpenSSH version 3.7.1 contain buffer management errors. It is unclear as to whether these errors create a security risk. As a precaution, we have applied a patch released by the OpenSSH community to this release (version 3.6.1p1).

For more information about this issue, see <http://www.openssh.com/txt/buffer.adv> (<http://www.openssh.com/txt/buffer.adv>).

User Objects Do Not Have uniqueid Attribute after Upgrade

After upgrading from a NetWare[®] 5.1 server with eDirectory[™] 7.x to a NetWare 6.5 server (which upgrades eDirectory to version 8.7), User objects don't have a `uniqueid` attribute which is used by `sshd` for authentication, so `sshd` falls back to the `cn` attribute. The `cn` attribute, however, is no longer public after the upgrade. Therefore, the admin user must make the `cn` attribute public in ConsoleOne[®] or iManager.

22 Pervasive.SQL

Insufficient Memory Might Cause a CPU Hog Abend

If Btrieve* doesn't have enough memory allocated when it's loaded on the NetWare® server, it could result in a cpu hog abend. The abend information will indicate that nwmkde.nlm abended in GetCacheBuffer.

The default memory requirement is 2 MB. However, Pervasive* recommends *at least* 10 MB (preferably 20 MB).

You can increase the Btrieve memory requirement in the sys:system\bti.cfg file by modifying the CacheSize=2024 parameter.

Pervasive.SQL 2000 Database Licenses

A permanent two-user license is installed during the NetWare 6.5 installation process. If you are upgrading an existing NetWare server, an unlimited license that will expire 90 days after installation is also installed.

The permanent two-user license is intended for use by the NetWare operating system. If you have additional applications using Pervasive.SQL 2000 or Pervasive.SQL 2000i, including the Btrieve interface, you can use the unlimited user count license for 90 days. If you have applications that need access to the NetWare Pervasive.SQL 2000i database engine, you must purchase an appropriate user count license from Pervasive Software before the 90-day evaluation period ends. Allow adequate time before the end of the evaluation period to receive your user count license.

For more information on Pervasive.SQL 2000i and its features, documentation, or information:

- ♦ Internet: [Pervasive Software Web site \(http://www.pervasive.com\)](http://www.pervasive.com)
- ♦ Email: Salesupport@pervasive.com
- ♦ Phone (U.S.): 1-800-287-4383

Phone numbers for all international offices are available from the [Contact Us link \(http://www.pervasive.com/company/contact/index.asp\)](http://www.pervasive.com/company/contact/index.asp) on the Pervasive Software Web site.

Known Issues

In order for Pervasive to update known issue reports between releases, all Known Issues are published in the [Pervasive Knowledge Base \(http://support.pervasive.com/eSupport\)](http://support.pervasive.com/eSupport). Search on Pervasive.SQL 2000 Service Pack 3 known issues.

You can also see a static list of known issues, including links to the associated Knowledge Base articles, at the [Fixed Defects and Known Issues Web page \(http://www.pervasive.com/support/updates/psql2kfixed.asp\)](http://www.pervasive.com/support/updates/psql2kfixed.asp).

Technical Support

For technical support and discussions about Pervasive products, see the [DevTalk forum \(http://www.pervasive.com/devtalk\)](http://www.pervasive.com/devtalk).

To file a support incident, submit an [Electronic Support Incident \(http://www.pervasive.com/support/support_email.asp\)](http://www.pervasive.com/support/support_email.asp).

You can also visit the [Pervasive Support Center \(http://www.pervasive.com/support/supportcenter.asp\)](http://www.pervasive.com/support/supportcenter.asp) for other contact information.

Useful Links

- ◆ [Comprehensive list and details of Pervasive products \(http://www.pervasive.com/offerings\)](http://www.pervasive.com/offerings)
- ◆ [Discussions about Pervasive development issues \(http://www.pervasive.com/devtalk\)](http://www.pervasive.com/devtalk)
- ◆ [Technical papers \(http://www.pervasive.com/support/TechPapers.asp\)](http://www.pervasive.com/support/TechPapers.asp)
- ◆ [Online product manuals \(http://www.pervasive.com/support/technical/online_manuals.asp\)](http://www.pervasive.com/support/technical/online_manuals.asp)
- ◆ [Support programs \(http://www.pervasive.com/support/support_programs.asp\)](http://www.pervasive.com/support/support_programs.asp)
- ◆ [Pervasive Knowledge Base \(http://support.pervasive.com/eSupport\)](http://support.pervasive.com/eSupport)
- ◆ [Updates and patches \(http://www.pervasive.com/support/updates\)](http://www.pervasive.com/support/updates)

23 Scripting Products

Scripting Products Included

The following scripting products are included with NetWare® 6.5. Additional Readme information is located on the Novell® Developer Web site:

- ♦ [PHP for NetWare \(http://developer.novell.com/ndk/readme/php.txt\)](http://developer.novell.com/ndk/readme/php.txt)
- ♦ [Perl for NetWare \(http://developer.novell.com/ndk/readme/perl5.txt\)](http://developer.novell.com/ndk/readme/perl5.txt)
- ♦ [Novell Script for NetWare \(NSN\) \(http://developer.novell.com/ndk/readme/nscript.txt\)](http://developer.novell.com/ndk/readme/nscript.txt)
- ♦ [Universal Component System \(UCS\) \(http://developer.novell.com/ndk/readme/ucs.txt\)](http://developer.novell.com/ndk/readme/ucs.txt)

Perl for NetWare

- ♦ The character encoding schemes of Unicode, except utf-8, are not supported.
- ♦ Encode::Guess is not supported.
- ♦ Perl debugger restart option is not supported on NetWare.
- ♦ Using a 'use' or 'require' statement on a non-existing Perl module with mod_perl 2.0 may result in an abend. You should create an instance of module, and use this object to access its methods; otherwise, it may not work as desired.
- ♦ crypt() function is not supported.
- ♦ Accessing MySQL4.1.1-alpha from perl is currently non-functional.

Universal Component System

All the UCS2Java scripts executed from the server console might not produce expected results. These scripts can be executed from the browser.

24 Storage Management Services (SMS)

TSAFS Issues

Backup of Extended Attributes

TSAFS can back up only up to five extended attributes. If there are more, only the first five are backed up and the following error is logged to the TSA internal error log and the backup application displays it:

```
The extended attributes cannot be read
```

SMS iManager Plug-In Issues

Server Selection

During TSA and SMDR configurations, the server has to be selected using the Novell® eDirectory™ object selector. The server will not be selected if the name is entered.

Invalid Value Entry

If invalid values are entered during TSA and SMDR configurations, the user will be prompted to re-enter the correct value and the invalid value will be replaced by the default.

25

Third-Party Adapters, Drivers, and Applications

Dell Server Management Software (AppCD)

Prior to installing the Support Pack, temporarily disable Dell OpenManage Software by editing the `autoexec.bat` file and commenting out—with a preceding semicolon (;) or pound sign (#)—the following lines:

```
dell/omanage/omsa/dcstart""arraymgr.ncf
sys:system/dell/omanage/iws/bin/netware/omastart
```

If a DRACIIIXT, ERA, or ERA/O card is present, also comment out the following line:

```
sys:system\dell\omanage\rac\d3start
```

Restart the server and install the Support Pack. After the Support Pack is installed, you can uncomment the lines and restart the server to finalize the installation. Failure to follow the above steps might cause the Support Pack install to stop.

Clustering Services Fails to Start on an iSCSI Cluster Node

Clustering Services fails to start on an iSCSI cluster node because it can't find the `sbd` cluster partition. The iSCSI initiator is unable to see the target partitions and cannot mount the iSCSI target volumes. All nodes of the cluster are upgraded to NetWare® 6.5 Support Pack 1. If you then uninstall Support Pack 1 from one of the nodes, you then cannot see partitions on the iSCSI target that were created with the SP1 installed, although the iSCSI device can be seen and the initiator appears to be connecting with the iSCSI target. The device, though seen, will show a different capacity than what is shown on the target and initiators running SP1.

To resolve the issue, load the version of `scsihd.nlm` which ships with NetWare 6.5 Support Pack 1 on the node which had been downgraded to the NetWare 6.5 release.

Hewlett Packard SmartStart

SmartStart* versions earlier than version 7.00 are not supported in the deployment of NetWare 6.5. Updated driver, Health, and Management agents will be available in the ProLiant* Support Pack (PSP) for NetWare version 6.41 or later, which is available on the Hewlett Packard Web site.

If versions earlier than SmartStart 7.00 or PSP 6.41 are used, ensure that all of the Health and Management agent modules have been removed from the `c:\nwupdate` subdirectory prior to restarting the server and ensure that all of the health and agent load lines have been removed from the `autoexec.ncf` file.

For updates to SmartStart and the ProLiant Support Pack, check with your Hewlett Packard representative or the Hewlett Packard Web site.

Symantec Norton Anti-Virus v8

Symantec* Norton Anti-Virus* v8 is not supported on NetWare 6.5. Contact your Symantec Sales Representative to purchase the upgrade (v8.1) in order to continue to run Symantec NAV on NetWare 6.5. For detailed information, access the [Novell KnowledgeBase \(http://support.novell.com/search\)](http://support.novell.com/search) and enter TID #10085603.

CPQSHD.CDM Driver

If servers running cpqshd.cdm experience any drive deactivation issues, it is possibly caused by the cpqshd.cdm. We recommend that you check with your Hewlett Packard representative or the Hewlett Packard Web site for timely updates to this driver.

QLogic QLA2x00 HAM Driver

For detailed information on the QLogic QLA2x00 HAM Driver for NetWare 4, 5, and 6, access the [Novell KnowledgeBase \(http://support.novell.com/search\)](http://support.novell.com/search) and enter TID #10085142.

ISA Adapters Are Not Supported

For performance and scalability reasons, all ISA adapter drivers were removed with the NetWare 6.0 release. There is a possibility that a family driver might support adapters which run on more than one bus type (PCI and ISA). In this case, any ISA adapter would be considered a noncertified driver and would not be supported by Novell.

Promise Adapter Support

The drivers that support the Promise Technology FastTrak S150 TX2plus and SATA150 TX2plus cards do not support CD-ROM drives.

HighPoint Adapter Support

NetWare does not currently support HighPoint adapter cards or integrated controller chipsets.

SCSIHD.CDM Command Line Options

Scsihd.cdm now has command line options that can customize the behavior of the driver. The following is the syntax:

```
load scsihd <</>option<=<value>>
```

Option	Explanation
?	Displays the help screen. Can be used only when the driver is not loaded (the loader cannot load it if it is already loaded). When this option is used, the help screen is displayed on the console screen in NetWare 4 and NetWare 5 and on the logger screen in NetWare 6, and the driver load fails.
AEN	Causes SCSIHD to issue Asynchronous Event Notification HACBs (AENs). This, in turn, causes the HAMS that can do so (such as fibre channel) to report the loss of a hard disk drive or the discovery of a new one even without active IO.
DEBUG	Causes SCSIHD to output extra messages to the console screen (NetWare 4 and 5) or logger screen (NetWare 6).

Option	Explanation
EXCLUDE= <i>value</i>	<p>Causes SCSIHD to not support a particular driver model. The model name specified in this option is compared with the Product ID field in the SCSI Inquiry data. The model name is case sensitive, and partial model names are acceptable as long as the truncation is not on the left.</p> <p>Replace <i>value</i> with the name of a hard drive model that you do not want SCSIHD to support.</p> <p>Maximum length of model name: 14 (decimal)</p> <p>Default: Do not exclude anything</p>
HELP	Same as?.
REQPOOL= <i>value</i>	<p>Causes SCSIHD to create a pool of buffers that can be used in addition to the one maintained by NWPA to create IO requests. In NetWare 4, performance is enhanced if the driver maintains its own buffer pool for requests. In NetWare 5 and NetWare 6, performance is faster if the driver uses NWPA's request pool—unless NWPA's request pool frequently becomes depleted, in which case it is better to specify REQPOOL and have the driver maintain the pool.</p> <p>Overuse of this option unnecessarily uses up memory. This option should be used only by those who have a highly technical knowledge of NetWare.</p> <p>Replace <i>value</i> with the number of buffers that SCSIHD should maintain in its pool before it tries to allocate new buffers from the operating system.</p> <p>Range: 1 to 99,999 (decimal)</p> <p>Default: 0</p>
RETRIES = <i>value</i>	<p>When an IO error occurs that is caused by hardware failure, SCSIHD tries to jumpstart the device back to life with a combination of Test Unit Ready and Start Device SCSI commands. If successful, SCSIHD retries the original request that failed; otherwise, the disk drive is deactivated to protect the data on it from corruption.</p> <p>Replace <i>value</i> with the number of retries that SCSIHD should attempt without success before it deactivates the drive.</p> <p>Range: 1 to 999 (decimal)</p> <p>Default: 3</p>
RETRYDELAY= <i>value</i>	<p>Between retries of the Test Unit Ready and Start Device SCSI command combination, SCSIHD delays for the number of seconds specified by this option.</p> <p>If recovery of the failed device is not successful, the RETRYDELAY value multiplied by the RETRIES value determines the amount of time that a device is deactivated after the hardware error is reported. This time amount could be distorted by the HAM driver doing its own retries.</p> <p>Replace <i>value</i> with the number of seconds SCSIHD should delay.</p> <p>Range: 1 to 999 (decimal)</p> <p>Default: 10</p>

Option	Explanation
SECTORS= <i>value</i>	NetWare requires the driver report a logical geometry for the drive so that it can create partitions beginning on cylinder boundaries although with LBA format, cylinder boundaries are logical. Using this option forces SCSIHD to report the geometry with the specified value as the number of sectors per track. Range: 1 to 63 (decimal), Default: 32 (decimal).
SIXBYTE= <i>value</i>	Specifies that SCSIHD will use 6-byte SCSI commands instead of 10-byte commands if the LBA permits it. The default is off.

IDEATA.HAM, IDEHD.CDM, and IDECD.CDM Command Line Options

Ideata.ham, idehd.cdm, and idecd.cdm now have command line options that can modify the behavior of the driver or display certain kinds of information about the driver or storage interface. In each case where information is to be displayed, the driver will display the information on the Server Console screen in NetWare 4 and NetWare 5 and on the Logger Screen in NetWare 6. Enter the following at the server console prompt to display a list of available options:

```
load ideata /?
```

```
load idehd /?
```

```
load idecd /?
```

Option	Explanation
/?	Displays the help screen, whether or not the driver is loaded. This option can be used in conjunction with other options to set those options, if the driver has already been loaded. For example, loading with "load ideata /? /nodma" after all instances of the driver have already been loaded will cause the driver to display the help screen and to disable DMA beginning with the next I/O transaction.
/break or /b	Causes the driver to break into the debugger immediately after loading (ideata.ham only). This option is available during installation.
/debug or /d	Displays various errors as they occur. Use /debug- or /d- to disable this option. Default: Disabled

Option	Explanation
/global or /g	<p>Keeps an internal list of the last 128 driver actions for ideata.ham only. This list is stored in the global variable IDEATA_History in four-byte sections as BBDDHHXX, where BB is the registered bus number, DD is the registered device number, HH is the upper byte of the lowest word of the HACB (storage request) address, and XX is the action number, described in TID #10085776 in the Novell KnowledgeBase (http://support.novell.com/search).</p> <p>From within the NetWare Internal Debugger, these actions can be displayed by entering "dds IDEATA_History" at the debugger command line, but only if this option is first invoked.</p> <p>Use /global- or /g- to disable this option.</p> <p>Default: Disabled</p>
/history or /h	<p>Keeps an internal list of the last 32 driver actions on the particular request. This list is stored in each HACB (storage request) in the HAM Space area beginning at offset 0x14 (offset 0x78 of the SuperHACB). Each byte in this list represents a driver action, described in TID #10085776 in the Novell KnowledgeBase (http://support.novell.com/search).</p> <p>Use /history- or /h- to disable this option.</p> <p>Default: Disabled</p>
/info or /i	<p>Displays certain or various technical information about the driver and storage interface, such as disk drives, device parameters, PCI Configuration information, and driver settings.</p> <p>Use /info- or /i- to disable this option.</p> <p>Default: Disabled</p>
/native	<p>By default, the ideata.ham driver does not attempt to switch the IDE controller to Native PCI Mode (as opposed to Compatibility or Legacy ISA Mode) if the controller indicates it supports the mode switch. Using this option enables the driver's ability to switch to Native Mode. For some types of controllers (such as RAID and Mass Storage) this switch has no effect because those controllers <i>must</i> run in Native Mode.</p> <p>The /native- option is accepted, but it has little effect after the driver is loaded because the action of switching to Native Mode takes place only once, just after the driver loads.</p> <p>Default: Disabled (the driver does not attempt to switch to Native Mode)</p>
/noaen	<p>By default, the driver will issue or accept AEN (asynchronous event notification) requests and queue them until the specified event occurs. Using this option disables the use of AEN requests. Executing the /noaen option after the driver is loaded will have no effect on AEN requests that might have been queued up to that point.</p> <p>Use /noaen- to re-enable support for AEN requests.</p> <p>Default: Disabled (AEN requests are issued or accepted)</p>

Option	Explanation
/nodma	<p>By default, the ideata.ham driver will check the IDE hardware for DMA compatibility and execute DMA commands if they are supported. Using this option (ideata.ham only) will disable all support for DMA transactions and cause all device communications to be done using PIO (programmed I/O).</p> <p>IMPORTANT: Using this option might cause significant performance degradation.</p> <p>Use /nodma- to re-enable support for DMA commands. This option is available during installation.</p> <p>Default: Disabled (DMA will be attempted)</p>
/noint	<p>By default, the Ideata.ham driver performs I/O with the CPU interrupt flag in the state unchanged from when NWPA called the driver to perform the I/O, normally with interrupts enabled. Using this option (ideata.ham only) disables interrupts during the entire I/O processing cycle.</p> <p>IMPORTANT: Using this option might cause significant performance degradation.</p> <p>Use /noint- to re-enable support for request handling with interrupts enabled.</p> <p>Default: Disabled (interrupts are not purposely disabled during the span of request processing)</p>
/nomp	<p>By default, the driver accepts requests from multiple processors. Using this option disables the driver's ability to do so and causes all requests to originate from a single processor.</p> <p>Use /nomp- to re-enable the acceptance of requests from multiple processors. This option is available during installation.</p> <p>Default: Disabled (requests from multiple processors are accepted)</p>
/noping	<p>By default, the idecd.cdm driver accepts requests to check for media change. Using this option (idecd.cdm only) causes the driver to ignore requests to check for media change. One implication of this option is that the operating system is not notified if a new platter is inserted into its CD-ROM drive.</p> <p>Use /noping- to re-enable the acceptance of requests that check for media change.</p> <p>Default: Disabled (the driver accepts requests to check for media change)</p>
/safe or /s	<p>Incorporates the /nodma, /noint, /nomp, /noaen, /global, and /history options into a single option. Using this option (ideata.ham only) causes the driver to execute requests in a manner that will help the user determine the cause of any problems.</p> <p>IMPORTANT: Using this option might cause significant performance degradation.</p> <p>Use /safe- or /s- to disable this option.</p> <p>Default: Disabled</p>

Option	Explanation
/verbose or /v	Displays each action for this driver. These actions are detailed in TID #10085776 in the Novell KnowledgeBase (http://support.novell.com/search) . Use /verbose- or /v- to disable this option. Default: Disabled

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Tomcat Servlet Container on NetWare

Debug Mode Is Now Available

Debug mode is now available on Tomcat. Enter `tc4jpd` at the system console to start Tomcat in Java Platform Debugging Architecture (JPDA) mode, which uses port 9070 for debugging. You can use any JPDA-enabled Java debugger to debug Tomcat operations.

Broken Links in the Tomcat Web Application Manager

In the Tomcat Web application manager utility (http://domain_name/tomcat/htmlmanager/html/), some hypertext links to various Web applications might not work. This is because while the manager utility can identify the names of each installed application, it has no method for discovering the exact paths (including port numbers) to all of the applications on your server. In addition, Apache requires a trailing forward slash (/) at the end of its URL, which the manager utility does not append by default.

In most cases, this issue can be resolved by adding a forward slash (/) at the end of the URL. For example, if you clicked the `/tomcat/manager` link, the referenced URL might be

```
https://tycoon.provo.novell.com/tomcat/manager
```

Because this URL is missing a required trailing forwards slash, the browser returns an Object Not Found error message. You could then append a forward slash to the end of the URL to access the application:

```
https://tycoon.provo.novell.com/tomcat/manager/
```

If the trailing slash does not fix the issue, you can access the application some other way, such as through the NetWare® 6.5 Welcome Web site, or through Virtual Office if you have installed it. For more information about available administration utilities, see the *NetWare 6.5 Administration Overview*.

Server Certificate Issues

Tomcat sometimes fails to start if there are problems with the server certificate.

If the server certificate has changed since the time of installation, you might need to export the SSL CertificateIP Trusted Root Object to `sys:/public/RootCert.der` using ConsoleOne® and then execute the following command at the system console:

```
keytool -import -v -noprompt -trustcacerts -file sys:/public/  
RootCert.der -keystore sys:/adminsrv/conf/.keystore -storepass  
changeit
```

Preventing Potentially Large mod_jk Log File

Extremely high traffic volumes on the Tomcat Servlet Container can cause the `mod_jk` log file to grow large enough to consume the hard drive space on your server's `sys` volume.

To prevent this potential problem, you can disable the log file by doing the following:

- 1** Open the `sys:\apache2\conf\httpd.conf` file and locate the following lines:

```
JkLogFile "logs/mod_jk.log"  
  
JkLogLevel error
```

- 2** Add a pound sign (#) at the beginning of each of these lines to comment them out.
- 3** Restart the Apache Web server by typing `ap2webrs` at the NetWare console.
- 4 (Optional)** Delete the `sys:\apache2\logs\mod_jk.log` file, especially if it is considerably large in size.

Tomcat Documentation

Refer to the *Tomcat Administration Guide for NetWare 6.5* for information about using Tomcat on NetWare 6.5. For the official Tomcat documentation that is created and maintained by the Apache Foundation's Jakarta Project, refer to the [Tomcat 4.x documentation Web page \(http://jakarta.apache.org/tomcat/tomcat-4.0-doc/index.html\)](http://jakarta.apache.org/tomcat/tomcat-4.0-doc/index.html).

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Virtual Office

E-Mail Attachment Might Not Appear

Attachments might not function when the eMail service is configured to use IMAP pointed at a Groupwise[®] IMAP provider.

Simultaneous Logout With iChain

In order for Virtual Office to simultaneously log out of iChain, the iChain accelerator must have the Forward Authentication Information To Web Server option enabled or be using an LDAP profile where Allow Authentication Through Http Authorization and Use Basic/proxy Authentication are enabled, or it must have OLAC configured to inject user credentials into the Authorization header.

eGuide Authentication Fails

The eGuide Service will not authenticate against a remote server over SSL. The Virtual Office home page displays an Error Message, `Error: Authentication failed: improper configuration`. Please contact your administrator. Also, the Advanced Search and link button ask for credentials. To correct this error, import the correct Trusted Root Certificate into the JVM on the server that Virtual Office uses. For detailed instructions on importing the certificate, see [“Step Six: Import the Trusted Root Certificate”](#) in the *Novell eGuide 2.1.2 Administration Guide*.

NetStorage URL Not Saved In Virtual Office Services Administration

With some browsers (including Mozilla 1.5, Internet Explorer 6.1 Service Pack 1, and NetScape 7.01 and 7.02), the URL you enter for your NetStorage Web page in the Virtual Office Services Administration plug-in does not save. If this happens, try using a different browser. Internet Explorer 6 and NetScape 7.1 work.

