

NetWare 6.5 Support Pack 2 Issues Readme

July 1, 2004

1.0 Installation/Upgrade

For complete instructions on installing NetWare® 6.5, see the *NetWare 6.5 Overview and Installation Guide* (<http://www.novell.com/documentation/lg/nw65/install/data/hz8pck9v.html>).

1.1 File Overwrites

Complete the following if you want to turn on error messages for file overwrites during the Support Pack install:

- 1 Using a text editor, open the response.txt file found in the Support Pack's install directory.
- 2 Locate the overWriteNewerFilePrompt=false entry and modify it to overWriteNewerFilePrompt=true.

We recommend that for an upgrade you choose to always overwrite every file, so you have the same configuration Novell® tested with.

1.2 Server Consolidation Utility

When using the Server Consolidation Utility and migrating data from or to a cluster volume, an error fffdae might occur if your cluster server nodes are spread throughout different eDirectory™ contexts. If the server (from the SCU project) that holds the mounted cluster volumes does not have rights to the cluster virtual server object and the cluster-enabled volume object, and does not have a Read\Write replica of the partition these objects reside in, then a failure fffdae is displayed on the Verification screen of the Server Consolidation Utility.

To resolve this, add the server as a trustee of the context that contains the Virtual Server and Cluster Volume objects. The default rights assigned when adding the trustee are sufficient.

1.3 Nsure Audit

If you have made any changes to auditsvr.ncf, make a backup copy of the file before installing the Support Pack and restore it after the install is complete. Otherwise, the configuration file is overwritten.

1.4 Using ZEN for Desktops with iPrint

iPrint v3.0.5 that ships with this Support Pack requires an update for ZEN for Desktops 4.0.1 in order to deliver the new iPrint modules in a policy. Download and install the ZEN for Desktops 4.0.1 Interim Release 4a (IR4a) from [Novell Product Downloads Web Site](http://download.novell.com) (<http://download.novell.com>).

1.5 Archive Manager Abend

If Archive Manager is running during the Support Pack Install, the server will abend. You must comment out ARKSTART from the autoexec.ncf file and reboot the server before installing the Support Pack.

NOTE: Using the console command ARKSTOP to stop Archive Manager does not prevent the server from abending.

1.6 NetBackup

When using NetBackup, occasionally an incremental backup performs a full backup. To resolve this, use NetBackup version 4.5 or later, or check the Novell Support Web site for an update.

1.7 NMAS Error when Migrating from NetWare 5.1

When migrating from NetWare 5.1 Support Pack 7 with eDirectory 8 to NetWare 6.5 Support Pack 2 using Migration Wizard 7.1, NMAS™ might show an error: - 1660 (0xFFFFF984) after completing the third step and rebooting the server and client.

Because this is a new server that hasn't been fully installed, there are no objects in the Security container, which means that NMAS (and other Security products such as NICI and PKI) have not been configured and this is the expected behavior.

For this to work with the Novell Client™ 4.9 and Novell Client 4.9 SP1a, you must disable the NMAS authentication. Right-click the Red N > Novell Client Properties > Advanced Login > deselect the NMAS Authentication option.

1.8 -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)), Novell has performed very limited testing on NDS 7.62b running NetWare 5.0 for *upgrade purposes only*. On a limited basis, Novell supports NDS 7.62b running on Netware 5.0 while upgrading to Netware 6.5. If outstanding issues that are specific to the NetWare 5.0 operating system, upgrading the NetWare 5.0 server to NetWare 5.1 is required in order to resolve the issue.

1.9 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 `http://server's_TCP_IP_address:httpstack_port/nds`.

1.10 LSI Driver with VMware

If you are running the lsimptnw.ham driver with VMware you need a lsimptnw.ham dated 9/12/2003 or earlier; otherwise, the server will not load after installing the Support Pack. If you chose the backup option during the Support Pack install, you can find the older driver in `sys:system\backsp2`.

1.11 Overlay Install Issues

1.11.1 Overlay Install Error

During the install using the Support Pack Overlay CDs, you might receive the following error: File "Z:\INSTALL\DRDOS\SYS\IBMDOS.COM" cannot be opened. ERROR: error code 3 (3 hex). (nwconfig-6-235) press Enter to continue.

To resolve this, select a manual install instead of the default install.

1.11.2 ULTRA Driver

If the ULTRA driver has been selected during the NetWare installation, yet refuses to load, you should load the IDEATA driver instead:

- 1** Return to the installation program's drivers screen
- 2** Select the ULTRA driver, and delete the driver.
- 3** Press Insert to select the IDEATA driver to replace it.

1.11.3 Timesync Error When Installing a New Server into an Existing eDirectory Tree

If you are installing a new server into an existing eDirectory tree, you might receive the following Timesync error during installation:

```
Time Synchronization
```

```
It appears that time on this server is not synchronized to the network.  
If you proceed with the installation, eDirectory might have trouble  
synchronizing objects properly and SSL certificates will be created  
with the incorrect time.
```

```
We recommend:
```

```
1)Retry the time sync check by pressing No below and then pressing  
Next on the eDirectory Installation screen
```

One possible cause is when an external network connection between the servers exist, but no internal network connection exists. You can prevent this error by completing the following steps, beginning with Step 2. If you already received the error, complete the following steps to resolve this issue.

- 1** Click No, then click Back to the Select the Time Zone screen.
- 2** At the Select the Time Zone screen, click Advanced.
- 3** Manually enter the IP address of the a server in the tree that the new server can get a connection to.
- 4** Select the Use TIMESYNC Configured Sources check box, and enter the IP address of the server.
- 5** Select NTP check box.
- 6** Click OK > Next and continue with the installation.

1.11.4 Using VMware

When installing with VMware, you need to mount a physical overlay CD instead of an ISO image because VMware cannot mount the ISO image.

2.0 New Issues for Support Pack 2

2.1 NetIdentity Client Settings for XTier

The NetIdentity Client configuration is done using registry settings under HKLM/Software/Novell/Client/Policies/NetIdentity. The /Try Local Credentials setting, , is set to 0 by default so that the user's desktop login credentials are never attempted for XTier application logins. If set to 1, desktop credentials are used (attempted) for XTier application logins.

2.2 ConsoleOne

2.2.1 Using ConsoleOne and CIFS

Older CIFS ConsoleOne® snap-ins do not know about the updated PDC/BDC modes added to CIFS. If you use an older version of the snap-in, the nfapCIFSAuthent attribute is changed to either LOCAL or Domain Passthru, leaving the new CIFS PDC/BDC unusable. You should use iManager to manage CIFS PDC/BDC.

2.2.2 Running ConsoleOne at the Server Console

ConsoleOne at the server should not be used to assign or view trustees. When the server version of ConsoleOne is used to add a trustee to an object, the trustee is incorrectly assigned to the object's parent, not the selected object. Likewise, viewing an object's trustee list displays the parent object's trustees. ConsoleOne at the client does not have this issue.

2.2.3 Updated ConsoleOne

ConsoleOne 1.3.6c is included with this Support Pack and should be used in place of older versions of ConsoleOne. This version of ConsoleOne supports only Windows* NT*/2000/XP. To use the new ConsoleOne, access the ConsoleOne files on the server from a Windows NT/2000/XP workstation. If you want to run it locally from a workstation's hard drive, you must copy the entire directory and subdirectories of sys:public\mgmt\consoleone\1.2 to a local drive and run *drive:\1.2\bin\consoleone.exe*.

If you are going to install the ZENWorks 6.5 Suite, you must add the following key to your Windows registry:

```
HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\AppPaths\ConsoleOne.exe.
```

Otherwise, the ZENworks snap-ins for ConsoleOne are not installed.

2.3 iPrint New Features

The following features have been added to iPrint. For more information, see the [iPrint Administration Guide \(http://www.novell.com/documentation/nw65/iprint/data/front.html\)](http://www.novell.com/documentation/nw65/iprint/data/front.html)

- ◆ iPrint supports printers using port 9100.
- ◆ Printer Profiles lets you configure the printer driver settings.
- ◆ Custom Banners lets you specify the layout and content of a banner page to be used by a printer.

2.4 Enabling Unicode Support

If you want to enable Unicode* support for your server and workstations, see “Supporting Mixed Language Environments with Novell NetWare Readme” located in \tools\nsstools.

2.5 Nwucinit Error

The following error might appear on the server console or in console.log after loading nwucinit.nlm:

UCMGR-403: File change mode error, file = sys:system\nwucutil.nlm, (errno=1).

UCINIT-100: Abnormal completion, status = 7009.

To resolve this

- 1 Copy nwucutil.nlm to sys:\system, if it is not already there.
- 2 At the server console, enter **nwucinit -patch**

2.6 Edit.nlm limitations

Edit.nlm is designed to be able to view or edit standard English (ASCII) files. Although Edit.nlm does allow for some extended uppercase ASCII characters, it does not support all extended ASCII or Unicode characters.

2.7 NetStorage Does Not Show Upload Files

If NetStorage does not display any uploaded files or new folders after upgrading from NetWare 5.1, you need to download and install a new ncpfsp.nlm from the [Support Web site \(support.novell.com\)](http://support.novell.com).

2.8 DNS/DHCP

- ♦ There is a New command line option for dnipinst.
- ♦ You cannot use iManager to import/export the DHCP Subnet Pool. Use the DNS/DHCP Java-Based Management Console to perform this operation.
- ♦ If you use the Reload DNS server feature using iManager, you might encounter an Invalid command line option *corrupted string* error on the named screen. This is because the command line options passed for Named in the reload request are being corrupted. However, you can use the Netware Console to reload the DNS server.

2.9 Cross-File System Restores

NSS volumes store pathnames natively in Unicode while traditional volumes use MBCS. Therefore, backing up from an NSS volume and restoring to a traditional volume involves conversion from Unicode to MBCS. Incorrect conversions are likely to occur for some characters that do not have an equivalent representation in MBCS.

2.10 Resolving Virtual Office 404 Error

If you receive a 404 error when accessing Virtual Office using https://dns/vo, use one of the following to resolve the issue:

- ◆ Point your browser to `https://ip/vo` or `http://ip/vo` or `http://dns/vo`

Or

- ◆ Edit `sys:/apache2/conf/httpd.conf` and modify the following line by adding an “R” near the end of the line inside the square brackets so that [L] becomes [R,L]:

Existing Line: `RewriteRule ^/vo.* https://%{HTTP_HOST}/nps/servlet/portalservice?NPSservice=iManagerContainer&gotoNPS=true [L]`

New Line: `RewriteRule ^/vo.* https://%{HTTP_HOST}/nps/servlet/portalservice?NPSservice=iManagerContainer&gotoNPS=true [R,L]`

2.11 Accessing exteNd Director Standard Products after Upgrading to NetWare 6.5

If you installed OnDemand, exteNd Director Standard, or Virtual Office prior to installing this Support Pack, you must use `https` instead of `http` to access these products.

exteNd Director Standard 4.1 and iManager 2.0.x products have been merged together in NetWare 6.5. As part of this merger, access to these products has been limited by using `https` through a security constraint. This applies to all products based upon exteNd Director Standard 4.1.

If you want to continue accessing these products over `http` instead of `https`, you can remove the security constraint and restart tomcat.

- 1 Edit `sys:/tomcat/4/webapps/nps/web-inf/web.xml`.
- 2 Find the section titled `<security-constraint>` near the bottom of the file.
- 3 Comment out this section so it appears like this:
- 4

```
<!--
<security-constraint>
<web-resource-collection>
<web-resource-name>SSL-requiring Area</web-resource-name>
<url-pattern>/servlet/*</url-pattern>
</web-resource-collection>
<user-data-constraint>
<transport-guarantee>CONFIDENTIAL</transport-guarantee>
</user-data-constraint>
</security-constraint>
>
```
- 5 Restart tomcat.

After restarting tomcat, you can connect to these products using `http`.

2.12 Running SilverMasterInit

If you are upgrading from NetWare 6.5 or later (or installing a support pack), you do not want SilverMasterInit to be run because the AppServer already exists. Running SilverMasterInit when the AppServer already exists deletes any projects currently deployed to the AppServer and deletes any configuration changes that have been made.

Because SilverMasterInit sets up the database for the AppServer, running SilverMasterInit against an existing AppServer deletes all your existing databases and set everything back to the defaults.

The AppServer only runs on NetWare 6.5 or later. If you are upgrading to NetWare 6.5 from a NetWare 6.0 or earlier release, then should run SilverMasterInit during the upgrade because the upgrade installs the AppServer and creates a new SilverMaster database in MySQL, if this is a new Extend AppServer Configuration.

Alternatively, the database can be created after the upgrade by running `load silverinit appserverpassword adminpassword mysqlrootpassword`. (These passwords are explained in `sys:\extend\appserver\bin\silverinit.ncf`)

Beginning with Support Pack 2, the `Execute Silvermasterinit` check box is not selected by default. In Support Pack 1, it was selected by default.

2.13 Extend AppServer

- ◆ If MySQL is installed on a volume other than `sys:`, the Appserver does not install correctly. This occurs only when the Appserver is not already installed, for example, for an overlay installation or upgrading from the original NetWare 6.5 release, which does not contain this Appserver.
- ◆ Uninstalling the appserver does not complete and results in a N/A status. If you want to disable the Appserver, configure your NetWare services instead of uninstalling the Appserver.
- ◆ If you have the Appserver and exteNd suite installed before upgrading to Support Pack 2, the exteNd™ Composer™ does not work after upgrading.

2.14 Large Cluster Move

While performing a volume move on a 50 GB and larger cluster shared volume to another shared volume on another server node, the server might abend with a Page Fault in `volms.nlm`. If this abend occurs, use another utility to move this data to another location.

2.15 3Com USB Controller

If you are using a motherboard with an integrated 3Com* USB controller, you might experience a server hang or abend. To resolve this, cold boot the machine by removing power to the machine before restarting it.

2.16 Perl for NetWare

- ◆ Using a “require” statement on a nonexisting Perl module with `mod_perl 2.0` might result in an abend. You should create an instance of module, and use this object to access its methods; otherwise, it might not work as desired.
- ◆ `Crypt()` and `Flock()` functions are not supported on NetWare.
- ◆ Unicode character encoding schemes, except UTF-8, are not supported.
- ◆ `Encode::Guess` is not supported.
- ◆ Accessing MySQL4.1.1-alpha from Perl is currently nonfunctional.
- ◆ The `Rename` function is not implemented.
- ◆ Failure of UCX methods is indicated by an unknown error. The error description given by the UCX call is currently not available for the Perl script.
- ◆ Scripts that use the “Thread” and “threads” modules may not work as desired.

- ◆ When multiple CGI scripts (more than about 40), each doing complex operations, are run simultaneously in Apache 1.3.x, the Web server either hangs or abends. The fix for this will be available in the future builds.
- ◆ The readlink built-in procedure always returns an undefined value. According to Perl's definition of the function, this is the correct behavior on a system such as NetWare that does not support symbolic links.
- ◆ To execute the **system()** command from the Perl Web interface you need to authenticate with administrator rights. This feature is provided for enhanced security. If you do not authenticate, no error is returned.

We recommend that you use the perl system (*nlmname*) without the *load* prefix to load an NLM™. However, this method of executing the NLM programs does not update the \$? variable.

- ◆ Complex scripts running from the console might give the following message: Process did not relinquish control frequently.

2.17 PHP for NetWare

2.17.1 Using Single-Quoted Strings for the System() and Exec() Functions

For the system() and exec() functions, we recommend that you use only single-quoted strings with any combination of slashes to separate directories. For example:

```
system('sys:\system\rconag6.nlm'); or system('sys:\\system\\rconag6.nlm');
```

If double-quoted strings need to be used, then use a double slashes. For example:

```
system("sys:\\system\\rconag6.nlm");
```

If double-quoted strings are used with single slashes and if the NLM name starts with the letter r, t, or n, for example, system("sys:\system\rconag6.nlm"); then the NLM does not load.

This is because the letters are considered as \r or \t or \n.

2.17.2 Socket -elated Features

- ◆ UDP functions are not yet stable and might cause the server to abend.
- ◆ fsocketopen(), on failure, might cause a memory leak and abend.

2.17.3 Environment Implementation

Environment implementation (getenv, putenv, etc.) is dependent on the underlying LibC implementation.

2.17.4 Infinite Scripts

When an infinite or a recursive script is run from one browser, running even a simple script from another browser might cause the server to hang or abend.

Stopping an infinite script by unloading Apache at the server console might cause the server to hang or abend.

2.17.5 Miscellaneous Issues

- ◆ Sorting using string indices might not work properly.
- ◆ `uniqid()` and `strtotime()` functions might not work properly.

2.17.6 Mail functionality

The Mail functionality does not work if the SMTP Server Name is used instead of the IP address, for the SMTP variable under the [mail function] section in the `php.ini` file.

2.18 Novell Archive and Version Services

2.18.1 Use Only ASCII Characters in Job Names

Novell Archive and Version Services fails to handle non-ASCII characters correctly in job names. To avoid this problem, use only ASCII characters in Job Names.

2.18.2 International Characters Do Not Display Correctly When Viewing Archived Files

If you use international characters in filenames for files archived with Novell Archive and Version Services 2.0 in a mixed language environment, the filenames might not display correctly when trying to recover files from the archive database. The symptoms include the following:

- ◆ Files appear to be renamed and filenames might include invalid characters.
- ◆ Files might appear to be missing or not displayable because filenames appear to have changed or filenames include invalid characters.

There are two known reasons why this might occur: MySQL or UTF8 encoding.

MySQL

MySQL* stores the files under their given filenames, but if queried for a file with international characters, MySQL returns an invalid character (?) in place of the correct international character. Using international characters in filenames can make it difficult, if not impossible, to find an exact match for the files you want to restore in the archive. This MySQL problem is scheduled for resolution in the next NetWare support pack release.

UTF-8 Encoding

ArkManager uses UTF-8 encoding for filenames. If the language code pages of the NCP™ client and server are different, and if you are using an older version of the Novell Client, the server conveys an incorrect filename to the archive database. In turn, the archive server presents unfamiliar filenames to the user who is trying to restore file versions.

To prevent the code page problem, upgrade your NCP clients to use the Novell client in NetWare 6.5 Support Pack 2, which provides UTF-8 support, then enable the UTF-8 service. CIFS clients include UTF-8 encoding support since NetWare 6.0 SP 2 and NetWare 6.5.

To enable the UTF-8 service:

- 1** Install or upgrade to the newest Novell Client in NetWare 6.5 Support Pack 2 or later.
- 2** Make sure you are logged in to the Novell Client.
- 3** To open the Novell Client Configuration window, right-click the Novell Client icon in the system taskbar, then select Novell Client Properties.

- 4** Click Advanced Settings.
- 5** In Parameter Groups, select Use UTF8 Encoding and NCPs.
- 6** In Setting, set the value to On to enable this service.
- 7** Click OK to apply the setting.
- 8** When prompted, reboot the client machine.

This makes it possible to access multiple language files from an NCP client without changing the code page on either the NCP client or the NetWare server.

2.18.3 Using the NSS File Version Utility (nwvver.exe) for File Version Retrieval

In NetWare 6.5 Support Pack 2, Novell Archive and Version Services 2.0 includes the Novell Storage Services File Version Utility for use by Microsoft Windows 2000/XP/2003 clients, with either NCP or CIFS support. The utility integrates with the Windows desktop to allow users to natively restore previous versions of their current, renamed, or deleted files that are stored in the Novell Archive and Version Services 2.0 archive database. To use this utility, you must first install a NetWare 6.5 archive server and set up ArkManager jobs to version NetWare 6.5 NSS volumes. The NSS File Version Utility is the preferred file retrieval method over NetStorage for users with access to a compatible Windows desktop.

This file is available in \tools\nsstools in the Support Pack. This file is not included in the Support Pack overlay. For information about installing and using the NSS File Version Utility, see [Novell Archive and Version Services User Guide \(http://www.novell.com/documentation/nw65/arc_users/data/bnmqv3f.html#bnmqv3f\)](http://www.novell.com/documentation/nw65/arc_users/data/bnmqv3f.html#bnmqv3f).

2.18.4 Modify ArkSQL.cnf Before Restarting ArkManager 2.0 After Upgrade to Prevent Data Corruption

To prevent data corruption and improve performance in the archive database, current users of Novell Archive and Version Services 2.0 must modify the sys:\arkManager\arkSQL.cnf file before restarting ArkManager after upgrading to NetWare 6.5 Support Pack 2.

- 1** Stop ArkManager 2.0.
- 2** Upgrade the server to NetWare 6.5 Support Pack 2.
- 3** Verify that the server is operating as expected, but do not start ArkManager.
- 4** Compare and modify values of non-system specific information in sys:\arkManager\arkSQL.cnf with the ones defined in sys:\arkManager\arkSQL_sample.cnf. Most importantly, add the following variable setting to the end of the file:

```
set-variable = transaction_isolation=READ_COMMITTED
```
- 5** Start ArkManager 2.0.

If you are configuring a new archive server after the upgrade, this setting is part of the updated sample arkSQL.cnf file, sys:\arkManager\arkSQL_sample.cnf. Use the updated sample file as a guide when setting up additional archive servers.

2.18.5 Timing Issues in Jncpv2.nlm Causes Random Job and Java Problems

Timing issues in the Java module (jncpv2.nlm) cause problems for your Novell Archive and Version Services 2.0 jobs and servers. Symptoms include one or more of the following:

- ◆ A job fails to copy all files scheduled to be versioned for an epoch.

- ◆ One job hangs while other jobs continue running.
- ◆ Java crashes.

The timing issues arise randomly and the job and server impact from a conflict is unpredictable. The more often versioning jobs run, the more opportunities there are for timing issues to arise, but running a job does not cause the conflict. The timing issues in the Java module are scheduled to be fixed in the next release.

To recover from job-related problems:

- 1** Stop ArkManager.
- 2** (Conditional) If ArkManager could not be shut down completely:
 - 2a** To get ArkManager's JVM ID: at the system prompt, enter
Java -show
 - 2b** To kill the ArkManager process: at the system prompt, enter
Java -kill<ID>
where <ID> is ArkManager's JVM ID.
- 3** Start ArkManager.

2.19 Storage Management Issues

2.19.1 Extended Attributes of Directories

TSAFS does not back up extended attributes for directories on traditional file system volumes. The following error is logged to the TSA error log: "The extended attributes cannot be read." However, extended attributes for files are fully supported.

2.19.2 iManager Plug-In

After upgrading a server using the overlay and attaching to an existing tree, the SMS plug-in for iManager might not be available. To manage this server:

- 1** Connect to another server in the tree that has the SMS plug-in installed and configure this server.
- 2** Manually install the SMS plug-in. For instructions on installing the plug-in, refer to the Installing and Using iManager Plug-ins section of the *Novell iManager 2.0.x Administration Guide* (<http://www.novell.com/documentation/imanager20/index.html>).

2.19.3 Cache Memory Threshold

To reduce the amount of memory used by TSAFS in backup operations, the cache memory threshold value can be set at 10%. It has been found empirically that setting it at 10% on standard configurations does not adversely affect backup performance while reducing memory utilization. New server installations use 10% as the default from NetWare 6.5 Support Pack 2, but upgrades do not alter existing values.

2.19.4 Data Backup in Non-English Environments

If data backed up from a NSS volume in non-English environments needs to be restored to a traditional volume, a conversion from UTF-8 to MBCS is required. This might result in certain specific characters in pathnames being altered.

This restored data needs verification especially if the target server runs in a different locale. Backup engines use MBCS interfaces and might display data differently from how they are represented on NSS volumes because of a conversion from UTF-8 to MBCS in non-English locales.

However, it is expected that data would be backed up and restored correctly, because TSAFS stores data natively in UTF-8 streams. In such circumstances, we recommend that the backup and a trial restore be manually verified before the backup is certified to be correct and consistent. In environments with MAC files stored on the NetWare server, files that have the character 0xDA might cause the scan to abort because this character is converted to a "/" during the scan by backup engines. If the backup engine did the scan in all available name spaces, then the files are backed up using their UTF-8 names.

2.20 DNS/DHCP Issues

- ◆ Configuring DNS/DHCP using iManager on Mozilla and Epiphany on Linux (SUSE®/Red Hat*) is currently not supported.
- ◆ A few error messages containing references to the source code might be displayed. In most cases, these error messages can be ignored. Please report this to Novell Support.
- ◆ The DNS/DHCP iManager utility and the Java-Based Management Console do not support the exporting or importing of comments into eDirectory.

2.21 Third-Party Issues

2.21.1 Epson Gateway

For information on the EpsonNet NDPS* Gateway 2.3, see \tools\espongw23_1.txt.

3.0 Issues for Support Pack 1

3.1 Interoperability Issues

3.1.1 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
- ◆ Nterprise™ 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>) 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) 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.

3.1.2 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

3.1.3 Third-Party Issues

For a description of third-party issues with NetWare 6.5, see “[Third-Party Adapters, Drivers, and Applications](#)” on page 30.

3.1.4 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.

3.1.5 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 (GroupWise WebAccess), 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 (Novell Speller), 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 (GroupWise WebPublisher) and then click Properties.
- 8** Click Application > Templates.
- 9** In the Template Path field, change Tomcat\33 to Tomcat\4 and then click OK.

3.2 Apache Web Server on NetWare

3.2.1 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.

3.2.2 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.

3.2.3 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 **ap2webbrs** at the NetWare console.
- 4 (Optional) Delete the sys:\apache2\logs\mod_jk.log file, especially if it is considerably large in size.

3.3 DirXML Starter Pack

3.3.1 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.

3.3.2 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`).

3.3.3 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.

3.4 DNS/DHCP

3.4.1 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.

3.5 ConsoleOne 1.3.6

3.5.1 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.

3.5.2 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.

3.5.3 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.

3.5.4 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.

3.5.5 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

3.6 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).

3.6.1 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.

3.6.2 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.

3.6.3 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.

3.6.4 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/
```

3.6.5 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`.

3.6.6 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
```

3.6.7 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.

3.6.8 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.

3.6.9 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 “MySQL for NetWare” on page 21](#).

3.6.10 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):

```
create database SilverMaster50
use SilverMaster50
grant all on SilverMaster50.* to appserver@%' identified by 'password'
grant all on SilverMaster50.* to appserver@localhost identified by 'password'
create database jBrokerMQ
use jBrokerMQ
grant all on jBrokerMQ.* to appserver@%' identified by 'password'
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.

3.6.11 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>

3.6.12 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

3.6.13 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
```

3.7 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).

3.7.1 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.

3.8 iSCSI for NetWare

- ◆ 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
```

3.9 MySQL for NetWare

3.9.1 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.

3.9.2 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.

3.9.3 Using MySQLHotCopy

NOTE: This issue was fixed in Support Pack 2

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

3.10 NetWare Web Search Server

3.10.1 Duplicate Ines

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.

3.10.2 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.

3.10.3 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.

3.11 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* (<http://www.novell.com/documentation/1g/ncs65/treetitl.html>).

3.11.1 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.

3.11.2 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.

3.11.3 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.

3.11.4 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.

3.12 Novell Native File Access Protocols

3.12.1 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* (<http://www.novell.com/documentation/lg/nw65/native/data/hz8pck9v.html>).

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.

3.12.2 Macintosh/AFP Issues

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.

3.12.3 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.

3.12.4 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).

3.13 Novell NetDrive 4.1

3.13.1 WebDAV Support

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

3.13.2 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.

3.14 Novell NetStorage

3.14.1 DNS Name Required for NetStorage iManager Plug-in

NOTE: This is fixed in Support Pack 2.

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.

3.14.2 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`.

3.14.3 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.

3.15 Novell Archive and Version Services

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

3.15.1 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.

3.15.2 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 [“MySQL for NetWare” on page 21](#).

3.15.3 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* (http://www.novell.com/documentation/lg/nw65/arc_admin/data/front.html).

3.16 Novell TCP/IP

3.16.1 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.

3.16.2 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.

3.16.3 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.

3.16.4 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.

3.16.5 NIC Teaming

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

3.16.6 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.

3.16.7 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.

3.16.8 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.

3.16.9 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.

3.16.10 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.

3.16.11 Routecon.nlm

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

3.17 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.
- ◆ When applying service packs to NetWare 6.5, auditagt.ncf might be overwritten. To prevent this, create a backup copy of auditagt.ncf before applying the service pack.

3.18 OpenSSH on NetWare

3.18.1 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.

3.18.2 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>).

3.18.3 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.

3.19 Pervasive.SQL

3.19.1 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.

3.19.2 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.

3.19.3 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).

3.19.4 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.

3.19.5 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)

3.20 Scripting Products

3.20.1 Scripting Products Included

The following scripting products are included with NetWare 6.5. Additional Readme information is located on the [Novell Developer Web \(http://developer.novell.com/ndk/downloadaz.htm\)](http://developer.novell.com/ndk/downloadaz.htm) site.

3.20.2 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 nonexisting 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 might not work as desired.
- ◆ crypt() is not supported.
- ◆ Accessing MySQL4.1.1-alpha from Perl is currently nonfunctional.

3.20.3 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.

3.21 Storage Management Services (SMS)

3.21.1 Backup of Extended Attributes in TSAFS

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
```

NOTE: This is Fixed in Support Pack 2

3.21.2 SMS iManager Plug-In Issues

- ◆ 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.
- ◆ 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.

NOTE: This is Fixed in Support Pack 2

3.22 Third-Party Adapters, Drivers, and Applications

3.22.1 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.

3.22.2 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.

3.22.3 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 \(http://www.hp.com\)](http://www.hp.com) site.

3.22.4 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.

3.22.5 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. The latest certified version of CPQSHD.CDM (as well as all other storage drivers) is available at <http://developer.novell.com/devres/storage/drivers/index.html#HP>.

3.22.6 QLogic QLA2x00 HAM Driver

For detailed information on the QLogic QLA2x00 HAM Driver for NetWare 4, 5, and 6, see [TID #10085142 \(http://support.novell.com/cgi-bin/search/searchtid.cgi?/10085142.htm\)](http://support.novell.com/cgi-bin/search/searchtid.cgi?/10085142.htm).

3.22.7 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.

3.22.8 Promise Adapter Support

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

3.22.9 HighPoint Adapter Support

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

3.22.10 SCSIHD.CDM Command Line Options

Scsihd.cdm now has command line options that can customize the behavior of the driver. See [TID 2963882](http://support.novell.com/cgi-bin/search/searchtid.cgi?/2963882.htm) (<http://support.novell.com/cgi-bin/search/searchtid.cgi?/2963882.htm>) for more information.

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

Ideata.ham, idehd.cdm, and idecd.cdm now have command line options that can customize the behavior of the driver. See [TID 10085776](http://support.novell.com/cgi-bin/search/searchtid.cgi?/10085776.htm) (<http://support.novell.com/cgi-bin/search/searchtid.cgi?/10085776.htm>) for more information.

3.23 Tomcat Servlet Container on NetWare

3.23.1 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.

3.23.2 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 forward 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.

3.23.3 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
```

3.23.4 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 **ap2webbrs** at the NetWare console.
- 4 (Optional) Delete the `sys:\apache2\logs\mod_jk.log` file, especially if it is considerably large in size.

3.23.5 Tomcat Documentation

Refer to the *Tomcat Administration Guide for NetWare 6.5* (http://www.novell.com/documentation/lg/nw65/web_tomcat/data/a7hjvxo.html) 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>).

3.24 Virtual Office

3.24.1 E-Mail Attachment Might Not Appear

Attachments might not function when the e-mail service is configured to use IMAP pointed at a GroupWise IMAP provider.

3.24.2 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.

3.24.3 eGuide Authentication Fails

The eGuide Service will not authenticate against a remote server over SSL. The Virtual Office home page displays the 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* (<http://www.novell.com/documentation/lg/eguide212/treetitl.html>).

3.24.4 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.

4.0 Uninstalling the Support Pack

If you selected the Backup option during the Support Pack installation, files that are overwritten by the Support Pack files are backed up to sys:system\backsp2 (or to the location you specified) so that you can restore the server to its original state if necessary. If you didn't select the Backup option, you can't uninstall the Support Pack.

IMPORTANT: Do not uninstall the Support Pack if you installed any products or patches after the installation of the Support Pack.

To uninstall the Support Pack, complete either one of the following procedures:

- 1 At the server console prompt, enter NWCONFIG.
- 2 Select Product Options > Install a Product Not Listed.
- 3 Press F3, then specify the path to the backup files (sys:system\backsp2 or the location you specified).

OR

- 1 At the server console prompt, enter NWCONFIG.
- 2 Select Product Options > View/Configure/Remove Installed Products > SPACK.
- 3 Press Delete, then select Yes.

5.0 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>)
- ◆ **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?/10091736.htm>)
- ◆ **Fixed issues in this Support Pack:** *Consolidated Support Pack 11 List of Fixes* (http://support.novell.com/tools/csp/Consolidated_Support_Pack_10_changes_since_last_support_pack.html)
- ◆ **NISCC vulnerability advisory on SSL (secure sockets layer) and TLS (transport layer security) protocol:** *TID 10087504* (<http://support.novell.com/cgi-bin/search/searchtid.cgi?/10087450.htm>).

- ♦ **NISCC vulnerability advisory on SSL (secure sockets layer) and TLS (transport layer security) protocol:** TID 10087450 (<http://support.novell.com/cgi-bin/search/searchtid.cgi?10087450.htm>).
- ♦ **EpsonNet NDPS Gateway 2.3:** Readme located in \tools\espongw23_1.tx of the Support Pack.
- ♦ **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_readme2.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>).
- ♦ **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).
- ♦ **Novell JVM 1.4.2 for NetWare:** See the *Readme* (<http://www.novell.com/documentation/lg/jvm142/index.html?treetitl.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>) 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>).
 - ♦ LDAP Beans (http://developer.novell.com/ndk/readme/bns_ldap.html)
 - ♦ LDAP Command Beans (http://developer.novell.com/ndk/readme/bns_ldapcmd.html)
 - ♦ Novell Nsure™ UDDI Command Beans (http://developer.novell.com/ndk/readme/bns_uddicmd.html)
 - ♦ SecretStore Command Beans (http://developer.novell.com/ndk/readme/bns_sscmd.html)
 - ♦ Security Command Beans (http://developer.novell.com/ndk/readme/bns_seccmd.html)
 - ♦ WebDAV Command Beans (http://developer.novell.com/ndk/readme/bns_wdavcmd.html)

6.0 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 (® , TM, etc.) denotes a Novell trademark; an asterisk (*) denotes a third-party trademark.

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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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