



RELEASE NOTES

**EMC® NetWorker®
Release 7.5
and Service Packs**

Release Notes

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These release notes contain supplemental information about the EMC® NetWorker® 7.5 Service Pack 3, Service Pack 2, Service Pack 1 and NetWorker 7.5 releases.

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Revision history

The EMC® NetWorker® 7.5 Release Notes was originally published in December 2008.

Table 1 Revision history (page 1 of 2)

Date	Description
July 14, 2010	<ul style="list-style-type: none"> NetWorker 7.5 Service Pack 3 released.
April 19, 2010	<ul style="list-style-type: none"> Documentation errata added for "Added information to the topic "Resolvable names for multiple network interface cards"" on page 164. Added known limitation "Volume mount point is recovered as a folder" on page 61.
March 26, 2010	<ul style="list-style-type: none"> Added "Installing or Upgrading to NetWorker 7.6 on Solaris AMD64 and Intel requires Solaris 10 Encryption Kit" on page 8 to "New features and changes" section.
February 22, 2010	<ul style="list-style-type: none"> NetWorker 7.5 Service Pack 2 released.
November 26, 2009	<ul style="list-style-type: none"> Added "Savegroup completion report output contains additional, unnecessary information" on page 60 to "NetWorker 7.5 Service Pack 1 problems and limitations". Documentation errata added for "nwrecover -p not supported for recovering encrypted data".
October 26, 2009	<ul style="list-style-type: none"> Added section for "VMWare High Availability (HA) problems and limitations descriptions" on page 52. Added "nsrim -x takes longer to complete on Linux" on page 53 to "NetWorker 7.5 Service Pack 1 problems and limitations". Documentation errata added for "AFTD must be configured on sub-directory of mount point if NAS device mounted on local directory" and "Supplement to target session information for devices".
September 16, 2009	<ul style="list-style-type: none"> Added "UTF8=Y no longer required for NDMP client configuration" to "NetWorker 7.5 Service Pack 1 documentation errata" on page 166. Added "Support for VMware High Availability (HA)" on page 10 to "New features and changes" section.
September 7, 2009	<ul style="list-style-type: none"> Added "Clarification of NetWorker support for LTO-4 devices" on page 11 to "New features and changes" section. Added known limitation "Direct SCSI backups using nsrscsi_save command not backing up last block of 512 bytes on a LUN; hotfix required if using NetWorker 7.5 Service Pack 1 or earlier" on page 53. Added "JRE version 1.4.x no longer supported" to "NetWorker 7.5 Service Pack 1 documentation errata" on page 166
June 18, 2009	<ul style="list-style-type: none"> Added "Installation requirements for Microsoft Failover Cluster on Windows Server 2008", "Installation requirements for the MC/ServiceGuard cluster", "Instructions for installing NetWorker packages to a nondefault location on Solaris" and "Specifying browse policies for clone data" to "NetWorker 7.5 Service Pack 1 documentation errata" on page 166

Table 1 Revision history (page 2 of 2)

Date	Description
May 15, 2009	<ul style="list-style-type: none"> • Added Saveset completion message and custom scripts to “New features and changes” section for NetWorker release 7.5 Service Pack 1. • Added “Saving the bootstrap and index to the same media pool” on page 171 and “Configuration of CIFS-mounted AFTD on Microsoft Windows servers and storage nodes requires additional steps” on page 172 to “NetWorker 7.5 Service Pack 1 documentation errata” section. • Categorized the “Known problems and limitations” on page 42 for each NetWorker release under the product feature.
April 16, 2009	<ul style="list-style-type: none"> • Added Support for Snapimage to “New features and changes” section for NetWorker release 7.5 Service Pack 1. • Updated workaround for Known Limitation, “Deposit operation fails on ACSLS and DAS silo (fixed for the 7.5 Service Pack 2 release)” on page 57.
April 2, 2009	<ul style="list-style-type: none"> • Updated step 4.c in “Configuring a deduplication node for replication” on page 174. • Updated release 7.5 and higher “Known problems and limitations” tables with the NetWorker feature, OS (operating system), and bug severity that applies to each limitation. • Updated step 6 in “Enabling NetWare 4.22 clients on Windows” on page 159.
March, 2009	<p>The following sections have been added for the 7.5 Service Pack 1 release:</p> <ul style="list-style-type: none"> • New features and changes for “NetWorker release 7.5 Service Pack 1” on page 10 • “Fixed bugs in release 7.5 Service Pack 1” on page 32 • “Table 11 on page 50 identifies problem issues and limitations discovered in NetWorker 7.5 Service Pack 1.” on page 49 • “Internationalization support” on page 148 • “NetWorker 7.5 Service Pack 1 documentation errata” on page 166
February, 2009	<p>Release 7.5 includes the following additions, corrections, and omissions:</p> <ul style="list-style-type: none"> • Removed support for VTL Replication from New Features section. • Removed LGTsc16961, NetWorker must support Stoli Replication, from Fixed Bugs in Release 7.5 table. • Added known limitations “LGTsc26210” and “LGTsc17146” • Added “Installing the NetWorker client in a failover zone” on page 181 • Updated “NetWorker 7.5 documentation errata” on page 176 with revised information on “Tuning to increase NetWorker stability”. • Added directed save set recovery issue “LGTsc24948” to known limitations. • Updated “NetWorker 7.5 documentation errata” on page 176 with notes regarding the parallelism attribute, firewall settings, and the nsrlic output. • Updated Environment and system requirements section.
December, 2008	<ul style="list-style-type: none"> • NetWorker 7.5 released.

Product description

The EMC NetWorker 7.5 and service packs release provides significant functional enhancements, including support for the following:

- ◆ Enhancements to the handling of advanced file type devices (AFTDs).
- ◆ NetWorker client support for Windows 7, and NetWorker server, storage node, client and NetWorker Management Console support for Windows Server 2008 R2.
- ◆ More integration between features and the NetWorker software, including enhanced support for VMware and Avamar deduplication.
- ◆ Support for IPv6, an internet protocol that allows for more unique IP addresses, and the interoperability of IPv6 and IPv4.
- ◆ Integration of the Client Configuration Wizard into the NetWorker Management Console (also referred to as NetWorker Console).
- ◆ Internationalized language packs.
- ◆ Path-to-tape functionality with NDMP cloning.

See [“New features and changes” on page 5](#) for more information.

Before installing NetWorker release 7.5, review the NetWorker release 7.5 installation guide, administration guide, and other documentation.

[“Documentation” on page 162](#) lists the complete NetWorker release 7.5 documentation set.

New features and changes

The NetWorker software contains the following new features and enhancements. More detailed information on these features is provided in the *EMC NetWorker Administration Guide*.

- ◆ [“NetWorker release 7.5 Service Pack 3” on page 5](#)
- ◆ [“NetWorker release 7.5 Service Pack 2” on page 6](#)
- ◆ [“NetWorker release 7.5 Service Pack 1” on page 10](#)
- ◆ [“NetWorker release 7.5” on page 14](#)

NetWorker release 7.5 Service Pack 3

NetWorker release 7.5 Service Pack 3 includes these new features and changes:

- ◆ [“AFTD enhancements — changes to load balancing, device target session values, and intelligent space management” on page 5](#)
- ◆ [“Support for LTO-5 tape technology” on page 6](#)
- ◆ [“Limit on device count per data zone removed” on page 6](#)
- ◆ [“NetWorker Management Console support for Windows Server 2008 R2” on page 6](#)
- ◆ [“Support for AutoStart 5.3 SP4” on page 6](#)

AFTD enhancements — changes to load balancing, device target session values, and intelligent space management

The following AFTD enhancements have been made to load balancing and the default values for device target sessions.

AFTD Load Balancing

NetWorker volume selection criteria was the same for AFTDs as for tapes, such that when there were multiple available AFTD volumes belonging to the same pool fitting the selection criteria (pool settings), NetWorker would select a volume based on label time. However, selecting a volume by label time is unnecessary for AFTDs, and results in the first AFTD being overused while others are underused.

The load-balancing scenario for AFTDs has been changed to properly utilize multiple LUNs for improved performance and utilization. Now, among all volumes that fit the selection criteria (pool settings), for the first save set NetWorker chooses the AFTD with the lowest used space, and then joins sessions based on device target sessions. For each AFTD thereafter, the same rule applies.

Target sessions and max sessions values for AFTDs

Previously, the target session default values for AFTDs were 4 for device target sessions and 512 for device max sessions. However, such values can lead to high concurrencies, resulting in disk thrashing.

The Device target session value has been changed from the default of 4 to 1 for AFTDs, and device max sessions for AFTDs has been reduced from 512 to 32.

Intelligent space management

NetWorker now provides a configurable setting for determining at what level NetWorker stops writing to an AFTD. This configurable setting can be from 0% to 100%. If the capacity is defined at a value of 100%, the entire disk capacity is used, though the existing save set cutoff size is still in use.

Support for LTO-5 tape technology

NetWorker release 7.5 Service Pack 3 supports LTO-5, a tape drive that provides up to 1.5 TB of storage per cartridge with data transfer rates up to 140 MBps. The use of LTO-5 hardware-based encryption is supported by NetWorker when controlled by management utilities that are provided with the LTO-5 hardware, or by third-party key management software. EMC does not test or certify these key management utilities; however, the NetWorker application can read from and write to LTO-5 devices that use hardware-based encryption.

New environment variable `NSR_SOCKET_BUF_SIZE` to adjust TCP window size

With the addition of the environment variable `NSR_SOCKET_BUF_SIZE`, you can now adjust the TCP window for tuning so that NetWorker can utilize larger TCP window sizes.

The operating system still needs to be configured to enable larger TCP windows. The NetWorker default settings are 64K for Windows and Solaris, and 32K for all other platforms. You can override these defaults by setting `NSR_SOCKET_BUF_SIZE` to the number of bytes desired prior to starting the NetWorker daemons:

```
NSR_SOCKET_BUF_SIZE = <# bytes>
```

Note: This setting must be changed on all systems in the environment for the desired size to be used (for example, if the server is 128K, any clients would need to be set to 128K); if there are mismatched systems (for example, the server is 128K but one client is 32K), NetWorker will throttle down to the lowest value.

Limit on device count per data zone removed

The hard limit of 512 on the device count per data zone supported with NetWorker has been removed. You can now have up to 700 or more devices per data zone.

NetWorker Management Console support for Windows Server 2008 R2

The NetWorker Management Console is now supported for use on the Windows 2008 R2 platform.

Support for AutoStart 5.3 SP4

The latest version of AutoStart, version 5.3 SP4, is supported for use with the NetWorker 7.5 Service Pack 3 software.

NetWorker release 7.5 Service Pack 2

NetWorker release 7.5 Service Pack 2 includes these new features and changes:

- ◆ [“Client support for Windows 7; Server, storage node and client support for Windows Server 2008 R2” on page 7](#)
- ◆ [“Installing or Upgrading to NetWorker 7.6 on Solaris AMD64 and Intel requires Solaris 10 Encryption Kit” on page 8](#)

- ◆ “RedFlag Linux version 3 client support” on page 8
- ◆ “DFS-R Granular Recovery” on page 8
- ◆ “Offline Restore using Windows Server Backup with NetWorker” on page 9
- ◆ “Automation of NetWorker Update Enablers” on page 9
- ◆ “Default client parallelism setting of 4 for all clients except NetWorker Server client instance” on page 9
- ◆ “Server network interface attribute added for storage node resource when scanning for devices” on page 9
- ◆ “New default timeout of 10 minutes for NetWorker server in a Microsoft cluster” on page 9
- ◆ “Scanner command affected due to automatic unloading of volumes placed in jukebox but not mounted” on page 10

Client support for Windows 7; Server, storage node and client support for Windows Server 2008 R2

NetWorker release 7.5 Service Pack 2 introduces client support for Windows 7 for x64 and Windows 7 for x32, and server, storage node and client support for Windows Server 2008 R2 for x64 (64-bit).

This includes support for the following:

- ◆ File system backup and recovery
- ◆ Online restore of System State
- ◆ Performance Counters writer
- ◆ VSS Task Scheduler writer
- ◆ VSS Metadata Store Writer
- ◆ Microsoft Cluster without Cluster Shared Volumes (CSV)
- ◆ Windows 2008 R2 Server core
- ◆ NetWorker Management Console (NMC) client

The following are not supported:

- ◆ Virtual Hard Disks (VHDs)
- ◆ Hyper-V writer
- ◆ Cluster Shared Volumes
- ◆ Deduplication
- ◆ NetWorker Management Console (NMC) on server and storage node

Limitations in support for Windows Server 2008 R2 and Windows 7

The following limitations apply to NetWorker backups performed on a Windows Server 2008 R2 or Windows 7 system:

Only BOOT/BCD data backed up on System Reserved partition

Only the **BOOT/BCD** data present on the System Reserved partition is backed up. NetWorker backs up all the files in the **SYSTEM RESERVED PARTITION:\Boot** directory as well as the **SYSTEM RESERVED PARTITION:\bootmgr** file. Any other data present in this partition will not be backed up. The System Reserved partition is mounted for the backup of **BOOT/BCD** and is unmounted after the backup is complete.

The files syscache.hve, syscache.hve.LOG1, and syscache.hve.LOG2 are skipped during backup

The files `syscache.hve`, `syscache.hve.LOG1`, and `syscache.hve.LOG2`, located in the `%systemdrive%\system volume information` folder, will be skipped during backup. These hive files are used for maintaining extended data for executable files on the system, such as SRP (Software Restriction Policies) and AppLocker. Microsoft recommends not restoring these files. These files are created from derived data and will be rebuilt over time.

Disk Quota database not backed up for System Reserved partition

The Disk Quota database for the System Reserved partition will not be backed up as part of the **VSS SYSTEM SERVICES: Disk Quota** backup on Windows Server 2008 R2 and Windows 7. The message "Skipping non-physical or system volume" displays during the full system backup.

DFS-R Granular Recovery

NetWorker release 7.5 Service Pack 2 supports Windows Distributed File System Replication (DFS-R) granular recovery. With this support, DFS-R Shared Directories can be backed up like standard file directories, allowing granular DFS-R folder and file recoveries on Windows Server 2008 with SP2 and Windows Server 2008 R2 operating systems. Users will not have to recover the entire VSS SYSTEM save sets to restore DFS-R shared directories.

Installing or Upgrading to NetWorker 7.6 on Solaris AMD64 and Intel requires Solaris 10 Encryption Kit

When installing or upgrading to NetWorker Release 7.5 on Solaris 10 AMD64 or Intel, ensure that the **Solaris 10 Encryption kit** is already installed on that host. This kit includes the packages `SUNWcrman`, `SUNWcry`, and `SUNWcryr`, and is available from the official SUN Solaris web downloads at <http://www.sun.com/download/index.jsp?tab=2>. Scroll down under "S" to find the link to the Solaris 10 Encryption Kit.

Failure to install this kit prior to the installation of NetWorker will result in NetWorker **NOT** functioning on the Solaris 10 AMD and Intel platforms.

RedFlag Linux version 3 client support

NetWorker release 7.5 Service Pack 2 client is supported on the RedFlag Linux version 3 platform.

SuSE Linux Enterprise Server (SLES) version 11 support

NetWorker release 7.5 Service Pack 2 server, storage node and client are supported on the SuSE Linux Enterprise Server (SLES) version 11 platform.

AutoStart 5.3 SP3 support

AutoStart 5.3 SP3 is supported for use with NetWorker release 7.5 Service Pack 2.

VMware Consolidated Backup support for ESX 4.0

VMware Consolidated Backup (VCB) is supported for the ESX Server 4.0.

NetWorker Management Console support for Internet Explorer 8

The NetWorker Management Console now supports the Internet Explorer 8 browser.

Offline Restore using Windows Server Backup with NetWorker

Instructions for performing an offline restore using Windows Server Backup for Windows Server 2008 and Windows Server 2008 R2 with NetWorker are provided in a technical note available on Powerlink at the following link:

http://powerlink.emc.com/km/live1/en_US/Offering_Technical/Technical_Documentation/300-010-339.pdf

This information is also available in Procedure Generator. Procedure Generator can be downloaded from Powerlink at **Support > Product and Diagnostic Tools > NetWorker Tools > NetWorker Procedure Generator**.

Automation of NetWorker Update Enablers

At the completion of a successful installation, when the NetWorker server starts, a check occurs to determine whether an Update enabler is required. If an Update enabler is required, the enabler is now added automatically.

After the update enabler is added, the NetWorker server generates an alert and displays the alert in NMC (and in nsrwatch) to notify that this enabler needs to be authorized within 45 days.

IMPORTANT

If the auth code for the update enabler code is not applied within 45 days, the NetWorker server software will be disabled. Entering the auth code enables the software even if the update enabler code has expired. The NetWorker 7.5 update enabler code cannot be deleted, only authorized with the auth code.

Default client parallelism setting of 4 for all clients except NetWorker Server client instance

Starting in NetWorker 7.5 Service Pack 2, the default parallelism setting for all clients, except the NetWorker Server's client instance, is 4. For the NetWorker Server client, the default setting is 12. Client parallelism should not be set higher than the total number of physically-attached drives in order to avoid disk contention (where two save processes are competing to access the same drive).

If upgrading the NetWorker Server from a previous version, the parallelism value must be manually changed to 4 for de-duplication, VSS and NDMP Clients.

Server network interface attribute added for storage node resource when scanning for devices

An optional attribute, **Server network interface**, has been added for the storage node resource. It is used when performing "scan for devices" to identify the specific server interface to be used for the storage node (dvdetect program) to contact the NetWorker server.

New default timeout of 10 minutes for NetWorker server in a Microsoft cluster

The default timeout for NetWorker server startup in a Microsoft cluster has been changed from 3 minutes per daemon to 10 minutes per daemon. You can now set the server's timeout value by modifying the **AdditionalArguments** field in the **Parameters** tab of the NetWorker Server cluster resource.

The parameter name is **ServerStartupTimeout**, and the name is case sensitive. The time value is represented in seconds and must be a numeric value. If the entry for the time value is not recognized, the default of 600 seconds (10 minutes) is used for this variable. The parameter is in the following format:

```
<keyword1>=<value1>
```

where <keyword1> is **ServerStartupTimeout** and <value1> is a numeric value.
For Example:

```
ServerStartupTimeout=200
```

Note: If upgrading from a version that does not let you set the default timeout to a version that does have this feature, you must re-register the NetWorker resource using **regcnstrd**.

Scanner command affected due to automatic unloading of volumes placed in jukebox but not mounted

NetWorker automatically unloads volumes that have been placed in a jukebox device but have never mounted (for example, by running `nsrjb -l -n <volume>`). Commands such as the scanner command that operate on volumes that have never been mounted will be affected by this behavior.

To prevent NetWorker from unloading the volume, the device should be set to service mode while the command is being run.

NetWorker release 7.5 Service Pack 1

NetWorker release 7.5 Service Pack 1 includes these new features and changes:

- ◆ [“Support for VMware High Availability \(HA\)” on page 10](#)
- ◆ [“Clarification of NetWorker support for LTO-4 devices” on page 11](#)
- ◆ [“Save set completion message and custom scripts” on page 11](#)
- ◆ [“Support for the NetWorker SnapImage module” on page 12](#)
- ◆ [“Language pack support” on page 12](#)
- ◆ [“Path-to-tape \(virtual to physical tape\) support with NDMP cloning” on page 12](#)
- ◆ [“Deduplication support for Microsoft Windows SYSTEM save sets” on page 12](#)
- ◆ [“Removal of save sets from an Avamar replication node” on page 12](#)
- ◆ [“Single-Step recovery of a VMware virtual machine” on page 13](#)
- ◆ [“Changed default settings for nsrjobd daemon” on page 13](#)
- ◆ [“Improvements to adhoc \(manual\) backup reporting” on page 13](#)

Support for VMware High Availability (HA)

Clients, storage nodes and servers that are NetWorker release 7.5 Service Pack 1 and later support environments where VMware High Availability (HA) is enabled. VMware HA provides high availability for any application running in a virtual machine, regardless of its operating system or underlying hardware configuration, without the need for dedicated standby hardware or software.

The following are limitations in NetWorker support for VMware HA:

- ◆ Any leftover **nsrindexd** processes for clients at the time of high availability do not terminate and must be stopped manually.
 - a **nsrindexd** process on the virtual NetWorker server must be stopped manually after the virtual client failover.

- a `nsrindexd` process on the NetWorker server must be stopped manually after failover of the NetWorker storage node.
- `nsrindexd` and `ansrd` processes must be stopped manually after failover of a virtual remote storage node while `nwrecover` of data is in progress on the storage node.
- ◆ A Savegroup automatic restart will restart the backup with `level=0`, ignoring the previously configured savegroup level information.
- ◆ Automatic cloning operations are successful only for save sets that are completed *after* the failover.
- ◆ An archive request of a virtual client does not exit after failover.

More information on VMware HA limitations is provided in the section [“NetWorker 7.5 Service Pack 1 problems and limitations”](#) on page 49.

ESX migration while the NetWorker server or storage node process backup/recovery operations is not supported

When performing an ESX migration, if there is an ESX cluster and one of the VMs in the active node in that cluster is hosting a NetWorker server or storage node, and the HA workflow is in use (either directly or through VMware Site Recovery Manager), then the NetWorker server or storage node will not process any backup or recovery request at that time.

Services will resume once the VM client hosting the NetWorker server or storage node is back online after the ESX migration.

Clarification of NetWorker support for LTO-4 devices

The use of LTO-4 hardware-based encryption is supported by NetWorker when controlled by management utilities that are provided with the LTO-4 hardware, or by third-party key management software. EMC does not test or certify these key management utilities; however, the NetWorker application can read from and write to LTO-4 devices that use hardware-based encryption and the use of this encryption is transparent to NetWorker.

Neither the encryption nor the key management process are managed by the NetWorker application. This includes the ability to turn encryption off/on within NetWorker, and the management of encryption keys.

Save set completion message and custom scripts

In NetWorker 7.5 Service Pack 1, changes were made to the *done saving* saveset completion message logged in the `daemon.raw` file. This can impact scripts designed to parse the message. In versions prior to NetWorker 7.5 Service Pack 1, a save set completion message similar to the following was reported:

```
nsrd client.corp.emc.com:D:\home\copy\ss420 done saving to pool
'poolname' (tape.001) 65 KB
```

In NetWorker 7.5 Service Pack 1, this message has been changed to the following:

```
nsrd client.corp.emc.com: 65 KB are saved to pool 'poolname'
(tape.001) D:\home\copy\ss420
```

Note: In the next release, the save set completion message will be reverted back to the syntax that was used in releases prior to NetWorker 7.5 Service Pack 1. When upgrading to NetWorker 7.5 Service Pack 1, ensure that scripts are updated to parse both the original message and the new message.

Support for the NetWorker SnapImage module

Support for the NetWorker SnapImage module was removed in NetWorker 7.5.

Changed in NetWorker 7.5 Service Pack 1

Support has been added for the NetWorker SnapImage module 2.0.2 for Windows and 1.6.1 for UNIX.

Language pack support

The initial release of NetWorker 7.5 did not include support for language packs.

Changed in NetWorker 7.5 Service Pack 1

The NetWorker release 7.5 SP1 includes language packs. Language packs can be installed as part of the NetWorker installation process, or can be installed separately after the NetWorker software has been installed.

See [“Internationalization support” on page 148](#) for important notes, tips, and known limitations related to language support in NetWorker 7.5 Service Pack 1.

Path-to-tape (virtual to physical tape) support with NDMP cloning

The NetWorker 7.5 Release Notes stated that this feature was supported in NetWorker 7.5. However the path-to-tape feature was not released to market as planned and the decision was made after press time for the NetWorker 7.5 Release Notes. The support for path-to-tape is being re-introduced and requires NetWorker 7.5 SP1.

New in NetWorker 7.5 Service Pack 1

Using NDMP cloning, the save sets written to virtual tape, but not save sets written to NAS, in a DL3D 1500 or 3000 VTL appliance can be directly copied to an attached physical tape library. This process, known as path-to-tape, frees up network bandwidth. The NetWorker backup process manages the data movement and catalogs the physical tape copy with a new media ID. NetWorker can also directly restore both the virtual tape data and the physical tape copy.

IMPORTANT

This feature is available with EMC DL3D models 1500 and 3000 at version 1.1.2. Version 1.1.2 is available on request from your EMC DL3D account representative.

For more information, see [“Updated information for NDMP Path-to-Tape cloning of regular save sets” on page 172](#).

Deduplication support for Microsoft Windows SYSTEM save sets

The deduplication of Microsoft Windows SYSTEM save sets was not supported.

New in NetWorker 7.5 Service Pack 1

NetWorker supports the deduplication of Windows SYSTEM save sets. Both legacy SYSTEM and VSS SYSTEM save set deduplication is supported.

Removal of save sets from an Avamar replication node

When a NetWorker save set expired, its corresponding save set in an Avamar replication node was not removed.

New in NetWorker 7.5 Service Pack 1

When a NetWorker save set expires, its corresponding save set on an Avamar replication node is removed. See [“Configuring a deduplication node for replication” on page 174](#) for information about a configuring this option.

Single-Step recovery of a VMware virtual machine

The disaster recovery of a VMware virtual machine was a multi-step process that involved separate tools and workflows.

New in NetWorker 7.5 Service Pack 1

The disaster recovery of a VMware virtual machine is now a single stage process on Windows XP or later hosts. If a backed up virtual machine is lost, for example the ESX server suffers a disaster, you can use NetWorker to perform a full recovery. See [“Performing a single step recovery of the full VMware virtual machine” on page 169](#) for more information.

Changed default settings for nsrjobd daemon

The `nsrjobd` daemon runs on the NetWorker server and is responsible for monitoring NetWorker activity during a backup or recovery operation.

Changed in NetWorker 7.5 Service Pack 1

The default retention period for the `nsrjobd` database has been reduced from seven days to three days. The maximum database size has been increased from 20 MB to 40 MB. These settings should result in better performance.

Note: The new default settings will not override any changes you may have implemented in a previous release.

Improvements to adhoc (manual) backup reporting

The following improvements have been made to adhoc (manual) backups.

Changed in NetWorker 7.5 Service Pack 1: improved backup notification

In previous NetWorker releases, the level specified for the manual backup was ignored and a notification was not generated.

The `save` command always performs a full backup, regardless of whether the backup level is specified. For NetWorker 7.5 Service Pack 1, a notification is generated indicating that a full backup is performed regardless of the backup level specified in the `save` command. For example if the `save -l incr` is entered from the command line, the following message displays:

```
"Client initiated backup.Option '-l' is ignored and backup is
performed at level adhoc"
```

Changed in NetWorker 7.5 Service Pack 1: improved mminfo reporting

In previous NetWorker releases, the output from the `mminfo` command (value for the level field) was left blank or incorrectly contained the level passed to the `save` command. This was inaccurate since the backup was performed at a level full.

The output from the `mminfo` command will now list the value `manual` for the adhoc backup level field.

NetWorker release 7.5

NetWorker release 7.5 includes these new features and changes:

- ◆ "Update enabler code for updating from NetWorker releases prior to 7.5" on page 14
- ◆ "License expiration alerts" on page 15
- ◆ "Support for Probe-based (Event-based) backups" on page 15
- ◆ "License conformance summary report" on page 15
- ◆ "TruCluster is not supported in NetWorker release 7.5" on page 15
- ◆ "Lockbox password management" on page 15
- ◆ "No default username/password combination for NMC" on page 16
- ◆ "LDAP v3 authentication for Console server users" on page 16
- ◆ "Enhanced VMware support" on page 17
- ◆ "Enhanced VMware support" on page 17
- ◆ "Support for the IPv6 protocol" on page 18
- ◆ "Changes to the Client Backup Configuration Wizard" on page 19
- ◆ "Directed recovery of save sets" on page 19
- ◆ "Bootstrap report is sent to the default email account" on page 20
- ◆ "Script-less command line improvements for cloning" on page 20
- ◆ "Backing up renamed directories" on page 20
- ◆ "Improvements to the scanner command" on page 21
- ◆ "JRE is no longer packaged with the NetWorker software" on page 21
- ◆ "JRE version 1.6 is required to run NMC on Windows with IPv6" on page 21
- ◆ "Parallelism for backup groups" on page 21
- ◆ "Enhanced savegroup logging and log viewing" on page 21
- ◆ "httpd replaces gsttclsh as web server process for NMC" on page 22
- ◆ "Support for OS Implemented Device Persistent Naming" on page 22
- ◆ "DXUL Save function removed" on page 22
- ◆ "Solaris 8 platform no longer supported" on page 23
- ◆ "Message changes may impact custom scripts" on page 23

Update enabler code for updating from NetWorker releases prior to 7.5

When updating from any pre-7.5 NetWorker release to release 7.5, the required update enabler is **ea7e6c-a61631-bf0db0**.

IMPORTANT

Apply the update enabler *before* upgrading to NetWorker release 7.5. Contact EMC licensing to get the update enabler permanently authorized.

License expiration alerts

A critical alert message was generated 14 days before a license was about to expire.

Changed in NetWorker 7.5

An informational (blue) alert is generated each day from 14 to 3 days before license expiration. A warning alert (yellow) is generated each day from 2 to 1 days before license expiration. A critical alert (red) is generated when the license has expired.

You can view alerts in one of two ways:

- ◆ From the Administration window, click **Monitoring>Alert**.
- ◆ From the Console window, click **Events**.

Support for Probe-based (Event-based) backups

NetWorker release 7.5 introduces support for probe-based backups, also known as event-based backups. Probe-based backups are set up from the **Configuration** tab of the **NetWorker Administration** window. Probe-based backups allow for backups to be driven by an event, rather than the current NetWorker time-based backups. For example, if there was a file that you wanted to be backed up every time the file changed, you can configure a probe-based backup with a short probe interval (15 minutes) so that every 15 minutes the file is checked to determine if anything has changed and, if it has, a backup is performed.

An event probe is a script or a binary provided by NetWorker administrators or NetWorker database modules. More information on creating probe-based backups is provided in the *EMC NetWorker Release 7.5 Administration Guide*.

License conformance summary report

In the course of using the NetWorker software to protect enterprise data, users add clients and modules as needed. It can be helpful to see a summary report of the current license information for any given NetWorker server. A summary report allows users to determine several things. For example:

- ◆ Which or how many products or features have been enabled
- ◆ Which or how many licenses have been purchased and authorized
- ◆ Which or how many of those licenses have been used and, conversely, how many are still available to use
- ◆ How many additional licenses might be needed
- ◆ Whether the number of licenses conforms to the number of licenses in use

The License Conformance Summary report is run from the NetWorker Console. The information is presented in a tabular form that makes it easy to see installed products, licenses that are in conformance, and which additional licenses, if any, must be obtained in order to close conformance gaps.

TruCluster is not supported in NetWorker release 7.5

NetWorker release 7.5 does not support the TruCluster environment.

Lockbox password management

The NetWorker server provides NetWorker Modules and clients with the ability to securely store and retrieve passwords over a network using the lockbox feature. The feature can be enabled from the **Configuration** tab of the **NetWorker Administration** window.

Authorization for Console server users

Functions on the Console server were grouped into two user roles: Console Administrator and Console user.

New in NetWorker 7.5

A third user role, Console Security Administrator, has been added. The three Console server user roles are described in [Table 2 on page 16](#). These roles cannot be deleted and their privileges cannot be changed. When Console is first opened, the default administrator is assigned to all three Console user roles.

For more information about managing Console server users, refer to the Console Server Management chapter in the *EMC NetWorker Administration Guide*.

Table 2 Console user roles

User Role	Privileges
Console Security Administrator	<ul style="list-style-type: none"> Add, delete, and edit users Configure login authentication Control user access to managed applications such as a NetWorker server All tasks available to a Console User role
Console Application Administrator	<ul style="list-style-type: none"> Configure Console system options Set retention policies for reports Specify the NetWorker server to backup the Console database Specify a NetWorker License Manager server Run the Console Configuration wizard All tasks available to a Console User role
Console User	All tasks except for those tasks explicitly mentioned for the Console Security Administrator and the Console Application Administrator.

No default username/password combination for NMC

A default Console Administrator username with a default password was automatically set up during a new installation.

New in NetWorker 7.5

When the Console server is opened for the first time after a new installation, the NMC Configuration wizard is launched and requires that you provide a password for the default Console Administrator user. If performing an upgrade, there is no change in the behavior since the wizard is only launched for new installations.

LDAP v3 authentication for Console server users

Usernames and passwords had to be maintained on the Console server. This is known as native authentication.

New in NetWorker 7.5

Native Console server authentication is still available and is enabled by default. However, usernames and passwords for the Console server can now be maintained and authenticated by an external LDAP v3 compliant server such as a Microsoft Active Directory server. To set up LDAP authentication for the Console server, access the Configure Login Authentication wizard from the Console Setup menu.

There is no need to add usernames and passwords on the Console server. However, one must still add LDAP usernames to user groups on the NetWorker server to enable privileges on the NetWorker server.

For more information about setting up LDAP authentication, refer to the Console Server Management chapter in the *EMC NetWorker Administration Guide*.

Enhanced VMware support

Support for VMware has been significantly enhanced with the features described in this section. For more information about using VMware with NetWorker, refer to the Support for VMware chapter in the *EMC NetWorker Administration Guide*.

New in NetWorker 7.5: automatic discovery of VMware environments

The NetWorker software can automatically discover VMware environments, and, on a scheduled or on-demand basis, can detect changes to those environments. Auto-discovery is performed by contacting one or more VMware VirtualCenter.

Note: The NetWorker software supports auto-discovery through VMware VirtualCenter only. It does not support auto-discovery through an ESX server.

New in NetWorker 7.5: visual representation of VMware environments

After performing auto-discovery of VMware environments, the NetWorker console provides a graphical or tabular view of your VMware environments. This map view is available in the right pane when the Virtualization node is selected in the left pane of the Configuration screen.

The Virtualization map view displays an empty Backup Type box in the following scenarios:

- ◆ The NetWorker client is created using the **New** dialog instead of the Client Configuration Wizard.
- ◆ The NetWorker server is upgraded from a pre-7.5 release to the 7.5 release.

A number of operations are available from the Virtualization node, such as creating a new client for an unprotected virtual machine, or initiating a recovery operation for a virtual machine.

New in NetWorker 7.5: notification of new virtual machines

After auto-discovery has been performed, if the NetWorker software determines that there are any new virtual machines, a notification will be triggered.

New in NetWorker 7.5: support for traditional file system backups and VMware Consolidated Backups

NetWorker clients can be configured for virtual machines to perform either NetWorker file system backups or VMware Consolidated Backups (VCB).

New in NetWorker 7.5: using the Client Configuration Wizard to configure virtual clients

You can now use the Client Configuration Wizard to create a Client resource for a virtual machine or modify an existing Client resource.

Deploying NetWorker with a Hyper-V Guest on Microsoft Windows Server 2008

Deploying NetWorker with a Hyper-V Guest on Microsoft Windows Server 2008 is now supported.

Installation of NetWorker Server or Storage Node in a virtual system

Installation of the NetWorker server or storage node in a virtual system, such as a VMware Guest or Hyper-V Child, is not recommended as it may lead to resource starvation (for example, CPU or I/O bandwidth). Also, the NetWorker server and storage node are dependant on storage hardware, such as tape drives and disk arrays, which might not be available in virtual environments or the virtual infrastructure may interrupt or slow communications to these devices.

Support for the IPv6 protocol

The Internet Protocol version 4 (IPv4) is the standard internet address protocol and has always been supported by NetWorker.

New in NetWorker 7.5

The IPv6 protocol is now supported in addition to IPv4. IPv6 is a new internet protocol that can work concurrently with IPv4 and is intended to eventually replace IPv4. IPv6 increases the number of available IP addresses, as well as adding improvements in areas such as routing and network autoconfiguration.

IPv6 is in the form “[#:#:#:#:]:Port”, where IPv4 is in the form “#.#.#.#:Port”. The square brackets are required to enclose the six decimal integers, since a colon is used to separate both the IPs from each other and from the port number. The following is an example of an IPv6 as it would be entered from the command line or the user interface:

```
http://[2001:720:1500:1:a100]:80/index.html
```

IPv6/IPv4 interoperability

NetWorker release 7.5 works in network environments that are pure IPv4 environments, pure IPv6, and mixed (dual stack) IPv4/IPv6.

If a NetWorker host is only IPv4, then it will interoperate only with NetWorker storage nodes, and servers that are IPv4. The same restriction applies for NetWorker hosts that are set up for IPv6 only, and NetWorker hosts that are set up for mixed IPv4/IPv6.

Additional IPv6 resources

More information on IPv6, as well as supported NetWorker client/server configurations, is provided in the *EMC NetWorker Installation Guide*. Also consult your operating system vendor documentation for IPv6 information.

The following list contains some vendor-specific IPv6 resources:

- ◆ Solaris
System Administration Guide: IP Services
- ◆ HP-UX
HP-UX IPv6 Transport Administrator's Guide for TOUR 2.0: HP-UX 11i v2
HP-UX IPv6 Transport Administrator's Guide for TOUR 2.0: HP-UX 11i v1
- ◆ Tru64
Network Administration: Connections
http://h30097.www3.hp.com/docs/base_doc/DOCUMENTATION/V51B_HTML/ARH9CDTE/TITLE.HTM
- ◆ AIX
IPV6 on AIX 5L White Paper

- ◆ IRIX
IRIX Network Programming Guide
- ◆ Microsoft Windows
There are numerous whitepapers, technical notes, and FAQs devoted to IPv6 on Microsoft's web portals.

Changes to the Client Backup Configuration Wizard

The NetWorker Client Backup Configuration wizard was not able to modify existing clients but could only create new clients. Additionally, there were many set up dependencies to enable the Client Backup Configuration wizard for use.

New in NetWorker 7.5

The Client Backup Configuration Wizard is now fully integrated with the NetWorker Management Console, and has been enhanced with the following new features and changes:

- ◆ In addition to creating new clients, an existing client can now be modified using the Wizard.
- ◆ Steps have been simplified to make client setup easier.
- ◆ The wizard is part of the NMC GUI, which can run on a host without any NetWorker packages installed. Note that the NetWorker client package must be installed on a host that is being configured for backup through the Wizard.
- ◆ The wizard can be run on a host that does not have direct communication to the NetWorker client being configured. However, direct communication is required between the NMC server and the NetWorker client being configured.
- ◆ The host no longer requires authorization with an entry in the NetWorker client's "servers" file.
- ◆ A group called "Client Management" has been added to the security model, so that users who do not have OS-level root (UNIX) or Administrator (Windows) privileges but do have NetWorker server and client privileges can perform client configuration.

Note: The Client Configuration Wizard cannot be used to configure a NetWorker NDMP client or a NetWorker client for NetWare.

For more information about using the Client Configuration wizard, refer to the Backing Up Data chapter in the *EMC NetWorker Administration Guide*.

Directed recovery of save sets

Directed save set recoveries were not supported in NetWorker.

New in NetWorker 7.5

You can now perform a directed recovery of save sets from the command line on either UNIX or Windows. You can also perform a directed recovery of save sets from the UNIX nwrecover user interface. For more information about performing a directed recovery of save sets, refer to the Recovering Data chapter in the *EMC NetWorker Administration Guide*.

Bootstrap report is sent to the default email account

The NetWorker server bootstrap report was sent to a printer.

New in NetWorker 7.5

By default, bootstrap reports are now sent as an email to the default email recipient, the administrator or root. To change the email recipient, open the Bootstrap notification and configure a new email recipient.

You can also choose to send the reports to the default printer configured for the NetWorker server. To change the default printer, edit the Printer attribute in the Group resource.

For more information about bootstrap reports, refer to the Backup Groups and Schedules chapter in the *EMC NetWorker Administration Guide*.

Script-less command line improvements for cloning

There were limitations with the **nsrclone** command that required complex **mminfo/nsrclone** wrapper scripts to extend certain features such as save set selection.

New in NetWorker 7.5

The need for **mminfo / nsrclone** scripting is now reduced or eliminated. The **nsrclone** command provides numerous selection criteria for save sets and cloning objects. You can also use the **nsrclone** command to change the browse time of a save set, if required.

For more information about using the new **nsrclone** command features, refer to the Cloning chapter in the *NetWorker Administration Guide*.

Backing up renamed directories

When a renamed directory was encountered during a non-full backup, the unchanged files and subdirectories under the renamed directory were not included in the backup. This could make it difficult to locate these files during a recovery.

New in NetWorker 7.5

You can now select to back up the files and subdirectories of a renamed directory even if only the name of the directory has changed. If this feature is enabled (select the **Backup renamed directories** attribute for a client resource), and a directory is renamed, all files and subdirectories under that directory will be backed up during the next scheduled full or non-full backup.

The advantage of this feature is that it is easier to locate the files and subfolders of a renamed directory when performing a recover operation. One disadvantage is that non-full backups will be larger if a renamed directory is detected.

To enable this feature, select the Backup renamed directories attribute in the NetWorker Client resource.

Improvements to the scanner command

There was no way to limit the range of records on a volume that had to be added back into the media database. The **scanner** program could only add the entire volume into the media database.

New in NetWorker 7.5

When a volume is marked with the scan needed flag, the user can specify the starting file and record numbers that need to be scanned into the media database. Use **scanner -f file -r record** when a whole volume scan is not needed. This shortens the time required to run the **scanner** program.

For more information about the **scanner** program, refer to the Recovering online indexes for a NetWorker server section in the chapter titled Recovering Data in the *NetWorker Administration Guide*.

JRE is no longer packaged with the NetWorker software

In releases prior to 7.5, JRE (Java Runtime Environment) 1.5 was packaged with the software and was automatically installed as part of the NetWorker installation if it was not detected on the system.

New in NetWorker 7.5

The JRE version 1.6 or 1.5 is required to access the NetWorker Management Console. JRE version 1.4.2 and earlier are not supported with NetWorker release 7.5.

The JRE 1.6 is not packaged with the software. If JRE 1.5 or 1.6 is not detected on the system during the NetWorker installation, you will be prompted to go to the Java website to download and install the required version.

JRE version 1.6 is required to run NMC on Windows with IPv6

If using NetWorker in a Windows environment with IPv6, JRE version 1.6 is required for running a NMC client. However, JRE version 1.5 is still supported for running NMC on a dual stack (IPv6 and IPv4) Windows system where IPv4 is being used to communicate with the NMC server.

Parallelism for backup groups

There was no way to specify save set parallelism for a backup group.

New in NetWorker 7.5

In the backup group resource, you can specify the maximum number of save sets that can be backed up simultaneously by the backup group. The default value is 0, which means that parallelism is not restricted.

Enhanced savegroup logging and log viewing

When a group was backed up, details of the corresponding savegroup's child jobs were temporarily saved to files in the following location, `NetWorker_install_dir\nsr\tmp\sg\savegroup_name`. There was no easy way to associate the output of a savegroup's child jobs with the parent savegroup job. Additionally, these output files were overwritten when the group was next backed up.

New in NetWorker 7.5

By default the pre-7.5 behavior is retained. However, you can now specify that details of a savegroup's child jobs be saved in files that are named according to the child job ID. These files are saved to `NetWorker_install_dir\nsr\logs\sg\savegroup_name\Job_ID` where *Job_ID* is a file whose name corresponds to a savegroup child job ID.

The child job files are purged based on the NetWorker server resource attributes Jobsdb retention in days and Jobsdb maximum size (KB).

To enable this feature, select the **Savegroup log by job id** attribute of the NetWorker server. For more information, refer to the chapter titled NetWorker Server Management in the *NetWorker Administration Guide*.

To help locate and retrieve information about a savegroup's child jobs, a new command, **jobsquery**, has been created. For more information, refer to the man pages or the *Command Reference Guide*.

httpd replaces gsttclsh as web server process for NMC

The NetWorker Management Console web server process was named gsttclsh.

New in NetWorker 7.5

The NetWorker Management Console for NetWorker release 7.5 uses httpd as the web server process instead of gsttclsh:

- ◆ On Windows, httpd is registered as the EMC GST Web Server. There are always two httpd processes running when the NMC server is active.
- ◆ On UNIX, during the installation of NMC you are prompted for the username and group name to use for running the web server process. There are also two or more httpd processes running when the NMC server is active, where the parent httpd process runs as root and the child process(es) run as the username specified during the installation.

Support for OS Implemented Device Persistent Naming

Linux and Windows OS platforms offer persistent device file naming across reboots.

New in NetWorker 7.5

NetWorker now supports Windows persistent names as well as the persistent storage device name functionality using udev, which is available with recent Linux kernel versions.

Setting NetWorker environment variables in a Sun cluster

In a Sun Cluster environment, the NetWorker.start script is used instead of the `/etc/init.d/networker` script to start the **nsrd** process. NetWorker environment variables must be added to the **networker.start** script instead of `/etc/init.d/networker` script. Place the environment variables in the **networker.start** script before the start up location of **nsrd**. The **networker.start** script is located in the `/usr/lib/nsr` directory.

DXUL Save function removed

DXUL save function has been removed from NetWorker. Due to a conflict with the DXUL library, DXUL backup awareness can no longer be enabled. DXUL recovery awareness is still supported. NetWorker hosts that are running DXUL FSM (file system) must ensure that they are using version 3.3 or later.

Solaris 8 platform no longer supported

The NetWorker software no longer supports the Solaris 8 OS platform.

Message changes may impact custom scripts

If you have custom scripts that take NetWorker messages as input, examine those scripts after upgrading to determine whether any adjustments are required. As with any new software release, messages may change. This section includes some examples of changed messages but is not an exhaustive listing.

Changed nsrd media waiting event message

In the nsrd media waiting event message, volumes was changed to volume(s). For example:

```
Waiting for 1 writable volumes to backup pool 'Default' tape(s)
or disk(s) on dren-fgre-03.nat.ber.com
```

has been changed to:

```
Waiting for 1 writable volume(s) to backup pool 'Default' tape(s)
or disk(s) on dren-fgre-03.nat.ber.com
```

nsrjb message to log information about slot, volume and device for load and unload operations

A **nsrjb** program message that could be used to determine which tapes were loaded into which drives used to be written to the daemon.log file at any verbosity level. This message is now written to the daemon.log file only when the **nsrjb** program is executed with a verbosity of level 1 (**-v**) or higher. An example of this message follows:

```
nsrd: media info: loading volume RC36L2 into
rd=host.name.reat:/dev/vf/TAPE12
```

Fixed problems

This section provides details on fixed bugs for the NetWorker releases:

- ◆ “Product issue details in Issue Tracker” on page 24
- ◆ “Fixed bugs in release 7.5 Service Pack 3” on page 25
- ◆ “Fixed bugs in release 7.5 Service Pack 2” on page 27
- ◆ “Fixed bugs in release 7.5 Service Pack 1” on page 32
- ◆ “Fixed bugs in release 7.5” on page 34

Product issue details in Issue Tracker

EMC Issue Tracker offers online access for up-to-date product issue information.

Product issues are sorted alphabetically by product feature and by issue number within each product feature. Product issue details include a three column table with the following information for each product issue:

- ◆ Issue number — Unique case number assigned to track the problem. If the problem was found during product test by EMC, the unique case number can be identified by its 3-letter product suffix.
- ◆ Product feature The name of the feature affected.
- ◆ Problem summary — A short (one or two sentence) description of the problem.

*Example issue number
search*

When searching for a NetWorker defect in Issue Tracker, for LGTpa or LGTsc defects list the Defect Number followed by suffix **nw**. For example, **LGTsc12345** would be **12345nw**. For defects prefixed by NW, enter the number as is.

- ◆ Fix Number — Number of the patch or fix for the problem.
- ◆ Knowledgebase ID — EMC Knowledgebase solution describing the issue.
- ◆ Host OS — Operating system version affected by the problem.
- ◆ Host Type — Host Type affected by the problem.
- ◆ Problem Summary — High-level description of the problem.
- ◆ Symptom — Observable behavior of the problem.
- ◆ Special Conditions — Brief description of the unique scenarios that may need to occur in order to reproduce the issue.
- ◆ Workaround or Fix Summary — Detailed description of what was fixed and any known workarounds.
- ◆ Found In Version — EMC product version where the problem was found.
- ◆ Impact Level — Severity and impact of the issue.
- ◆ Additional Feature — Additional categorization of problems within an EMC product feature set.
- ◆ Impact Statement — Description of how the issue might affect the customers environment.

Note: The most up-to-date product issues for EMC NetWorker release 7.5 are detailed online in the EMC Issue Tracker available on the EMC Powerlink® website: <http://Powerlink.EMC.com> under **Support > Knowledgebase Search > Issue Tracker Search**.

Fixed bugs in release 7.5 Service Pack 3

Table 3 on page 25 lists customer reported defects resolved in release 7.5 Service Pack 3.

Table 3 Fixed bugs in NetWorker release 7.5 Service Pack 3 (page 1 of 3)

Issue Number for customer service	Issue Tracker Issue Number	Description
LGTsc21714	21714nw	Some files are skipped or missed during recovery if a parallel save of the same parent mount point is performed
LGTsc23251	23251nw	VSS Recovery fails due to the doubling of the PendingFileRenameOperations value.
LGTsc27092	27092nw	The tape_perf_test fails with the message open_it returns fffffff
LGTsc28166	28166nw	Save set retention period gets incremented by a day for cloned Oracle save set
LGTsc28433	28433nw	VSS SYS FILESET:\saveset fails because it is selecting the ONTAP NetApp VSS provider
LGTsc28518	28518nw	Some saving/reading messages are missing from the daemon log file
LGTsc30674	30674nw	No solution offered after the warning message "64-bit inode number uses high order 32 bits" appears
LGTsc31984	31984nw	In a NDMP DDS configuration, the nsrmdmp_save cores on storage node 2 after taking over the volume from storage node 1.
LGTsc32131	32131nw	A clone save set expires on the retention date though the source save set remains browsable
LGTsc32157	32157nw	Disaster recovery of domain controller fails to restore domain functions
LGTsc32333	32333nw	NMC does not update with the correct information in the Monitoring -> Sessions -> Clone Sessions tab when cloning jobs are run
LGTsc32555	32555nw	Bootstrap save very slow until jobsd is stopped
NW105423	NW105423	NMC library data flashes between visited libraries when the polling/stop comes before the polling/start
NW105426	NW105426	Some successfully backed up directories in a Windows nested mount point do not display in the recover GUI or recover command line
NW105980	NW105980	Random NetWorker group restarts occur after a failed backup causes 'savegrp.exe' application faults
NW110385	NW110385	In NMC, the expiration field is blank for some volumes, with mminfo -m showing the volretent as "undefined" and displaying all ssids as past retention.
NW110404	NW110404	Failed save sets are reported as successful by mminfo
NW112119	NW112119	Non-root users cannot recover data
NW112414	NW112414	Users who are not in the administrators group cannot connect to the NetWorker server via NMC
NW112455	NW112455	Automatic cloning fails for savesets that backed up a UNC share
NW112522	NW112522	Backup of NetWorker client causes winworkr GUI to crash if started from GUI, or save.exe to crash if stated from command line

Table 3 Fixed bugs in NetWorker release 7.5 Service Pack 3 (page 2 of 3)

Issue Number for customer service	Issue Tracker Issue Number	Description
NW112571	NW112571	Backup of a client fails with savefs and save command being launched on the NetWorker server instead of the client
NW112726	NW112726	The NetWorker nsrexecd fails to start when a small port range is specified
NW112790	NW112790	Oracle backup logs saved at /nsr/logs/sg/ are truncated
NW113167	NW113167	NetWorker backup of a holey file does not complete
NW113313	NW113313	Index directory located on NFS mount causes backup failure
NW113382	NW113382	Scanner and uasm are unable to recover data from a clone tape if the volume containing the header is not available.
NW113413	NW113413	When the library loading door is opened to load and unload tapes, NetWorker puts the library in offline mode in the server must be rebooted to get the library back online.
NW113715	NW113715	Nsrd becomes unresponsive after nsrlcpd exits, requiring a NetWorker server reboot.
NW113839	NW113839	During a NetWorker upgrade, the Lockbox becomes unusable after changing the NetWorker version, and client creation fails.
NW113841	NW113841	nsrmmdbd core dumps at startup during the consistency check.
NW113850	NW113850	NetWorker hangs when changing the debug level for nsrd.
NW113950	NW113950	The Group schedule does not work when Client Override is selected
NW113998	NW113998	mminfo -m reports the incorrect write size on an AFTD while using /nsr/debug/force_disk_usage.
NW114157	NW114157	NetWorker reuses staging tapes after a read attempt on the staging target device.
NW114367	NW114367	The NetWorker server hangs if a single Storage Node is unresponsive.
NW114407	NW114407	NMC crashes after upgrading the NetWorker server and client.
NW114591	NW114591	Intermittent NMC core dumps occur at least once a month
NW114655	NW114655	After staging off all data from AFTD and running nsrim -X, the volume is marked as recyclable.
NW114856	NW114856	nsrlcpd fails to acquire a device lock during backups.
NW114899	NW114899	Savenpc backups hang after upgrading the NetWorker server and client to version 7.4 SP4 and later.
NW114913	NW114913	NetWorker does not allow sessions, preventing new or existing sessions from starting a backup to media, and resulting in savegroup hangs.
NW115158	NW115158	nsrwatch adds a break to each line of output when Japanese LANG environment is used.
NW115381	NW115381	Upgrading clients using nsrpush overwrites the /res/servers file.
NW115387	NW115387	A VSS system state restore fails and crashes with a dump for a dedupe client backup to Avamar.
NW115555	NW115555	NMC becomes unresponsive and core dumps, with many FCP warning messages.
NW115687	NW115687	Recover core dumps when performing a directed recover with a large number of files.
NW116153	NW116153	In an environment with multiple FTDs, a backup can fail during switching of volumes
NW116719	NW116719	nsrmmdbd core dumps and restarts, resulting in various performance issues

Table 3 Fixed bugs in NetWorker release 7.5 Service Pack 3 (page 3 of 3)

Issue Number for customer service	Issue Tracker Issue Number	Description
NW117544	NW117544	nsrexecd takes a long time to start with non-responding entries in the servers file
NW117598	NW117598	A nsrd memory leak occurs on Windows
NW118772	NW118772	The NetWorker client fails to install on Solaris when the client has a long name
LGTsc30829	30829nw	Increase the NetWorker device limit to >= 700.
NW112801	NW112801	The Silo configuration option should not be displayed on platforms where it is not supported
NW112846	NW112846	The bootmgr file must be skipped during file system backup (C:\) since it comes under VSS SYSTEM FILESET.
NW113503	NW113503	Improved error reporting of invalid NSR peer information resources.
NW113505	NW113505	GSS authentication should be reauthenticated upon session timeouts
NW114055	NW114055	Change disk volume selection criteria to be based on utilization and not label time.
NW114057	NW114057	Change device target sessions from the default value of 4 to 1 for AFTDs, and reduce device max sessions for AFTDs from 512 to 32.
NW114561	NW114561	Qualification and addition of LTO-5 support.
NW114648	NW114648	Snapshot management needs to be enabled for Solaris on AMD server in order to support Powersnap clients.
NW114701	NW114701	Add intelligent space management feature for AFTDs
NW114851	NW114851	Add a 'Warning' section to inquire man page and provide best practices.

Fixed bugs in release 7.5 Service Pack 2

[Table 4 on page 27](#) lists customer reported defects resolved in release 7.5 Service Pack 2.

Table 4 Fixed bugs in NetWorker release 7.5 Service Pack 2 (page 1 of 6)

Issue Number for customer service	Issue Tracker Issue Number	Description
LGTsc07681	07681nw	NDMP fbf recover requiring files from incremental and full backups only recovers from incremental.
LGTsc08694	08694nw	Scanner -v command changes tape "used" parameter of NDMP Volumes
LGTsc09318	09318nw	Tape unmount fails when mail cap in use
LGTsc15448	15448nw	File History generation fails for backups of SUN NAS 5320 filers
LGTsc15911	15911nw	NMC Not Updating when Cloning - Source Volume\Device incorrect
LGTsc17128	17128nw	Unable to autoconfigure NDMP Drives on SUN NAS 5320
LGTsc18393	18393nw	NetWorker does not dynamically detect disabled drives during inventory
LGTsc19487	19487nw	nsrscsi_save scheduled backup displays as successful when some BCVs were skipped
LGTsc20118	20118nw	Save fails in connecting directory section

Table 4 Fixed bugs in NetWorker release 7.5 Service Pack 2 (page 2 of 6)

Issue Number for customer service	Issue Tracker Issue Number	Description
LGTsc20439	20439nw	Recover operation does not start all ssid in parallel
LGTsc20477	20477nw	Volumes are marked full prematurely with "verify label on unload"
LGTsc20776	20776nw	nsriscpd fails to initialize on a multihomed storage node
LGTsc21910	21910nw	nsrexecd is dumping core
LGTsc22272	22272nw	NetWorker server is not using AFTD volume or jukebox volumes
LGTsc22381	22381nw	Subfolders not being backed up in folder containing mount points
LGTsc23887	23887nw	NDMP client cannot restore files with french characters in name
LGTsc23900	23900nw	Running nsrclone -J does not enforce the read host selection
LGTsc24102	24102nw	Inquire and dvdetect command issues occur on AIX
LGTsc24186	24186nw	Intermittent clone failures
LGTsc24230	24230nw	Daemon.raw cannot be rendered, looping indefinitely
LGTsc24392	24392nw	ACSLS communication fails after migration from NetWorker 7.2.2
LGTsc24484	24484nw	Savegrp parallelism not honored when using expander jobs for NMO4.5
LGTsc25060	25060nw	NMC GUI hangs, unable to login to AIX NMC server
LGTsc25508	25508nw	Problem mounting tape into LINUX storage nodes
LGTsc25669	25669nw	Save sets are marked in the expired "E" status and recyclable, but the media does not expire
LGTsc25887	25887nw	Environment variable required to customize the compress-period for nsrim runs
LGTsc26015	26015nw	Device auto-detection fails in NMC on Windows with nsrmon error
LGTsc26209	26209nw	AFTD Volumes are dismounting without notification
LGTsc26353	26353nw	nsrd hangs due to a daemon raw file lock
LGTsc26395	26395nw	Load volume issue on highly shared (DDS) environment
LGTsc26443	26443nw	More data is returned for a mminfo query for totalsize (the sum of all save sets) over a shorter period.
LGTsc26530	26530nw	nsrclone hangs when cloning an expired save set
LGTsc26537	26537nw	NetWorker overwrites a NDMP tape after the tape gets full
LGTsc26628	26628nw	NMC fails to display a very large number of volumes, with the gst service consuming 100% of CPU
LGTsc26831	26831nw	nsrexecd repeated backups are causing a slow memory leak
LGTsc27174	27174nw	NetWorker cannot manage the Jukebox due to a nsrmmgd issue
LGTsc27323	27323nw	The environment variable MMGD_EXTRA_LOAD_TIMEOUT=86400 is not being honored
LGTsc27421	27421nw	The Location field of non-barcode jukebox volumes is not updated during an inventory
LGTsc27438	27438nw	nsrd hangs in deadlock with nsrmmgd
LGTsc27811	27811nw	Unable to recover from avamar replication node

Table 4 Fixed bugs in NetWorker release 7.5 Service Pack 2 (page 3 of 6)

Issue Number for customer service	Issue Tracker Issue Number	Description
LGTsc28062	28062nw	Virtual client is consuming additional licenses in HP Service Guard
LGTsc28160	28160nw	nsrmmdbd updates to the media database hang when purging staged save sets
LGTsc28186	28186nw	Nsrclone output when using -J displays wrong storage node
LGTsc28205	28205nw	NDMP size upon completion is not reported in 7.5
LGTsc28455	28455nw	When loading a volume on an AIX storage node with CDI enabled, a tabe_bsf warning displays
LGTsc28506	28506nw	Incorrect create/open file errors are reported for /nsr on SAN disk
LGTsc28659	28659nw	Characters > 200 get truncated from the notification action field
LGTsc28789	28789nw	Each clone host needs at least two enabled devices
LGTsc28861	28861nw	A LUS race condition may cause processes to hang
LGTsc29069	29069nw	Running an inquire on Solaris10 skips devices at double digit LUNs
LGTsc29111	29111nw	nsrlcpd is unresponsive after a temporary jukebox disconnection
LGTsc29126	29126nw	Savegp -R ignores the -l parameter
LGTsc29159	29159nw	nsrmmgd/nsrlcpd stops mounting/unmounting volumes
LGTsc29197	29197nw	mminfo fails with RPC Authentication error and failure to initialize ports
LGTsc29301	29301nw	Save set chunking occurs during a backup
LGTsc29321	29321nw	There are missing values for attributes in jobsdb for NDMP cloning
LGTsc29340	29340nw	Confusing errors appear if during a recover the client cannot resolve the Storage Node hostname
LGTsc29351	29351nw	Unable to query volumes with blank location field
LGTsc29377	29377nw	NMC fails to withdraw more than one volume from ACSLS jukebox
LGTsc29561	29561nw	Cannot recover space after manual deletion of save set from MMDB.
LGTsc29681	29681nw	Change Journal use is not reported in the Savegroup Completion report.
LGTsc29763	29763nw	Unable to recover all files using the NMC GUI
LGTsc29771	29771nw	LDAP error "Error Size limit exceeded" displays for large User Directory
LGTsc29824	29824nw	mminfo does not filter output to specified clients when the query condition is set for today
LGTsc29884	29884nw	nwrecover recovers and relocates selected file(s) but does not recover the file to the correct directory
LGTsc29934	29934nw	Savepsm fails when there is a NMC instance in the folder other than legato
LGTsc29969	29969nw	The nwrecover GUI status shows "Off-line" instead of "near-line"
LGTsc30001	30001nw	A completed savegroup displays as interrupted in NMC Group Details window
LGTsc30071	30071nw	Idle device timeout does not work for automatic mounted tape
LGTsc30097	30097nw	Sorting by "Backup Date" in the Winworkr Recover GUI does not work
LGTsc30170	30170nw	Excessive jobsdb indication records overwhelm server

Table 4 Fixed bugs in NetWorker release 7.5 Service Pack 2 (page 4 of 6)

Issue Number for customer service	Issue Tracker Issue Number	Description
LGTsc30176	30176nw	A device becomes busy and eventually goes into service mode during clone
LGTsc30195	30195nw	Save.exe faults Due to liblocal.dll
LGTsc30219	30219nw	During crosscheck of the media database using nsrim -X, a command error appears
LGTsc30263	30263nw	Group Details dialog changes among different group's contents
LGTsc30271	30271nw	Volume marked as "Unlabeled" after NetWorker is restarted
LGTsc30472	30472nw	Windows XP does not secure files in folder called C:c but backup succeeds
LGTsc30475	30475nw	Cloning is slow from the local to remote device
LGTsc30547	30547nw	A nsrd core occurs on Sparc Solaris 10
LGTsc30554	30554nw	The ssaccess time remains set to the original fragment creation time
LGTsc30690	30690nw	Aliases field updated improperly in cluster configuration
LGTsc30859	30859nw	Some files in the subdirectory are not marked in nwrecover
LGTsc30876	30876nw	Nsrmm infinitely loop in insert_frag() while update_volume fails
LGTsc30901	30901nw	nsrck hangs on unregistered clients
LGTsc30903	30903nw	nsrscsi_recover dumps core
LGTsc30954	30954nw	Unable to use ampersand symbol for configuring LDAP authentication
LGTsc30977	30977nw	Data recovered by nsrscsi_recover is corrupted
LGTsc31024	31024nw	Invalid time format displayed when using Hungarian locale
LGTsc31127	31127nw	A MAC-OS save of millions of files fails with malloc() error
LGTsc31214	31214nw	With the introduction of the new stlcmd daemon, the code from LGTsc15434 is inactive
LGTsc31280	31280nw	nsrmmdbd consumes 100% CPU when backing up a client
LGTsc31283	31283nw	Running nsrclone -J fails to clone
LGTsc31457	31457nw	"Server network interface" is not used when performing a VCB proxy backup
LGTsc31564	31564nw	The nsrexecd service leaves behind defunct processes.
LGTsc31925	31925nw	Recovery of large chunked (2GB) save sets fails
LGTsc32077	32077nw	Invalid host ID when applying enablers and authorization codes
LGTsc32082	32082nw	NMM client index is not backed up to the server indexes.
LGTsc32105	32105nw	Windows 2008 cluster failover issues
LGTsc32218	32218nw	nsrd core dumps when attempting client backup
LGTsc32233	32233nw	Recover returns a zero exit code even if it fails
LGTsc32239	32239nw	In nwrecover, Object "%s" does not have a windowed ancestor
LGTsc32251	32251nw	nsrlcpd core dumps

Table 4 Fixed bugs in NetWorker release 7.5 Service Pack 2 (page 5 of 6)

Issue Number for customer service	Issue Tracker Issue Number	Description
LGTsc32258	32258nw	If the /nsr directory is not created then nsrexecd fails to start
LGTsc32458	32458nw	OP_LABEL timeout occurs in device shortage of labeling and cloning
LGTsc32510	32510nw	Savegrp fails with "Too many open files" Segmentation Fault
LGTsc32547	32547nw	Volume % used resets to 0 when the volume is marked as read-only
LGTsc32567	32567nw	A NetWorker memory leak occurs
LGTsc32602	32602nw	A multiple read from AFTD does not work
LGTsc32710	32710nw	During NDMP DSA recover, Listening Port number is not found and DSA is unresponsive
LGTsc32803	32803nw	A save output error creates a file in \nsr\tmp
LGTsc32929	32929nw	Savegrp dumps core with SEGV error
LGTsc33035	33035nw	NDMP backup fails with timeout reading error
LGTsc33068	33068nw	pstcmd runs 60 seconds after precmd completes
NW104850	NW104850	Cannot unmount tape from tape device in service mode
NW104920	NW104920	VSS SYSTEM FILESET fails on Windows 2008
NW105000	NW105000	nsrscsi_save intermittently corrupts the file pathname
NW105081	NW105081	Save hangs on cluster after "clu_is_cluster_disk: Invalid path"
NW105186	NW105186	There are multiple nsrmdms for the same device on the same storage node
NW105225	NW105225	Nsr_render_log is dumping core when rendering daemon.raw files
NW105293	NW105293	If the SnapImage client machine crashes or is rebooted while snapimage backup is in progress, the nsrndmp_save process utilizes 100% of the CPU on the NetWorker server and the process will not quit
NW105404	NW105404	The exit code for nsrclone returns 0 even when a clone job fails.
NW105495	NW105495	Multiple unload mount causes volume mark suspect/debug binary
NW105927	NW105927	GSTD dies when connecting to port 9000
NW110457	NW110457	User preferences under NetWorker.cfg are lost after upgrading
NW110458	NW110458	The recover command dumps core with Segmentation fault
NW110555	NW110555	The Japanese internationalized version of the nwrecover GUI returns an unreadable error message when LANG=ja is set and hangs when help is clicked
NW112149	NW112149	Even when the index for exchange logs and data has been purged, exchange save sets are displayed as recoverable
NW112382	NW112382	dvdetect started on a storage node receives -s <networker server> as argument instead of the content of the field server network interface
NW112809	NW112809	nsr_render_log has a segmentation fault
LGTpa82608	82608nw	Provide ndmpsup tool similar to nsrsup and pssup
LGTsc01126	01126nw	Request to stop and restart a client in a group without requiring a restart of the whole group

Table 4 Fixed bugs in NetWorker release 7.5 Service Pack 2 (page 6 of 6)

Issue Number for customer service	Issue Tracker Issue Number	Description
LGTsc07737	07737nw	There is no clear indication whether Encryption took place
LGTsc08195	08195nw	Better logging and notifications needed on suspect volume
LGTsc13473	13473nw	NDMP ghost index issue
LGTsc16042	16042nw	Add "QUANTUM.*DXi.*" to list of virtual jukeboxes in scsilbc
LGTsc17462	17462nw	RPC messages point to wrong server
LGTsc21675	21675nw	Add support for additional VSS Writers in Windows 7
LGTsc29086	29086nw	Silo support is required for NetWorker and Solaris x86 (64-bit)
LGTsc30840	30840nw	Improve Performance of DFS Backup in Windows 2008
LGTsc31792	31792nw	Turn on support for DMF on Linux x86_64
LGTsc32103	32103nw	Improve NetWorker Win32 storage node CIFS, nsr device performance
LGTsc33002	33002nw	Upgrade NMC to Apache 2.2.12 or later
NW104940	NW104940	Bundle release 7.5 Service Pack 2 with nsravatar version 4.1.106-27
NW112141	NW112141	Detect if Cluster Shared Volumes (CSVs) are configured on Windows 2008 R2
NW112243	NW112243	Incremental metadata feature for SnapImage

Fixed bugs in release 7.5 Service Pack 1

[Table 5 on page 32](#) lists customer reported defects resolved in release 7.5 Service Pack 1.

Table 5 Fixed bugs in NetWorker release 7.5 Service Pack 1 (page 1 of 3)

Issue number for Customer Service	Issue Number for Issue Tracker	Description
LGTsc08391	08391nw_c	The nsrlcpd daemon incorrectly rotates AlphaStor volumes when the volume is empty.
LGTsc14591	14591nw_c	During a directed recover of a large number of files, the recover hangs in unknown status and cannot be terminated
LGTsc15648	15648nw_c	Manual savegroup does not have the level defined.
LGTsc16628	16628nw_c	The software distribution inventory function fails if any OpenVMS clients were configured for the NetWorker server.
LGTsc17900	17900nw_c	After allocating volumes in the silo, the available slot range is modified such that the volumes cannot be used or labelled.
LGTsc18795	18795nw_c	NetWorker does not identify specific writers for the system to use with VSS file system backup.
LGTsc19567	19567nw_c	Resizing the xterm/terminal window running nsradm results in nsradm crashing with a bus error.
LGTsc20225	20225nw_c	Savepnpc logs repeated pstclntsave error messages.
LGTsc20522	20522nw_c	Volume unload loops indefinitely if the volume ID is changed.

Table 5 Fixed bugs in NetWorker release 7.5 Service Pack 1 (page 2 of 3)

Issue number for Customer Service	Issue Number for Issue Tracker	Description
LGTsc20840	20840nw_c	Cloning performance is degraded on HP LTO-3 after upgrading from NetWorker 7.2.2.
LGTsc21047	21047nw_c	When run nsrjb -V -v is run against the library, the number of ports is not returned.
LGTsc21240	21240nw_c	Index backups hang at the end of a savegrp.
LGTsc21258	21258nw_c	When using the keyword "All-local" for the save sets listing in a global or local zone setting, ZFS file systems get backed up but UFS file systems do not.
LGTsc21378	21378nw_c	A nsrstage error message indicates an invalid cloneid, even though it appears the clone is valid.
LGTsc21575	21575nw	NMC GUI hangs when terminating "Operation in progress" window.
LGTsc22291	22291nw_c	A reset of nsrlcpd does not clear outstanding operations.
LGTsc22336	22336nw_c	A Linux Save does not have a built in asm to ignore the binfmt_misc format.
LGTsc22342	22342nw_c	NetWorker does not remove expired save sets from a replicated Avamar node.
LGTsc22556	22556nw_c	When the nsrck command is run against the index for an HPUX 11i (PA-RISC) client at any level above 2, a core dump occurs.
LGTsc22595	22595nw_c	VCB image-level backup cannot be recovered in Winworkr GUI after file system backup is performed.
LGTsc22781	22781nw_c	Some PowerSnap save sets that have passed their browse and retention policy dates are not marked as recoverable or deleted from the media database.
LGTsc22849	22849nw_c	Devices cannot be added using jbedit.
LGTsc23049	23049nw	Slow shutdown time on Mac OS X if IPv6 is enabled.
LGTsc23091	23091nw_c	Running mminfo with -c switch on Windows 64-bit fails.
LGTsc23104	23104nw_c	Bus ordering on AIX is dependant on results of an ODM query, which makes it difficult to maintain consistent bus numbering for HACMP clusters.
LGTsc23149	23149nw_c	Scheduling override for a Single day is overwriting recurring overrides that fall on the same day.
LGTsc23366	23366nw_c	NetWorker is handling NFS4 file systems similar to local file systems, and attempts to back up NFS4 file systems.
LGTsc23458	23458nw_c	A Savegroup reaches its inactivity timeout but nsrmmid still reads the session as active, causing processes to hang.
LGTsc23519	23519nw_c	The nsrlcpd process fails to correctly inventory volumes in an ACSLS library that are reported as STATUS_VOLUME_NOT_IN_LIBRARY.
LGTsc23551	23551nw_c	The gst_ha_cluster script is not properly branded for Sun EBS.
LGTsc23860	23860nw_c	A number of nsrindexd defunct processes occur after a restart of Networker.
LGTsc23961	23961nw	Save/NMO backups fail if nsrauth only authentication used for non-root user on HP-UX 11i v3.
LGTsc24103	24103nw	AES Encryption Recovery Fails On HP-UX Itanium 64.
LGTsc24106	24106nw_c	Volretent for the backup volume has been changed to the ssretent of the save set on the volume that is extended after cloning, resulting in a longer retention policy.
LGTsc24213	24213nw_c	Replace nsrlc with rpcinfo and retry rpcinfo.
LGTsc24406	24406nw_c	If nsrexecd goes down in a quiet environment, then the monitoring script does not detect a failure.

Table 5 Fixed bugs in NetWorker release 7.5 Service Pack 1 (page 3 of 3)

Issue number for Customer Service	Issue Number for Issue Tracker	Description
LGTsc24749	24749nw_c	Inquire command hangs with no output on Windows.
LGTsc24948	24948nw	Directed save set recoveries will restore the entire save set only.
LGTsc24966	24966nw_c	Nsrmmgd core dumps occur due to a race condition.
LGTsc25020	25020nw_c	When labelling more than two tapes from NMC, subsequent labelling fails with a "Duplicate volume name - Select a new name or remove the original volume" or similar error.
LGTsc25030	25030nw_c	VSS backups of the NetWorker server cause application failures of save.exe.
LGTsc26269	26269nw_c	When performing an active directory restore, the restore fails with an error indicating that the Directory Service could not start because the transaction recover failed.
LGTsc26600	26600nw_c	After upgrading the NetWorker server, the socket buffer fills up and nsrindexd fails to initialize ports from nsrexecd.
LGTsc26652	26652nw_c	Clone volume retention time causes a conflict with defined volume retention policies, picking up the longest ssretent instead of clretent.
LGTsc27126	27126nw_c	The NMC error "Can't decode result" pops up frequently during normal NMC operations.

Fixed bugs in release 7.5

[Table 6 on page 34](#) lists customer reported defects resolved in release 7.5.

Table 6 Fixed bugs in NetWorker release 7.5 (page 1 of 5)

Issue number for Customer Service	Issue number for Issue Tracker	Description
LGTsc13842	13842nw_c	Bootstrap report is sent to the default email account.
LGTsc19551	19551nw_c	nsrmon locks the daemon.raw file and causes nsrd to hang.
LGTsc19552	19552nw_c	gstd crashes, faulting module gstnsm.dll.
LGTsc19943	19943nw_c	Mutex operation is unable to complete on nsrexecd and nsrd.
LGTsc20077	20077nw_c	nsrd memory and handlers increase and eventually cause NetWorker to generate RPC errors and lead to backup failure.
LGTsc20970	20970nw_c	The local device path is used for the resource query of serial number data rather than the NetWorker device name.
LGTsc14078	14078nw_c	Dedicated storage node license used for VCB proxy instead of DSN.
LGTsc14596	14596nw_c	DDAR setting is done through defining an environment variable, which is not persistent across different login sessions.
LGTsc15842	15842nw_c	Unable to initialize AFTD on NetWorker for Windows 7.4.1.
LGTsc16460	16460nw_c	LUS driver causes kernel panic.
LGTsc16539	16539nw_c	DL Data Loss after cleaning up space on a FTD during backup.
LGTsc16742	16742nw_c	The nsrexecd.exe service terminates unexpectedly.
LGTsc16770	16770nw_c	nsrim -X is deleting index entries for a particular client.

Table 6 Fixed bugs in NetWorker release 7.5 (page 2 of 5)

Issue number for Customer Service	Issue number for Issue Tracker	Description
LGTsc16781	16781nw_c	Recycling of the volume to a different pool, that does not change
LGTsc16786	16786nw_c	Volume is loaded into wrong device in a mix media library, regardless of pool setting.
LGTsc16984	16984nw_c	NetWorker is not resolving the alias for RSN as it does for SN.
LGTsc17645	17645nw_c	Save.exe faults during a DFS Backup.
LGTsc17694	17694nw_c	nsrwatch does not display messages in Pending: section.
LGTsc17749	17749nw_c	VSS backup fails with "0x800704d0" ERROR.
LGTsc18053	18053nw_c	mminfo query for multiple barcodes causes a core dump.
LGTsc18996	18996nw_c	Nsrmmgd core dumps during processing of a partial lcp update from a load operation.
LGTsc19163	19163nw_c	Mmgd mishandles hardware status changes, causing an import/export problem
LGTsc19190	19190nw_c	NMC Crashes with faulting module librap.dll, fault addr. 0x0000e114
LGTsc19410	19410nw_c	A nsrlcpd core occurs when allocating media.
LGTsc19892	19892nw_c	nsrjobd hangs in thread while in debug mode.
LGTsc20106	20106nw_c	gstcreport '-a Number of Files' does not work.
LGTsc20344	20344nw_c	recover -u does not stop when encountering an error.
LGTsc06212	06212nw_c	Media events reset on unsuccessful mounts.
LGTsc10070	10070nw_c	A race condition leads to a nsrjobd core dump during backup.
LGTsc10408	10408nw_c	A defunct process is created when the NMC database is backed up.
LGTsc12408	12408nw_c	New interface needed to display the progress of deduplication backups.
LGTsc15434	15434nw_c	NetWorker does not handle the drive empty error properly.
LGTsc15537	15537nw_c	Nsrlcpd loses connection to dmi_server.
LGTsc16011	16011nw_c	Misleading msg "nsrexecd: The user does not have the privileges"
LGTsc16180	16180nw_c	EDL labeling loads tapes, then labels those last loaded.
LGTsc16223	16223nw_c	Mminfo valid inconsistent with scanner valid for volumes.
LGTsc16761	16761nw_c	Wrong behavior using -J switch with nsrclone.
LGTsc16920	16920nw_c	Clients are registering as storage nodes in the NMC console.
LGTsc17004	17004nw_c	Library reconfigure fails with RAP error.
LGTsc17072	17072nw_c	Client backups are being delayed from starting.
LGTsc17141	17141nw_c	NetWorker 7.3 SP4 sporadically returns "media emergency" reports
LGTsc17412	17412nw_c	nsr_shutdown unsuccessful and linked to savegrps.* in /nsr/run.
LGTsc18009	18009nw_c	Group restart in Restart Window does not obey the original backup level.
LGTsc18379	18379nw_c	NetWorker does not report unlink failure on AFTD.

Table 6 Fixed bugs in NetWorker release 7.5 (page 3 of 5)

Issue number for Customer Service	Issue number for Issue Tracker	Description
LGTsc19409	19409nw_c	Nsrmmdbd cores at startup.
LGTsc19846	19846nw_c	Savepnpc ignoring tmp files.
LGTsc20091	20091nw_c	Misleading error message.
LGTsc20094	20094nw_c	nsrjobd leaking list element and duplicating list records.
LGTsc19849	19849nw_c	Nsrmmgd is dumping core.
LGTsc11577	11577nw_c	NetWorker to support more than 250 drives for DAS Silos.
LGTsc16254	16254nw_c	NDMP cloning of NetWorker save stream.
LGTpa43965	43965nw_c	Support keyboard shortcuts.
LGTpa78064	78064nw_c	Efficient way to backup lastlog file in Linux.
LGTsc09460	09460nw_c	NetWorker daemons not to fallback to use port 111.
LGTsc16097	16097nw_c	Support Cloning of NMM and PS/LNM.
LGTsc16198	16198nw_c	Qualify staging support for NMM 2.1.
LGTsc16381	16381nw_c	Virtual Client licensing enhancements are needed for NetWorker 7.4.3.
LGTsc19587	19587nw_c	Ignore license expiration if base enabler authorized.
LGTsc19589	19589nw_c	Create NW server attr for license conformance.
LGTpa64646	64646nw_c	Ability to print and export data from NMC tables.
LGTpa84131	84131nw_c	Command Line Log Viewer for i18n Structured Log files.
LGTpa89550	89550nw_c	Volume's WORM flag not displayed in library operations screen.
LGTpa94193	94193nw_c	Client information is not updated due enterprise license.
LGTsc03256	03256nw_c	Non interactive directed recovery.
LGTsc06215	06215nw_c	Logging improvements on ACSLS errors.
LGTsc07904	07904nw_c	Hard limit on savegroup timeout when initializing.
LGTsc10935	10935nw_c	Improve or suppress auth messages when waiting on tape.
LGTsc11020	11020nw_c	Seeking to make Sybase and NMC more secure.
LGTsc11375	11375nw_c	Add client attribute (ca_*) entry to libavctl shared library.
LGTsc12395	12395nw_c	Recover CLI integration for Home Base support.
LGTsc12858	12858nw_c	Enhance GUI client recover to prompt for NetWorker Server to be used.
LGTsc14167	14167nw_c	Need re-locatable directed ssid recovery executed on server
LGTsc14174	14174nw_c	daemon.log to include jobid in every lines from savegrp.
LGTsc14361	14361nw_c	nsrinfo to only need "recover local data" privilege.
LGTsc14966	14966nw_c	Non-interactive directed recover support in recover.

Table 6 Fixed bugs in NetWorker release 7.5 (page 4 of 5)

Issue number for Customer Service	Issue number for Issue Tracker	Description
LGTsc17572	17572nw_c	Core changes to support dedupe in NetWorker modules.
LGTsc17594	17594nw_c	Enhancements to mmrecov implementation of scan needed.
LGTsc17753	17753nw_c	Probe based backup.
LGTsc17875	17875nw_c	Session channel to pass additional parameters securely.
LGTsc18279	18279nw_c	Encode output as UTF-8 when rendered output is redirected to fil.
LGTsc18316	18316nw_c	Lockbox access needs to support impersonation.
LGTsc18317	18317nw_c	Lockbox access needs to support impersonation.
LGTsc18441	18441nw_c	NSR hypervisor and NSR task resources.
LGTsc18477	18477nw_c	nsrclone enhanced filtering, browse setting, abort rpt, etc.
LGTsc18676	18676nw_c	Add NMC support for probe based backup.
LGTsc18678	18678nw_c	Add NMC support for License Conformance Summary.
LGTsc18728	18728nw_c	Automatic cloning fails with error indicating each clone host needs at least two enabled devices, even if there are 2 or more devices available for cloning.
LGTsc18962	18962nw_c	Generating backup reports for backups completed in the past "1 day" switches the value "1 day" to an actual date.
LGTsc19002	19002nw_c	Auto Discovery Configuration Dialog.
LGTsc19240	19240nw_c	LGTOclnt packaging should depend/warn on missing SUNWcry.
LGTsc19248	19248nw_c	VMware Auto-Discovery.
LGTsc19373	19373nw_c	Add deduplication support to the NMC Client Wizard.
LGTsc19714	19714nw_c	Add virtual client support to the NMC Client Wizard.
LGTsc20002	20002nw_c	Add messaging for invalid probe reference.
LGTsc20139	20139nw_c	AIX support for Homebase agent in NetWorker 7.5.
LGTsc20161	20161nw_c	Need functions to create SHA-1 for report.
LGTsc20219	20219nw_c	Windows install needs property to bypass dedup cache warning.
LGTsc20342	20342nw_c	Continuation of LGTsc18457: add new device types: SAIT-2.
LGTsc20403	20403nw_c	Add Find capability to Mapping component.
LGTsc20615	20615nw_c	A Host ID containing a leading 0 generates unaccepted authorization codes.
LGTsc20813	20813nw_c	Running nsrclone -J does not enforce the read host selection.
LGTsc21031	21031nw_c	Nsrlicpd core dumps upon startup when connecting to SSI.
LGTsc21073	21073nw_c	Enable Sybase communication diagnostics based on Debug level.
LGTsc21079	21079nw_c	Improve workflow for Virtual Client support.
LGTsc21179	21179nw_c	The hot fix for LGTsc18379 does not contain the Storage Node name, only the ATFD name.

Table 6 Fixed bugs in NetWorker release 7.5 (page 5 of 5)

Issue number for Customer Service	Issue number for Issue Tracker	Description
LGTsc21188	21188nw_c	Save.exe detects normal folder on local disk as mount point on NTFS file system due to the backup of some critical files not occurring.
LGTsc21504	21504nw_c	Need power on/off info for VM in auto-discovery detailed view.
LGTsc21668	21668nw_c	An inconsistency in the nsrmmgd jukebox state information can result in a nsrmmgd core dump.
LGTsc21736	21736nw_c	The nsrlcpd process does not start due to slot tag corruption.
LGTsc21786	21786nw_c	NetWorker Fast Start License is not interoperable with DDS, so when a DDS license is entered the jukebox license becomes disabled.
LGTsc21825	21825nw_c	NetWorker does not start unless the hosts file has IPV6 loopback address, even if IPV6 is not enabled or being used.
LGTsc22407	22407nw_c	Encryption ASM is a feature that should be included it as a standard directive.
LGTpa48806	48806nw_c	NetWorker daemons report their version information.
LGTsc17245	17245nw_c	2nd phase formatting fixes for NetWorker man pages (for CRG PDF script).
LGTsc19457	19457nw_c	The Configuration Wizard "Choose Client Properties" screen contains a header for Browse Policy but not for Retention Policy.
LGTsc19545	19545nw_c	Errors in some NetWorker manpage source files result in incorrectly formatted or labeled output.

Environment and system requirements

This section describes specific environment and system requirements.

System configuration requirements for a dedicated NetWorker server

Table 7 on page 38 and Table 8 on page 39 outline the following:

- ◆ Minimum system configuration requirements to be met when running the NetWorker software on a dedicated NetWorker server.
- ◆ Tips when setting parameters at the operating system level.

Note: If the following system requirements are not met, the performance of the NetWorker software could be significantly affected or the NetWorker daemons might crash.

Table 7 Minimum system requirements for a dedicated NetWorker server

	Minimum recommended configuration
CPU	Dual Core with a minimum of 1.5 GHz speed for each CPU
RAM	2 GB
Swap space	4 GB minimum (at least twice RAM)

Table 8 Minimum system requirements for a dedicated NetWorker server

Minimum recommended configuration			
Kernel parameters	The following plimit values for all NetWorker daemons should be set to maximum as follows:		
	Resource	Current	Maximum
	Time	Unlimited	Unlimited
	file(blocks)	Unlimited	Unlimited
	data(Kbytes)	Unlimited	Unlimited
	stack(Kbytes)	8192	Unlimited
	coredump(blocks)	Unlimited	Unlimited
	nofiles(descriptors)	65536	65536
	vmemory(Kbytes)	Unlimited	Unlimited
	Dedicated NetWorker storage nodes and servers should be tuned to for shared memory usage as follows:		
msgsys:msginfo_msgmni=1024 msgsys:msginfo_msgtql=1024 semsys:seminfo_semmni=2048 semsys:seminfo_semmns=2048 semsys:seminfo_semopm=128 shmsys:shminfo_shmmax=33554432 shmsys:shminfo_shmmni=512 These settings are not required for Solaris 10, but are required for Solaris 9.			

The *NetWorker Performance Tuning Guide* has information on tuning the operating system and is available at: <http://Powerlink.EMC.com>.

Java Web Start jnlp file caching issue after upgrading the NetWorker Console

After the NetWorker Console is upgraded or a client locale is changed, the `gconsole.jnlp` file will be different than the original `gconsole.jnlp` file in the Java Web Start cache. The NetWorker console will fail to launch.

Workaround

Remove the NetWorker Management Console Application and Language Pack from the Java Application Cache Viewer:

1. Run the **Java Application Cache Viewer**. From the command line, use the `javaws` command to launch the application.
2. Select the **NetWorker Management Console Application and Language Pack**.
3. Click **Remove Selected Application**.
4. Clear the temporary files used by Java applications:
 - a. In the **Java Application Cache Viewer**, select **Preferences** from the **Edit** menu.
 - b. Click **Delete Files** and click **OK**.

Write access to temp folders required when using the NetWorker Software Administration Wizard or nsrpush CLI for a Windows 2008 client

Microsoft Windows 2008 restricts write access to temp folders, including the folders defined in the Windows SYSTEM user's TEMP or TMP environment variable. Write permissions must be enabled when performing software updates, add to repository operations, and inventory operations using the Software Administration Wizard or the **nsrpush** CLI.

On the Windows 2008 client, grant the Administrator and SYSTEM users write permissions to the temp folders defined in the SYSTEM user's TEMP and TMP environment variables.

Windows hot fix required for Vista to recover VSS System files

Due to an issue with the Microsoft Windows Vista operating system, a hot fix is required to successfully recover VSS System files. Contact Microsoft to obtain the fix. Details can be found at: <http://support.microsoft.com/kb/935606>.

Install latest Microsoft VSS roll-up fix for Windows Server 2003

If running NetWorker on Windows Server 2003, install the latest Microsoft VSS roll-up fix. To view more information on the roll-up fix and to download the package appropriate to your platform, go to the Microsoft knowledge base article at <http://support.microsoft.com/kb/940349>.

QPK1123 and PHSS_37492 patches required to run NetWorker on HP-UX RISC 11.23

The NetWorker services cannot be started on an HP-UX RISC 11.23 system until the following patches are downloaded from the HP website:

- ◆ QPK1123(B.11.23.0712.070a) 1185010 Quality Pack Depot
- ◆ PHSS_37492

Go to <http://itrc.hp.com> and click **patch database** to obtain these patches. You must provide an appropriate username and login password to download the patches.

Features provided with base enablers

Table 9 on page 40 lists the features that are available as part of NetWorker base enablers.

Table 9 Features provided with base enablers

Feature	Support by edition			
	Power	Network	Workgroup	Business
Number of included client connections	12	10	8	8
Parallel data streams per NetWorker server	64	32	32	32
Parallel datastreams per storage node ^a	64	32	N/A	N/A

Feature	Support by edition			
	Power	Network	Workgroup	Business
Number of physical devices included with base enabler	32	16	4	4
Increase in datazone's devices, per storage node license	32	16	N/A	N/A
Maximum number of devices	512 ^b	512 ^c	4	4

a.Storage nodes available for additional cost for the Power and Network Editions only.

b.Available in NetWorker 7.2.x and later. For NetWorker 7.1.x the maximum is 256.

c.Available in NetWorker 7.2.x and later. For NetWorker 7.1.x the maximum is 256.

Additional features available with base enablers

Table 10 on page 41 lists the features that are available for support with NetWorker base enablers.

Table 10 Additional features available with base enablers

Feature	Support by edition			
	Power	Network	Workgroup	Business
Additional client connections	Yes	Yes	No	No
Storage nodes	Yes	Yes	No	No
Cluster support	Server and Client	Client	No	Maximum 2 Cluster client connections
ClientPak Module ^a for heterogeneous environments	Yes	Yes	Yes	Yes
NetWorker NDMP Client Connections	Yes	Yes	No	Maximum 2 NDMP client connections
Dynamic Drive Sharing Option	Yes	Yes	N/A	N/A
NetWorker DiskBackup Option	Yes	Yes	Yes	Yes
NetWorker Archive Module	Yes	Yes	No	No
Autochanger Software Modules	All	All	1-9, 1-16, 1-20, 1-32	One 1-26 included in base
NetWorker Application Modules	Yes	Yes	Yes	Yes
NetWorker Windows Server 2003 Open File Option	Yes	Yes	Yes	Yes
Open File Manager	Yes	Yes	Yes	Yes
NetWorker PowerSnap Modules	Yes	Yes	No	No
NetWorker SnapImage Module	Yes	Yes	No	Yes
VSS Support for Windows 2003	Yes	Yes	Yes	Yes
Simple Network Management Protocol (SNMP)	Yes	Yes	Yes	Yes
VTL (Virtual Tape Library)	Yes	Yes	Yes	Yes

a. The ClientPak Module license requirement was eliminated in NetWorker 7.4.1 and later.

Known problems and limitations

This section describes known limitations found in the entire NetWorker family of releases:

- ◆ “NetWorker release 7.5 Service Pack 3” on page 5
- ◆ “NetWorker release 7.5 Service Pack 2” on page 6
- ◆ “NetWorker release 7.5 Service Pack 1” on page 10
- ◆ “NetWorker 7.5 problems and limitations” on page 63
- ◆ “NetWorker releases previous to 7.5 problems and limitations” on page 78
- ◆ “NetWorker releases previous to 7.4 problems and limitations” on page 120

Unless the entry for a known limitation indicates that it is resolved for a specific release, the limitation applies to the release in which it is identified *and* all subsequent releases. If a limitation is resolved, it will also be identified in the fixed bugs table for the release in which it is resolved.

Note: The most up-to-date product issues for EMC NetWorker are detailed online in the EMC Issue Tracker, available on the EMC Powerlink website: <http://Powerlink.EMC.com>.

NetWorker 7.5 Service Pack 3 problems and limitations

The following section identifies problem issues and limitations discovered in NetWorker 7.5 Service Pack 3.

SuSE Linux OES recovery fails to recover extended attributes

NW114960

Extended attributes are not recovered during recovery of a SuSE Linux OES NSS volume.

Workaround

The Extended Attributes (**XAttr**) extension for NSS allows you to read, back up, and restore extended attributes of files on NSS. Information regarding how extended attributes are handled for NSS on Linux is provided in the following article from Novell:

http://www.novell.com/documentation/oes2/stor_nss_lx_nw/?page=/documentation/oes2/stor_nss_lx_nw/data/b52o663.html

IMPORTANT

Note the following considerations when backing up/recovering NSS metadata:

1. **Save must be run as root to back up NSS metadata.**
2. **Recover must be run as root to recover NSS metadata.**
3. **Limitations described under LGTsc11264 are still relevant. The NSS metadata is overwritten in the recover phase due to the order in which metadata is recovered and the chmod/chown/utime being applied**

gstd memory utilization can shoot up to 2 GB during browsing large number of volumes

NW119255

The **gstd** daemon runs on the NetWorker Management Console (NMC) server and is responsible for monitoring NetWorker activity. It has been observed that memory consumption of **gstd** can grow up to 2 GB during the browsing of a large number of volume operations (for example, 150,000 or more). Running **gstd** on low RAM memory could therefore lead to a hang/panic situation.

Scanner -i does not rebuild media indices

NW118223

Running **scanner -i <device>** does not rebuild the media indices from the volumes read.

Workaround

To rebuild the media indices:

1. Prior to running **scanner -i**, run **scanner -m <device>**.
2. Run **scanner -i <device>**.
3. Synchronize the media database and indices by running **nsrim -X**.

Device status continues to display as “active” after cloning operation terminated

NW118255

When a cloning operation is terminated by way of the **nsrmmmd** process being stopped, the status of the device used for the operation continues to display as active in NMC.

Workaround

Refreshing the NMC browser results in the correct status being displayed.

Repository creation fails when client is Windows 2008/2008 R2 and server is UNIX or Linux

NW118190

Creation of a repository using the Client Configuration wizard fails when the client is Windows 2008 or Windows 2008 R2 and the server is UNIX or Linux. An error similar to the following appears:

```
nsrccd Error on remote host: No address for hostname
```

Workaround

Add to the repository using a Windows 2003 system, and then perform the upgrade.

RPC error returned after jukebox is configured from remote storage node, even though configuration was successful

NW117067

When a jukebox is configured from a remote storage node using **jbconfig**, an RPC error message appears in the server's daemon raw file, even though the configuration was successful. This error can be ignored.

RPC port not released when nsr_shutdown is run and savegroup is still writing to jukebox**NW118014**

If `nsr_shutdown` is run while a savegroup is still writing to a jukebox, the RPC port used by `nsrmmgd` does not get released.

Workaround

Manually release the port by running the following:

```
rpcinfo -d <program number> <version>
```

Failure reported during disaster recovery of VSS SYSTEM BOOT; set NSR_RECOV_TEMP_CLEANUP variable**NW117057**

When performing a disaster recovery in multiple Windows platforms and copying the registry, a failure may be reported during the recovery of VSS SYSTEM BOOT due to the size of the **PendingRenameFileOperations** registry value, which is populated during the disaster recovery. The error message indicates a lack of system resources.

If this error appears, it is recommended to restart the disaster recovery after setting the environment variable `NSR_RECOV_TEMP_CLEANUP` to an appropriate value (for example, 1) in the system space. Setting this variable ensures that the above error does not appear, and that the recovery and subsequent cleanup of the temporary recover files after reboot occur without this interruption.

Incremental backup failure may occur due to number of VSS shadow copies; set NSR_VSS_WAIT_INTERVALS variable**NW114428**

Incremental backups may fail due to the number of VSS shadow copies that are created and released by Windows when a backup is performed. A new environment variable, `NSR_VSS_WAIT_INTERVALS`, has been introduced to resolve the issue if a failure occurs. The syntax of the variable is as follows:

```
NSR_VSS_WAIT_INTERVALS=<Mutex wait in mins>,<Snap attempt wait time in seconds>
```

where

<Mutex wait in mins> is the timeout interval that a save instance waits until requesting a snapshot to the VSS framework. The recommended value in case of a failure is 30.

<Snap attempt wait time in seconds> is the time interval that occurs between successive snapshot requests being sent to the VSS framework. The recommended value in case of a failure is 5.

If the problem persists, higher values for both the parameters can be set.

Bootmgr file deleted upon recovery of C:\directory with VSS System save set selected**NW116575**

If the `bootmgr` file is located under the C:\ directory, a backup of folders under "C:\\" with "VSS SYSTEM FILESET: \\" will also back up the `bootmgr` file as part of

the file system. During recovery, if you select the entire C:\ directory and the **Overwrite** option is selected, the original **bootmgr** file gets deleted and the following errors appear:

```
52973: Winworkr: Didn't recover requested file C:\bootmgr
52973: Winworkr: Didn't recover requested file C:\config.sys
```

This leads to corruption of the machine. Upon rebooting the machine, a message appears indicating "bootmgr file is missing, press Ctrl+Alt+Del to restart".

Note: This issue is only seen when a backup is performed via NMC (scheduled backups) and the machine has its bootmgr file in C:\. This does not occur with client-initiated Winworkr backups. Note also that a machine running Windows 2008 R2 can be configured to hold the boot related files in a separate volume.

Workaround

During recovery, mark the backed up folders present in the C:\ directory one-by-one; do not include the **bootmgr** and **Config.sys** files.

Note: If you select the entire C:\ directory and then try to unmark only bootmgr and config.sys, the recovery will not work.

AutoStart warning messages appear when running nwinst.bat script

NW115620

AutoStart warning messages are generated when running the **nwinst.bat** script. The messages do not indicate that any AutoStart functionality is affected, and should be ignored.

This is an example of an Autostart warning message:

```
Connecting to AutoStart domain autostar...Backbone warning on
primrose (pid 135) Wed Mar 31 01:52:34 2010 in
ISIS_MGT_INTERCL_MODULE .\cl_inter.c/intercl_accept(), line
1927 ID00005235 Intercl IO Queue NULL/IO_DEAD calling
resurrect. Process from=1/612 nd dest=1/1352. Backbone warning
on primrose (pid 1352) Wed Mar 31 01:52:34 2010 in
ISIS_MGT_INTERCL_MODULE .\cl_inter.c/intercl_accept(), line
1927 ID00005235 Intercl IO Queue NULL/IO_DEAD calling
resurrect. Process from=2/1868 and dest=1/1352.
```

Savegroup core occurs for clients with 1000 save sets

NW117204

A savegroup core occurs when running a savegroup where 4 or more configured clients each contain 1000 save sets.

nsr_shutdown fails to shut down NetWorker services on Linux

NW117027

Running **nsr_shutdown** on Linux does not shut down NetWorker services.

Workaround

Use **nsr_shutdown -f**.

Server parallelism not honored when scheduling savegroups from Windows client on NetWorker server**NW117495**

When savegroups are scheduled from the Windows client on the NetWorker server, the backup occurs very slowly due to the server parallelism value not being honored.

AFTD with lowest usage not selected for backup, client and server parallelism not honored**NW117363**

The AFTD with the lowest usage is not selected for backup, even though the client and server parallelism value is set to 1.

Workaround

If this occurs, to ensure the AFTD with the lowest usage is selected, unmount any other AFTDs.

nsrccd core dumps and upgrade fails when performing cross-platform client push**NW117106**

When performing a cross-platform client push (for example, Windows server to Linux client) to upgrade the NetWorker software, nsrccd core dumps and the upgrade fails.

nsrd crashes when adding invalid client on Windows**NW116992**

When an invalid NetWorker client is added on a Windows system, an RPC error is returned and nsrd crashes.

Workaround

Add host entries prior to adding the client.

nsrexecd memory consumption increases linearly during strong authentication**NW116845**

Upon executing RPC strong authentication requests, nsrexecd memory consumption increases linearly, and does not decrease when the transactions are complete.

Schedule savegroups put in waiting state during purge operation and remain in waiting state**NW116288**

During a purge operation, scheduled savegroups are put in waiting state. The savegroups remain in waiting state up to 18 hours after the purge was initiated.

Workaround

For **Jobsdb**, select a policy based on purging by time (the **retention in days** attribute) rather than purging by **maximum size**.

Scheduled savegroups with large number of save sets hang with devices remaining in Writing/Idle state

NW115637

Scheduled savegroups for groups of up to 1000 save sets hang, and the devices being written to remain in Writing/Idle state, even though none of the save sets from the group are backed up. When the group is stopped, a nsrjobd core occurs.

NetWorker 7.5 Service Pack 2 problems and limitations

The following section identifies problem issues and limitations discovered in NetWorker 7.5 Service Pack 2.

Directed Recover fails when destination client is Windows 7

NW113513

A directed recover performed from either **Winworkr** or the command line fails when the destination client is a Windows 7 client.

The recover will fail with the following error in Winworkr.

```
39077:nsrexec: error, remote exec problem for command `recover -s
vm19 -win-13 -c vm19-win-17 -iR -I - -a': The network path was not
found.
```

The recover will fail with the following error from command line recover.

```
67080:recover: Remote process exited with errors
```

Workaround

Perform the recovery from the Windows 7 client.

nsrjobd process still running after uninstallation of NetWorker on Windows 2008

NW110327

The **nsrjobd** process continues to run after NetWorker is uninstalled on a Windows 2008 system, and is not stopped after NetWorker services are shut down. As a result, the NetWorker installation folder does not get deleted and the **nsrjobd** daemon consumes unnecessary memory.

Workaround

Manually kill the **nsrjobd** process and then delete the NetWorker installation folder.

VSS BCD BOOT files are recovered to a temporary folder, not the original path that displays during recovery

NW110565

The recover path that displays during the recovery of VSS BCD BOOT files (c:\boot) is incorrect. The BOOT/BCD files are actually recovered to a temporary location (c:\boot_restored_timestamp).

Upgrade of NMC for NetWorker 7.4 Service Pack 5 to 7.5 Service Pack 2 may result in core dump on AIX**NW113316**

When performing an upgrade from NetWorker 7.4 Service Pack 5 to release 7.5 Service Pack 2 or later on AIX, uninstallation of the previous NetWorker Management Console may result in a core dump of the dbsrv9 process, with a core file created in the <NMC install dir>/cores/gstd directory. This has no impact on Console functionality after the upgrade, and can be ignored.

NETWORKER.cfg file must be backed up prior to upgrading from any NetWorker version previous to 7.5 Service Pack 2**NW110457**

When upgrading from any version of NetWorker previous to 7.5 Service Pack 2, the **NETWORKER.cfg** file must be backed up on each client and used to replace the new **NETWORKER.cfg** file created after the upgrade, in order to maintain user preferences. If upgrading from NetWorker 7.5 Service Pack 2 to a later release, this is not required.

System Reserved partition remains mounted after scheduled backup of VSS SYSTEM FILESET aborted on Windows Server 2008 R2 and Windows 7 clients**NW112832**

The System Reserved Partition remains mounted when the scheduled backup of a VSS SYSTEM FILESET is aborted for Windows Server 2008 R2 and Windows 7 clients. Under normal conditions, NetWorker automatically mounts and unmounts the System Reserved Partition during a scheduled backup of VSS SYSTEM FILESET.

Workaround

On the affected Windows 2008 R2 and Windows 7 clients, manually remove the drive letter of the system reserved partition using the disk management console.

System Reserved partition is assigned a drive letter after VSS SYSTEM BOOT: recovery on Windows Server 2008 R2 and Windows 7**NW112250**

When a savegroup backup of the **VSS SYSTEM BOOT:** along with **VSS SYSTEM FILESET:**, or a full system backup is performed, the system partition gets mounted with a drive letter. During the recovery of **VSS SYSTEM BOOT:**, the system reverts to the same state and the reserved partition is assigned a drive letter.

Workaround

Manually remove the drive letter after every **VSS SYSTEM BOOT:** recovery and reboot.

Unable to obtain update enabler from the License Manager when there are two NetWorker servers**NW112883**

If there are two NetWorker servers using one License manager, only one of the servers is able to obtain a license from License manager. However, you do not need to obtain an additional enabler as only one update enabler is required for all the servers using License manager.

nsrclone memory consumption can grow up to 8 GB during cloning**NW112823**

Memory consumption of **nsrclone** can grow up to 8 GB during cloning operations. Running NetWorker services on low RAM memory could lead to a hang/panic situation.

NMC help contents under Encrypting Backup data missing a subdirectory**NW110209**

The subdirectory under the heading **Encrypting backup data** in the help contents of NMC is blank.

Path-to-tape cloning of save sets spanning across multiple volumes with different block sizes fails**LGTsc31596**

NDMP path-to-tape cloning fails if the source save set resides on multiple volumes with different block sizes. For example, when backup is performed using one LTO4 and one LTO2 volume, the cloning fails with the following error message:

```
"Error - Current NDMP session's block size 65536 does not match with new volume's block size 131072".
```

If performing path-to-tape cloning, save sets should be backed up on similar volumes.

VTL in DDS configuration fails for Quantum DXI device**LGTsc29272**

Path To Tape cloning requires a VTL in DDS from a quantum-dxi device, where one path is from the NDMP node and the other path from the non-NDMP node. When all the drive paths are selected for a VTL in a DDS configuration from NMC, it fails with an error message indicating "number of drives (4) not equal to number of unique drives(8)".

Workaround

Configure the library using only one path so the drive can be used by either a non-NDMP storage node or NDMP storage node. then reconfigure the drive by adding another drive path.

NetWorker 7.5 Service Pack 1 problems and limitations

[Table 11 on page 50](#) identifies problem issues and limitations discovered in NetWorker 7.5 Service Pack 1.

The known limitations are separated into the following categories:

- ◆ [“Backup operations problems and limitations descriptions” on page 52](#)
- ◆ [“VMWare High Availability \(HA\) problems and limitations descriptions” on page 52](#)
- ◆ [“CLI problems and limitations descriptions” on page 53](#)
- ◆ [“Configuration problems and limitations descriptions” on page 54](#)
- ◆ [“Devices and media problems and limitations descriptions” on page 56](#)
- ◆ [“GUI problems and limitations descriptions” on page 58](#)

- ◆ “Licensing problems and limitations descriptions” on page 59
- ◆ “Localization problems and limitations descriptions” on page 59
- ◆ “Messaging problems and limitations descriptions” on page 60
- ◆ “Upgrading problems and limitations descriptions” on page 61
- ◆ “Restore problems and limitations descriptions” on page 61

For known limitations related to internationalization support in NetWorker 7.5 Service Pack 1, see “Internationalization support” on page 148.

Table 11 Limitations discovered in NetWorker release 7.5 Service Pack 1 (page 1 of 3)

Customer Service defect number	Issue tracker issue number	Description of limitation	Operating System Affected	Product Feature
“LGTsc26157” on page 52	26157nw	Deduplication: save sets and snapups with same timestamp not being removed after save set expiry/deletion	Solaris	Backup
“LGTsc28171” on page 52	28171nw	VMware backups do not work with ESX 3.0.2 and VCB mounter 1.1 (fixed for the 7.5 Service Pack 2 release)	Windows	Backup
“LGTsc21279” on page 52	21279nw	nsrindexd process not terminating after virtual client failover		VMware HA
“LGTsc21401” on page 52	21401nw	nsrindexd and ansrd processes do not exit after failover of virtual remote storage node with nwrecover in progress		VMware HA
“LGTsc21336” on page 53	21336nw	Scanner command fails, nsrindexd processes not terminated after remote storage node failover		VMware HA
“LGTsc21118” on page 53	21118nw	Archive request for virtual client does not exit after failover		VMware HA
“LGTsc30365” on page 53	30365nw	nsrim -x takes longer to complete on Linux	Linux	CLI
“LGTsc30977” on page 53	30977nw	Direct SCSI backups using nsrscsi_save command not backing up last block of 512 bytes on a LUN; hotfix required if using NetWorker 7.5 Service Pack 1 or earlier	Solaris	CLI
“LGTsc28136” on page 54	28136nw	NDMP client savegroup limited to 256 characters when performed from the command line	Windows	CLI
“LGTsc25711” on page 54	25711nw	Running nsrvtar directly from the command line might fail	AIX	CLI
“LGTsc27302” on page 54	27302nw	nsrjobd memory consumption may cause NetWorker services to hang if running on low RAM	Linux	Configuration
“LGTsc18079” on page 54	18079nw	Glibc version of 2.5-12 or later required if configuring more than 32 VLAN NICs on Linux	Linux	Configuration
“LGTsc26202” on page 55	26202nw	Cannot configure Windows Firewall Support in the NetWorker Installation Wizard	Windows	Configuration
“LGTsc22076” on page 55	22076nw	AIX package 5300-09 required to prevent memory leak in function called by NetWorker	AIX	Configuration
“LGTpa94658” on page 55	94658nw	NMC cannot connect to GSTDB if EMC AlphaStor or EMC DPA is installed	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Configuration

Table 11 Limitations discovered in NetWorker release 7.5 Service Pack 1 (page 2 of 3)

Customer Service defect number	Issue tracker issue number	Description of limitation	Operating System Affected	Product Feature
"LGTsc28059" on page 57	28059nw	Multiplexing must be disabled for save sets to be cloned from the DXi/DL3D using NDMP path-to-tape	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Devices and Media
"LGTsc27756" on page 57	27756nw	Default setting on IBM LTO1 emulation may lead to NDMP tape read errors, verification failure in NetWorker	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Devices and Media
"LGTsc27773" on page 57	27773nw	Deposit command fails on ACSLS and DAS silo (fixed for the 7.5 Service Pack 2 release)	Solaris	Devices and Media
"LGTsc27571" on page 58	27571nw	Tapes left in "Ejecting" state after labelling large number of volumes in a Windows virtual environment	Windows	Devices and Media
"LGTsc27902" on page 58	27902nw	Adding additional devices to a DDS storage node may fail	Windows	Devices and Media
"LGTsc27106" on page 58	27106nw	Querying large numbers of save sets in the NetWorker user interface may cause a Java heap space error	Windows	GUI
"LGTsc26673" on page 59	26673nw	Inconsistent license information displayed for NDMP Workstation Client	Windows	Licensing
"LGTsc26980" on page 153	26980nw	Non-ASCII hostnames are not supported by NetWorker	Windows	Localization
"LGTsc28174" on page 153	28174nw	Cannot perform a redirected NDMP recover operation to a non-English path on Windows	Windows	Localization
"LGTsc28516" on page 154	28516nw	Some English messages appear on Windows 2008 hosts in the Chinese locale	Windows	Localization
"LGTsc31111" on page 60	31111nw	Savegroup completion report output contains additional, unnecessary information	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Messaging
"LGTsc26965" on page 60	26965nw	Single step recovery of a full virtual machine: some error messages are cyptic	Windows	Messaging
"LGTsc27063" on page 61	27063nw	Single step recovery of a full virtual machine: some messages are non-standard	Windows	Messaging
"LGTsc24358" on page 61	24358nw	When upgrading to NetWorker Release 7.5 on Windows, reboot NMC	Windows	Upgrading
"LGTsc33060" on page 61	33060nw	Volume mount point is recovered as a folder	Windows	Restore
"LGTsc24329" on page 62	24329nw	Recovering client file index fails if NDMP attribute is selected on client resource	Windows	Restore
"LGTsc27447" on page 62	27447nw	Single step recovery of a full virtual machine: VCB restore must use Virtual Center IP/name and password/username combination if Virtual Center used for backup	Windows	Restore
"LGTsc26268" on page 62	26268nw	Single step recovery of a full virtual machine: Validation of the VC/ESX server credentials are validated once the NetWorker recover complete	Windows	Restore

Table 11 Limitations discovered in NetWorker release 7.5 Service Pack 1 (page 3 of 3)

Customer Service defect number	Issue tracker issue number	Description of limitation	Operating System Affected	Product Feature
"LGTsc27647" on page 63	27647nw	Single step recovery of a full virtual machine: recovery of continued save sets may fail	Windows	Restore

Backup operations problems and limitations descriptions

This section details problems and limitations related to backup operations.

Deduplication: save sets and snapups with same timestamp not being removed after save set expiry/deletion

LGTsc26157

If two or more snapup labels created in Avamar share the same timestamp, some snapups may not get deleted, even if the NetWorker save sets have expired and the corresponding NetWorker entries have been deleted. Also, running the deduplication cleanup cycle will not remove these save sets on the deduplication node.

Workaround

Ensure that the **client parallelism** attribute is set to 1.

VMware backups do not work with ESX 3.0.2 and VCB mounter 1.1 (fixed for the 7.5 Service Pack 2 release)

LGTsc28171

Due to VMware limitation, VMware hosts that are running ESX 3.0.2 and VCB 1.1.0 cannot be mounted and therefore, cannot be backed up.

Workaround

Ensure that the VMware hosts are running ESX version 3.5 and VCB 1.1 or later.

VMWare High Availability (HA) problems and limitations descriptions

This section details the problems and limitations related to NetWorker support for VMware HA.

nsrindexd process not terminating after virtual client failover

LGTsc21279

The **nsrindexd** process is not terminated on a virtual NetWorker server after the virtual client failover. As a result, you cannot umount the file-type device or perform a manual clone on that volume after the failover.

Workaround

Shut down and restart the NetWorker daemons on the NetWorker server.

nsrindexd and ansrd processes do not exit after failover of virtual remote storage node with nwrecover in progress

LGTsc21401

After a failover of a virtual remote storage node while **nwrecover** is in progress on the storage node, the **nsrindexd** and **ansrd** processes do not exit, even though the

recover operation is reported as successful in the daemon log file and the nwrecover log.

Workaround

The **nsrindexd** and **ansrd** processes must be stopped manually after failover of a virtual remote storage node while **nwrecover** is in progress on the storage node.

Restart the recover after failover of the storage node, and configure VMWare HA so that it does not automatically failover the NetWorker hosts during a recover operation.

Scanner command fails, nsrindexd processes not terminated after remote storage node failover

LGTsc21336

After failover of a remote NetWorker storage node, running the scanner command fails and **nsrindexd** processes are not terminated.

Workaround

Shut down and restart the NetWorker server to clear the **nsrindexd** processes.

Archive request for virtual client does not exit after failover

LGTsc21118

An archive request for a virtual client continues to display in NMC after failover, and does not exit.

Note: This does not apply to modules.

Workaround

Stop the archive request after failover, then restart the archive.

CLI problems and limitations descriptions

This section details the problems and limitations related to the CLI.

nsrim -x takes longer to complete on Linux

LGTsc30365

Running **nsrim -x** on a NetWorker server on Linux takes more time to complete than on a Windows or Solaris system.

Direct SCSI backups using nsrscsi_save command not backing up last block of 512 bytes on a LUN; hotfix required if using NetWorker 7.5 Service Pack 1 or earlier

LGTsc30977

Direct SCSI backups using the **nsrscsi_save** command will not back up the last block (512 bytes) on a LUN. As a result, restores will not contain the last 512 bytes. If there was data in this block at the time of backup, that data will not be available for recovery.

EMC strongly recommends installing the fixes made available on all Solaris NetWorker Servers and storage nodes utilized for Direct SCSI backups and restores. A hotfix is available for NetWorker 7.5 Service Pack 1 and can be downloaded from ftp.legato.com/pub/NetWorker/Updates/LGTsc30977. The

Knowledge Base article 106611 contains more information on this issue and instructions for downloading the hotfix.

Note: When restoring from backups created prior to applying this hotfix, the restore should be directed to a target device that is alternate to the original.

NDMP client savegroup limited to 256 characters when performed from the command line

LGTsc28136

When a savegroup is performed from the command line for an NDMP client with a save set name of more than 256 characters, a core dump occurs. This character limitation *only* applies when `nsrndmp_save` is run from the command line.

Workaround

If running an NDMP savegroup from the command line, ensure that the path name contains fewer than 256 characters.

Running nsrvtar directly from the command line might fail

LGTsc25711

Running `nsrvtar` directly from the command line might fail if the following environment variable was not updated:

`LD_LIBRARY_PATH`

Workaround

Add `/usr/lib/nsr` to the `LD_LIBRARY_PATH` environment variable.

Configuration problems and limitations descriptions

This section details the problems and limitations related to configuration.

Service port range must not include ports 7397 and 7398

LGTsc30093

Ports 7937 and 7938 are included in the number of ports used by `nsrexecd`. The service port range must therefore not include these ports.

nsrjobd memory consumption may cause NetWorker services to hang if running on low RAM

LGTsc27302

Memory consumption of the `nsrjobd` daemon can grow up to 9.8 GB during backup and recovery operations. If `nsrjobd` memory consumption reaches that level, running NetWorker services on low RAM may cause the services to hang.

Workaround

Ensure that there is sufficient RAM available for all NetWorker services to run.

Glibc version of 2.5-12 or later required if configuring more than 32 VLAN NICs on Linux

LGTsc18079

After connecting to a jukebox, if you configure more than 32 VLAN NICs, running NetWorker `nsr` commands may return error messages and result in failure of these

commands on Linux. This problem occurs if you have a glibc package version previous to 2.5-12 installed.

Workaround

Upgrade the glibc package version to 2.5-12 or later.

Cannot configure Windows Firewall Support in the NetWorker Installation Wizard**LGTsc26202**

The option to configure Windows Firewall support does not appear in the NetWorker Installation wizard under the following conditions:

- ◆ The Windows Firewall Service is not turned on.
- ◆ Windows Firewall is not supported for a particular Windows operating system.

The Windows Firewall Service is turned on and enabled by default on the following Windows operating systems:

- ◆ Windows XP SP2 and later.
- ◆ Windows 2008

Note: Windows Firewall is not supported on Windows 2000.

Workaround

The Windows Firewall service is turned off by default on Windows Server 2003.

To turn on the firewall service on:

1. Ensure that Service Pack 1 or later has been installed. This Service Pack is required for Windows Firewall support.
2. Start the Windows Firewall/ICS service.

AIX package 5300-09 required to prevent memory leak in function called by NetWorker**LGTsc22076**

A memory leak in an AIX operating system function used by NetWorker may cause NetWorker daemons memory footprint to grow indefinitely.

Workaround

Update the system to the AIX package 5300-09. The package can be downloaded from the IBM website at the following link:

<http://www.ibm.com/support/fixcentral/>

NMC cannot connect to GSTDB if EMC AlphaStor or EMC DPA is installed**LGTpa94658**

By default, the NetWorker Console database uses port 2638 for TCP/IP communications. Other applications may also use this port or, as is the case with EMC AlphaStor or EMC DPA installed with default options, may have their own instance of the iAnywhere database installed, which can create conflicts if both applications are installed on the same host.

Workaround

To change the service port used by the NetWorker Console database:

1. Stop the GST Service.
2. Stop any other products that are using the iAnywhere database, for example EMC AlphaStor or EMC DPA.
3. Ensure that no **dbsrv9** processes are running. If the **dbsrv9** processes are running, stop them.
4. Open a terminal or command prompt window.
5. Depending on the shell you are using, use the appropriate command (for example, **setenv** for csh, **export** for sh) to update the library path environment variable in the terminal window to the following location:
 - Solaris: **/opt/LGTONmc/bin:/opt/LGTONmc/sybase/lib**
 - Linux/AIX/HPUX: **/opt/lgtonmc/bin:/opt/lgtonmc/sybase/lib**
 - Microsoft Windows (assumes default installation location):
C:\Program Files\Legato\Management\GST\sybase\bin

The environment variable to set varies by platform, for example:

- Solaris/Linux: LD_LIBRARY_PATH
 - AIX: LIBPATH
 - HP-UX: SHLIB_PATH
6. Edit the `gstd.conf` file to add or change the following line:

```
db_svc_port=port_number
```

For example:

```
db_svc_port=2639
```

The `gstd.conf` is located in the following locations:

- Solaris: `/opt/LGTONmc/etc`
 - Linux/AIX/HP-UX: `/opt/lgtonmc/etc`
 - Microsoft Windows: `C:\Program Files\Legato\Management\GST\etc`
7. Run the **gstconfig** command to update the port value in the NetWorker Console. The `gstconfig` command is located in the following locations:
 - Solaris: `/opt/LGTONmc/bin`
 - Linux/AIX/HP-UX: `/opt/lgtonmc/bin`
 - Windows: `C:\Program Files\Legato\Management\GST\bin`
 8. Close the terminal or command prompt window.
 9. Restart the GST Service.

Devices and media problems and limitations descriptions

This section details the problems and limitations related to devices and media.

Multiplexing must be disabled for save sets to be cloned from the DXi/DL3D using NDMP path-to-tape

LGTsc28059

Multiplexing of save sets is not supported for save streams that are to be cloned from the Dxi/DL3D with the NDMP path-to-tape feature.

Note: Only volumes created without multiplexing can be used with the NDMP path-to-tape feature.

Workaround

Device properties must be set to disable multiplexing capability.

To disable multiplexing of save sets:

1. From NMC on the NetWorker server, select **Devices**.
2. For each configured target device on the DL3D or Dxi:
 - a. Select **Device > Properties**.
 - b. Click the **Configuration** tab.
 - c. Set **Target sessions** to **1**.
 - d. Set **Max sessions** to **1**.
 - e. Click **OK**.

Note: Backup performance may be affected by disabling multiplexing of save sets.

Default setting on IBM LTO1 emulation may lead to NDMP tape read errors, verification failure in NetWorker

LGTsc27756

In the Quantum Dxi environment, a default setting on the IBM LTO1 emulation can lead to a possible data loss issue with NetWorker during NDMP tape reading. This default setting sets the drive to "fixed block" mode, which can lead to tape label verification failure and I/O errors when NetWorker attempts to read the volume.

Workaround

Do not use the IBM LTO1 emulation with NetWorker.

Deposit operation fails on ACSLS and DAS silo (fixed for the 7.5 Service Pack 2 release)

LGTsc27773

Running the Deposit operation (nsrjb -a -d -T <>) on an ACSLS or DAS silo returns an error, and volume deposit fails.

Workaround

1. Perform one the following:
 - Run the deposit operation from the ACSLS server using the **enter** command.
 - Run the deposit operation in manual mode from the DAS server.

2. Follow the deposit operation with `nsrjb -a -T <>`.

Tapes left in "Ejecting" state after labelling large number of volumes in a Windows virtual environment

LGTsc27571

After labeling a large number of virtual volumes over a large number of virtual drives in a Windows 2008 environment, some tapes may be left in the "Ejecting" state without being removed from the drive.

Workaround

Select **Diagnostic Mode** within NMC (**View > Diagnostic Mode**), then perform the following:

1. In the **Devices** pane, highlight the affected library.
2. Right click the library and select **Properties**.
3. Click the **Advanced** tab.
4. In the **Jukebox features** selection box, check the **autoeject** feature.
5. Click the **Timers** tab.
6. Set the **load sleep**, **unload sleep**, and **eject sleep** values to 0.
7. Click **Save** to save the changes.

Note: You may be required to disable and re-enable the jukebox for changes to take effect.

Adding additional shared devices to a DDS configuration may fail

LGTsc27902

Adding additional multiple shared devices to an existing Dynamic Drive Sharing (DDS) environment may fail with an error similar to the following:

```
Cannot start operation. drive D:000143 is currently associated
with device
rd=bar.cql.com:/dev/tape/by-id/scsi-1IBM_ULTRIUM-TD3_4765638801
which has a NULL hardware ID
```

Workaround

Although an error was encountered, one device will have been added successfully. To continue adding all the shared devices for the library drive, re-open the **Re-configure Library** wizard and select the remaining unconfigured drives that are to be shared and select **Start Configuration**.

GUI problems and limitations descriptions

This section details the problems and limitations related to the GUI.

Querying large numbers of save sets in the NetWorker user interface may cause a Java heap space error

LGTsc27106

Querying large numbers of save sets in the NetWorker user interface may fail with a Java heap space error.

Workaround

Increase the Java heap size used by the NetWorker Management Console application:

1. On the Console server host, open the gconsole.jnlp file in a text editor. The gconsole.jnlp file is located in:

```
<Console_install_dir>\web
```

2. Increase the default **max-heap-size** value from 700MB to 1400MB. For example,

```
<resources>
<j2se version="1.5+" initial-heap-size="64M"
max-heap-size="1400M" />
```

Note: To provide meaningful query results and to reduce the chance of encountering this error, narrow the save set search criteria by specifying selection parameters.

Licensing problems and limitations descriptions

This section details the problems and limitations related to licensing.

Inconsistent license information displayed for NDMP Workstation Client**LGTsc26673**

If an IP address is specified in the NDMP Array name attribute of the NetWorker client resource, the license information displayed for the WORKSTATION CLIENT TYPE may be incorrect. NetWorker client license information can be displayed with the **nsrlic -v** command. In this case, the license information displayed for the NDMP CLIENT LICENSES is correct. However, the information displayed for the WORKSTATION CLIENT TYPE may be incorrect.

Localization problems and limitations descriptions

This section details the problems and limitations related to localization.

For more information on localization important notes and tips, see [“Internationalization support” on page 148](#).

Non-ASCII hostnames are not supported by NetWorker**LGTsc26980**

NetWorker does not support hosts that have non-ASCII characters in the hostname.

Cannot perform a redirected NDMP recover operation to a non-English path on Windows**LGTsc28174**

You cannot perform an NDMP redirected recover operation to a directory path with non-English characters. This limitation applies to the Windows operating system only.

Workaround

Recover to an English path and then copy or move the recovered data to the path with non-English characters.

Some English messages appear on Windows 2008 hosts in the Chinese locale

LGTsc28516

Some NetWorker messages and command output appear in English on Windows 2008 Chinese hosts.

Messaging problems and limitations descriptions

This section details the problems and limitations related to messaging.

Savegroup completion report output contains additional, unnecessary information

LGTsc31111

Upon completion of a NetWorker 7.2.x client savegroup backup on NetWorker servers 7.3 and later, the following additional information is added to the output of the savegroup completion report. This additional information is unnecessary and can be ignored.

```
type: NSR client description;
pools supported: Yes;
browse time supported: Yes;
multiple balanced streams supported: Yes;
remote user: <NetWare_User>;
arch: NetWare IA32;
client OS type: NetWareOS;
CPU type: Intel Pentium;
CPUs: 2;
kernel arch: Intel Pentium;
machine type: server;
MB used: 57221;
NetWorker version: nwnnc_7_2;
OS: NetWare IA32 6;
version: nwnnc_7_2;
save set: path="<Save_Set_Name>:", level=full, diskno=0,
max_sessions=1,
stype=save ;
parallelism: 8
V <NetWare_client_Name>: <NetWare_save_set_name>: level=6,      8360
MB 00:09:34 21096 files
  <NetWorker_Server_Name>: index:<NetWare_client_Name> level=6, 47
MB 00:00:03 56 files
```

Single step recovery of a full virtual machine: some error messages are cryptic

LGTsc26965

During the single step recovery of a full VMware virtual machine, some error messages may appear to be cryptic. These error messages are generated by the VMware converter product. The error messages may refer to the underlying function name rather than the cause or required solution. The following is an example of one such error message:

```
70047:winworkr: Retore failed with error P2VError
IMPORT_DEST_INSUFFICIENT_SPACE()
```

The previous error message was generated because there was insufficient space in the staging location that was specified for the single step recovery.

Single step recovery of a full virtual machine: some messages are non-standard

LGTsc27063

During the single step recovery of a full VMware virtual machine, some messages may appear to be non-standard. These messages are generated by the VMware converter product. The following is an example of such messages:

```
[2009-02-17 14:27:37.380 'Libs' 4380 info] HOSTINFO: Seeing Intel
CPU,
numCoresPerCPU 4 numThreadsPerCore 1.
[2009-02-17 14:27:37.380 'Libs' 4380 info] HOSTINFO: This machine
has 2 physical CPUs, 8 total cores, and 8 logical CPUs.
[2009-02-17 14:27:37.802 'Libs' 4380 info] System libeay32.dll
library is older than our library (90709F < 9070AF)
[2009-02-17 14:27:49.850 'Libs' 4380 warning]
SSLVerifyCertAgainstSystemStore: Subject mismatch: VMware vs
10.31.236.60
[2009-02-17 14:27:49.850 'Libs' 4380 warning]
SSLVerifyCertAgainstSystemStore: The remote host certificate has
these problems:
* The host name used for the connection does not match the subject
name on the host certificate
* A certificate in the host's chain is based on an untrusted root.
[2009-02-17 14:27:49.850 'Libs' 4380 warning] SSLVerifyIsEnabled:
failed to open the product registry key. Assuming verification is
disabled. LastError = 0
[2009-02-17 14:27:49.850 'Libs' 4380 warning]
SSLVerifyCertAgainstSystemStore: Certificate verification is
disabled, so connection will proceed despite the error p2vTool
version 3.0.3 build-89816
```

Upgrading problems and limitations descriptions

This section details the problems and limitations related to upgrading.

When upgrading to NetWorker Release 7.5 on Windows, you might need to reboot the system

LGTsc24358

When upgrading to NetWorker Release 7.5 on Windows from a previous release of NetWorker software, you might need to reboot the system.

Restore problems and limitations descriptions

This section details the problems and limitations related to restore operations.

Volume mount point is recovered as a folder

LGTsc33060

When performing a mount point recovery, the volume mount point is recovered as a folder instead of a mount point.

Workaround

To recover the data within the mount point:

1. Manually create the mount point (if it does not exist already).
2. Use **winworkr** to recover the data under the mount point.

Recovering client file index fails if NDMP attribute is selected on client resource**LGTsc24329**

Recovering the client file index for a NetWorker client will fail if the NDMP attribute is set on the client resource.

Workaround

Before using the `nsrck -L7` command to recover a client file index, ensure that the NDMP attribute is not selected in the corresponding NetWorker client resource. After the client file index is recovered, you can once again select the NDMP attribute on the client resource.

Single step recovery of a full virtual machine: VCB restore must use Virtual Center IP/name and password/username combination if Virtual Center used for backup**LGTsc27447**

When a VMware Consolidated Backup (VCB) backup is performed using Virtual Center (for example, if the `config.js` file contains Virtual Center as the Host and its credentials), then the restore must be performed using the Virtual center IP (or its fully qualified domain name) with its credentials. Similarly, this process should be followed when performing a VCB restore using the ESX server, otherwise the restore will fail with an error message indicating "unknown path."

Single step recovery of a full virtual machine: Validation of the VC/ESX server credentials are validated once the NetWorker recover completes**LGTsc26268**

The VC/ESX server credentials are validated once the NetWorker recover operation completes:

If wrong user credentials are entered, the following might occur:

- ◆ The restore operation fails after the completion of the NetWorker recover operation.
- ◆ The user must wait until the NetWorker software completes the recover operation before being notified that a wrong credential was entered.
- ◆ For large a save set, the NetWorker recover operation will take a longer time to complete depending upon the size of the save set. Notification of wrong ESX/VC credentials happens after the NetWorker recover operation completes.

Workaround

Ensure that you enter the proper user credentials to avoid long response time for the following operations:

- ◆ VC/ESX server credentials validation. This task is performed in the later stages of a VCB restore operation.
- ◆ Before performing a VMware Consolidated Backup (VCB) restore operation. The validation of wrong credentials might cause longer response times.

Single step recovery of a full virtual machine: cannot specify CIFS path for staging location

LGTsc27559

When performing a single step restore of a full VMware virtual machine, the staging location you specify cannot be a Common Internet File System (CIFS) path. The recovery will fail with an error message similar to one of the following:

Error 1:

```
Recovering files of client 'langre-rh-1.takman.com' from
server '11.32.64.115'.
Total disk space available for recover is 0 KB.
Total disk space needed for recover is 2304 MB.
67854:winworkr: Failed to recover save sets: Recover failed due to
low disk space!..
```

Error 2:

```
Recovering files of client 'langre-rh-1.takman.com' from
server '11.32.64.115'.
70483:winworkr: Staging location Z:\rack2 is in use by other
process.
Select new staging location or delete the staging location Z:\rack2
manually.
Restore of virtual machine failed!...
```

Single step recovery of a full virtual machine: recovery of continued save sets may fail

LGTsc27647

If NetWorker assigns dual save set ids to a single save set for a full VMware virtual machine, then the restore of a full VMware virtual machine from the NetWorker user program fails with an error message similar to the following:

```
43694:winworkr: Cannot recover continued ssid 5235851802
```

Workaround

Recover the full virtual machine from the command line by using the **recover** command with the first save set ID. See [“Performing a single step recovery of the full VMware virtual machine” on page 169](#) for information about recovering a full virtual machine from the command line.

NetWorker 7.5 problems and limitations

Table 12 on page 64 identifies problem issues and limitations discovered in NetWorker release 7.5.

The known limitations are separated into the following categories:

- ◆ [“Backup problems and limitations descriptions” on page 67](#)
- ◆ [“CLI problems and limitations descriptions” on page 69](#)
- ◆ [“Cloning and staging problems and limitations descriptions” on page 69](#)
- ◆ [“Configuration problems and limitations descriptions” on page 70](#)
- ◆ [“Deduplication problems and limitations descriptions” on page 71](#)
- ◆ [“Devices and media problems and limitations descriptions” on page 72](#)

- ◆ “GUI problems and limitations descriptions” on page 72
- ◆ “Installation problems and limitations descriptions” on page 73
- ◆ “Licensing problems and limitations descriptions” on page 74
- ◆ “Localization problems and limitations descriptions” on page 74
- ◆ “Messaging problems and limitations descriptions” on page 74
- ◆ “Performance problems and limitations descriptions” on page 75
- ◆ “Restore problems and limitations descriptions” on page 76
- ◆ “Security problems and limitations descriptions” on page 77
- ◆ “Upgrading problems and limitations descriptions” on page 78

Table 12 Limitations discovered in NetWorker release 7.5 (page 1 of 3)

Customer Service defect number	Issue Tracker issue number	Description of limitation	Operating System affected	Product Feature
“LGTsc25800” on page 67	25800nw	Memory leak occurs during group backup and recover on SuSE version 10.	Linux	Backup
“LGTsc23366” on page 67	23366nw	NetWorker attempts to back up NFS4 file systems. (resolved for the 7.5 SP1 release)	Linux	Backup
“LGTsc22164” on page 67	22164nw	Software distribution feature cannot be used to perform upgrade on some platforms	Linux, Solaris	Backup
“LGTsc24483” on page 67	24483nw	Low system memory may cause unpredictable results	Solaris	Backup
“LGTsc15176” on page 67	15176nw	VCB backup of multiple virtual machines simultaneously may fail.	Windows	Backup
“LGTsc11447” on page 67	11447nw	Hosts file entries for IPv6 must contain localhost before aliases.	AIX	Backup
“LGTsc11274” on page 68	11274nw	Backup fails when save set list has a very large number of save sets defined.	Solaris	Backup
“LGTsc09692” on page 68	09692nw	Out-of-date output files in the savegroup completion report are not automatically deleted.	HP-UX	Backup
“LGTsc21070” on page 68	21070nw	Save jobs may terminate prematurely or later than desired if NetWorker server and clients time settings differ	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup
“LGTsc14530” on page 68	14530nw	VCB fails with custom pre-freeze script error.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
“LGTsc14319” on page 68	14319nw	SSL key length limitation on Solaris AMD64.	Solaris	Backup
“LGTsc23714” on page 69	23714nw	Savegroup initiated with “@” symbol at beginning of name does not trigger desired group.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	CLI
“LGTsc22013” on page 69	22013nw	NetWorker requires an ipnodes entry in /etc/nsswitch.conf on HP-UX	HP-UX	CLI

Table 12 Limitations discovered in NetWorker release 7.5 (page 2 of 3)

Customer Service defect number	Issue Tracker issue number	Description of limitation	Operating System affected	Product Feature
"LGTsc10723" on page 69	10723nw	AFTD direct file recover option may yield incomplete volume information	Solaris	CLI
"LGTsc07111" on page 70	07111nw	Solaris 9 users who upgrade from NetWorker 7.2.x may notice errors during cloning operations	Solaris	Cloning and Staging
"LGTsc24548" on page 70	24548nw	Slow performance on Solaris 10 because asynchronous I/O is disabled	Solaris	Cloning and Staging
"LGTsc23081" on page 70	23081nw	NetWorker Console unable to generate reports in pure IPv6 environment	HP-UX	Configuration
"LGTsc18543" on page 70	18543nw	Relabeling volume after deleting remote client resource does not purge file index.	Windows	Configuration
"LGTsc11811" on page 71	11811nw	Do not perform client backups using temporary IPv6 addresses.	Linux, Windows	Configuration
"LGTsc14761" on page 71	14761nw	Connecting to web server through IPv6 fails using Internet Explorer 6.	Windows	Configuration
"LGTsc12407" on page 71	12407nw	Cannot recover data using an Isilon NAS Filer and a DAR backup.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Configuration
"LGTsc09460" on page 71	09460nw	Troubleshooting connection issues between the server and storage node.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Configuration
"LGTsc17588" on page 71	17588nw	Log data may not be written when recovering a deduplication node	Windows	Deduplication
"LGTsc17146" on page 72	17146nw	Raw disk backup and restore not supported on NetWorker with Microsoft Windows 2008.	Windows	Devices and Media
"LGTsc23484" on page 72	23484nw	Media label verification may fail in NDMP drive of DDS configuration.	Solaris	Devices and Media
"LGTsc07321" on page 72	07321nw	Inquire command does not detect tape drive on HP-UX.	HP-UX	Devices and Media
"LGTsc13785" on page 72	13785nw	Quantum PX500 series jukebox cannot be configured on multiple hosts.	HP-UX	Devices and Media
"LGTsc23661" on page 72	23661nw	Monitor activity status displays failure after updating using software distribution, even if update was successful.	Windows	GUI
"LGTsc22595" on page 73	22595nw	VCB image-level backup cannot be recovered in Winworkr GUI after file system backup is performed. (resolved for the 7.5 SP1 release)	Linux, Solaris	GUI
"LGTsc21575" on page 73	21575nw	NMC GUI hangs when terminating "Operation in progress" window. (resolved for the 7.5 SP1 release)	Linux	GUI
"LGTsc18350" on page 73	18350nw	Console server cannot be installed on Solaris server if running only LDAPS without native NetWorker user authentication.	Solaris	GUI

Table 12 Limitations discovered in NetWorker release 7.5 (page 3 of 3)

Customer Service defect number	Issue Tracker issue number	Description of limitation	Operating System affected	Product Feature
"LGTsc12061" on page 73	12061nw	Cannot dismiss events in the events table until the event is resolved.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	GUI
"LGTsc08415" on page 73	08415nw	A user cannot be a member of more than 512 groups.	Windows	GUI
"LGTsc17805" on page 73	17805nw	NetWorker installation directory path longer than 160 characters returns error, but installation still completes successfully.	Windows	Installation
"LGTsc26210" on page 74	26210nw	License Conformance Summary displays incorrect base license type.	Solaris	Licensing
"LGTsc21657" on page 153	21657nw	In a non-English environment, the character encoding used for the NMC client and NetWorker client must be the same	Windows	Localization
"LGTsc26288" on page 154	26288nw	JRE 1.6 users cannot export reports as PDF documents for non-English locales on AIX and HP-UX	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Localization
"LGTsc22735" on page 74	22735nw	mminfo query ignores "!" on non-boolean fields.	Windows	Messaging
"LGTsc23049" on page 75	23049nw	Slow shutdown time on Mac OS X if IPv6 is enabled. (resolved for the 7.5 SP1 release)	Mac OS X	Performance
"LGTsc20179" on page 75	20179nw	Optimizing DNS lookups on IPv4-only AIX machines	AIX	Performance
"LGTsc21253" on page 76	21253nw	nsrjobd may consume large amount of memory depending on backup environment	Windows	Performance
"LGTsc19690" on page 76	19690nw	NetWorker programs may experience delays on SuSE Linux Enterprise Server version 9.x using IPv6.	Linux	Performance
"LGTsc24948" on page 76	24948nw	Directed save set recoveries will restore the entire save set only. (resolved for the 7.5 SP1 release)	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore
"LGTsc24103" on page 77	24103nw	AES Encryption Recovery Fails On HP-UX Itanium 64. (resolved for the 7.5 SP1 release)	HP-UX	Restore
"LGTsc12672" on page 77	12672nw	nsrck -L7 -t must be performed with additional steps in order to recover client index with save sets passed browse period.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore
"LGTsc20723" on page 77	20723nw	Ctime attribute not modified on AIX version 5.3 and later, Mac OS X version 10.4 and later.	AIX, Mac OS X	Restore
"LGTsc21704" on page 78	21704nw	Authentication error displays when NetWorker connecting to client.	Solaris	Security
"LGTsc23961" on page 78	23961nw	Save/NMO backups fail if nsrauth only authentication used for non-root user on HP-UX 11i v3. (resolved for the 7.5 SP1 release)	HP-UX	Security
"LGTsc24076" on page 78	24076nw	New client's global attributes do not inherit existing client values after upgrading NMC.	Windows	Upgrading

Backup problems and limitations descriptions

This section details the problems and limitations related to backup operations.

Memory leak occurs during group backup and recover on SuSE version 10 (fixed for the 7.5 Service Pack 2 release)

LGTsc25800

A memory leak from `libcommonssl` and `CST` occurs during a group backup and recover on SuSE version 10.

NetWorker attempts to back up NFS4 file systems (resolved for the 7.5 SP1 release)

LGTsc23366

The NetWorker software handles NFS4 file systems the same as local file systems and attempts to back up the NFS4 file systems

Software distribution feature cannot be used to perform upgrade on some platforms

LGTsc22164

You cannot perform a NetWorker upgrade using the software distribution feature on the `linux_ia64`, `linux_ppc64`, and `solaris_amd64` client platforms.

Low system memory may cause unpredictable results

LGTsc24483

If your NetWorker server runs low on system memory, unpredictable behavior could result. [“Environment and system requirements” on page 38](#) has information on minimum recommended system requirements.

VCB backup of multiple virtual machines simultaneously may fail

LGTsc15176

Due to a limitation in VMware Consolidated Backup (VCB) version 1.1, a VCB backup of multiple virtual machines simultaneously may fail with an exit code of -2146234327.

Workaround

There are two possible workarounds for this limitation:

1. Upgrade to VMware Consolidated Backup version 1.5.
2. Update the following settings in the `config.js` file used by VCB on the VCB proxy host:
 - a. Set `MAX_RETRIES` to a number greater than 0.
 - b. Set `PREEXISTING_MOUNTPOINT` to `delete` to attempt to remove the pre-existing mount point.

Hosts file entries for IPv6 must contain localhost before aliases

LGTsc11447

If an entry for the IPv6 localhost address `::1` is added to the `/etc/hosts` file, localhost must be entered before aliases such that the order is `<address> <localhost> <alias>`. For example, if `<alias>` is "loopback", the entry for the address should read:

`::1 localhost loopback`

Backup fails when save set list has a very large number of save sets defined**LGTsc11274**

When a very large number of save sets are defined in the client's save set attribute, backups may fail with the message:

```
SYSTEM error: Not enough space
```

This error may occur when the total length of all save sets included in the save set list exceeds 25 KB.

Workaround

Create one or more Client resource for the client and divide the save sets between the two clients. The *EMC NetWorker Administration Guide* provides information about creating multiple client resources for the same client.

Out-of-date output files in the savegroup completion report are not automatically deleted**LGTsc09692**

Out-of-date output files in the savegroup completion report are not automatically deleted. To avoid having a very large savegroup completion report, periodically delete the temporary files under the Directory `/nsr/tmp/sg/<group name>` that are more than 7 days old.

Save jobs may terminate prematurely or later than desired if NetWorker server and clients time settings differ**LGTsc21070**

The `NSR_UNRESPONSIVE_JOB_TIMEOUT` environment variable can be used to automatically terminate jobs that have no activity for a predetermined period of time regardless of their state. If this environment variable is used and there is a discrepancy between client and server times, save jobs may be terminated prematurely or later than desired.

Workaround

Periodically synchronize the time between the NetWorker server and clients. "[LGTsc18589](#)" on page 88 provides more information on synchronizing clock times between hosts.

VCB fails with custom pre-freeze script error**LGTsc14530**

Due to a known limitation with VMware, VCB backup of a Solaris virtual machine may fail due with the error of "Custom pre-freeze script failed," even though no customization is made to the pre-freeze script.

This limitation has been fixed in ESX 3.5 Update 2.

SSL key length limitation on Solaris AMD64; Solaris 10 Encryption Kit required**LGTsc14319**

The default OpenSSL library on the Solaris operating system for AMD 64 does not support key lengths greater than 128 bits. You must install the **Solaris 10 Encryption kit**, which includes the packages `SUNWcrman`, `SUNWcry`, and `SUNWcryr`. The Solaris 10 Encryption kit supports AES encryption of 256 bit key lengths. This kit is available from the official SUN Solaris web downloads at

<http://www.sun.com/download/index.jsp?tab=2>. Scroll down under "S" to find the link to the Solaris 10 Encryption Kit.

Failure to install this kit will result in NetWorker NOT functioning on the Solaris 10 AMD platform.

CLI problems and limitations descriptions

This section details the problems and limitations related to the CLI.

Savegroup initiated with "@" symbol at beginning of name does not trigger desired group

LGTsc23714

When a savegroup with the "@" symbol at the beginning of the name is initiated from the command line or from NMC, the default group will be triggered instead of the specified savegroup. The "@" symbol is being interpreted as a special flag/option, not as part of the savegroup name.

Workaround

Do not use the "@" symbol at the beginning of a savegroup name.

NetWorker requires an ipnodes entry in /etc/nsswitch.conf on HP-UX

LGTsc22013

NetWorker may fail to run on HP-UX hosts when the /etc/nsswitch.conf file does not contain an ipnodes policy. In this case, the following error displays:

```
lgtolmd: Failed to resolve the IPv6 localhost address ::1. Please
verify an entry for the IPv6 localhost address exists in your
/etc/hosts file andan "ipnodes" policy has been added to your
/etc/nsswitch.conf file.
```

Workaround

Enable /etc/hosts-based lookups for IPv6 hosts. Add the following line to the /etc/nsswitch.conf file (you can create the file from one of the nsswitch templates if necessary):

```
ipnodes: files
```

AFTD direct file recover option may yield incomplete volume information

LGTsc10723

Recovering data from AFTD volumes using direct files recovery method will not update the "read" information in the volume record. As a result, the mminfo command will incorrectly display the "read" data as 0.

For example, the command, `mminfo -a -r "written, read, volume"` might yield results similar to the following:

```
written read volume
99 KB 0 KB trout.legato.com.002
0 KB 0 KB trout.legato.com.002.RO
```

Cloning and staging problems and limitations descriptions

This section details the problems and limitations related to cloning and staging operations.

Solaris 9 users who upgrade from NetWorker 7.2.x may notice errors during cloning operations

LGTsc07111

Customers upgrading from 7.2.x may notice errors similar to the following during cloning operations:

```
38758 11/27/08 16:21:45 2 0 0 1 23334 0 <hostname> nsrd media
warning: /dev/rmt/0cbn writing: posix async write: Error 0
```

```
42506 11/27/08 16:21:45 2 0 0 1 23334 0 <hostname> nsrd media
notice: LTO Ultrium-4 tape 64U00S00 on /dev/rmt/0cbn is full
```

```
42506 11/27/08 16:21:45 2 0 0 1 23334 0 <hostname> nsrd media
notice: LTO Ultrium-4 tape 64U00S00 used 89 MB of 800 GB capacity
```

Workaround

These issues may be related to a Solaris operating system limitation. If you experience these errors, disabling asynchronous I/O capability may resolve the problem.

To disable async I/O capability:

1. Shut down NetWorker
2. Set the **DISABLE_SOL_ASYNC_IO** environment variable in the NetWorker startup script. The default location of the startup script is `/etc/init.d/networker`.
3. Re-start NetWorker using the NetWorker startup script

Note: With Async I/O disabled, performance impacts may be noticed during cloning operations.

Slow performance on Solaris 10 because asynchronous I/O is disabled

LGTsc24548

Due to a Solaris 10 operating system issue, asynchronous tape input/output operations are disabled by default. As a result, some I/O intensive operations such as cloning will be slower.

Configuration problems and limitations descriptions

This section details the problems and limitations related to configuration.

NetWorker Console unable to generate reports in pure IPv6 environment

LGTsc23081

The NetWorker Console is unable to generate reports when deployed in a pure IPv6 environment due to a Sybase iAnywhere 9 limitation.

Relabeling volume after deleting remote client resource does not result in purge of file index

LGTsc18543

The file index of a remote client cannot be purged by relabeling a volume after deleting the remote client resource.

The file index of the remote client can be purged (for the volume ID) by relabeling a volume when the remote client is a current valid client resource.

Workaround

Run `nsrck -L 3` from the command line to purge the file index.

Do not perform client backups using temporary IPv6 addresses**LGTsc11811**

Temporary or randomly generated IPv6 TCP/IP addresses are not supported in NetWorker. If the address for a client is not stored in DNS or in a hosts file and has not been added to the client resource, NetWorker will be unable to back up the client.

Connecting to web server through IPv6 fails using Internet Explorer 6**LGTsc14761**

Internet Explorer 6 does not handle IPv6 addresses. If you attempt to connect to the GST web server through an IPv6 address using the IE6 web browser, the browser does not connect and returns an error.

Use Internet Explorer 7 web browser. This problem does not occur when using IE7.

Cannot recover data using an Isilon NAS Filer and a DAR backup**LGTsc12407**

Recovery operations fail when a NetWorker DAR backup is performed with an Isilon NAS Filer.

Workaround

To work around this issue, back up and recover the data using a non-DAR backup or recovery type.

Troubleshooting connection issues between the server and storage node**LGTsc09460**

If port 111 is blocked by a firewall between the backup server and the storage node, the NetWorker `nsrd` process loops when trying to connect to `nsrmmgd` on the NetWorker server. Because the NetWorker `nsrd` process is unable to connect to port 111, both the storage node and the `nsrmmgd` process are not available. The process loop hangs in the firewall until the connect timeout is reached, which is four minutes by default.

Workaround

To prevent NetWorker from using port 111, make sure that there is no service lookup of `sunrpc`. Additionally, if you would like to use a different port for the NetWorker Portmapper `nsrrpc`, add its port number to the services file.

Deduplication problems and limitations descriptions

This section details the problems and limitations related to deduplication.

Log data may not be written when recovering a deduplication node**LGTsc17588**

When recovering data from a deduplication node to a remote client, the user performing the recovery must have NETWORK read and write permissions to the `/nsr/dedup/logs` folder on the host to which data is being recovered. Otherwise, deduplication recovery log data will not be created.

Devices and media problems and limitations descriptions

This section details the problems and limitations related to devices and media.

Raw disk backup and restore not supported on NetWorker with Microsoft Windows 2008

LGTsc17146

NetWorker does not support backup and restore of raw disks with Windows Server 2008.

Media label verification may fail in NDMP drive of DDS configuration

LGTsc23484

After labelling volumes using NDMP drives and then unmounting, the next time those volumes are mounted in NDMP drives some volumes may fail media label verification and display as "unlabeled".

Inquire command does not detect tape drive on HP-UX

LGTsc07321

When you attach a Tape drive to the HP-UX 11i V2 64-bit host and run the **inquire** command, the tape drive is not detected, even though the device was configured, labeled and mounted and a save was successful.

Workaround

Identify the drive path in the /dev/rmt folder, and using this path configure the device, as usual.

Whenever a new device is attached to the system, ensure that the cached file /tmp/lgto_scsi_devlist is updated. Remove this temp file and then run the inquire command, which will rebuild the file.

Quantum PX500 series jukebox cannot be configured on multiple hosts

LGTsc13785

The partitioned Quantum PX500 series jukebox cannot be configured on multiple hosts using the NetWorker command **jbconfig -s <server-name>** upon selecting configuration option 2, "Configure an Autodetected SCSI Jukebox". However, the same can be configured by selecting option 4, "Configure an SJI Jukebox".

GUI problems and limitations descriptions

This section details the problems and limitations related to the GUI.

Monitor activity status displays failure after updating using software distribution, even if update was successful

LGTsc23661

After updating the NetWorker software to release 7.5 from release 7.4.3 on a Windows 2008 Server using the software distribution feature, the monitoring activity status indicates that the operation failed, even if the update was successful.

Workaround

To verify that the update was successful:

1. In the Programs Files\Legato\nsr\bin folder, right click the **nsrexecd** binary and select **Properties**.

- Click the **Version** tab to ensure the version is NetWorker 7.5.

VCB image-level backup cannot be recovered in Winworkr GUI after file system backup is performed (resolved for the 7.5 SP1 release)

LGTsc22595

On a virtual machine running Linux or Solaris, a VCB image-level backup cannot be recovered in the NetWorker Winworkr GUI after a file system backup is performed from the guest operating system.

Workaround

Run the recover command on the VCB proxy host to perform the recovery:

```
recover -s <nw server> -s <ssid for FULLVMM> -d <relocation path>
```

NMC GUI hangs when closing "Operation in progress" window (resolved for the 7.5 SP1 release)

LGTsc21575

Upon attempting to close the Operation in progress window in the Management Console GUI, the program hangs and GST may core.

Workaround

Terminate the NMC program, and then restart GST.

Console server cannot be installed on Solaris server if running only LDAPS

LGTsc18350

If your environment runs only LDAPS, also known as LDAP over SSL, and you are not using native NetWorker user authentication, the Console server must not be installed on a Solaris server. However, the Console server can still be installed on a Linux, Windows, AIX or HP-UX server.

Cannot dismiss events in the events table until the event is resolved

LGTsc12061

Events cannot be dismissed or hidden in the events table until the event is resolved or has finished.

A user cannot be a member of more than 512 groups

LGTsc08415

A user cannot be a member of more than 512 groups when running any operation with NetWorker. If the user is a member of more than 512 groups, the following message appears:

```
Maximum number of groups exceeded, some groups may be dropped
from the credential. Number of groups the user belongs to: XXX,
maximum number of groups supported: 512
```

Installation problems and limitations descriptions

This section details the problems and limitations related to installation.

NetWorker installation directory path longer than 160 characters returns error, but installation still completes successfully

LGTsc17805

In Windows 2003, when a NetWorker installation directory path is longer than 160 characters, an error message appears during installation. However, if you click **OK**

in the error message dialog box, the installation completes successfully. The NetWorker software is then installed in a new directory where the name is the first 160 characters of the folder selected during installation.

The longest path name currently supported by NetWorker is 160 characters.

Licensing problems and limitations descriptions

This section details the problems and limitations related to licensing.

License Conformance Summary displays incorrect base license type

LGTsc26210

The License Conformance Summary, accessed through the Configuration tab of the **NetWorker Administration** window, incorrectly displays the base license type as "Eval" when it should be "Data Backup Utility".

Localization problems and limitations descriptions

This section details the problems and limitations related to localization.

For more information on localization important notes and tips, see [“Internationalization support” on page 148](#).

In a non-English environment, the character encoding used for the NMC client and NetWorker client must be the same

LGTsc21657

In a non-English environment, characters do not display correctly if the character encoding is different on the NMC client than the files on the NetWorker host that are being browsed.

Workaround

In a non-English environment, ensure that the NMC client uses the same character encoding as the files on the NetWorker client host that are to be browsed.

For example, if the NMC client uses the zh_CN.EUC locale it will not properly display files that were created using the zh_CN.UTF-8 locale. The character encoding used for the NMC client and NetWorker client must be the same to ensure the proper display of characters. In this example, the NMC client should be started using the zh_CN.UTF-8 locale.

JRE 1.6 users cannot export reports as PDF documents for non-English locales on AIX and HPUX

LGTsc26288

The NetWorker option to export reports in Acrobat PDF format is not supported on AIX and HPUX hosts that are running JRE 1.6 in a non-English locale.

Messaging problems and limitations descriptions

This section details the problems and limitations related to messaging.

mminfo query ignores “!” on non-boolean fields

LGTsc22735

Performing an **mminfo** query with “!” (for example, if you run **mminfo -q "!client=hydra"**) should exclude all save sets for the client hydra. However, **mminfo** ignores the “!” and returns all save sets for the specified client.

Performance problems and limitations descriptions

This section details the problems and limitations related to performance.

Slow shutdown time on Mac OS X if IPv6 is enabled (resolved for the 7.5 SP1 release)

LGTsc23049

If you are experiencing slower than normal shutdown times on NetWorker for Mac OS X and are not using IPv6, disable IPv6 by using the following command:

```
ip6 -x
```

Optimizing DNS lookups on IPv4-only AIX machines

LGTsc20179

The default behavior of the AIX name resolver is to attempt lookups of both IPv4 and IPv6 addresses.

AIX first retrieves the address locally, and if this fails, requests the address from the DNS server. For servers that do not have IPv6 configured, this operation only returns a failure message after the request has timed out. Since the NetWorker software relies on AIX for resolving address information, NetWorker commands may appear to be hanging.

Note: Any program which calls one of several AIX name resolution APIs that includes resolving IPv6 protocol will experience the same delays.

Workaround

If the server is configured for IPv4 only, you need to override the default behavior for DNS lookups. The **NSORDER** variable, `/etc/irs.conf` file and `/etc/netsvc.conf` file control name resolution. These entries need to be changed, depending on the name resolution ordering in place, so that NetWorker services do not attempt to lookup IPv6 addresses against DNS.

Ensure that your AIX hosts use local name resolution ordering. The recommended name resolution ordering method is to use the `/etc/netsvc.conf` file. The order of priority in which AIX consults the files is:

- ◆ **NSORDER**
- ◆ **irs.conf**
- ◆ **netsvc.conf**

Update each name resolution ordering file, or files, that are in use so that the server attempts to lookup IPv4 addresses only with DNS. The following entries show how to update each file:

- ◆ Change the **NSORDER** variable to the following:
export NSORDER=local,bind4
- ◆ Change the **hosts** entry in the `/etc/irs.conf` file to the following:
hosts local
hosts dns4
- ◆ Change the **hosts=local,bind** entry in the `/etc/netsvc.conf` file to the following:
hosts=local, bind4

nsrjobd may consume large amount of memory depending on backup environment

LGTsc21253

The nsrjobd daemon runs on the NetWorker server and is responsible for monitoring NetWorker activity during a backup or recovery operation. Be aware that, depending on the size of your backup environment, **nsrjobd** can require large amounts of RAM.

NetWorker programs may experience delays on SuSE Linux Enterprise Server version 9.x using IPv6

LGTsc19690

NetWorker programs may experience a start up delay on a SuSE Linux Enterprise Server (SLES) version 9.x using IPv6 in either a single stack or dual stack (IPv4/IPv6) environment. This situation may occur if the Scope:Link IPv6 address of the Linux host network interface is not included in the /etc/hosts file.

To determine the Scope:Link address of the host network interface, run the ipconfig command from the host's command line. In the following example, the host named geo1 has a network interface named eth0, which has a Scope:Link address of fe80::2c0:4ff:fe68:c24/64.

```
geo1> ifconfig
eth0      Link encap:Ethernet  HWaddr 00:C0:4F:68:C2:4F
          inet addr:192.168.0.1 Bcast:10.5.163.255
          Mask:255.255.254.0
          inet6 addr: 3ffe:80c0:22c:74:2c0:4ff:fe68:c24/64
          Scope:Global
          inet6 addr: fe80::2c0:4ff:fe68:c24/64 Scope:Link
          inet6 addr: 2001:abcd:0:1001:2c0:4ff:fe68:c24/64
          Scope:Global
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:137451625 errors:0 dropped:0 overruns:0 frame:0
          TX packets:13840698 errors:0 dropped:0 overruns:0
          carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:1834082191 (1749.1 Mb)  TX bytes:69705018 (66.4
          Mb)
          Interrupt:19 Base address:0xdc00
```

Workaround

Add the Scope:Link address of the host network interface(s) to the /etc/hosts file on the affected NetWorker client. The following example shows how an entry in the /etc/hosts file might appear:

```
# Scope:Link address
fe80::2c0:4ff:fe68:c24 geo1.fss.dcp.com geo1
```

Restore problems and limitations descriptions

This section details the problems and limitations related to restore operations.

Directed save set recoveries will restore the entire save set only (resolved for the 7.5 SP1 release)

LGTsc24948

When performing a remote directed save set recover and specifying the path in the recover command line, the path is not acknowledged. As a result, the entire save set is recovered, not just the specified path(s).

Workaround

Perform an index based recover or a save set restore from the destination client. Refer to the recover man pages for further details.

AES Encryption Recovery Fails On HP-UX Itanium 64 (resolved for the 7.5 SP1 release)**LGTsc24103**

A recover of AES encrypted data fails when the **-p** option is used to provide the pass phrase.

Workaround

Set the pass phrase in the NSR resource.

nsrck -L7 -t must be performed with additional steps in order to recover client index with save sets passed browse period**LGTsc12672**

The **nsrck -L7 -t** command can no longer be used solely to perform a recovery of a client index where save sets have passed the period identified in the browse policy.

The following operations must be performed in addition to running the **nsrck** command on the save sets in order to recover the index information:

1. Identify a save set containing the index for the desired time/client.
2. Adjust the retention of the identified client file index to a date in the future.
3. Change the mode to **notrecyclable** for the identified client file index.
4. Identify the save sets required to browse (for example, the full backup and all the following incremental backups prior to the desired date).
5. Set a new retention period for each of the individual save sets to a date in the future.
6. Change the mode to **notrecyclable** for each of the individual save sets.
7. Run the **nsrck -L7 -t** command.
8. Browse the save sets and perform the recover as usual.

Ctime attribute does not get modified on AIX version 5.3 and later, Mac OS X version 10.4 and later**LGTsc20723**

When a file is renamed on AIX version 5.3 and later or Mac OS X 10.4 and later, the **ctime** attribute is not modified. The **ctime** attribute is the timestamp NetWorker uses to determine whether a file has been modified when performing a non-full backup. If renaming files on AIX version 5.3 and later or Mac OS X 10.4 and later, perform a full backup to ensure recovery of the renamed files.

Security problems and limitations descriptions

This section details the problems and limitations related to security.

Authentication error displays when NetWorker connecting to client**LGTsc21704**

When trying to connect to a client to browse the client's file system, NetWorker displays the error message "Authentication failed or no valid authentication methods supported by both client and server".

Workaround

If this error message appears, search the daemon log file for more information and instructions.

Save/NMO backups fail if nsrauth only authentication used for non-root user on HP-UX 11i v3 (resolved for the 7.5 SP1 release)**LGTsc23961**

If `nsrauth` is the only authentication method being used, a regular save or NMO backup started as a non-root user on HP-UX 11i v3 fails with authentication errors.

Workaround

Manually add execute permissions for "other" to the `/nsr`, `/nsr/tmp`, and `/nsr/tmp/sec` directories.

Upgrading problems and limitations descriptions

This section details the problems and limitations related to upgrading.

New client's global attributes do not inherit existing client values after upgrading NMC**LGTsc24076**

After upgrading to the latest version of NMC and launching the Console for the first time, the **Configuration** window appears, prompting you to set the configuration for the Console and to add NetWorker servers. In the **Set Database Backup Server** page, the checkbox **Create client resource on this server** is selected by default. If you click **Finish** with this checkbox selected, the NetWorker software disables the client's global attributes archive services, hard links, and short filenames if enabled prior to the upgrade when the new client resource is created.

Workaround

Clear the checkbox **Create client resource on this server**.

NetWorker releases previous to 7.5 problems and limitations

[Table 13 on page 79](#) identifies problem issues and limitations discovered previously to NetWorker release 7.5

The known limitations are separated into the following categories:

- ◆ ["Archiving problems and limitations descriptions" on page 86](#)
- ◆ ["Backup problems and limitations descriptions" on page 86](#)
- ◆ ["CLI problems and limitations descriptions" on page 94](#)
- ◆ ["Cloning and Staging problems and limitations descriptions" on page 98](#)
- ◆ ["Compatibility problems and limitations descriptions" on page 98](#)
- ◆ ["Configuration problems and limitations descriptions" on page 99](#)

- ◆ “Devices and Media problems and limitations descriptions” on page 99
- ◆ “GUI problems and limitations descriptions” on page 103
- ◆ “Installation problems and limitations descriptions” on page 104
- ◆ “Licensing problems and limitations descriptions” on page 108
- ◆ “Localization problems and limitations descriptions” on page 109
- ◆ “Messaging problems and limitations descriptions” on page 110
- ◆ “NetWorker support for Novell’s OES Linux limitations” on page 112
- ◆ “NMC problems and limitations descriptions” on page 114
- ◆ “Restore problems and limitations descriptions” on page 114
- ◆ “Upgrading problems and limitations descriptions” on page 119

Table 13 Limitations discovered in NetWorker releases previous to 7.5 (page 1 of 8)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
“LGTsc05166” on page 86	05166nw	DiskXtender Data Manager file systems get archived on NetWorker	Windows	archiving
“LGTsc20517” on page 86	20517nw	For each NetWorker client that is BMR enabled, set the save set attribute in the client resource to ALL.	Linux, Windows Solaris	Backup
“LGTsc19514” on page 87	19514nw	Delay in cancelling savegroups in NMC for BMR enabled clients.	Linux, Windows, Solaris	Backup
“LGTsc13933” on page 87	13933nw	VSS system fileset backups fail on Windows Server 2008 Hyper-V role implementation.	Windows	Backup
“LGTsc16575” on page 87	16575nw	A backup might fail for CIFS shares on Microsoft Windows hosts.	Windows	Backup
“LGTsc18589” on page 88	18589nw	A backup might fail if the system clocks for the NetWorker server and client differ more than the default of one day or the user specified interval.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
“LGTsc17703” on page 88	17703nw	How to back up a NetWorker Windows client that has multiple domains that are part of both an AD domain, and a DNS domain.	Windows	Backup
“LGTsc04870” on page 89	04870nw	The nsr_shutdown command fails when a large number of savegroups are running.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
“LGTsc10292” on page 89	10292nw	Incorrectly configured NPS role results in failed backup of VSS SYSTEM SERVICES of Windows Server 2008.	Windows	Backup
“LGTsc11914” on page 89	11914nw	Active Directory Lightweight Directory Services backup fails for Windows 2008 client.	Windows	Backup
“LGTsc13139” on page 89	13139nw	VMware Consolidated Backup not terminating completely.	Windows	Backup
“LGTsc13141” on page 90	13141nw	Save Operation attribute not functioning correctly with VMware Consolidated Backup.	Windows	Backup
“LGTsc13933” on page 90	13933nw	VSS system state backups may fail if programs were not cleanly uninstalled.	Windows	Backup

Table 13 Limitations discovered in NetWorker releases previous to 7.5 (page 2 of 8)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTsc14872" on page 90	14872nw	Global directives not supported with VMware Consolidated Backup.	Windows	Backup
"LGTsc14956" on page 90	14956nw	Not all drives in a VCB file level backup are browsable.	Windows	Backup
"LGTsc15061" on page 91	15061nw	Savegroup completion report for VCB backups does not contain expected information about save sets.	Windows	Backup
"LGTsc15236" on page 91	15236nw	Incorrect error during recovery of VCB backups.	Windows	Backup
"LGTsc19665" on page 92	19665nw	Replicated dedupe save sets are not deleted	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
"LGTsc12970" on page 92	12970nw	Backups of /dev directory fail in HP-UX 11i v3 on PA_RISC and IA64.	AIX, Solaris, HP-UX, Tru64 UNIX	Backup
"LGTsc06312" on page 92	06312nw	The <code>nsr_render_log</code> program doesn't accept input from STDIN.	AIX, Solaris, HP-UX, Tru64 UNIX	Backup
"LGTsc09257" on page 92	09257nw	A user cannot be a member of more than 512 groups.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
"LGTsc06172" on page 93	06172nw	Testing large number of groups in parallel causes core dumps.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
"LGTpa91475" on page 93	91475nw	The <code>savenpc</code> command fails if the precommand and post command contains any non-ASCII characters.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
"LGTsc00850" on page 93	00850nw	Restrictions associated with the ZFS file system.	AIX, Solaris, HP-UX, Tru64 UNIX	Backup
"LGTsc19916" on page 94	19916nw	The contents of the /opt, /var, /etc directories are not excluded when the -B option is used.	Linux, Windows, Solaris	CLI
"LGTsc19916" on page 94	19916nw	Extended profile not included in file system recover when using recover -B option.	Solaris	CLI
"LGTsc19682" on page 94	19682nw	mcclimcs.xml files not updated when using change-passwords utility to modify password for MCUser.	Windows	CLI
"LGTsc09483" on page 95	09483nw	Not all save sets listed after running mminfo command with dedupe option.	Solaris	CLI
"LGTsc19402" on page 95	19402nw	The <code>-e exclude file</code> option behaves differently for files and directories.	Linux, Windows, Solaris	CLI
"LGTsc14945" on page 96	14945nw	The recover <code>-e exclude file</code> option does not exclude any files if the directory is incorrectly specified in the exclude file.	Linux, Solaris, Windows	CLI

Table 13 Limitations discovered in NetWorker releases previous to 7.5 (page 3 of 8)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTsc19084" on page 96	19084nw	The recover <i>-e exclude file</i> option does not support NDMP file systems.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	CLI
"LGTsc19405" on page 96	19405nw	No filename checks for remote clients when using the <i>--e exclude file</i> option with a directed recovery operation.	Linux, Windows, Solaris	CLI
"LGTsc10665" on page 96	10665nw	Cannot view log files created with the nsr_render_log command.	AIX, Solaris, HP-UX, Tru64 UNIX, Windows	CLI
"LGTpa94794" on page 96	94794nw	The nsrlcpd process does not start for an ACSLS jukebox when DDS is implemented.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	CLI
"LGTsc06809" on page 97	06809nw	Clients running pre-7.4 releases cannot use the mminfo -N command to query save set names longer than 255 bytes.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	CLI
"LGTpa95406" on page 97	95406nw	The jbverify command is not supported on Solaris 10.	AIX, Solaris, HP-UX, Tru64 UNIX	CLI
"LGTsc15337" on page 98	15337nw	Marking volumes as Recyclable might slow system performance.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Cloning and Staging
"LGTsc19401" on page 98	19401nw	Removable Storage Manager (RSM) not supported.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Compatibility
"LGTsc20557" on page 98	20557nw	The Homebase Agent is not supported in a Cluster environment.	Linux, Windows, Solaris	Compatibility
"LGTsc14700" on page 99	14700nw	Support for Windows Change Journal Manager with Microsoft Windows 2008.	Windows	Compatibility
"LGTsc18397" on page 99	18397nw	Cannot set nsrdir parameter for virtual server using remote Microsoft Management Console (MMC).	Windows	Configuration
"LGTsc06585" on page 99	06585nw	Running the Linux 64 bit package with the 2.6.x kernel may result in crashes.	Linux	Configuration
"LGTsc19241" on page 99	19241nw	For Microsoft Windows Server 2008 raw devices are not saved under the virtual client's index	Windows	Devices and Media
"LGTsc19676" on page 100	19676nw	Broker connects to first available storage node if no device or mmd available on first host.	Solaris	Devices and Media
"LGTpa72839" on page 100	72839nw	NetWorker support for Solaris 9 HBAs and drivers.	Solaris	Devices and Media
"LGTsc11158" on page 101	11158nw	Cannot create an advanced file-type device on a remote storage node device.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Devices and Media
"LGTsc14352" on page 101	14352nw	Incorrect path suggested during jbconfig of ACSLS silo for HP Tru64.	HP Tru64	Devices and Media

Table 13 Limitations discovered in NetWorker releases previous to 7.5 (page 4 of 8)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTsc10950" on page 101	10950nw	VMware Consolidated Backup 1.0.x is not supported on Windows Server 2003, Enterprise Edition (x64) Service Pack 2.	Windows	Devices and Media
"LGTsc06358" on page 101	06358nw	NetWorker becomes unresponsive when attempting an invalid clone operation.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Devices and Media
"LGTsc01923" on page 102	01923nw	Cannot query UNIX non-ASCII save sets in the NetWorker Management Console.	AIX, Solaris, HP-UX, Tru64 UNIX	Devices and Media
"LGTpa93001" on page 102	93001nw	Virtual tapes are listed as "full" after mounting.	Windows	Devices and Media
"LGTpa88188" on page 102	88188nw	Scan for Devices configures all devices as a regular storage node device.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Devices and Media
"LGTsc01446" on page 102	01446nw	The Virtual Jukebox attribute for a CDL virtual tape library is not automatically set after upgrading to release 7.4.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Devices and Media
"LGTsc06280" on page 103	06280nw	Inventory operation in Software Administration Wizard delays for unreachable clients	AIX, Solaris, Tru64 UNIX, Linux, HP-UX	Devices and Media
"LGTsc10295" on page 103	10295nw	dedup recover sessions do not display in the NMC GUI.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	GUI
"LGTsc08756" on page 103	08756nw	Text searched for in the NetWorker Console Help program does not get highlighted correctly if using JRE 1.5.x for Asian languages.	Solaris	GUI
"LGTsc00365" on page 103	00365nw	On HP-UX the NetWorker Server window does not appear.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	GUI
"LGTsc01115" on page 104	01115nw	Cannot copy and paste Japanese characters using the NetWorker Management Console.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	GUI
"LGTpa95162" on page 104	95162nw	Newly created groups are not displayed by the NetWorker Console GUI after moving system date back in time.	Linux, AIX, Solaris, HP-UX, Tru64 UNIX	GUI
"LGTpa96168" on page 104	96168nw	Cannot launch NetWorker Console Help program on Solaris 10 with a JRE earlier than version 1.5.0_09.	AIX, Solaris, HP-UX, Tru64 UNIX	GUI
"LGTsc05879" on page 104	05879nw	NMC version 3.4 and NWD version 1.0 cannot be installed on the same host	AIX, Solaris, HP-UX, Tru64 UNIX	GUI
"LGTsc19557" on page 104	19557nw	For Microsoft Windows 2000, the Support Tools must be installed in order to run the HomeBase Agent installation script	Windows	Installation
"LGTsc19513" on page 105	19513nw	HomeBase installation files are automatically extracted during a NetWorker client install.	Linux, Windows, Solaris	Installation
"LGTsc16831" on page 105	16831nw	For Microsoft Windows, ensure that the HomeBase agent software installed in the same installation path as the NetWorker software.	Windows	Installation

Table 13 Limitations discovered in NetWorker releases previous to 7.5 (page 5 of 8)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTsc18023" on page 105	18023nw	For UNIX, only install the NetWorker HomeBase agent software in the NetWorker default installation directory.	Linux, Solaris	Installation
"LGTsc18641" on page 106	18641nw	Before restoring the base profile, manually edit the fields in the recovery-configuration.xml file.	Linux, Windows, Solaris	Installation
"LGTsc18925" on page 106	18925nw	Unable to launch the NetWorker Dashboard software with NetWorker Release 7.4 Service Pack 3.	Windows	Installation
"LGTsc14023" on page 107	14023nw	Package requirement for Linux platforms.	Linux	Installation
"LGTsc14930" on page 107	14930nw	An uninstall that uses the Add/Remove Programs functionality in Windows does not function correctly with User Account Control enabled.	Windows	Installation
"LGTsc15258" on page 107	15258nw	Installation of Microsoft Windows Server 2008 does not grant correct permissions to nsr/tmp directory.	Windows	Installation
"LGTsc15490" on page 107	15490nw	Linux upgrade using rpm -Uvh not working correctly.	Linux	Installation
"LGTsc15782" on page 108	15782nw	Cannot register a highly available NetWorker server in x64 MSCS environments.	Windows	Installation
"LGTsc12500" on page 108	12500nw	NetWorker release 7.4 SP1 must be installed using the --nodeps option on SuSE 8.	Linux	Installation
"LGTsc19388" on page 108	19388nw	NetWorker and the HomeBase agent (BMR) licenses work independently.	Linux, Windows, Solaris	Licensing
"LGTpa57158" on page 109	57158nw	Current user locale is used with JRE 1.4.2 on Microsoft Windows	Windows	Localization
"LGTpa57158" on page 109	57158nw	Current user locale is used With JRE 1.4.2 on Microsoft Windows.	Windows	Localization
"LGTsc03894" on page 155	03894nw	The garbled characters may appear in the NetWorker Console GUI on Solaris.	AIX, Solaris, HP-UX, Tru64 UNIX	Localization
"LGTpa88887" on page 155	88887nw	Entering non-ASCII characters in NetWorker user interfaces.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Localization
"LGTsc05339" on page 155	05339nw	Recovering a large number of files may take longer in the French locales on Solaris.	AIX, Solaris, HP-UX, Tru64 UNIX	Localization
"LGTsc05879" on page 104	05879nw	NMC version 3.4 and NWD version 1.0 cannot be installed on the same host.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Localization
"LGTsc06280" on page 103	06280nw	Inventory operation in Software Administration Wizard delays for unreachable clients.	AIX, Solaris, HP-UX, Tru64 UNIX	Localization
"LGTsc05166" on page 86	05166nw	DiskXtender Data Manager file systems get archived on NetWorker.	Windows	Localization

Table 13 Limitations discovered in NetWorker releases previous to 7.5 (page 6 of 8)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTsc02814" on page 155	02814nw	Problem with highlighted text in the NetWorker Console Help program after search using JRE 1.5.x in Japanese or Chinese Languages.	AIX, Solaris, HP-UX, Tru64 UNIX	Localization
"LGTsc02862" on page 153	02862nw	The NMC Japanese Online Help displays incorrect characters on Linux systems	Linux	Localization
"LGTsc02808" on page 154	02808nw	The nwrecover program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed	Linux	Localization
"LGTsc04862" on page 154	04862nw	Mixed locales display in NetWorker installation wizards on Windows	Windows	Localization
"LGTsc05339" on page 155	05339nw	Recovering a large number of files may take a long time in the French locales on Solaris	Solaris	Localization
"LGTsc03894" on page 155	03894nw	Garbled characters may appear in the NetWorker Console GUI font list on Solaris	Solaris	Localization
"LGTsc02814" on page 155	02814nw	Problem with highlighted text in the NetWorker Console Help program after performing a search using JRE 1.5.x for Asian languages	Solaris	Localization
"LGTpa88887" on page 155	88887nw	Entering non-ASCII characters in NetWorker user interfaces	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Localization
"LGTpa92833" on page 155	92833nw	Non-ASCII save set names are displayed incorrectly in nsradmin visual mode on Linux	Linux	Localization
"LGTsc16423" on page 110	16423nw	nsrbmr does not give proper error messages under certain conditions.	Linux, Windows Solaris	Messaging
"LGTsc17737" on page 111	17737nw	Error message does not display for annotations with similar characters at end.	Windows	Messaging
"LGTsc08054" on page 111	08054nw	Erroneous error message may be generated by Linux operating systems when performing an I/O to a volume.	Linux	Messaging
"LGTsc08978" on page 111	08978nw	New pdksh package required on SuSE 10 x86.	Linux	Messaging
"LGTsc03478" on page 111	03478nw	Incorrect error message reported when starting the NetWorker console on Red Hat 64-bit Enterprise Server 4.	AIX, Solaris, HP-UX, Tru64 UNIX	Messaging
"LGTsc06288" on page 112	06288nw	Error states you need to perform an uninstall when updating from NetWorker 7.2.2 32-bit to NetWorker 7.5 64-bit.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Messaging
"LGTsc02903" on page 114	02903nw	NetWorker Management Console may become unresponsive when opened using Exceed.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	NMC
"LGTsc19364" on page 114	19364nw	Last-modified date changed for files recovered to Sun Cluster global file system.	Solaris	Restore
"LGTsc20332" on page 115	20332nw	Files and directories should be in specific order in exclude file.	Linux, Windows, Solaris	Restore

Table 13 Limitations discovered in NetWorker releases previous to 7.5 (page 7 of 8)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTsc10796" on page 115	10796nw	Do not recover identical save sets with different ssids to the same target directory.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore
"LGTsc13799" on page 116	13799nw	Antivirus programs block recovery.	Windows	Restore
"LGTsc14577" on page 116	14577nw	NetWorker interactive recover does not recover the registry and the com+ regdb writers.	Windows	Restore
"LGTsc11618" on page 116	11618nw	Restoring full VM image on ESX server fails.	Linux	Restore
"LGTsc11734" on page 116	11734nw	Unable to restore files encrypted with both Microsoft Windows Encrypting File System & AES encryption.	Windows	Restore
"LGTsc06577" on page 117	06577nw	The nwrecover program might fail to launch on a Solaris Sparc V240 server.	AIX, Solaris, HP-UX, Tru64 UNIX	Restore
"LGTsc05990" on page 117	05990nw	FSRM Disk Quota may not be restored to previous settings after recovery.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore
"LGTsc20558" on page 117	20558nw	After a BMR recovery operation the root password might change.	Linux, Windows, Solaris	Restore
"LGTsc06325" on page 117	06325nw	An ASR recovery might fail on Microsoft Windows 2003.	Windows	Restore
"LGTpa95900" on page 117	95900nw	On NetApps files, filenames ending with special characters might be renamed.	Windows	Restore
"LGTpa94966" on page 118	94966nw	The winworkr program fails to retrieve successfully archived files if a slash (\) character was entered in the annotation string.	Windows	Restore
"LGTpa83927" on page 118	83927nw	Directed recover using the CLI fails with permission errors on Windows.	Windows	Restore
"LGTsc00167" on page 119	00167nw	The winworkr program will not relocate to a partition not existing on the initiating host if the NetWorker server is running release 7.4 and the client is running release 7.2.	Windows	Restore
"LGTsc05053" on page 119	05053nw	Performing a save set query can take a long time if the query parameter in the Query Save Set tab is set to "Save Time" and From and To calendars for 3 or more days	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore
"LGTpa96554" on page 119	96554	For recoveries operations using Celerra filers, misleading error messages might display	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore

Table 13 Limitations discovered in NetWorker releases previous to 7.5 (page 8 of 8)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTsc08958" on page 119	08958nw	JRE version mismatch causes authentication failure, stops GSTD.	Linux	Upgrading
"LGTpa95019" on page 120	95019nw	When upgrading from release 7.3.1 the Virtual jukeboxes attribute will not be set correctly.	Windows	Upgrading
"LGTsc01587" on page 120	01587nw	Group details window is empty after upgrading from NetWorker release 7.2.2.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Upgrading

Archiving problems and limitations descriptions

This section details the problems and limitations related to archiving operations.

DiskXtender Data Manager file systems get archived on NetWorker

LGTsc05166

On the Data Manager file system for Windows, when you perform a client or server initiated archive of the file system containing the file stubs (or if you archive the file stubs themselves), file systems managed by the DiskXtender Data Manager are archived by NetWorker, and no error message is displayed. With DiskXtender running on UNIX, NetWorker properly fails the archiving and reports the error.

There are several problems that may result from the archive:

- ◆ If an archive is scheduled with grooming, this may cause the file stubs to be deleted.
- ◆ If an archive retrieve is performed, the existing file stubs may be overwritten.
- ◆ If the DX schedule is running after grooming, the file on the media server may be deleted.

Backup problems and limitations descriptions

This section details the problems and limitations related to backup operations.

For each NetWorker client that is BMR enabled, set the save set attribute in the client resource to ALL

LGTsc20517

If the extended profile is not backed up as part of the NetWorker data set, a recovery or migration of the source to the target system cannot be performed.

For each NetWorker client that is BMR enabled, set the **save set** attribute in the client resource to **ALL**. This ensures that the extended profile is part of NetWorker data backup.

The location of extended profile differs for Microsoft Windows and UNIX:

- ◆ Microsoft Windows: *NetWorker_install_path\HomeBaseAgent\history*
- ◆ UNIX: */opt/homebase-agent/history*

Note: Where *NetWorker_install_path* is the location of the NetWorker installation files.

Delay in cancelling savegroups in NMC for BMR enabled clients

LGTsc19514

Stopping a savegroup from NMC when there are BMR clients enabled for profiling does not result in the savegroup being cancelled immediately. The clients with BMR enabled must wait until the profiling jobs complete before the savegroup is cancelled. Once the profiling completes, the savegroup is cancelled and subsequent savegroups for the clients will not be triggered.

VSS system fileset backups fail on Windows Server 2008 Hyper-V role implementation

LGTsc13933

NetWorker backups of the VSS SYSTEM FILESET fail on Windows Server 2008 with Hyper-V role implementation.

Workaround

To work around this issue:

1. Copy the `slanaccel.exe` file from the following location:

```
C:\Windows\winsxs\amd64_microsoft-hyper-v-slanaccel_31bf3856ad364e35_6.0.6001.18000_none_1db986a6500c51a0\
```

2. Save the copied `slanaccel.exe` file to the following location:

```
C:\windows\system32\
```

A backup might fail for CIFS shares on Microsoft Windows hosts

LGTsc16575

A backup might fail for CIFS shares on a Microsoft Windows host. When `nsrexecd` is started as a service (context account), it cannot obtain the CIFS path because of access restrictions to its security credentials from the NetWorker client (`nsrexecd`). By default, `nsrexecd` starts as a service under the SYSTEM account that does not have the correct permissions to access the CIFS share.

A message similar to the following appears:

```
save: \\10.31.73.80\bluenose\sam\t1.txt: "No such file or directory"
```

Workaround

To work around this issue:

1. Create an account on the NetWorker client machine with the same username and password as an account with permissions to the CIFS shares.
2. Perform one of the following backup operations:
 - Backup the CIFS shares save set:
 - a. Edit the Client resource for the NetWorker client that is backing up the CIFS share:
 - For the **Remote User** attribute, type the username from step 1.
 - For the **Password** attribute, type the password from step 1.
 - b. Use the `savegrp` command to backup the CIFS shares save set from the command line. For example:

```
# savegrp client_name -G group_name
```

- Backup the CIFS shares:
 - a. Ensure that the NetWorker client is connected to the CIFS share. For example:
Run a command shell that:
 - Has a mapped share with *net use \\IP_address\share*
 - Is connected with the username and password that has access to the CIFS share.
 - b. Use the **Save -L** command to backup the CIFS shares. For example:
Save -L

A backup might fail if the system clocks for the NetWorker server and client differ more than the default of one day or the user specified interval

LGTsc18589

A backup might fail if the system clocks for the NetWorker server and client differ more than the default of one day, or the user-specified internal timeout value specified in NSR_SAVE_REQ_TIMEOUT.

An error message similar to the following appears:

```
39077:save: error, Automatically cancelling save request: save is
unable to start active session in 136216 seconds.
```

Note: Where the reported interval reflects the degree of the time disagreement between the NetWorker server and client.

Workaround

To set a common time reference, periodically run a clock synchronization utility on all administered network systems. The commands to set a common time reference differ for UNIX and Microsoft Windows systems:

- ◆ For UNIX:

```
ntpdate local_ntp_server_hostname
```

Where *local_ntp_server_hostname* is the hostname of the local time server.

- ◆ For Microsoft Windows:

```
w32tm /resync
```

Note: Microsoft Knowledgebase article 314054 contains information about configuring the Microsoft Windows time service.

How to back up a NetWorker Windows client that has multiple domains that are part of both an AD domain, and a DNS domain

LGTsc17703

To back up a NetWorker Windows client that has multiple domains that are part of both an AD domain and a DNS domain, perform one of the following steps:

- ◆ Define the AD domain name, which is the Full Computer Name, in the NetWorker server's */etc/hosts* file.

- ◆ Define the AD domain, which is the Full Computer Name, in the Active Directory DNS. Also, on the NetWorker server, open the Client resource and add the Full Computer Name in the alias list.

The nsr_shutdown command fails when a large number of savegroups are running

LGTsc04870

When a large number of savegroup sessions are running (more than 100), the **nsr_shutdown** command fails because its default timeout of 180 seconds is exceeded.

Workaround

To resolve this issue, increase the timeout for the **nsr_shutdown** command by including the **-t** flag, which overrides the default timeout. The **-t** flag is defined in seconds.

Incorrectly configured NPS role results in failed backup of VSS SYSTEM SERVICES of Windows Server 2008

LGTsc10292

Due to a problem identified by Microsoft with Windows Server 2008, an incorrectly configured Network Policy Server (NPS) results in the writer incorrectly reporting files to the NetWorker software. As a result, the backup of the VSS SYSTEM SERVICES fails.

The Microsoft defect number for this issue is 872233.

Active Directory Lightweight Directory Services backup fails for Windows 2008 client

LGTsc11914

When running a scheduled backup of a save group which includes a Windows 2008 client configured with Active Directory Lightweight Directory Services (AD LDS), the backup may fail with the following error:

```
"VSS USER DATA:\ VSS USER DATA: ERROR: VSS failed to process
snapshot, error=0x800423f4. The VSS writer operation failed
because of an error that might recur if another shadow copy is
created.
```

There will also be ADAM Writer errors in the Application Event Log that correspond to the time of the save of the ADAM component.

Workaround

To avoid this problem, increase the **Client Retries** attribute on the **Advanced** tab of the Group resource. Increasing the value to 2 or 3 will resolve the problem.

VMware Consolidated Backup not terminating completely

LGTsc13139

During a VMware Consolidated Backup (VCB) backup, if the **savegrp** process is stopped, the VCB backup is not completely terminated.

Workaround

To resolve this issue, manually kill the **save** process on the VCB proxy host. You may also need to manually clean up the VCB snapshot on the proxy host.

Save Operation attribute not functioning correctly with VMware Consolidated Backup

LGTsc13141

When the Save Operation attribute for the Client resource contains an equals (=) sign (for example, vss:*=off), backups using VMware Consolidated Backup (VCB) do not correctly parse the **save** command. As a result, the backup may fail, or an incorrect save set name may be registered in the media database and client file index.

Workaround

Do not include any values that contain an equals sign in the Save Operation attribute for the Client resource.

VSS system state backups may fail if programs were not cleanly uninstalled

LGTsc13933

If a program is not cleanly uninstalled and some files continue to exist after uninstallation, VSS system state backups will fail with an error similar to:

```
VSS SYSTEM FILESET: System Writer - Get file attributes returned
error 3 for VSS file filename
```

For example:

```
VSS SYSTEM FILESET: System Writer - Get file attributes returned
error 3 for VSS file
\\?\GLOBALROOT\Device\HarddiskVolumeShadowCopy71\users\admini~1.
bur\appdata\local\temp\2\unz34b2.tmp
```

Workaround

To resolve this issue:

1. Reinstall the program that did not cleanly uninstall.
2. Uninstall the program by using the Windows Installer CleanUp Utility.

Microsoft Knowledgebase articles 290301 and 955078 contains more information about the Windows Installer CleanUp Utility.

Global directives not supported with VMware Consolidated Backup

LGTsc14872

When global directives are defined in the Client resource for a VMware Consolidated Backup (VCB), the **savegrp** program will hang.

Workaround

Do not use any global directives with VCB backups.

Not all drives in a VCB file level backup are browsable

LGTsc14956

When performing a virtual machine restore from a file level VCB backup, only the drive letters that exist on the proxy host will be seen in the Recover window. For example, if the proxy host has only a C:\ drive and the virtual machine has a C:\, D:\ and E:\ drive, then during the restore of the virtual machine, only the C:\ drive of the Virtual machine will be displayed.

Workaround

To resolve this problem, perform one of the following:

- ◆ From the NetWorker User program:
 1. Select **Change Selection** from the **File** menu.
 2. Type the drive that you want to browse.

Note: This workaround will need to be performed each time you change the browse time.

- ◆ From the **recover** command:
 1. Change to the root of the current directory:


```
recover> cd /
```
 2. Change to the drive that you want to browse, for example:


```
recover> cd e:
```
 3. Verify that you can now browse the drive:


```
recover> dir
```

Savegroup completion report for VCB backups does not contain expected information about save sets**LGTsc15061**

When a VCB backup is performed, the savegroup completion report does not contain information about the save sets created during the backup. The report does indicate the success or failure of the backup but does not contain expected information about the save sets, such as the save set name, level, and other information.

Workaround

Query the client file index or the media database to determine information about the save sets that were backed up.

Incorrect error during recovery of VCB backups**LGTsc15236**

During a file-based recovery of a VCB backup, when a drive letter (rather than a filename or directory) is identified for recovery, one of several error messages similar to the following is displayed:

```
Failed to write to directory_location The directory is not empty.
```

These errors occur when using either the **recover** command or the NetWorker User Program (winworkr).

Workaround

These error messages are incorrect and should be ignored.

Replicated dedupe save sets are not deleted**LGTsc19665**

NetWorker supports deduplication in Avamar environments where the primary server is replicated to another server.

When a snap-up that is generated on the primary Avamar server as a result of dedupe save set creation operation, the snap is replicated to the secondary Avamar server. These snapups have infinite retention time.

When the NetWorker software deletes the dedupe save set, the replicated snapup on the secondary Avamar server is left untouched. Over time this might result in secondary Axion server running out of space. This occurs because of the left over snapups that are no longer on primary Axion server.

Backups of /dev directory fail in HP-UX 11i v3 on PA_RISC and IA64**LGTsc12970**

If you back up the /dev directory using a local storage node in an HP-UX 11i v3 environment on PA_RISC and IA64, the backup fails and the system freezes.

Workaround

To work around this issue:

- ◆ Do not back up the /dev directory. Do not specify Save Set ALL in the client's Save Set attribute, and do not specify save sets that include the /dev directory in the backup.
- ◆ Use a directive to exclude the /dev directory from the backup.
- ◆ Use a remote storage node.

The nsr_render_log does not accept input from STDIN**LGTsc06312**

The `nsr_render_log` does not accept input from STDIN. The following error message is displayed:

```
Please provide the input log filename with the path.
```

After the error message the usage information is listed.

Workaround

Type the following command:

```
tail -f /nsr/logs/daemon.raw | nsr_render_log -
```

A user cannot be a member of more than 512 groups**LGTsc09257**

A user cannot be a member of more than 512 groups when running any operation with NetWorker software. If the user is a member of more than 512 groups, the following message appears:

```
Maximum number of groups exceeded, some groups may be dropped
from the credential. Number of groups the user belongs to: XXX,
maximum number of groups supported: 512
```

The nsrjobd process core dumped when running a large number of groups in parallel

LGTsc06172

The **nsrjobd** process core dumped when running a large number of groups (exceeding 150) running in parallel. Several other core dumps might occur in the same scenario including the **nsrindexd** and **nsrexecd**.

The savepnpc command fails if the precommand and post command contains any non-ASCII characters

LGTpa91475

The **savepnpc** command fails if the precommand and post command contains any non-ASCII characters. When editing the `<group-name>.res` file for the **savepnpc** command, the use of UTF-8 BOM characters is unsupported. Some text editors, such as Windows Notepad, include UTF-8 BOM at the beginning of the file. You need to create a UTF-8 encoded file without the UTF-8 BOM.

If you use a text editor that includes UTF-8 BOM characters, use a hex editor to remove the first 3 bytes in the UTF-8 encoded file. The UTF-8 BOM character is 3 bytes long and the value is `0xef 0xbb 0xbf`.

Restrictions associated with the ZFS file system

LGTsc00850

The following are restrictions associated with the ZFS file system:

- ◆ Only a root user with full access to ZFS directories may recover files. ZFS files can be restored to a UFS file system. When restoring ZFS files to a UFS file system, only the permission information is retained, the access control entries are not retained. If a non-root user attempts to recover a ZFS file, the recover operation will core dump.
- ◆ ZFS snapshots and the files in ZFS directories are not backed up or restored when restoring the original files. File systems must be explicitly specified in the client's save set attribute. ZFS file systems will not be recognized if you use the ALL keyword.
- ◆ Backup and recovery of raw partitions on Solaris ZFS file systems is unsupported.

CLI problems and limitations descriptions

This section details the problems and limitations related to the CLI.

The contents of the `/opt`, `/var`, `/etc` directories are not excluded when the `-B` option is used

LGTsc19916

During the HomeBase base profile recovery, the `exclude.NETWORKER` file is created in `<hombaseagent>/install path`. The `-B` option uses this exclude file and excludes the specified files and directories.

However, the `exclude.NETWORKER` file does not exclude files and directories under the following directories. Data from these directories are not recovered from the source to the target system since they might cause issues during the recovery and migration operations:

- ◆ `/opt`
- ◆ `/var`
- ◆ `/etc`

To recover application files installed under `/var` or `/opt`, you must manually recover the data to the appropriate directories for the application.

To recover configuration files or service binaries under `/etc`, you must manually recover those files and directories.

Extended profile not included in file system recover when using `recover -B` option

LGTsc19916

When a file system recover is performed using the `recover -B` option, the extended profile is excluded. The extended profile needs to be recovered separately. The profile by default resides on the client in `<installdir>\HomeBaseAgent\history\`.

`mcclimcs.xml` files not updated when using `change-passwords` utility to modify password for MCUser

LGTsc19682

When the `change-passwords` utility is used to modify the password for MCUser, none of the `mcclimcs.xml` files on the utility node are updated with the new password information. As a result, `mccli` fails to pick up the new user/password.

When `change-passwords` has been used to change the password for MCUser, update the password for the MCUser account in the following `mcclimcs.xml` files on the utility node:

- ◆ `/data01/home/admin/.avamardata/var/mc/cli_data/prefs/mcclimcs.xml`
- ◆ `/data01/home/dpn/.avamardata/var/mc/cli_data/prefs/mcclimcs.xml`
- ◆ `/root/.avamardata/var/mc/cli_data/prefs/mcclimcs.xml`
- ◆ `/usr/local/avamar/lib/mcclimcs.xml`
- ◆ `/.avamardata/var/mc/cli_data/prefs/mcclimcs.xml`

Not all save sets listed after running `mminfo` command with `dedupe` option

LGTsc09483

When you run the `mminfo` command with the `-q dedupe` option to view save sets created using deduplication, the command does not list the following types of save sets:

- ◆ Empty save sets
- ◆ Save sets in which nothing was backed up as the result of skip directives

Such save sets are treated as regular save sets, not as deduplicated save sets.

The `recover -e exclude file` option behaves differently for files and directories

LGTsc19402

The `recover -e exclude file` option behaves differently for files and directories.

If the content of the exclude file has `/etc/a*`, the following occurs:

- ◆ Filenames that start with the character `a` are excluded.
- ◆ Directory names that start with the character `a` are excluded only when the directories are empty.
- ◆ The NetWorker `recover` operation looks for the entries which start with the character `a`:
 - If it is the end node in the tree, then the `recover` operation will exclude that entry.
 - If it is not end node in the tree, then the NetWorker software will recover the contents inside the tree.

Examples

If the content of exclude file has `/etc/a*`, type the following in the exclude file:

- ◆ To exclude all contents under a directory:
`directory_name/*`
- ◆ To exclude all files and directories inside the `/'`:
`/*`
- ◆ To avoid recovering the `/'`:
`/**`
- ◆ To exclude all files starting with the character `a` inside `/'`:
`/a*`

This excludes all of the files starting with the character `a` inside `/'`. It also excludes the empty directories starting with the character `a`.

- ◆ To exclude all files and empty directories inside the `/'`:
`/?*`

The recover -e *exclude file* option does not exclude any files if the directory is incorrectly specified in the exclude file

LGTsc14945

While performing a recover with **-e *exclude file*** option, the recover operation does not exclude any files if the directory is incorrectly specified in the exclude file.

Examples

If the directory in the exclude file is incorrectly entered as:

```
/opt
```

instead of:

```
/opt/*
```

The recover operation will not exclude any files and the command line output displays the total number of exclude files as 1.

The recover -e <exclude file> option does not support NDMP file systems

LGTsc19084

Do not use the **-e *exclude file*** option to exclude NDMP file system files and directories during a recover operation.

If the **-e *exclude file*** option is used with the **recover** command during a NDMP file system recover operation, the specified files listed with the **-e *exclude file*** option will not be excluded from the recovery and the following message will appear:

```
Total files excluded in the exclusion list is '0'
```

No filename checks for remote clients when using the -e *exclude file* option with a directed recovery operation

LGTsc19405

The NetWorker software does not validate specified exclude filenames when the **-e *exclude file*** option is used with a remote client during a directed recovery operation. The validation will not be performed because the specified exclude file is present on the target client when the recovery is invoked.

If the **-e *exclude file*** option is used with a local recover operation, the NetWorker software validates the specified exclude filename. If the file does not exist, an error message appears. This validation is limited to only local recover operations.

Cannot view log files created on a Windows on UNIX with the nsr_render_log command

LGTsc10665

When log files created on Windows operating systems are viewed on a UNIX operating system using the **nsr_render_log** command, **nsr_render_log** core dumps. View the log files created on a Windows operating system using a Windows operating system.

The nsrlcpd process does not start for an ACSLS jukebox when DDS is implemented

LGTpa94794

The **nsrlcpd** process does not start for an ACSLS jukebox when DDS is implemented.

Workaround

To work around this issue:

1. Stop the NetWorker services, or disable the jukebox (to stop the **nsrlcpd** process).
2. Print the device filenames from the jukebox configuration. For example:


```
devices: "rd=katana:/dev/rmt/0cbn", /dev/rmt/0cbn,
         "rd=katana:/dev/rmt/1cbn", /dev/rmt/1cbn;
```
3. Find the device filenames from the jukebox configuration. For example:


```
STL device names: "0,0,0,0", "0,0,0,0", "", "";
```
4. Update the STL device names field to be match device filenames. For example:


```
replace STL device names: "0,0,0,0", "0,0,0,0", "", "";
```

 with


```
STL device names: "0,0,0,0", "0,0,0,0", "0,0,0,1", "0,0,0,1";
```

 because


```
"rd=katana:/dev/rmt/0cbn", /dev/rmt/0cbn corresponds to 0,0,0,0 and
      "rd=katana:/dev/rmt/1cbn", /dev/rmt/1cbn corresponds to 0,0,0,1 in the
      acsls silo.
```
5. Restart the NetWorker server, or enable the jukebox (for **nsrlcpd** to be started).

Contact Customer Support for further details and reference esg90408.

Clients running pre-7.4 releases cannot use the **mminfo -N command to query save set names longer than 255 bytes**

LGTsc06809

Clients running pre-7.4 releases cannot use the **mminfo -N** command to query save set names longer than 255 bytes. This issue is caused by the enhancement in release 7.4 for supporting longer save set names for to up to 1024 bytes (was 255 bytes in release 7.3) to accommodate non-ASCII save set names, which will take more bytes.

Workaround

There are two workarounds for this issue if you are using a pre-7.3 client:

- ◆ Do not specify **-N** option on pre-7.4 **mminfo** to query save set names longer than 255 bytes. For example, the **mminfo -avot** command can be issued, but will only display the first 255 bytes of save set name.
- ◆ Use the **mminfo -N** command with a 7.4 client to view save set names longer than 255 bytes.

The **jbverify command is not supported on Solaris 10**

LGTpa95406

The **jbverify** command is not supported on Solaris 10. The NetWorker software has an autoconfiguration option provided that ensures a jukebox is configured correctly.

Cloning and Staging problems and limitations descriptions

This section details the problems and limitations related to cloning and staging operations.

Marking volumes as recyclable might slow system performance

LGTsc15337

The following factors might slow system performance when marking a volume as recyclable.

For each volume that is to be marked as recyclable:

1. The number of save set clone instances that reside on that particular volume and are required to be marked as expired.
2. The number of clones or clone instances for each of the save set clone instances on that particular volume, that reside on other volumes.

The number of clones that are created for a save set, equal the number of save set clone instances. Each save set clone instance has the same ssid and unique clone ID. Each save set clone instance resides on a separate volume. The first instance of backup also has a clone ID.

Thus, the volume being marked as recyclable might contain save sets that have multiple clone instances that reside on other volumes. These clone instances need to be checked before the save sets are marked as expired. A save set, identified by the ssid, only expires when all of the clone instances, which are identified by a clone ID, expire.

To mark a volume as recyclable:

- ◆ From the server's **Administration** window, click **Media**.
 - a. In the navigation tree, select **Volumes**. The **Volumes** detail table appears.
 - b. Right-click a volume in the **Volumes** detail table, and select **Recycle**. The **Recycle** window appears. It names the selected volume.
 - c. Select the recycle policy: **Auto** (default) or **Manual**.
 - d. Click **OK**.
- ◆ From the command prompt, type the following:

```
nsrmm -o recyclable volume
```

Compatibility problems and limitations descriptions

This section details the problems and limitations related to software compatibility.

Removable Storage Manager (RSM) not supported

LGTsc19401

The NetWorker software does not support RSM. You cannot use the NetWorker software to allocate one or more volumes in an RSM library.

The Homebase Agent is not supported in a Cluster environment

LGTsc20557

For NetWorker Release 7.5, the Homebase Agent is not supported in a Cluster environment.

Support for Windows Change Journal Manager with Microsoft Windows 2008

LGTsc14700

When VSS is used, the Microsoft Change Journal is not used. Microsoft Windows 2008 is VSS only, so Windows 2008 does not use the Windows Change Journal.

Configuration problems and limitations descriptions

This section details the problems and limitations related to software configuration.

Cannot set `nsrdir` parameter for virtual server using remote Microsoft Management Console (MMC)

LGTsc18397

When configuring a virtual NetWorker server on Windows Server 2008 Core using a remote Microsoft Management Console (MMC), the `nsrdir` parameter for the NetWorker server service cannot be set because the service's Properties tab is not visible.

Workaround

It is necessary to register the NetWorker server resource type on the remote machine running MMC in order to view the service's Properties tab to change the settings. To register the resource type:

1. Install the NetWorker server software.
2. Run `regcnsrd -r` on the remote machine. You can now use a remote MMC to set the parameters.

Note: Besides MMC, you can also use the CLI cluster command on the cluster to set the `nsrdir` value. For example: `cluster res networker /priv: NsrDir="I:\nsr"`

Running the Linux 64-bit package with the 2.6.x kernel may result in crashes

LGTsc06585

A compatibility issue with `libc` and `pthread` libraries on Linux 2.6 kernel-based environments causes problems when running the 64-bit package for Linux on platforms built on the 2.6.x kernel (for example, RedHat AS 4 and SuSE SLES 9). Although operation may be normal at first, continued use of the 64-bit package with a 2.6.x kernel may result in crashes of various programs.

Use the 32-bit package when running with a 2.6.x kernel. Running a 32-bit package instead of the 64-bit package should have no operational impact. The 64-bit package can still be used for kernel version 2.4 Linux variants such as RedHat AS 3 and SuSE SLES 8.

Devices and Media problems and limitations descriptions

This section details the problems and limitations related to devices and media operations.

For Microsoft Windows Server 2008 raw devices are not saved under the virtual client's index

LGTsc19241

When performing a savegroup of save set "All" for the virtual client, raw device are excluded from the backup list, even when directives are used. When a backup

of the raw device is performed from the command line, the raw device is saved under the physical host's index, rather than the virtual client's.

Workaround

To work around the problem and back up the raw devices under the physical node's index:

1. Edit the client resource for the virtual client:
 - a. Update the save set list to include the raw device, for example:


```
\\.\M:
```
 - b. For the Backup Command attribute, set the following value to force the save sets go to the correct index:


```
save -c virtual_client_name
```
 - c. Create a directive using **rawasm**, for example:


```
rawasm: \\.\M:
```
2. On all nodes in the cluster, create the pathownerignore file. Ensure that the pathownerignore file is created in the NetWorker installation directory, for example:

```
c:\Program Files\Legato\nsr\bin
```

Broker connects to first available storage node if no device or mmd available on first host

LGTsc19676

If there is no device or mmd available on the first host in the affinity list, the broker continues through the affinity list until the first available storage node is located. Since the broker is not designed for file and AFTD devices, it does not recognize that the volume and the device are inseparable (for example, the broker could request an AFTD volume to be mounted on a different host). This is only a problem with stand-alone devices, because volumes are not associated with storage nodes.

Workaround

To work around the problem, assign different devices to different pools. If the volume is not in a jukebox, the server has no way of knowing which volume can be mounted on which storage node.

NetWorker support for Solaris 9 HBAs and drivers

LGTpa72839

In order to ensure correct NetWorker operation on Solaris 9 systems, the environment variable definition **USE_LUS_NO=YES** must be set.

NetWorker for Solaris uses the Solaris **cfgadm** utility to obtain device information. In environments where the **cfgadm** utility works correctly, the NetWorker software will work correctly. If the **cfgadm** utility does not see the devices, the NetWorker software will not see the devices.

Workaround

To work around this issue:

1. Set this environment variable definition:

USE_LUS_NO=YES

This forces NetWorker to use the `cfgadm` utility.

2. Ensure that the `USE_LUS_NO=YES` environment variable is made available to:
 - The NetWorker daemons
 - Any command shell in which NetWorker CLI commands are run

Note: When `USE_LUS_NO` is set, do **not** run the `lus_add_fp_devs.sh` script.

Cannot create an advanced file-type device on a remote storage node device

LGTsc11158

If the `nsrmmmd` daemon has not started on the storage node, creation of an advanced file-type device (AFTD) on the storage node will fail because the `nsrmmmd` daemon cannot validate the AFTD path.

Workaround

If this issue is encountered, either:

- ◆ Select **No** to the **Verify path** prompt when the AFTD is being created, then manually label the device.
- ◆ Attempt to create the AFTD again.

Incorrect path suggested during `jbconfig` of ACSLS silo for HP Tru64

LGTsc14352

When using `jbconfig` to configure an ACSLS silo on HP Tru64, the default location for the path to the STL library is incorrect. Currently, `jbconfig` states:

```
=>Pathname of the STL library for the ACSLS silo?
[/usr/opt/networker/bin/libstlstk.so]
```

Workaround

Identify the correct path for the STL library, rather than selecting the incorrect default path. The correct path should be:

```
/usr/opt/networker/lib/libstlstk.so
```

VMware Consolidated Backup 1.0.x is not supported on Windows Server 2003, Enterprise Edition (x64) Service Pack 2

LGTsc10950

VMware Consolidated Backup 1.0.x is not supported on Windows Server 2003, Enterprise Edition (x64) Service Pack 2.

NetWorker becomes unresponsive when attempting an invalid clone operation

LGTsc06358

You cannot put multiple instances of the same clone onto a single volume. NetWorker should prevent the operation and provide an error message. Instead, if this operation is attempted, NetWorker becomes unresponsive.

Workaround

Ensure that multiple instances of a clone are placed on different volumes.

Cannot query UNIX non-ASCII save sets in the NetWorker Management Console

LGTsc01923

Because of differences between the encoding used to create non-ASCII save sets on UNIX platforms and the encoding used by the NetWorker Management Console to query the media database, using the Query Save Set window to query for non-ASCII save sets that were created on UNIX platforms will result in no matches being found.

Virtual tapes are listed as full after mounting

LGTPa93001

In a Windows environment when using virtual IBM tape drives, virtual tapes are listed as "full" even though 0 KB have been written to the tape. This can be observed after labeling and mounting the tape.

Workaround

Change the system configuration to use an equivalent tape drive from a manufacturer other than IBM. For example, type HP LTO-3, instead of IBM LTO-3.

Scan for Devices configures all devices as a regular storage node device

LGTPa88188

When adding a new device to a jukebox, the scan operation detects a device, but incorrectly displays it as a storage node device. Attempting to configure the device as standalone device fails with the following error message:

```
cannot create the device, storage node enabler is required
```

Workaround

1. Using the Console, create a new device. For example:

```
rd=Storage_Node:/dev/rmt/...
```
2. Specify the device is a Dedicated Storage Node by using the **Configuration** tab.
3. Use **jbedit** command to add a new drive to this device. The **jbedit** man page contains more information regarding the use of the **jbedit** command.

The Virtual Jukebox attribute for a CDL Virtual Tape Library is not automatically set after upgrading

LGTsc01446

If the **jbconfig** command was used to configure a CDL VTL in the 7.3.2 release, the Virtual Jukebox attribute is not automatically set after upgrading to the current release.

Workaround

After upgrading to the current release, initiate a Scan for Devices operation using the NetWorker Console to scan only the NetWorker storage node on which the VTL is configured. The NetWorker software will update all VTL related attributes utilizing the new VTL license.

This behavior does not occur when using the auto-configuration option.

Inventory operation in Software Administration Wizard delays for unreachable clients

LGTsc06280

When starting an inventory operation using the Software Administration Wizard, there is a delay of 7 to 8 minutes for each client configured on the server that is unreachable (for example, if a NSR Installed Software resource entry does not exist) and has not previously been inventoried. Once started, you cannot cancel the inventory operation and must wait until the **Select Clients for Inventory** window displays to continue the operation.

Workaround

Ensure there are no unreachable clients on the server. Also, if you want to perform an inventory operation but do not need to inventory specific clients, inventory all clients using the `nsrpush` command with the `-all` option; for example, `nsrpush -i -all`.

GUI problems and limitations descriptions

This section details the problems and limitations related to the GUI.

Deduplication recover sessions do not appear in the NMC GUI

LGTsc10295

Deduplication recover sessions do not appear in the Monitoring window of the NetWorker Management Console. However, deduplication save sessions appear.

To view the Monitoring window:

1. From the **Administration** window, click **Monitoring**.
2. Click **Session**.

Text searched for in the NetWorker Console Help program does not get highlighted correctly if using JRE 1.5.x for Asian languages

LGTsc08756

Due to a known limitation with JRE 1.5.x (Sun bug 6375606), when performing a search for text in the NetWorker Console Help program, the search is completed but the keyword is not highlighted correctly.

On HP-UX the NetWorker Server window does not appear

LGTsc00365

On HP-UX, the following error message appears if the NetWorker Management Console **Setup > Setup System Options** attribute is selected and the NetWorker server window does not appear:

"Unable to connect to server: Failed to contact using UDP ping."

Workaround

1. Open the NetWorker Management Console window and select **Setup > Setup System Options**.
2. Ensure that **RPC ping using UDP when connecting to NetWorker** is cleared.

Cannot copy and paste Japanese characters by using the NetWorker Management Console

LGTsc01115

On UNIX platforms, cannot copy and paste Japanese characters with **Ctrl+C** and **Ctrl+V** using the NetWorker Management Console.

Newly created groups are not displayed by the NetWorker Console after moving system date back in time

LGTpa95162

If the system date is moved to a past date and subsequently moved back to the current date, newly created groups are not displayed in the NetWorker Console.

Workaround

Select the Archive Request tab from within the Monitoring task window and the Groups table will refresh.

Cannot launch NetWorker Console Help program on Solaris 10 with a JRE earlier than version 1.5.0_09

LGTpa96168

The NetWorker Console Help program will not launch if the JRE version is earlier than 1.4.2_11 and 1.5.0_09.

NMC version 3.4 and NWD version 1.0 cannot be installed on the same host

LGTsc05879

If NetWorker Dashboard (NWD) 1.0 is installed on the NetWorker Management Console Server 3.4 host, the NMC GUI fails to download, and a Java Web Start error appears. NMC 3.4 and NWD 1.0 cannot function together due to database security and Java certificate issues, and the NMC GUI will not launch if NWD is installed on the same host as the NMC Server.

Workaround

Uninstall NWD before updating to NMC 3.4 for NetWorker release 7.4.

Installation problems and limitations descriptions

This section details the problems and limitations related to installation.

For Microsoft Windows 2000, the Support Tools must be installed in order to run the HomeBase Agent installation script

LGTsc19557

To run the HomeBase Agent installation script (setup-homebase.bat) on Microsoft Windows 2000:

1. Install the Microsoft Windows 2000 Support Tools. This installs **REG.exe** which is not included with the Microsoft Windows 2000 operating system.
2. Once the Microsoft Windows 2000 Support Tools have been installed, verify that the path has been set. If not, manually set the path. This step is required to run HomeBase Agent installation script.
3. Run the following HomeBase Agent installation script:

```
setup-homebase.bat
```


For all other Microsoft Windows operating systems, REG.exe is installed as part of the operating system.

HomeBase installation files are automatically extracted during a NetWorker client install

LGTsc19513

As part of the NetWorker client install, the HomeBase agent binary and setup files are always extracted to the standard location for all supported NetWorker platforms.

To install the EMC HomeBase agent, run the HomeBase setup file. The location of the setup file for Microsoft Windows and UNIX is different:

- ◆ Microsoft Windows: `\NWInstallDIR\HomeBaseAgent\setup_homebase.bat`
- ◆ UNIX: `/opt/homebase-agent/setup-homebase`

Note: For Microsoft Windows, the install directory **HomeBaseAgent** is at the same peer level as the **nsr** directory.

For Microsoft Windows, ensure that the HomeBase agent software is installed in the same installation path as the NetWorker software

LGTsc16831

For Microsoft Windows, ensure that the HomeBase agent software is installed in the same installation path as the NetWorker software.

It is not recommended to manually install the HomeBase agent software into a location that was not specified during the NetWorker software installation process.

On Microsoft Windows, the HomeBase agent installation path is at the same level as the default or user-defined installation directory.

For example:

```
C:\Program Files\Legato\nsr
C:\Program Files\Legato\HomeBaseAgent
```

Example

For example, if the NetWorker software is installed under:

- ◆ `C:\Program Files\Legato` which is the default location for the NetWorker software, then the HomeBase agent software is installed under the following location: `C:\Program Files\Legato\HomebaseAgent`
- ◆ `C:\Legato` which is an example of a non-default installation location for the NetWorker software, then the HomeBase agent software is installed under the following location: `C:\Legato\HomebaseAgent`

For UNIX, only install the NetWorker HomeBase agent software in the NetWorker default installation directory

LGTsc18023

On all UNIX platforms, ensure that the NetWorker HomeBase agent software is only installed in the default installation directory. Do not install the software in another directory. For example, the default installation directory is located in:

```
/opt/homebase-agent
```

On all UNIX platforms, the NetWorker bare metal recovery profiling feature will not work if the HomeBase agent software is installed in a location other than the default installation directory, `/opt/homebase-agent`.

Before restoring the base profile, manually edit the fields in the `recovery-configuration.xml` file

LGTsc18641

If the HomeBase agent is installed with the NetWorker client package, the base profile for the HomeBase agent might not be updated.

Before you restore the base profile, you must first update the `recovery-configuration.xml` file or the recovery operation might fail.

Workaround

To work around this issue, manually edit the fields in the following file before performing a recovery of the base profile:

`install_dir/etc/config/recovery/custom/recovery-configuration.xml`

Note: Where `install_dir` is the location of the Homebase agent installation directory.

Unable to launch the NetWorker Dashboard software with NetWorker installed

LGTsc18925

If the NetWorker Dashboard software is installed on a computer with the NetWorker software already installed, the NetWorker Dashboard software will not start.

The following errors might occur:

- ◆ At the end of the NWD server installation process, a warning message might appear stating that the NWD server could not start.
- ◆ After starting the NWD Server process, either manually through Microsoft Windows Services or automatically on system start up, the NWD server process might stop shortly afterwards.
- ◆ When launching the NWD GUI, a message might appear stating that the NWD server process is not running.

Workaround

To work around this issue:

1. Open and edit the `serverproperties.xml` file. The file is located in:

`NWD_Install_Dir\classes\serverproperties.xml`

Note: Where `NWD_Install_Dir` is the installation directory where the NWD server software was installed.

2. Locate the text specifying the **dbport** value. For example:

```
<param name="dbport">2638;DoBroadcast=NONE;HOST=myhost</param>
```

3. Edit the text string so that it contains only the port information. For example:

```
<param name="dbport">2638</param>
```

4. Save the serverproperties.xml file.
5. Restart the NWD server process.

Package requirement for Linux platforms

LGTsc14023

During installation on all supported Linux platforms, the installation will fail with a package dependency error if the `compat-libstdc++` package is not installed.

Workaround

Prior to installation, install the appropriate `compat-libstdc++` for your platform:

- ◆ 32 bit Intel platforms: install the `compat-libstdc++-33-3.2.3-47.3.i386.rpm` package.
- ◆ 64 bit Intel platforms: install the `compat-libstdc++-33-3.2.3-47.3.x86_64.rpm` package.

Uninstall using Add/Remove Programs does not function correctly with User Account Control enabled

LGTsc14930

When User Account Control for Microsoft Windows Server 2008 is enabled, uninstallation by using the Add/Remove Programs function produces errors and does not remove all programs.

Workaround

Disable User Account Control prior to uninstalling.

Installation of Microsoft Windows Server 2008 does not grant correct permissions to `nsr\tmp` directory

LGTsc15258

During installation of the NetWorker client on Windows Server 2008, the `networker_install_dir\tmp` directory does not have the correct permissions. The Administrator account needs write permissions to this directory.

Workaround

Manually change the permissions to the `networker_install_dir\tmp` directory:

1. In **Windows Explorer**, right-click on the `networker_install_dir\tmp` directory and select **Properties**.
2. Select the **Security** tab.
3. Temporarily change the ownership to the Administrators group.
4. Grant Read/Write permissions to the Administrators group.
5. Change the ownership back to the system.

Upgrading on Linux with `rpm -Uvh` not working correctly

LGTsc15490

When upgrading on Linux systems using the `rpm -Uvh package_name` command, the NetWorker startup script, `/etc/init.d/networker`, is not installed.

Workaround

To upgrade on Linux systems, use the following steps:

1. Uninstall NetWorker packages using `rpm -e`.
2. Install the new versions of NetWorker packages using `rpm -ivh`.

Cannot register a highly available NetWorker server in x64 MSCS environments**LGTsc15782**

Runtime components of Visual C++ libraries are not included in the NetWorker installation. As a result, the NetWorker server cannot be registered as a highly available server.

Workaround

Install the Microsoft Visual C++ 2005 Redistributable Package (x64) from following link:

<http://www.microsoft.com/downloads/details.aspx?familyid=90548130-4468-4BBC-9673-D6ACABD5D13B&displaylang=en>

After installing this package, the NetWorker server can be registered as a highly available server.

NetWorker must be installed using the --nodeps option on SuSE 8**LGTsc12500**

An RPM dependency error occurs on SuSE Linux Enterprise Server 8 when installing the NetWorker software.

Workaround

To perform the installation, run the `rpm` program using the `--nodeps` option. For example:

```
rpm -i --nodeps lgtocln-7.4.1-1.i686.rpm
```

Licensing problems and limitations descriptions

This section details the problems and limitations related to licensing.

NetWorker and the HomeBase agent (BMR) licenses work independently**LGTsc19388**

The software licenses for the NetWorker software and the HomeBase agent (Bare Metal Recovery) software work independently.

Example 1

If the Bare Metal Recovery (BMR) license is *disabled* and the base enabler license for the NetWorker server where the client is configured is *enabled*, the following occurs when a savegroup is run:

- ◆ The BMR profiling fails
- ◆ The NetWorker backup succeeds

Example 2

If the Bare Metal Recovery (BMR) license is *enabled* and the base enabler license for the NetWorker server where the client is configured is *disabled*, the following occurs when a savegroup is run:

- ◆ The BMR profiling succeeds
- ◆ The NetWorker backup fails

Localization problems and limitations descriptions

This section details the problems and limitations related to localization.

For more information on localization important notes and tips, see [“Internationalization support” on page 148](#).

Current user locale is used with JRE 1.4.2 on Microsoft Windows

LGTpa57158

Due to a limitation in JRE 1.4.2 on Microsoft Windows, the JRE uses the system locale rather than the current user locale.

Workaround

If you are using JRE 1.4.2 and need to change the locale for the NetWorker software, change the Windows system locale rather than the current user locale.

This bug is fixed in JRE 1.5, which is provided by default with the NetWorker installation software.

The NMC Japanese Online Help displays incorrect characters on Linux systems

LGTsc02862

The NMC Japanese Online Help displays incorrect characters on Linux systems due to limitations with the Javahelp software. These limitations affect the software’s ability to display fonts in the help viewer content pane.

Due to this limitation in Javahelp the only character encoding that displays is the system default; not the font defined by the user.

The nwrecover program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed

LGTsc02808

The `nwrecover` program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed.

Workaround

Install the following font packages:

- ◆ `ttf-founder-simplified-0.20040419-6.1.noarch.rpm`
- ◆ `ttf-founder-traditional-0.20040419-6.1.noarch.rpm`

Recovering a large number of files may take a long time in the French locales on Solaris

LGTsc05339

In the French locale on Solaris, a degradation in performance may be seen when recovering a large number of files (greater than 100,000).

To improve performance, expand the command dialog box to reveal the complete path names of the files being recovered in the output field.

Garbled characters may appear in the NetWorker Console GUI font list on Solaris

LGTsc03894

Garbled characters may appear in the NetWorker Console GUI font list for font names if the fonts do not have English names, or the localized names are not recognized by the JRE.

Problem with highlighted text in the NetWorker Console Help program after performing a search using JRE 1.5.x for Asian languages

LGTsc02814

Due to a known limitation with JRE 1.5.x (Sun bug 6375606), text that is highlighted in the NetWorker Console Help program after a search has been performed will not be highlighted correctly.

Entering non-ASCII characters in NetWorker user interfaces

LGTpa88887

Non-ASCII characters are supported only for the **Save Set** attribute in **Client** and **Archive Request** resources. However, user interfaces such as the NetWorker Management Console do not prevent the user from entering non-ASCII characters for other attributes in NetWorker resources.

Non-ASCII save set names are displayed incorrectly in nsradmin visual mode on Linux

LGTpa92833

Non-ASCII save set names are displayed incorrectly in **nsradmin** visual mode on Linux.

Workaround

To work around this limitation, do one of the following:

- ◆ Use the **print nsr client** command in **nsradmin** window to view the non-ASCII save set.
- ◆ Use the Console GUI on the Linux client to view the non-ASCII save set.

Messaging problems and limitations descriptions

This section details the problems and limitations related to messaging.

nsrbmr does not give proper error messages under certain conditions

LGTsc16423

An appropriate error message is not displayed when both BMR profiling status and **savegrp** status fail due to one of the following:

- ◆ The Homebase agent is uninstalled and a **savegrp** with BMR enabled client is performed.
- ◆ A communication issue occurs between **nwserv** and **nwclnt**.

An error message appears but BMR profiling still completes with a status of “pass” in the following scenarios:

- ◆ The Homebase agent services are stopped during or after profiling. In this case, **nsrbmr** completes without any errors.

- ◆ Incorrect options are specified in the BMR options field under client properties. A command usage error appears, but profiling status indicates “pass”.
- ◆ After installation, when the first **savegrp** is performed with BMR enabled client, the HomeBase server name is specified in the server properties and the BMR options field is left blank.

Once the **savegrp** is completed for the BMR enabled client, it is recommended to check the status of the BMR profile completion to ensure that BMR profiling has completed successfully.

Error message does not display for annotations with similar characters at the end

LGTsc17737

Nsrretrieve does not display an error message when a retrieve is performed using regular expressions for two annotations with similar characters at the end.

Erroneous error message may be generated by Linux operating systems when performing an I/O to a volume

LGTsc08054

The following erroneous error message may be generated by Linux operating systems when performing an I/O to a volume:

```
kernel: program nsrmmmd is using deprecated SCSI ioctl, please
convert it to SG_IO.
```

Ignore this message. In upcoming NetWorker releases, this warning from the kernel will stop.

New pdksh package required on SuSE 10 x86

LGTsc08978

A failed dependencies error occurs on the SuSE 10 x86 platform if the required version of the **pdksh** package is not installed. The following is displayed:

```
error: Failed dependencies: /bin/ksh is needed by lgtocln-7.4-1
```

Workaround

Install **pdksh-5.2.14-801.i586.rpm**, which can be downloaded from the SuSE/Novell website.

You could alternatively install the packages with the **--nodeps** option.

Incorrect error message reported when starting the NetWorker console on Red Hat 64-bit Enterprise Server 4

LGTsc03478

On a Red Hat 64-bit Enterprise Server 4, the preinstalled Mozilla browser incorrectly reports that the JRE is not installed. The NetWorker console uses Javascript to detect the JRE installation and a warning message appears reporting that the correct JRE is not installed on the client machine.

If the correct JRE is already installed, ignore the message. To start the NetWorker Console, click the Start link in the line "If you have installed JRE1.4.2 and 1.5, then click here to start NetWorker Management Console" from the Mozilla browser.

Error states you need to perform an uninstall when updating from NetWorker 7.2.2 32-bit to NetWorker 7.5 64-bit

LGTsc06288

When updating from NetWorker release 7.2.2 32-bit on x64 to NetWorker 7.5 64-bit, an error message is displayed stating that the 32-bit NetWorker software is already installed and should be uninstalled.

Workaround

It is not necessary to do a complete uninstall of NetWorker release 7.2.2 to perform this update. Perform a partial uninstall of NetWorker release 7.2.2 32-bit, then install NetWorker release 7.5 64-bit to the same location that the 7.2.2 32-bit version was installed.

Note: The 32-bit version of NetWorker release 7.3.x is the only version of 32-bit NetWorker software that is supported on ntx64. NetWorker release 7.4 and later does not allow 32-bit NetWorker to be installed on ntx64.

NetWorker support for Novell's OES Linux limitations

Limitations to support for Novell's OES Linux with NetWorker are as follows:

- ◆ [“Metadata modifier field not recovered” on page 112](#)
- ◆ [“Creating eDirectory backup files for NetWorker backup and recovery” on page 112](#)
- ◆ [“Creating GroupWise backup files for NetWorker backup and recovery” on page 113](#)

IMPORTANT

NSS+eDirectory backups and GroupWise backups are two unrelated procedures and should be considered separately.

Metadata modifier field not recovered

When you perform backup and recovery by using the NetWorker software, it does not recover the metadata modifier field for NSS files or directories.

Creating eDirectory backup files for NetWorker backup and recovery

eDirectory is a database of Network resources that contains extra information related to NSS objects. However, since eDirectory is not part of the file system, when you perform backup and recovery using the NetWorker software, NetWorker does not recover eDirectory data as it was backed up.

Workaround

NetWorker can perform a parallel backup and recover of eDirectory files using eMBox/DSBK (eMBox is a GUI version of DSBK). DSBK is a command line tool used to back up eDirectory as a complete database, saving all the information on a file that is created when running the pre-and-post script. The file created by DSBK is saved by NetWorker along with the backup of the file system.

The following is an example of how to create a pre-and-post script to backup and recover eDirectory.

Note: If performing a manual (non-scheduled) backup, DSBK should always be run before the NSS file system backup. If performing a scheduled backup, initiate DSBK by a pre-command script using savenpc, and ensure that the savegrp includes the exported database on the file system. DSBK should always create the eDirectory backup file before save runs, so NetWorker can back up both the file system and the DSBK file. If performing a recovery, the same order applies. Recover eDirectory using DSBK, and then recover the NSS file system.

To back up and recover eDirectory by using DSBK:

1. In the `/etc/dsbk.conf` file, set the following value:

```
/root/dsbk.command
```

The output for the command is written to eDirectory's log file.

2. Run the following command:

```
dsbk backup -f /media/nss/NSS1/ndsbk -l /media/nss/NSS1/nds.log
```

Two files are created; ndsbk and nds.log. The ndsbk file contains eDirectory information that can be backed up using the NetWorker software. The nds.log file contains messages for the successful creation or errors.

3. Using the NetWorker software, recover the ndsbk file.

Once the file has been recovered, you can recover eDirectory.

4. To recover eDirectory, run the following command:

```
dsbk restore -f /media/nss/NSS1/ndsbk -l /media/nss/NSS1/nds.log  
-r -a -o
```

Creating GroupWise backup files for NetWorker backup and recovery

When you perform backup and recovery using the NetWorker software, you need to create a pre-and-post script to backup GroupWise so that NetWorker can recover GroupWise data as it was backed up.

Workaround

The following is an example of how to create a pre-and-post script to backup GroupWise:

1. Create a backup directory (for example, backup).
2. Run this command to copy the Post office (-p) to the backup directory:

```
./dbcoppy -m -p -v /gw /backup
```

3. Run this command to copy the Domain (-d) to the backup directory:

```
./dbcoppy -m -d -v /gw /backup
```

You can now use the NetWorker software to back up the backup directory.

4. Run the following command to stop GroupWise:

```
./rcgrpwise stop
```

5. Remove GroupWise and the backup directory.

6. Run the following command to start GroupWise:

```
./rcgrpwise start
```

The following is an example of how to create pre-and-post script to recover GroupWise:

1. Use NetWorker to recover the backup directory.
2. Run the following command to stop GroupWise:


```
./rcgrpwise stop
```
3. Run the following command to copy the Domain (-d) from the backup directory to the GroupWise directory:


```
./dbcopy -m -d -v /backup /gw
```
4. Run the following command to copy the Post office (-p) from the backup directory to the GroupWise directory:


```
./dbcopy -m -p -v /backup /gw
```
5. Run the following command to start GroupWise:


```
./rcgrpwise start
```
6. Run the following command to view the status of GroupWise and confirm that the recovery was successful:


```
./rcgrpwise status
```

NMC problems and limitations descriptions

This section details the problems and limitations related to the NetWorker Management Console (NMC).

NetWorker Management Console may become unresponsive when opened using Exceed

LGTsc02903

When using Exceed to launch the NetWorker Management Console from a UNIX or Linux system, the NMC GUI may become unresponsive.

Workaround

Enable the **XTEST (X11R6)** variable in the Exceed XConfig program on the Windows host.

Restore problems and limitations descriptions

This section details the problems and limitations related to restore operations.

Last-modified date changed for files recovered to Sun Cluster global file system

LGTsc19364

The last-modified date for files recovered to the SUN Cluster global file system may be displayed as the current time instead of the last date the files were changed, due to an issue with Sun Cluster version 3.2.

Workaround

Disable **pxfs_fastwrite** by performing the following:

1. On all cluster nodes, run:


```
# echo "pxfs_fastwrite_enabled/W 0" |mdb -kw
```
2. Unmount, then mount the global file systems for the change to appear.

To re-enable fastwrite:

1. Set the variable `pxfs_fastwrite_enabled` to 1.
2. Unmount, then mount the global file systems.

More information on this issue is provided at the following website:

http://bugs.opensolaris.org/bugdatabase/view_bug.do?bug_id=6540206

Files and directories should be specified in a specific order in the exclude file

LGTsc20332

The procedure to recover all files and directories specified in the exclude file using wildcard characters differs when performing an index or save set recovery operation.

Index recover operation

During an index recovery operation, to exclude all files and directories specified in the exclude file using wildcard characters, you must specify the filenames first before the directory names in the exclude file.

For example, to exclude all files that begin with character **h** in the directory */etc*, type the following:

```
/etc/h*
/etc/h*/*
```

Save set recover operation

During a save set recovery operation, to exclude all files and directories specified in the exclude file using wildcard characters, you must specify the directory names first before the filenames in the exclude file.

For example, to exclude all files that begin with character **h** in the directory */etc*, type the following:

```
/etc/h*/*
/etc/h*
```

Do not recover identical save sets with different ssids to the same target directory

LGTsc10796

Do not perform a save set recovery from the command prompt, with multiple save set IDs that all point to the same file/directory path and will be recovered into the original location.

Data corruption might occur when the same dir/file path is backed up multiple times. This creates multiple save sets, each with a different save set ID. For example, *ssid1* and *ssid2* are save set IDs created for the same file/directory path, at different save or backup times.

When the `recover` command or the `nsrretrieve` command is run to retrieve more than one instance of the save set, each with a different save set ID, into the original location, the recovered instance of the directory/file from *ssid1* might be overwritten by the recovered data of the same directory/file from *ssid2*, or vice-versa.

Example

Data corruption might occur in the following scenario:

```
recover -s server -c client -S ssid1 -S ssid2
nsrretrieve -s server -S ssid1 -S ssid2
```

where *ssid1* and *ssid2*, are save set IDs of the same file/directory.

Antivirus programs block recovery

LGTsc13799

During recovery, antivirus programs may block the recovery of certain files. Antivirus programs are designed to protect their own program files and settings from external threats that may be attempting to disable the program. The antivirus program may not be able to distinguish between a recovery and an attack.

Workaround

Prior to recovery, disable the antivirus program's protection properties. Consult your anti-virus program's documentation for further information. After recovery, reenble the program's protection properties.

NetWorker interactive recover does not recover the registry and the com+ regdb writers

LGTsc14577

You cannot perform a system recover of the registry and com+ regdb writers by using the interactive mode of the **recover** command.

Workaround

Perform a system recovery using the noninteractive mode of the **recover** command, or use the NetWorker User program.

Restoring full VM image on ESX server fails

LGTsc11618

When attempting to restore a full VM image directly onto the ESX server, the recovery fails.

Workaround

Recover to the proxy host and use VirtualCenter tools (VMware Converter).

Unable to restore files encrypted with both Microsoft Windows Encrypting File System & AES encryption

LGTsc11734

When AES encryption is applied to a file that is also encrypted using the Microsoft Windows Encrypting File System (EFS), the backup will be reported as successful. However, recovery of the file fails and the following message is written to the NetWorker log file:

```
recover: Error recovering <filename>. The RPC call completed before
    all pipes were processed.
```

Workaround

Do not use AES encryption when backing up files that are encrypted by using EFS.

The nwrecover program might fail to launch on a Solaris Sparc V240 server

LGTsc06577

The `nwrecover` program might fail to launch on a Solaris Sparc V240 server if the following CDE/Motif patch is not installed:

Solaris 10 CDE 1.6 Runtime update:

sparc: 119280

x86: 119281

FSRM Disk Quota may not be restored to previous settings after recovery

LGTsc05990

The NetWorker software might not restore the previous FSRM Disk Quota configuration after the Disk Quota recovery. Some of the changes made to the setup values after saving the FSRM Disk Quota may remain after the recovery operation. However, if the Disk Quota is completely deleted, it can be restored to the previous configuration.

After a BMR recovery operation the root password might change

LGTsc20558

After BMR recovery (base profile) operation, the root password might change. For example:

- ◆ On UNIX, the root password might be reset to **riskey**.
- ◆ On Microsoft Windows a new admin username and password is created. You can log in as administrator with the profiled servers password or as the indigostone user. For example:
 - Admin username: indigostone
 - Admin username password: H0meBase

An ASR recovery might fail on Microsoft Windows 2003

LGTsc06325

An ASR recovery might fail on Microsoft Windows 2003. The recovery appears to complete successfully, but after the computer reboots and the user enters his name and password, the following error is reported:

```
"A problem is preventing Windows from accurately checking the
license for this computer. Error Code: 0x8007007f"
```

Full access is denied to the restored machine. The *NetWorker Disaster Recovery Guide* contains full details on recovering the ASR recovery.

On NetApps files, filenames ending with special characters might be renamed

LGTpa95900

On NetApps filers, the recovery of filenames ending with the special character sequence `~n` (where `n` is a number) might be renamed with `~1` appended at the end of the name. For example, a file named `C~1` might be restored with the name `C~1~1`.

This behavior might occur when the **DIRECT=Y** application parameter has been defined in the NetApps client instance.

Workaround

To perform a file level recovery of a file with a special character sequence, perform one of the following:

- ◆ Set the following environment variable prior to performing a file level recovery:

```
NSR_NDMP_RECOVER_NO_DAR=y
```

- ◆ Redefine the NetApps client application parameters:

```
DIRECT=Y.
```

Note: This will not address the recovery of legacy backups performed prior to the **DIRECT=Y** parameter removal. In this case, you must set the **NSR_NDMP_RECOVER_NO_DAR=y** environment variable before performing the recovery operation.

The winworkr program fails to retrieve successfully archived files if a slash (\) character was entered in the annotation string

LGTPa94966

The **winworkr** program fails to retrieve successfully archived files if a slash (\) character was entered in the annotation string.

Workaround

Enter a double slash (\\) into the annotation string and the files will be archived and retrieve operations perform successfully.

Directed recover fails with permission errors on Windows

LGTPa83927

A directed recover operation fails when using the command line interface (CLI) and the **winworkr** program. Permission errors display if the NetWorker server and the client where the files are to be recovered to are running Windows.

Workaround

To perform a directed recover, one of the two following conditions must be met:

- ◆ If the NetWorker server and target recover client are in the same domain:
 - Start the NetWorker server (**nsrd**) as a domain user that is in the Windows Administrators group on the NetWorker server machine.
 - Ensure that the user has the same password on both machines.
- ◆ If both machines are not in a domain, or they are not in the same domain:
 - Ensure that the user:
 - Exists on both machines.
 - Has the same password on both machines.
 - Is in the Windows Administrators group on the NetWorker server machine.
 - Start the NetWorker server (**nsrd**) as a domain user that is in the Windows Administrators group on the NetWorker server machine.

The winworkr program will not relocate to a partition not existing on the initiating host if the NetWorker server is running release 7.4 and the client is running release 7.2

LGTsc00167

If the NetWorker server is running release 7.4, and the 7.2 release is installed on a client, a directed recover will not relocate to a partition that does not exist on the host initiating the recover operation. An error message is displayed indicating that it is an invalid directory.

Workaround

Upgrade the client to release 7.4 or create the appropriate directory on the host initiating the recovery.

Performing a save set query can take a long time if the query parameter in the Query Save Set tab is set to "Save Time" and From and To calendars for 3 or more days

LGTsc05053

In a large scale NetWorker environment, performing a save set query can take a long time if the query parameter in the Query Save Set tab is set to **Save Time** and **3 or more days** in the From and To calendar.

An Operation in Progress window appears with the following message:

```
Getting save set information from NetWorker server <server name>
```

This dialog box will remain till the save set query is complete blocking you from performing any other operations on the NetWorker server.

Workaround

Perform the save set query using the **mminfo** command from the command line.

For recoveries operations using Celerra filers, misleading error messages might display

LGTpa96554

On Celerra filers, the recovery of a backup containing a recursive directory can result in the generation of log messages:

```
NDMP Service Debug: Too much retry on header research
```

This log message can be intermittent in nature as subsequent recoveries of the same back might not result in the generation of a log message.

This log message does not affect the recovery and can be ignored.

Upgrading problems and limitations descriptions

This section details the problems and limitations related to upgrading the software.

JRE version mismatch causes authentication failure, stops GSTD

LGTsc08958

After updating to NetWorker version 7.5, if the JRE version installed on the system is lower than the JRE version required by NetWorker, NMC cannot be launched and the GSTD process stops with an "authentication failure" error message.

Workaround

Update to JRE version 1.5.0_11 or JRE version 1.6.

When upgrading from release 7.3.1 the Virtual Jukeboxes attribute will not be set correctly**LGTpa95019**

When upgrading from the 7.3.1 release, the Virtual Jukeboxes attribute will not be set if you previously configured a Virtual Tape Library (VTL) using the 7.3.1 release. After upgrading to 7.5, the Virtual Jukeboxes attribute uses the normal jukebox license instead of a VTL license. The VTL still functions normally using the normal jukebox license.

The Virtual Jukeboxes attribute will function normally if upgrading to the 7.5 release from 7.3.2.

Group details window is empty after upgrading from NetWorker release 7.2.2**LGTsc01587**

After upgrading to NetWorker release 7.4 from release 7.2.2, savegroups details run prior to the upgrade do not appear in the Group Details window.

NetWorker releases previous to 7.4 problems and limitations

Table 12 on page 121 identifies problem issues and limitations discovered in NetWorker release prior to 7.4 that continue to be applicable.

The known limitations are separated into the following categories:

- ◆ “Backup operations problems and limitations descriptions” on page 126
- ◆ “CLI problems and limitations descriptions” on page 130
- ◆ “Cloning problems and limitations descriptions” on page 131
- ◆ “Compatibility problems and limitations descriptions” on page 131
- ◆ “Configuration problems and limitations descriptions” on page 132
- ◆ “Devices and media problems and limitations descriptions” on page 134
- ◆ “GUI problems and limitations descriptions” on page 140
- ◆ “Installation problems and limitations descriptions” on page 142
- ◆ “Licensing problems and limitations descriptions” on page 144
- ◆ “Localization problems and limitations descriptions” on page 144
- ◆ “Messaging problems and limitations descriptions” on page 144
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Table 12 Limitations discovered in NetWorker releases prior to 7.4 (page 1 of 6)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTpa91299" on page 130	91299nw	ZFS file systems are not automatically backed up when performing a savegroup backup of ALL.	AIX, Linux, Solaris, HP-UX, Tru64 UNIX	Backup
"LGTpa83221" on page 127	83221nw	Backup might default to an incorrect server if the -s option is not specified with the save command.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup
"LGTpa82436" on page 128	82436nw	VSS on Windows Server 2003 x64 is unsupported without a Microsoft hotfix.	Windows	Backup
"LGTpa75719" on page 127	75719nw	Save set status is displayed as invalid if a DSA backup is terminated due to an invalid backup path.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Backup
"LGTpa75339" on page 128	75339nw	Backup will fail with remote exec service if passwords are not configured correctly.	Windows	Backup
"LGTpa73509" on page 127	73509nw	The /system/object and /system/contract directories are not skipped during a backup on Solaris 10.	AIX, Solaris, HP-UX, Tru64 UNIX	Backup
"LGTpa51184" on page 127	51184nw	Increase server parallelism to complete concurrent operations.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Backup
"LGTpa61694" on page 128	61694nw	SHAREPOINT save set cannot be excluded with directives when a save set of ALL is specified.	Windows	Backup
"LGTpa58888" on page 128	58888nw	Command-Line Backup and Recovery of SYSTEM Save Sets.	Windows	Backup
"LGTpa58422" on page 129	58422nw	VSS backups of raw devices unsupported.	Windows	Backup
"LGTpa44863" on page 128	44863nw	Files larger than 2 GB can break the save set consolidation process.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup
"LGTpa41039" on page 126	41039nw	Windows management instrumentation database might stop responding.	Windows	Backup
"LGTpa54620" on page 126	54620nw	Microsoft VSS backups on a FAT32 partition take longer than on an NTFS partition.	Windows	Backup
"LGTpa35171" on page 126	35171nw	Hot fix required to operate the NetWorker software in a Windows 2000 Clustered Environment running Service Pack 1 or 2.	Windows	Backup
"LGTpa33868" on page 126	33868nw	Windows 2000 server cannot handle large numbers of concurrent saves.	Microsoft Windows	Backup
"LGTpa83221" on page 127	83221nw	Backup might default to an incorrect server if the -s option is not specified with the save command.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup
"LGTpa79664" on page 127	79664nw	The /var/log/lastlog file causes a save process to appear to hang on RedHat AS4 x86_64.	Linux, Solaris	Backup
"LGTpa75719" on page 127	75719nw	Save set status is displayed as invalid if a DSA backup is terminated due to an invalid backup path.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX,	Backup

Table 12 Limitations discovered in NetWorker releases prior to 7.4 (page 2 of 6)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTpa73509" on page 127	73509nw	The /system/object and /system/contract directories are not skipped during a backup on Solaris 10.	Linux, Solaris	Backup
"LGTpa51184" on page 127	51184nw	Increase server parallelism to complete concurrent operations.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX,	Backup
"LGTpa44863" on page 128	44863nw	Files larger than 2 GB can break the save set consolidation process.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup
"LGTpa82436" on page 128	82436nw	VSS on Windows Server 2003 x64 is unsupported.	Windows	Backup
"LGTpa75339" on page 128	75339nw	Backup will fail with remote exec service if passwords are not configured correctly.	Windows	Backup
"LGTpa61694" on page 128	61694nw	SHAREPOINT save set cannot be excluded with directives when a save set of ALL is specified.	Windows	Backup
"LGTpa58888" on page 128	58888nw	Command line backup and recovery of SYSTEM save sets.	Windows	Backup
"LGTpa58422" on page 129	58422nw	VSS backups of raw devices unsupported	Windows	Backup
"LGTpa91299" on page 130	91299nw	ZFS file systems are not automatically backed up when performing a savegrp backup of.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX	Backup
"LGTpa87308" on page 130	87308nw	Using the withdraw command to withdraw a volume on a partitioned library fails.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	CLI
"LGTpa91406" on page 130	91406nw	The ls -l command does not display files recovered from a NetApp Data ONTAP 6.5 file system.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	CLI
"LGTpa76457" on page 131	76457nw	The mminfo command does not display a weekly summary of save set usage during the change to daylight savings time.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	CLI
"LGTpa51045" on page 131	51045nw	Perform a save set recovery when using the save command with the -l input_file option.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	CLI
"LGTpa62490" on page 131	62490nw	Cloning on an EMC DART CFS 5.2 is unsupported.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Cloning and Staging
"LGTpa70320" on page 131	70320nw	Automatic cloning might fail when using a single staging policy.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Cloning and Staging
"LGTpa41044" on page 131	41044nw	NetWorker software might stop responding when running SQL server 2000 and NetWorker client.	Windows	Compatibility
"LGTpa89947" on page 132	89947nw	Cannot deposit volumes in a DAS silo.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Configuration

Table 12 Limitations discovered in NetWorker releases prior to 7.4 (page 3 of 6)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTpa89946" on page 132	89946nw	Cannot configure a DAS silo using the NetWorker Management Console.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Configuration
"LGTpa66196" on page 132	66196nw	Warning when using AlphaStor 3.0x with SR2 on a Windows server with a NetWorker for Windows 2000 storage node.	Windows	Configuration
"LGTpa57709" on page 132	57709nw	Removable storage manager jukebox configures all devices automatically.	Windows	Configuration
"LGTpa35407" on page 133	35407nw	Change journal manager problems with multiple servers.	Windows	Configuration
"LGTpa83273" on page 134	83273nw	Misleading error message reported if an invalid NDMP storage node password is entered when labeling a volume.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
"LGTpa83579" on page 134	83579nw	Device operations using the right click option might be lost.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
"LGTpa82503" on page 134	82503nw	Media capacity notification not logged in the media database.	AIX, Solaris, Windows, HP-UX, Tru64 UNIX, Linux	Devices and Media
"LGTpa80901" on page 134	80901nw	Labeling volumes concurrently might fail when using the NetWorker Console.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
"LGTpa87657" on page 135	87657nw	The udev tool is unsupported on Emulex running Linux RedHat AS 4 using default kernel 2.6.	Linux	Devices and Media
"LGTpa74492" on page 135	74492nw	The jbconfig command might fail on Windows 2003 with a multidrive jukebox.	Windows	Devices and Media
"LGTpa68867" on page 135	68867nw	Tape gets stuck in a drive when labeling Linux Red Hat.	Linux	Devices and Media
"LGTpa66140" on page 135	66140nw	The jbconfig command reports a BNCHMARKVS640 DLT drive as 4mm.	Windows	Devices and Media
"LGTpa54632" on page 136	54632nw	Error message appears in daemon log when labeling a volume that contains PowerSnap save sets.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
"LGTpa55128" on page 136	55128nw	Slow Solaris tape operations when using an IBMtape driver with IBM LTO-2 Tape drives and the NetWorker CDI.	AIX, Solaris, HP-UX, Tru64 UNIX	Devices and Media
"LGTpa51725" on page 136	51725nw	NetWorker software attempts to eject a stuck tape.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
"LGTpa66565" on page 136	66565nw	Volume retention information does not apply to volumes that contain snapsets.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
"LGTpa50485" on page 137	50485nw	Increase the value of the save mount timeout attribute when auto media management is enabled and a corrupt tape is encountered.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
"LGTpa45470" on page 137	45470nw	Volume remains in the tape drive if the storage node nsrmmnd is not responding in a shared drive environment with DDS.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media

Table 12 Limitations discovered in NetWorker releases prior to 7.4 (page 4 of 6)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTpa37996" on page 139	37996nw	The nsrjb -L and -I operations fail with an Exabyte Mammoth-2 tape drive with Fibre Channel device.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
"LGTpa58356" on page 137	58356nw	Label tape operation fails on an HP-UX platform if CDI is turned on and IBM tape driver is used.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
"LGTpa58215" on page 138	58215nw	Jukebox fails to allocate enough devices.	Windows	Devices and Media
"LGTpa50089" on page 138	50089nw	Entering the inquire command during tape activity causes a device error.	Windows	Devices and Media
"LGTpa48374" on page 138	48374nw	Managing optical drives with Solaris 9.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
"LGTpa50279" on page 139	50279nw	Cannot label a tape if CDI is enabled on a tape drive on HP Tru64 5.1.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
"LGTpa37996" on page 139	37996nw	The nsrjb -L and -I operations fail with an Exabyte Mammoth-2 tape drive with Fibre Channel device.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
"LGTpa36367" on page 139	36367nw	Tape Drive Requires Cleaning Error Message.	Windows	Devices and Media
"LGTpa89946" on page 132	89946nw	Cannot configure a DAS silo using the NetWorker Management Console.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
"LGTpa26003" on page 140	26003nw	Element status feature must be manually enabled for jukeboxes that support the feature.	Linux, Solaris	Devices and Media
"LGTpa89859" on page 140	89859nw	Unable to configure an ACSLS silo on Windows with lib_attach 1.4.1.	Windows	Devices and Media
"LGTpa87730" on page 140	87730nw	Cannot launch the NetWorker Console from a Linux PowerPC client.	Linux	GUI
"LGTpa77990" on page 141	77990nw	Cannot run commands in nsradmin without the nsrexecd daemon.	Windows	GUI
"LGTpa82555" on page 141	82555nw	Remote client save sets with japanese characters are displayed incorrectly.	Windows	GUI
"LGTpa83820" on page 141	83820nw	Files backed up from a VSS system filesset appear in the file system tree.	Windows	GUI
"LGTpa53364" on page 141	53364nw	SCSI device ID displayed differently than NetWorker NDMP devices.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	GUI
"LGTpa56231" on page 141	56231nw	All client file index entries might appear not to have been deleted.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	GUI
"LGTpa86214" on page 142	86214nw	Microsoft Windows username cannot contain a '!' character.	Windows	GUI

Table 12 Limitations discovered in NetWorker releases prior to 7.4 (page 5 of 6)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTpa80764" on page 142	80764nw	No alternative location provided for the java14.sdk.tar file if the /tmp directory is full.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Installation
"LGTpa83706" on page 142	83706nw	ASR and non-ASR recovery fails if the Windows install CD does not match the service pack level of the data being backed up.	Windows	Installation
"LGTpa61643" on page 142	61643nw	Package installation on Linux IA64 Red Hat results in an error.	Linux	Installation
"LGTpa50807" on page 143	50807nw	Error downgrading to business edition.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Installation
"LGTpa62224" on page 144	62224nw	NetWorker License Manager allowance limitation.	Windows	Licensing
"LGTpa79450" on page 155	79450nw	The XAPPLRESDIR environment variable must be set to operate the NetWorker Console on HP-UX	HP-UX	Localization
"LGTpa81024" on page 144	81024nw	Fatal error incorrectly reported no printer available to print a bootstrap on AIX 5.3.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Messaging
"LGTpa54165" on page 144	54165nw	Error message generated if the snapshot policy is configured to request more snapshots than a Savegroup can generate.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Messaging
"LGTpa43135" on page 145	43135nw	System log notifications fail on SuSE 8.0.	Linux	Messaging
"LGTpa88065" on page 145	88065nw	If a connection is lost during an NDMP backup to a NAS filer the NetWorker software stops responding.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	NDMP
"LGTpa74026" on page 145	74026nw	The scanner command might stop responding if it encounters an aborted save set backed up to an NDMP device.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	NDMP
"LGTpa28778" on page 146	28778nw	NetWorker software fails to use tapes preinitialized in NDMP-enabled tape devices.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	NDMP
"LGTpa65644" on page 146	65644nw	NDMP save sets in status recyclable are not recoverable.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Restore
"LGTpa48556" on page 146	48556nw	Preventing duplicate filenames during recovery.	Windows	Restore
"LGTpa48322" on page 146	48322nw	Windows error message during automated system recovery.	Windows	Restore
"LGTpa37508" on page 147	37508nw	Limitation on browse and retention policy dates	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Restore
"LGTpa35856" on page 147	35856nw	No message is logged if resource files are missing.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Restore

Table 12 Limitations discovered in NetWorker releases prior to 7.4 (page 6 of 6)

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
"LGTpa23372" on page 147	23372nw	Concurrent multiclient recovery on Windows 2000.	Microsoft Windows	Restore
"LGTpa38176" on page 148	38176nw	Cannot change the browse time if there are files for recovery.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Recovery

Backup operations problems and limitations descriptions

This section details the problems and limitations related to backup operations.

Windows management instrumentation database might stop responding

LGTpa41039

While performing a save of the Windows Management Instrumentation (WMI) database, the **save** process stops responding during a Microsoft application programming interface (API) call. A Microsoft API call should be nonblocking.

To work around this issue, obtain the hot fix for the Microsoft operating system bug. The Microsoft Knowledgebase article Q319579, *COM Activity Deadlock Causes IIS to Stop Responding*, contains more information on this hot fix.

Microsoft VSS backups on a FAT32 partition take longer than on an NTFS partition

LGTpa54620

VSS backups of files on a FAT32 partition take longer than VSS backups of files on an NTFS partition. This is a known Microsoft issue.

Hot fix required to operate the NetWorker software in a Windows 2000 Clustered Environment running Service Pack 1 or 2

LGTpa35171

To run NetWorker software in a Windows 2000 cluster environment by using MSCS and the Windows Service Pack 1 or 2, apply the Microsoft Gethostbyaddr() hot fix. The hot fix is available from Microsoft Product Support Services. The Gethostbyaddr() hot fix is not required if Windows 2000 Service Pack 3 is installed on the cluster nodes. It is only required when running Service Pack 1 or 2.

Windows 2000 server cannot handle large numbers of concurrent saves

LGTpa33868

Running a large number of concurrent saves might cause the server to stop responding.

To work around this issue, increase the desktop heap for noninteractive processes from the default value (512 KB) to 3,072 KB. If the failures continue to occur, increase the heap up to 5,120 KB.

Backup might default to an incorrect server if the -s option is not specified with the save command

LGTpa83221

On a NetWorker client, if the -s servername option is not specified with the save pathname command, the save command does not select the first server name in the `/nsr/res/servers` file. The save command selects the first server it contacts on the network.

Workaround

Use the -s servername option with the `save` command to specify a specific NetWorker server.

The /var/log/lastlog file causes a save process to appear to hang on RedHat AS4 x86_64

LGTpa79664

RedHat AS4 x86_64 creates a 4TB sparse file, `/var/log/lastlog`, during the install process. A save process that includes this file appears to hang while it reads the sparse file. The save process executes after the delay.

Save set status is displayed as invalid if a DSA backup is terminated due to an invalid backup path

LGTpa75719

If a DSA backup is terminated due to an invalid backup path, the save set status is displayed as invalid ss (for file type devices and tape devices) in the Volumes window. The Volume window should not display information about the save set status.

The /system/object and /system/contract directories are not skipped during a backup on Solaris 10

LGTpa73509

The `/system/object` and `/system/contract` directories should be skipped when running backups on a Solaris 10 operating system.

Create a `.nsr` file with directives to skip the `/system/object` and `/system/contract` directories.

If the directories are not skipped, error messages are reported during a backup. For example:

```
enoexec:/system/contract save: readdir overflow error, backup of
  directory cannot continue
enoexec: /system/contract          level=full,      3 KB 00:04:06
  9 files
```

Increase server parallelism to complete concurrent operations

LGTpa51184

There may be a need to increase the server parallelism value to complete the concurrent operations with an advanced file type device (AFTD) device when the number of simultaneous save sessions reaches the maximum value for server parallelism.

For example, if the server parallelism is set to 4, and there are 4 simultaneous saves going to an AFTD, set the server parallelism to 5 to complete a concurrent clone/stage operation from this AFTD while the four saves are in progress.

Files larger than 2 GB can break the save set consolidation process**LGTpa44863**

The NetWorker software cannot consolidate save sets when either the full or Level 1 save set contains a file larger than 2 GB.

VSS on Windows Server 2003 x64 is unsupported**LGTpa82436**

Due to problems that Microsoft is encountering with certain VSS writers, this release of the NetWorker software cannot support VSS on Windows Server 2003 x64 platforms.

VSS on Windows Server 2003 x64 can be supported if the following Microsoft hot fix is installed: <http://support.microsoft.com/default.aspx?scid=kb;en-us;913100>.

Backup will fail with remote exec service if passwords are not configured correctly**LGTpa75339**

A backup will fail if the following is true:

- ◆ A NetWorker Remote Exec service on a client machine is configured so that the service is initiated by a local system account.
- ◆ The remote user and password field for the client is configured to use the same username and password as the Remote Exec service.

This error message is reported:

```
Cannot authenticate user: a required privilege is not held by the
client. Permission denied.
```

Workaround

To avoid this issue, configure the NetWorker Remote Exec service on the client to initiate with the local system account and populate the Remote User and Password fields of the client by using the NetWorker Administrator program.

SHAREPOINT save set cannot be excluded with directives when a save set of ALL is specified**LGTpa61694**

The SHAREPOINT save set cannot be excluded with directives when a save set of ALL is specified for backup.

Command line backup and recovery of SYSTEM save sets**LGTpa58888**

When backing up or recovering SYSTEM or VSS SYSTEM save sets from the command line, these limitations apply:

- ◆ A maximum of one SYSTEM or VSS SYSTEM save set can be included in the same **save** or **recover** command.
- ◆ File system directories cannot be specified in the same **save** or **recover** command.
- ◆ A maximum of one SYSTEM or the VSS SYSTEM save set can be specified in an input file.

Note: An input file is specified in a **save** or **recover** command with the **-I** option.

File system directories cannot be specified in an input file.

Examples of invalid command line entries include:

```
recover -s servername "SYSTEM DB:" "SYSTEM STATE:"
recover -s servername D:\letters "SYSTEM DB:"
save -s servername "SYSTEM DB:" "SYSTEM STATE:"
save -s servername D:\letters "SYSTEM DB:"
save -s servername -I D:\list.txt
```

Where **list.txt** is an input file. Examples of invalid input files include:

- ◆ The following input file is invalid because it includes a file system and a VSS SYSTEM save set:
D:\letters
VSS SYSTEM BOOT:
- ◆ The following input value file is invalid because it includes multiple VSS SYSTEM save sets:
VSS SYSTEM BOOT:
VSS SYSTEM SERVICES:

Examples of valid command line entries include:

```
save -s servername "VSS SYSTEM BOOT:"
save -s servername "VSS SYSTEM SERVICES:"
recover -s servername "VSS SYSTEM BOOT:"
recover -s servername "VSS SYSTEM SERVICES:"
```

Workaround

To back up multiple SYSTEM or VSS SYSTEM save sets in one operation, choose one of these options:

- ◆ In the NetWorker Administration window, edit the Client resource to include multiple SYSTEM or VSS SYSTEM save sets. Alternatively, ensure that the default save set All is selected for the Client resource.
- ◆ In the NetWorker User program, mark all of the required SYSTEM or VSS SYSTEM save sets and any other required save sets and then complete the backup.

To recover multiple SYSTEM or VSS SYSTEM save sets in one operation, from the NetWorker User program, mark all of the required SYSTEM or VSS SYSTEM save sets and any other required save sets and then complete the recovery.

The *EMC NetWorker Administration Guide* contains more information about editing Client resources, using the NetWorker Administrator program or the NetWorker User program.

VSS backups of raw devices unsupported

LGTpa58422

NetWorker release 7.4 does not support the VSS backups of raw devices.

ZFS file systems are not automatically backed up when performing a savegrp backup of ALL

LGTpa91299

The `savefs` command fails to automatically backup a ZFS file system when performing a savegrp backup of ALL. The ZFS file systems do not appear in the `/etc/vfstab` file.

Workaround

To workaround this issue do one of the following:

- ◆ Explicitly set the file systems for backup in the client's save set list.
- ◆ Set the ZFS file systems to legacy mount point behavior and add an entry to the `/etc/vfstab` file.

For example:

```
# zfs umount <zpool>
# zfs set mountpoint=legacy <zpool>
```

Add an entry to the `/etc/vfstab`. For example:

```
<zpool> - /mypool zfs - yes -
where /mypool is the mount point

# mount /mypool
```

CLI problems and limitations descriptions

This section details the problems and limitations related to the Command Line Interface (CLI).

Using the withdraw command to withdraw a volume on a partitioned library fails

LGTpa87308

The `withdraw` command fails when a volume is withdrawn from a partitioned library.

Workaround

When using the `withdraw` command, specify the port number also. For example,

```
nsrjb -w -S 1 -P 2 -vvv
```

The ls -l command does not display files recovered from a NetApp Data ONTAP 6.5 file system

LGTpa91406

After performing a recovery from a NetApp Data ONTAP 6.5 file system mounted on a UNIX client (NFS share), the recovered files are not displayed if the `ls -l` command is entered.

Workaround

Unmount and remount the file system and the files are visible.

The `mminfo` command does not display a weekly summary of save set usage during the change to daylight savings time

LGTpa76457

If you use `mminfo` query to get a weekly save set usage summary during the change to daylight saving time (last Sunday of October and first Sunday of April), there is no information for the day of the change.

Perform a save set recovery when using the `save` command with the `-I input_file` option

LGTpa51045

When using the `save` command with the `-I input_file` option and one of the entries is deleted while the backup is running, the remaining entries in the input file are saved successfully. However, connecting directories are not saved and you are unable to perform index-based recoveries. The workaround is to perform a save set recovery.

Cloning problems and limitations descriptions

This section details the problems and limitations related to cloning operations.

Cloning on an EMC DART CFS 5.2 is unsupported

LGTpa62490

Cloning on an EMC DART CFS 5.2 is unsupported.

The source tape begins reading data after the clone tape is mounted and the clone operation fails. The source drive does not exit the reading data state.

A clone error is reported in the `/nsr/cores/nsrndmp_clone` file.

Automatic cloning might fail when using a single staging policy

LGTpa70320

Automatic cloning fails when using a single staging policy if the following apply:

- ◆ Backup is to an advanced file type device.
- ◆ Server Parallelism value is set low (two or less).
- ◆ Recover space and check file system interval is approximately three and five minutes.
- ◆ High-water mark is set at a low value (approximately 10 percent).

This error message appears:

```
Error: nsrd: nonexistent cloneid (SSID) for saveset(ss_name)
```

Compatibility problems and limitations descriptions

This section details the problems and limitations related to compatibility of the software.

NetWorker software might stop responding when running SQL server 2000 and NetWorker client

LGTpa41044

On systems running both SQL Server 2000 and the NetWorker client, the NetWorker software might stop responding when obtaining device information on the client computer.

To work around this issue, obtain the hot fix for the Microsoft operating system bug. The Microsoft Knowledgebase article Q319246, *FIX: Error Dialog Box During SQL Server Database Backup* contains more information on this hot fix.

Configuration problems and limitations descriptions

This section details the problems and limitations related to configuring the software.

Cannot deposit a volume from the CAP (I/O Port) using `nsrjb -d` command

LGTPa89947

Cannot deposit a volume from the CAP (I/O Port) using `nsrjb -d` command. A silo volume deposit requires the `-T` and `-a` options in sequence to add a volume in the media database.

The sequence of operations is:

```
nsrjb -d -T BarCode
```

Ignore the error message that appears.

```
nsrjb -a -T Barcode
```

Cannot configure a DAS silo using the NetWorker Management Console

LGTPa89946

The NetWorker Management Console cannot be used to configure a DAS silo. To configure a DAS silo, use the `jbconfig` command.

Warning when using AlphaStor 3.0x with SR2 on a Windows server with a NetWorker for Windows 2000 storage node

LGTPa66196

When using AlphaStor 3.0x with Service Release 2 on a Windows server with Windows 2000 Storage node, this scenario might occur:

The `nsrncnt` process terminates after loading a volume into the storage node tape devices. The `nsrncnt` process is contacted by the `nsrjb` program to perform a mount request. If the `nsrncnt` process does *not* remain active during the backup, the process fails and the tape is ejected from the drive.

To prevent the `nsrncnt` process from failing, add the `system@storagenode` (default) or the account that starts the NetWorker services. This problem only occurs with the AlphaStor SR2 release when both the NetWorker storage node and server are running Windows 2000.

Removable storage manager jukebox configures all devices automatically

LGTPa57709

When using the `jbconfig` command to configure a tape drive, a Removable Storage Manager (RSM) jukebox configures all devices automatically and picks the most generic device type available. For example, if you are configuring a 4 mm 20 GB tape drive, the RSM jukebox defines the device as a 4 mm type device, not 4 mm 20 GB. Likewise, if you are configuring a DLT8000 device, it is configured as DLT. Therefore, you might not receive the same performance and usage as with a fully defined device.

Change journal manager problems with multiple servers

LGTpa35407

Configuring multiple NetWorker servers to back up a client with Change Journal enabled is unsupported. Such a configuration can cause problems in the Change Journal Manager.

A volume's Change Journal state (enabled or disabled) is maintained in the client computer's registry. This key is created the first time the client is backed up with Change Journal enabled. If a second NetWorker server backs up the same client while Change Journal is enabled, a second registry key is created. These keys are named for the NetWorker server that performed the backup.

For example, the following registry keys will be present on a client that is backed up by two servers while Change Journal is enabled for at least one volume:

```
HKEY_LOCAL_MACHINE
SOFTWARE
Legato
NetWorker
Change Journal
Server1
Server2
```

If a volume's Change Journal state appears enabled in the **Server1** key and disabled in the **Server2** key, you cannot edit the volume's settings by using the Change Journal Manager.

When the volume is selected, the NetWorker Uses Change Journal checkbox is dimmed, indicating that components controlled by the checkbox have different states. Details of each volume's state are displayed in the textbox.

Note: No data is lost if a backup occurs while the client is configured using the following.

If you experience this problem, perform these procedure on the client:

1. Stop the NetWorker services.
2. Start the **regedit** program.
3. Expand the **HKEY_LOCAL_MACHINE>SOFTWARE>Legato>NetWorker>Change Journal**.
4. As an optional precaution, select the NetWorker key, and select **Export Registry File** from the **Registry** menu to save a copy of the current configuration.
5. Select the key for one of the servers under **Change Journal** and delete all of the values the key contains. (Do not delete the server key itself).
6. Repeat step 5 for each server key under **Change Journal**.
7. Restart the NetWorker services.

Use Change Journal Manager to enable or disable the Change Journal on each of the client computer's volumes.

Devices and media problems and limitations descriptions

This section details the problems and limitations related to device and media operations.

Misleading error message reported if an invalid NDMP storage node password is entered when labeling a volume

LGTpa83273

If an invalid NDMP storage node password is entered when labeling a volume, the error message does not indicate that the password is incorrect. Instead, this error message is reported:

```
command operation `LOAD', command ID 231 is not connected
```

Device operations using the right-click option might be lost

LGTpa83579

Device operations that use the Console are limited if a resource was created by a pre-7.4 release NetWorker server that used the `nsradmin` program in nonvisual mode. Mount, unmount, and label operations cannot be performed by using the right-click option.

Workaround

Delete and re-create the device.

Note: This limitation only occurs when the Type attribute is in lowercase.

Media capacity notification not logged in the media database

LGTpa82503

When the maximum number of save sets for a volume is reached, no notification is logged in the media database indicating a volume reached capacity.

Labeling volumes concurrently might fail when using the NetWorker Management Console

LGTpa80901

When labeling a volume by using the NetWorker Console, concurrent label operations might fail if one of these conditions is true:

- ◆ Two or more label operations are running concurrently.
- ◆ The operation is using the same pool, or two pools with the same label template.

This error message appears:

```
Error: Duplicate volume name `rh64.014'. Select a new name or remove the original volume."
```

Workaround

Use the `nsrjb` command to perform concurrent label operations. The *EMC NetWorker Command Reference Guide* or the UNIX man pages has more information on the `nsrjb` command.

The udev tool is unsupported on Emulex running Linux RedHat AS 4 using default kernel 2.6

LGTpa87657

The **udev** tool is unsupported on Emulex running Linux RedHat AS 4 using default kernel 2.6.

The jbconfig command might fail on Windows 2003 with a multidrive jukebox

LGTpa74492

When configuring media libraries on Windows Server 2003, the **jbconfig** command might fail with this error:

```
jukebox error: scsi command MODE_SENSE failed.
```

If this error message appears:

1. Right-click **My Computer** and select **Manage**.
2. Select **Device Manager**.
3. Right-click the effected library and select **Disable**.
4. Rerun the **jbconfig** command.

Tape gets stuck in a drive when labeling Linux Red Hat

LGTpa68867

While labeling tape in a DDS configuration by using a NetWorker server that is running Linux Red Hat, the tape becomes stuck in the drive and this error message is displayed:

```
unload failure-retrying 30 seconds
```

To prevent a tape from being stuck in the drive, set the `auto_lock` setting to "0" (Off) in the `/etc/stinit.def` file for these drive types:

- ◆ Sony AIT-2 and AIT-3
- ◆ IBM LTO Gen1
- ◆ HP LTO Gen1
- ◆ IBM LTO GEN2
- ◆ IBM 3580 drive LTO-1
- ◆ IBM 3592 J1A
- ◆ Quantum DLT 7000

By default the `auto_lock` setting is set to **1** (On).

The jbconfig command reports a BNCHMARKVS640 DLT drive as 4mm

LGTpa66140

When using the **jbconfig** command to configure an autodetected SCSI jukebox by selecting option 2, **Configure an Autodetected SCSI Jukebox**, a BNCHMARKVS640 DLT drive is incorrectly reported as a 4mm drive.

To work around this issue, select option 4, **Configure an SJI Jukebox**, to specify the drive.

Error message appears in daemon log file when labeling a volume that contains PowerSnap save sets

LGTpa54632

When labeling a volume that contains PowerSnap save sets, this error message appears in the daemon log file:

```
nsrmmdbd: error, null
```

Ignore the error messages in the daemon log file. No actual error occurred.

Slow Solaris tape operations when using an IBMtape driver with IBM LTO-2 tape drives and the NetWorker CDI

LGTpa55128

Solaris tape operations are slow when using an IBM tape driver with IBM LTO-2 tape drives when **CDI** is turned on.

Note: This behavior is seen with the Solaris **st** driver.

Workaround

Turn **CDI** off.

NetWorker software attempts to eject a stuck tape

LGTpa51725

If a hardware problem results in a tape becoming stuck in a drive, the NetWorker software tries to eject the tape instead of continuing the backup on another tape. In this situation, save stream backups from clients intended for the stuck tape/drive might fail.

If the NetWorker software keeps trying to eject a stuck tape:

1. Mark the volume as read-only.
2. Disable the drive.
3. Manually eject the tape.
4. Inventory the slot to which the tape was ejected.
5. Resolve the hardware error that led to the tape becoming stuck in the drive (for example, a faulty tape or a faulty drive).
6. Reenable the drive.
7. Mark the volume appendable again (if appropriate).

Volume retention information does not apply to volumes that contain snapsets

LGTpa66565

The output produced by the **mminfo** command by using the **volretent** flag (the date the last save set on this volume expires) does not apply to volumes that contain snapsets.

Increase the value of the save mount time-out attribute when auto media management is enabled and a corrupt tape is encountered

LGTpa50485

Note: This issue has only been seen on SDLT110/220 drives.

A label operation may take more than 30 minutes before it fails under these conditions:

- ◆ Automeia management is enabled and a backup is initiated.
- ◆ The NetWorker software encounters a corrupted tape during label operations.

The NetWorker software keeps a record of the location of the corrupted tape only for the current backup operation, so a corrupted tape could be used again for the next backup operation if the operator does not remove it.

Workaround

To increase the value of the **Save Mount Time-out** attribute to 60 minutes from the default 30 minutes:

1. In the **NetWorker Administrator** program, select **Devices** from the **Media** menu to open the **Devices** window.
2. From the **View** menu, select **Details** to display the hidden attributes.
3. Set the **Save Mount Time-out** attribute to 60 minutes.

Volume remains in the tape drive if the storage node nsrmmmd is not responding in a shared drive environment with DDS

LGTpa45470

In a shared drive environment, volumes remain in the physical drive when these conditions exist:

- ◆ The drives are accessed by multiple storage nodes through DDS.
- ◆ The NetWorker server is unable to communicate with the **nsrmmmd** daemon on any storage node.
- ◆ The storage node has loaded or mounted volumes onto shared drives.

Label tape operation fails on an HP-UX platform if CDI is turned on and IBM tape driver is used

LGTpa58356

On an HP-UX platform, a label tape operation fails with this error message if CDI is turned on and an IBM tape driver is used:

```
Error: while operating on slot `1': write open error: drive status
      is Drive reports no error - but state is unknown
```

Workaround

To avoid a failed label tape operation, turn off **CDI**.

The IBM Atape driver version 3.0.1.8 does not display this behavior. The *EMC NetWorker Hardware Compatibility Guide* contains more information and is available at <http://Powerlink.EMC.com>.

Jukebox fails to allocate enough devices

LGTPa58215

When the NetWorker jukebox control command (**nsrjb**) attempts to access an eligible drive to complete a NetWorker service daemon (**nsrd**) task, the drive reports as busy. This error message is displayed:

```
Error 'nsrd: Jukebox 'xx' failed cannot allocate enough devices
```

Workaround

Wait for the eligible drive to become free and retry the operation. If the problem persists, contact EMC Technical Support.

Entering the inquire command during tape activity causes a device error

LGTPa50089

Issuing the **inquire** command from the command line while there is any tape activity, such as labeling of tapes or backing up of data, might cause an operating system crash or a device I/O error.

Managing optical drives with Solaris 9

LGTPa48374

With Solaris 9, the Volume Management daemon (**vold**) is changed so that it automatically attempts to manage all removable media devices. Because of this change, the Volume Management daemon may interfere with NetWorker operations related to optical drives.

Workaround

Disable the **vold** daemon *or* modify the daemon configuration file:

Disable the vold daemon

To disable the volume management (**vold**) daemon:

1. Log in as **root** on the NetWorker storage node, and remove or rename the `/etc/rc2.d/*volmgt` script.
2. Enter the `/etc/init.d/volmgt stop` command.

Modify the daemon configuration file

To modify the daemon configuration file:

1. Log in as **root** on the NetWorker storage node, and open the daemon configuration file, `/etc/vold.conf`, in a text editor.
2. Comment out this line in the **Devices to Use** section.

```
use rmscsi drive /dev/rdsk/c*s2 dev_rmscsi.so rmscsi%d
```

After commenting out this line, the **Devices to Use** section of the configuration file looks similar to this:

```
# Devices to use
# use rmscsi drive /dev/rdsk/c*s2 dev_rmscsi.so rmscsi%d
```

3. Save the configuration file.

4. Reinitialize the **Volume Management** daemon with the new configuration file settings. One way to do this is to send a hang-up signal to the daemon, for example:

```
ps -ef | grep vold
kill -HUP vold_pid
```

where *vold_pid* is the process ID of the volume management daemon, **vold**.

Cannot label a tape if CDI is enabled on a tape drive on HP Tru64 5.1

LGTPa50279

To use the CDI feature with a storage node or server that is running on HP Tru64 UNIX version 5.1, install the latest patch kit available from Hewlett-Packard. If you choose not to install the patch kit on the Tru64 5.1 operating system, disable the CDI feature on any preconfigured devices.

The nsrjb -L and -I operations fail with an Exabyte Mammoth-2 tape drive with Fibre Channel device

LGTPa37996

When using the **nsrjb -L** and **-I** commands to perform inventory and tape label operations, the NetWorker software reports this error message with an Exabyte Mammoth-2 tape drive with a Fibre Channel device:

```
timestamp /dev/rmt/2cbn Tape label read for volume? in pool?, is not
recognized by Networker: I/O error"
```

Workaround

Update the firmware on the Exabyte Mammoth-2 tape drive with Fibre Channel device to version v07h, and the changer firmware to 3.03 or higher.

Tape drive requires cleaning error message

LGTPa36367

When trying to create a tape backup, the Windows 2000 dltpape.sys device driver may read and report soft and hard errors on digital linear tape (DLT) drives. When this occurs, the backup is not created and this error message appears:

```
Tape Drive Requires Cleaning
```

A supported hot fix is now available from Microsoft, but apply it only to systems experiencing this specific problem. Therefore, if you are not severely affected by this problem, Microsoft recommends waiting for the next Windows 2000 service pack containing this fix. To resolve this problem immediately, contact Microsoft Product Support Services to obtain the hot fix.

Cannot configure a DAS silo using the NetWorker Management Console

LGTPa89946

The NetWorker Management Console cannot be used to configure a DAS silo. To configure a DAS silo, use the **jbconfig** command.

Element status feature must be manually enabled for jukeboxes that support the feature

LGTPa26003

When a jukebox supports the element status feature, but that feature is not enabled in the Autochanger resource of the NetWorker Administrator program, **nsrjb -I** and **nsrjb -H** commands do *not* work properly.

When using jukeboxes that support the element status feature, ensure that this feature is enabled in the Autochanger resource of the NetWorker Administration program under the tab preferences in the Jukebox Features section before using the **nsrjb** command.

Unable to configure an ACSLS silo on Windows with lib_attach 1.4.1

LGTPa89859

The NetWorker software is unable to configure an ACSLS silo on Windows with lib_attach 1.4.1. If the NetWorker **nsrexecd** service is started first, it begins serving the portmapper services on port 111. In this situation, the Windows Services for UNIX portmapper is unable to start, causing dependent services to fail. Conversely, if the Windows Services for UNIX portmapper is started first, the NetWorker **nsrexecd** process will simply not service portmapper requests on port 111, allowing both products to coexist without problems.

Workaround

1. Shut down the NetWorker daemons.
2. Add a value to the Windows Registry to delay the start of the **nsrexecd** service until the Windows Services for UNIX portmapper is running. Technical Bulletin 375: Portmapper Conflict between NetWorker and Microsoft Windows Services for UNIX is available at <http://Powerlink.EMC.com>
3. Restart the NetWorker daemons.

GUI problems and limitations descriptions

This section details the problems and limitations related to the GUI.

Cannot launch the NetWorker Console from a Linux PowerPC client or using the browser of another supported Operating System

LGTPa87730

The NetWorker Console client GUI is unsupported on a PowerPC Linux client. Client operations must be performed from the NetWorker Console server.

1. Above **Required-Start: networker** script, add these two lines to the file:

Default-Start: 3 5

Default-Stop: 0 1 2 6

2. Run the **chkconfig --add gst** command:

This command adds a symbolic link to the **gst** script in the **/etc/init.d/rc3.d** and **/etc/init.d/rc5.d** directories.

Cannot run commands in nsradmin without the nsrexecd daemon

LGTpa77990

To increase datazone security, running the **nsradmin** program, or any other NetWorker command on a host without the **nsrexecd** daemon running, is unsupported.

New authentication fails if you run the **nsradmin** program without the **nsrexecd** daemon. If old authentication is disallowed in a datazone, the **nsrexecd** daemon is required to connect to the server even when running **nsradmin** from a client.

Remote client save sets with Japanese characters are displayed incorrectly

LGTpa82555

The **nsrinfo** and **recover** commands display remote client save sets with Japanese characters incorrectly. The command line on Windows does not support UTF-8 natively so the Japanese characters will not display correctly.

Note: This behavior does not occur when using the **mminfo** command or browse Japanese files from **winworkr** or NetWorker Console.

Files backed up from a VSS system file set appear in the file system tree

LGTpa83820

On a Windows 2003 operating system, saving a VSS save set, such as VSS SYSTEM FILESET: or VSS SYSTEM SERVICES: creates index entries for backed-up files as well as their parent directories. This can cause problems when browsing the recover items by displaying the version from the VSS backup as part of the file system.

Note: If the VSS system saves sets are marked along with the file system, the save sets will fail to recover and the status will indicate those folders failed (for example, you select **My Computer** using the **winworkr** program). This is expected behavior.

SCSI device ID displayed differently than NetWorker NDMP devices

LGTpa53364

For NetWorker NDMP devices, the bus number in the control port is offset by a value of 1,024 so that they occupy a different range compared to a locally attached SCSI jukebox. This offset helps visually differentiate the type of device (NDMP or non-NDMP). The actual value of the NDMP device bus number can be obtained from the NDMP Bus Number field. This is found if you select Jukeboxes from the Media menu.

All client file index entries might appear not to have been deleted

LGTpa56231

The NetWorker software does not delete all client file index entries under these conditions:

- ◆ All save sets are recycled.
- ◆ Volumes are deleted.
- ◆ Device is relabeled.

After running the **nsrck -L6** command, the **nsrinfo client** output command indicates there are still browsable files.

This is an issue only when all save sets for a client are deleted from the media database. If there is at least one valid save set for that client in the media database, the **nsrck -L6** command deletes the invalid save set records from client file index.

Note: This requirement might be more apparent with AFTD as it supports concurrent operations, but it is applicable to all other device types with a similar setup.

Microsoft Windows username cannot contain a '!' character

LGTPa86214

The NetWorker Management Console does not launch correctly if a Microsoft Windows username contains a '!' character. This error message is displayed:

```
"Can't find bundle for base name res/gwt_rb, locale en_US"
```

NetWorker Management Console can be launched from the same machine when logged in as a user with no special characters in the name.

Installation problems and limitations descriptions

This section details the problems and limitations related to installing the software.

No alternative location provided for the java14.sdk.tar file if the /tmp directory is full

LGTPa80764

After installing the NetWorker Console server on an AIX platform, if the /tmp directory does not have enough space for the java14.sdk.tar JRE file, this error message appears:

```
There is not enough room on the disk to save /tmp/uontdich.tar.
  Remove unnecessary files from the disk and try again, or try
  saving in a different location.
```

ASR and non-ASR recovery fails if the windows install CD does not match the service pack level of the data being backed up

LGTPa83706

If you have installed a Service Pack on a client machine, you will not be able to perform an automated system recovery (ASR) or non-ASR recovery unless the data you are trying to backup has the same service pack(s) incorporated into the backup. For example, this behavior occurs if you backed a Windows 2003 Server SP1 machine and then use a Windows 2003 Server CD during the recovery.

To ensure an ASR recovery succeeds, use a Windows install CD that matches the service pack level of the backed-up data that you are trying to recover. Otherwise, an ASR recovery will not succeed. The *EMC NetWorker Disaster Recovery Guide* contains more information on a Windows non-ASR recovery if the backup and the CD do not match.

Package installation on Linux IA64 Red Hat results in an error

LGTPa61643

During installation of NetWorker packages on Linux IA64, the **rpm** program incorrectly reports these missing library errors:

```
rpm -i lgtoclnt-1.ia64.rpm
  error: Failed dependencies:
  ld-linux-ia64.so.2 is needed by lgtoclnt-1
```

```

libc.so.6.1 is needed by lgtoclnt-1
libc.so.6.1(GLIBC_2.2) is needed by lgtoclnt-1
libncurses.so.5 is needed by lgtoclnt-1

```

Workaround

To correct the installation errors:

1. Log in as root.
2. Verify that the libraries exist.
3. Run the **rpm** program, for example:


```
rpm -i --nodeps lgtoclnt-1.ia64.rpm
```
4. Repeat this procedure for each required NetWorker package, **lgtonode**, **lgtoserv**, or **lgtodrvr**.

Error downgrading to business edition

LGTpa50807

The licensing utility (**nsrkap**) cannot downgrade to the Business Edition from a higher enabler.

Workaround

To downgrade from Power Edition or Network Edition to Business Edition:

1. Enter the computer's hostname in the License Server attribute, if a license service is not specified:
 - a. In the **NetWorker Administrator** program on the NetWorker server, select **Server Setup** from the **Server** menu.
 - b. From the **View** menu, select **Details**.
 - c. Enter the hostname in the **License Server** attribute and select **Add**.
2. Delete the base enabler of the edition being downgraded:
 - a. From the **Server** menu, select **Registration**.
 - b. In the **Registration** window, select the NetWorker product whose enabler code you want to delete.
A series of windows appear.
 - c. Click **OK** in the windows and repeat the steps to delete the base enabler.
3. Select the hostname from the NetWorker server's **License Server** attribute:
 - a. From the **Server** menu, select **Server Setup**.
 - b. From the **View** menu, select **Details**.
 - c. Select the hostname in the **License Server** attribute that was entered in step 1 and click **Delete**.
 - d. Click **Apply**.

4. Enter the Business Edition enabler code:
 - a. From the **Server** menu, select **Registration**.
 - b. Click the **Create**.
 - c. Type the Business Edition enabler code in the **Enabler Code** attribute and click **Apply**.

Licensing problems and limitations descriptions

This section details the problems and limitations related to licensing the software.

NetWorker License Manager allowance limitation

LGTPa62224

If NetWorker License Manager is used to allocate licenses to specific servers, wait a minimum of two minutes. Failure to allow two minutes for the synchronization to occur may result in incorrect assignment of a license to the server.

Localization problems and limitations descriptions

This section details the problems and limitations related to localization.

For more information on localization important notes and tips, see [“Internationalization support” on page 148](#).

The XAPPLRESDIR environment variable must be set to operate the NetWorker Console on HP-UX

LGTPa79450

To operate the NetWorker Console on HP-UX that is running a non-English locale, the XAPPLRESDIR environment variable must be set as follows:

```
XAPPLRESDIR=/usr/lib/X11/app-defaults
```

Messaging problems and limitations descriptions

This section details the problems and limitations related to messaging.

Fatal error incorrectly reported no printer available to print a bootstrap on AIX 5.3

LGTPa81024

After a save group operation completed successfully, the Completed Successfully table of the Group Details window incorrectly reported a fatal error. This window indicates there is not a printer available to print the bootstrap.

Error message generated if the snapshot policy is configured to request more snapshots than a Savegroup can generate

LGTPa54165

If a snapshot policy is configured to request more snapshots than a savegroup can generate for a group in a given time, the savegroup generates this error message when running the group, and does not back up that group:

```
timestamp savegrp: RAP error: Invalid snapshot policy with
number_of_requested_snapshots snapshot creation per day. NetWorker
will not be able to create, number_of_requested_snapshots from
timestamp in a single day.
```


Workaround

To resolve this issue, do one of the following:

- ◆ Modify the savegroup Start Time and Interval attributes of the Group resource to synchronize the resource with the snapshot policy.
- ◆ Modify the snapshot policy to synchronize it with the Group resource.

The *EMC NetWorker Administration Guide* contains more information on modifying the Start Time and Interval attributes and snapshot policies.

System log notifications fail on SuSE 8.0**LGTpa43135**

System log notifications might fail on the SuSE 8.0 and SuSE Linux Enterprise Server operating systems. The logger binary appears in the /bin directory instead of /usr/bin. This causes the log default notification to fail.

Note: The SuSE 7.3 distribution does not have this problem.

Workaround

To resolve this issue, do one of the following:

- ◆ Create a link in the /usr/bin directory to /bin/logger.
Update the default Tape Mount Request 1 and Tape Mount Request 2 notifications if a link is not created.
- ◆ Modify the log default notification and change the /usr/bin/logger filepath to /bin/logger.

NDMP problems and limitations descriptions

This section details the problems and limitations related to NDMP.

If a connection is lost during an NDMP backup to a NAS filer the NetWorker software stops responding**LGTpa88065**

If a connection is lost during an NDMP backup to a NAS filer, a connection reset by peer error is written to the daemon log file, but the **nsrndmp_save**, **ndmp2fh** and **nsrmmmd** processes stop responding. The tape device also appears in writing mode, but stops responding.

Workaround

Stop the **nsrndmp_save**, **ndmp2fh** and **nsrmmmd** processes by using **kill -9I** command, and restart NetWorker daemons to free the tape device.

The scanner command might stop responding if it encounters an aborted save set backed up to an NDMP device**LGTpa74026**

The **scanner** command might stop responding if:

- ◆ The **scanner** command encounters a save set backed up to an NDMP device.
- ◆ The save set aborts after the start note is written.
- ◆ The last complete save set was backed up to the device and cannot be scanned.

NetWorker software fails to use tapes preinitialized in NDMP-enabled tape devices

LGTPa28778

If a new tape is preinitialized in an NDMP-enabled tape device, the NetWorker software does not use the tape.

To ensure that NetWorker software uses all tapes in an NDMP tape device:

- ◆ Do not use tapes that were preinitialized in an NDMP-enabled tape device.
- ◆ Label preinitialized tapes in a non-NDMP tape drive before inserting the tape into an NDMP tape drive or jukebox.

Restore problems and limitations descriptions

This section details the problems and limitations related to restore operations.

NDMP save sets in status recyclable are not recoverable

LGTPa65644

NDMP save sets cannot be recovered if they are in the status eligible for recycling. This error message appears:

```
Failed save set, not recoverable
```

Workaround

Set the status of the save set to **recoverable**.

Preventing duplicate filenames during recovery

LGTPa48556

Because of the case-sensitive nature of Portable Operating System Interface (POSIX) compliance, NetWorker software can restore a file when another file exists with the same name but different case. For example, if the **FILE1.DOC file** exists on the target client, restoring **file1.docfile** can result in two files with the same name but different case. The contents of the two files may or may not be the same.

To avoid this problem, disable POSIX compliance by setting this system environment variable:

```
NSR_DISABLE_POSIX_CREATE=YES
```

The Windows online help contains detailed instructions about setting system environment variables.

Windows error message during automated system recovery

LGTPa48322

Due to a problem in Windows XP Professional and Windows Server 2003, this error message may appear when you start an ASR disaster recovery of a client computer:

```
Can't create partition...
```

This error is intermittent. To work around the problem, restart the ASR recovery.

Limitation on browse and retention policy dates

LGTpa37508

Client file index browse and save set retention policies can be set no later than the year 2038. This is caused by an operating system limitation in which support for time is limited to a maximum of 68 years starting from the year 1970.

Note: An expired save set retention date does not immediately result in the save set being overwritten.

Save sets can only be overwritten if the following is true:

- ◆ The retention policy has expired and NetWorker uses the storage volume for backup.
- ◆ The storage volume is relabeled.
- ◆ Entries are manually deleted from the storage volume.

Workaround

To enable full browse and retention policies beyond the year 2038, use the NetWorker Archive feature. Archived data is never subject to automatic recycling, so it cannot be accidentally overwritten.

No message is logged if resource files are missing

LGTpa35856

If one or more resource files are somehow removed from the NetWorker resource database directories (as a result of disk corruption or manual deletion, for example), no error message is logged in the daemon log file.

Concurrent multiclient recovery on Windows 2000

LGTpa23372

In the NetWorker Administration window, the Parallelism attribute specifies the maximum number of clients that the NetWorker server may back up or recover simultaneously. Each client being recovered typically requires 10 MB to 15 MB of memory or more if large numbers of files are being recovered on the NetWorker server host. For example, recovering 30 clients concurrently might require approximately 450 MB of memory.

The recovery operation has been tested to recover up to 30 clients concurrently. Attempting to recover more than 30 clients concurrently with insufficient virtual memory might cause the recovery operation to fail with this error message:

```
nsrindexd.exe - Application Error
The application failed to initialize properly (0xc0000142).
Click OK to terminate the application.
```

To avoid a failure when recovering a large number of clients concurrently:

- ◆ In the **Set Up Server** dialog box in the **NetWorker Administration** window, reduce the **Parallelism** attribute to 25 or less.
- ◆ Increase the virtual memory on the NetWorker server host to 2 GB or more (or enough to accommodate at least 15 MB per client).
- ◆ Use a multiprocessor computer as the NetWorker server host.

Cannot change the browse time if there are files for recovery

LGTpa38176

The following warning message is displayed if you attempt to change the browse time if files are marked for recovery.

```
There are files marked for recovery.
OK to ignore the marked files.
Cancel to stay with the current browse time.
OK / Cancel
```

Unmark files for recovery before attempting to change the browse time.

Internationalization support

These sections describe important notes and tips pertaining to the internationalized NetWorker release:

Additional information on support for internationalization can also be found in the *EMC NetWorker Release 7.5 Administration Guide*, chapter 17, NetWorker Server Management.

Locale and Code Set Support

NetWorker software does not support locales (defined by your operating system) or code sets that remap characters having special meaning for filesystems. Depending on the filesystem, these special characters can include the forward slash (/), the backslash (\), the colon (:), or the period(.). De_DE.646 is an example of one unsupported locale.

NetWorker software might function normally in such an environment, but might not function normally if the locale is changed (the previously existing indexes can become invalid).

Important notes and tips

The NetWorker 7.5 Service Pack 2 software supports language packs, which can be installed as part of the NetWorker installation process, or can be installed separately after the NetWorker software has been installed. Note however, that any screens or messages that have changed since NetWorker 7.5 Service Pack 1 are not localized

The following sections contain important notes and tips, as well as limitations, pertaining to the internationalized NetWorker software:

- ◆ [“Localized software contains some English Text” on page 149](#)
- ◆ [“Backwards and forwards compatibility issues” on page 150](#)
- ◆ [“Java Web Start cache path and non-English characters” on page 150](#)
- ◆ [“Java Web Start jnlp file caching issue after a client locale is changed on the NetWorker Console” on page 150](#)
- ◆ [“Fonts may not display correctly in UNIX Motif GUIs in non-english locales” on page 150](#)
- ◆ [“Solaris 9 does not support certain non-English code sets” on page 150](#)

- ◆ “Locale settings with NDMP” on page 150
- ◆ “Display of an unsupported character in the current locale” on page 151
- ◆ “Man page locales” on page 151
- ◆ “Supported Locales” on page 151
- ◆ “Changing the Locale in the NMC GUI” on page 151
- ◆ “Scheduled backup or Archive Requests of non-ASCII files or directories” on page 152
- ◆ “Maximum NetWorker supported path” on page 153
- ◆ “In non-English environment, character encoding used for NMC client and NetWorker client must be the same” on page 153
- ◆ “The NMC Japanese Online Help displays incorrect characters on Linux systems” on page 153
- ◆ “Non-ASCII hostnames are not supported by NetWorker” on page 153
- ◆ “Cannot perform a redirected NDMP recover operation to a non-English path on Windows” on page 153
- ◆ “JRE 1.6 users cannot export reports as PDF documents for non-English locales on AIX and HPUX” on page 154
- ◆ “The nwrecover program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed” on page 154
- ◆ “Some English messages appear on Windows 2008 hosts in the Chinese locale” on page 154
- ◆ “Mixed locales display in NetWorker installation wizards on Windows” on page 154
- ◆ “Recovering a large number of files may take a long time in the French locales on Solaris” on page 155
- ◆ “Garbled characters may appear in the NetWorker Console GUI font list on Solaris” on page 155
- ◆ “Problem with highlighted text in the NetWorker Console Help program after performing a search using JRE 1.5.x for Asian languages” on page 155
- ◆ “Entering non-ASCII characters in NetWorker user interfaces” on page 155
- ◆ “Non-ASCII save set names are displayed incorrectly in nsradmin visual mode on Linux” on page 155
- ◆ “The XAPPLRESDIR environment variable must be set to operate the NetWorker Console on HP-UX” on page 155

Localized software contains some English Text

Messages and strings that were added after the NetWorker 7.5 release have not been localized. Some strings from the operating system have also been left intentionally unlocalized. The **nsrwatch** and **nsradmin** programs are not localized. The English language components do not affect the functionality of the software.

The only RAP value that supports non-ASCII characters is the Save Set attribute of the Client and Archive Request resources.

Backwards and forwards compatibility issues

The internationalization (I18N) support available with NetWorker release 7.5 is not fully compatible with NetWorker release 7.2.x or earlier. In environments where earlier releases of NetWorker are installed, some functionality might *not* be available. However, data saved on a NetWorker 7.2.x or earlier client can be restored to a NetWorker 7.5 client.

The following known limitation applies in a NetWorker environment:

Filenames with multibyte characters may display incorrectly

Filenames with multibyte characters saved by using a NetWorker 7.2.x or earlier client might be displayed incorrectly. This affects filenames from both UNIX and NDMP backups.

Workaround

Temporarily change the LANG parameter prior to recovery. For example, for Japanese filenames, setting `LANG=ja_JP.UTF-8` temporarily prior to the recovery will recover the Japanese files with the correct filenames. Ensure that the variable is restored to the original setting (for example, `LANG=ja`) when the recovery is complete. Note that changing the parameter back to the original LANG setting after recovery does *not* alter the encoding of the filenames.

Java Web Start cache path and non-English characters

If the path for the Java Web Start cache contains non-English characters, this will cause the NetWorker Console to fail to launch. The resolution to this problem is to change the Java Web Start cache path to a path that contains no non-English characters.

The Java Web Start cache path is changed in the Java Web Start Console. Different JRE versions have different names for the Java Web Start Console; consult java.sun.com for details.

Java Web Start jnlp file caching issue after a client locale is changed on the NetWorker Console

After the NetWorker Console is upgraded or a client locale is changed, the `gconsole.jnlp` file will be different than the original `gconsole.jnlp` file in the Java Web Start cache. The NetWorker console will fail to launch.

Workaround

Refer to [“Java Web Start jnlp file caching issue after upgrading the NetWorker Console”](#) on page 39 for information about a workaround.

Fonts may not display correctly in UNIX Motif GUIs in non-english locales

If you are having trouble displaying fonts in the `nwrecover` program, for your current locale, ensure that the operating system is configured to display them.

Solaris 9 does not support certain non-English code sets

Solaris 9 does not support certain code sets. The Sun website has a full list of supported code sets.

Locale settings with NDMP

When running NDMP backups, the locale setting has to be consistent in your environment. All UNIX operating system locale settings on the filer (including UTF-8) must be the same and the NMC client can only be run on an UNIX client set to the exact same locale setting as the filer.

Backup and recovery operations can be run on any locale, but if you try and browse on a locale that is different from the original locale the filenames will show up as random characters.

Display of an unsupported character in the current locale

If the NetWorker software encounters a character that is unsupported in the current locale, it replaces the character with a '?'.

Man page locales

Man pages are displayed based on the locale setting for a specific language. The following EUC locales are supported:

- ◆ Chinese: **EUC-CN**
- ◆ French: **ISO8859-15**
- ◆ Korean: **EUC-KR**
- ◆ Japanese: **EUC-JP**

If the locale is not set to a specific language matching an installed language pack, the man pages will be displayed in English.

Supported Locales

[Table 13 on page 151](#) lists the supported locales.

Table 13 Supported Locales

Language	Operating system				
	Windows	Solaris	HPUX	AIX	Linux
English	English	OS Default Locale	OS Default Locale	OS Default Locale	OS Default Locale
French	French (France)	UTF-8 ISO8859-1 ISO8859-15	UTF-8 ISO8859-1 ISO8859-15	UTF-8 ISO8859-1 ISO8859-15	UTF-8 ISO8859-1 ISO8859-15
Japanese	Japanese (Japan)	UTF-8 EUC-JP S-JIS	UTF-8 EUC-JP	UTF-8 EUC-JP	UTF-8 EUC-JP S-JIS
Chinese	Chinese (China)	UTF-8 EUC-CN GB18030 GBK BIG5	UTF-8 EUC-CN	UTF-8 EUC-CN	UTF-8 EUC-CN GB18030 GBK BIG5
Korean	Korean (Korea)	UTF-8	UTF-8	UTF-8	UTF-8

Note: Localization is not supported on the Mac OS, Tru 64 or SGI platforms.

Changing the Locale in the NMC GUI

There are three conditions for the displayed textual elements (messages, dates, time and numbers) in the NMC GUI:

1. If there is an appropriate NetWorker language pack installed on the NMC server, all textual elements will be rendered to the current user locale.
2. If no NetWorker language pack is installed on the NMC server, all textual elements will be rendered to English.
3. If the locale is neither supported by the NetWorker software nor has an appropriate NetWorker language pack installed, all textual elements will be rendered to English, except dates, times and numbers which will appear in the current user locale that is supported by the installed JRE on the user host.

The NMC GUI must be restarted to apply any change to the locale.

Example 1

There is a French language pack installed on the NMC server and the user locale is French. The user logs in to the NMC server. In the NMC GUI, all textual elements will be in French.

Example 2

The installed JRE supports French and the user locale is French. There is no French (France) language pack installed on the NMC server. In the NMC GUI, all texts and messages will be in English, except dates, time and numbers will be in French.

It is the user's responsibility to change the locale and apply the change correctly to the operating system. For example, changing and applying the locale to Windows server 2003 and Solaris 5.9 are as follows:

Windows server 2003

- a. Click **Start**.
- b. Select **Control panel > Regional and Language Options > Regional Options**.
- c. Select the language.
- d. Select the location.
- e. Click **Ok**.

Solaris 5.9

- a. Logout to the **Welcome** dialog box.
- b. Click **Options > Language**.
- c. Select the language.
- d. Log in.

Note: Date and times may be still in North American format. Not all date and time displayed are internationalized. This is a known deficiency that will be addressed in a future release.

Scheduled backup or Archive Requests of non-ASCII files or directories

The value of the **Save Operations** attribute in Clients or Archive Requests resource should be set to:

- ◆ NetWorker UNIX clients at release 7.4 or higher: **I18N:mode=nativepath**.
- ◆ NetWorker UNIX clients at a release level prior to 7.4: **I18N:mode=utf8path**.

- ◆ Microsoft Windows clients: **I18N:mode=utf8path**

If the Client Configuration Wizard is used to create the Clients resource, the Save Operations attribute will be automatically filled-in based on the client platform when non-ASCII save sets are specified.

Maximum NetWorker supported path

The maximum length of the NetWorker supported path has increased to 12 KB. The number of characters supported in the path is dependent on the language of the characters *and* any specific operating system limitations.

Non-English characters require more bytes than English characters. Ensure that the filepath and directory names remain within the limits imposed by the operating system and the NetWorker software.

In non-English environment, character encoding used for NMC client and NetWorker client must be the same

LGTsc21657

In a non-English environment, characters do not display correctly if the character encoding is different on the NMC client than the files on the NetWorker host that are being browsed.

Workaround

In a non-English environment, ensure that the NMC client uses the same character encoding as the files on the NetWorker client host that are to be browsed.

For example, if the NMC client uses the zh_CN.EUC locale it will not properly display files that were created using the zh_CN.UTF-8 locale. The character encoding used for the NMC client and NetWorker client must be the same to ensure the proper display of characters. In this example, the NMC client should be started using the zh_CN.UTF-8 locale.

The NMC Japanese Online Help displays incorrect characters on Linux systems

LGTsc02862

The NMC Japanese Online Help displays incorrect characters on Linux systems due to limitations with the Javahelp software. These limitations affect the software's ability to display fonts in the help viewer content pane.

Due to this limitation in Javahelp the only character encoding that displays is the system default; not the font defined by the user.

Non-ASCII hostnames are not supported by NetWorker

LGTsc26980

NetWorker does not support hosts that have non-ASCII characters in the hostname.

Cannot perform a redirected NDMP recover operation to a non-English path on Windows

LGTsc28174

You cannot perform an NDMP redirected recover operation to a directory path with non-English characters. This limitation applies to the Windows operating system only.

Workaround

Recover to an English path and then copy or move the recovered data to the path with non-English characters.

JRE 1.6 users cannot export reports as PDF documents for non-English locales on AIX and HPUX**LGTsc26288**

The NetWorker option to export reports in Acrobat PDF format is not supported on AIX and HPUX hosts that are running JRE 1.6 in a non-English locale.

The nwrecover program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed**LGTsc02808**

The **nwrecover** program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed.

Workaround

Install the following font packages:

- ◆ ttf-founder-simplified-0.20040419-6.1.noarch.rpm
- ◆ ttf-founder-traditional-0.20040419-6.1.noarch.rpm

Some English messages appear on Windows 2008 hosts in the Chinese locale**LGTsc28516**

Some NetWorker messages and command output appear in English on Windows 2008 Chinese hosts.

Mixed locales display in NetWorker installation wizards on Windows**LGTsc04862**

In the NetWorker Windows installation wizard, if you select a language for the installation language that is different than your Windows operating system language, the subsequent pages displayed in mixed locales. First, an operating system language Wizard page is displayed in your Windows operating system locale. When you click **Next**, the language switches back to the selected installation language. For example, on a Japanese Windows operating system, if you select English for the installation language, first a Japanese Wizard page is displayed. When you click **Next**, the language switches back to English.

Workaround

Use the following procedure to ensure a consistent language is used:

1. Change the **Regional** Option to a supported language.
2. Select a NetWorker installation language that is the same as the one specified in the **Regional** Option.
3. Continue the NetWorker installation.

Recovering a large number of files may take a long time in the French locales on Solaris

LGTsc05339

In the French locale on Solaris, a degradation in performance may be seen when recovering a large number of files (greater than 100,000).

To improve performance, expand the command dialog box to reveal the complete path names of the files being recovered in the output field.

Garbled characters may appear in the NetWorker Console GUI font list on Solaris

LGTsc03894

Garbled characters may appear in the NetWorker Console GUI font list for font names if the fonts do not have English names, or the localized names are not recognized by the JRE.

Problem with highlighted text in the NetWorker Console Help program after performing a search using JRE 1.5.x for Asian languages

LGTsc02814

Due to a known limitation with JRE 1.5.x (Sun bug 6375606), text that is highlighted in the NetWorker Console Help program after a search has been performed will not be highlighted correctly.

Entering non-ASCII characters in NetWorker user interfaces

LGTpa88887

Non-ASCII characters are supported only for the **Save Set** attribute in **Client** and **Archive Request** resources. However, user interfaces such as the NetWorker Management Console do not prevent the user from entering non-ASCII characters for other attributes in NetWorker resources.

Non-ASCII save set names are displayed incorrectly in nsradmin visual mode on Linux

LGTpa92833

Non-ASCII save set names are displayed incorrectly in **nsradmin** visual mode on Linux.

Workaround

To work around this limitation, do one of the following:

- ◆ Use the **print nsr client** command in **nsradmin** window to view the non-ASCII save set.
- ◆ Use the Console GUI on the Linux client to view the non-ASCII save set.

The XAPPLRESDIR environment variable must be set to operate the NetWorker Console on HP-UX

LGTpa79450

To operate the NetWorker Console on HP-UX that is running a non-English locale, the **XAPPLRESDIR** environment variable must be set as follows:

```
XAPPLRESDIR=/usr/lib/X11/app-defaults
```

Technical notes

This section describes important notes and tips for using the NetWorker software.

Open File Management on Microsoft Windows

NetWorker clients will automatically use VSS for file system backups, avoiding the need for Open File Manager. A license is not required when used in conjunction with a NetWorker server.

NetWorker clients prior to release 7.4 Service Pack 2 also automatically use VSS for file systems backups, whether or not the NetWorker VSS Client for Microsoft Windows is installed. However, those clients will require a NetWorker VSS Client Connection license.

Table 14 Recommended management of open files

Windows 2000 and XP	Windows 2003	Windows 2008 and Vista
No VSS is available in the operating system. For all versions of NetWorker, use Open File Manager to back up open files.	Use VSS to back up open files. <ul style="list-style-type: none"> • If both client and server are using release 7.4 Service Pack 2 or later, no VSS Client Connection license is required. • If client or server are at using a release prior to 7.4 Service Pack 2, a VSS Client Connection license is required. 	Use VSS to back up open files. <ul style="list-style-type: none"> • If both client and server are Windows 2008, no VSS Client Connection license is required. • If the client is Windows Vista and the server is using release 7.4 Service Pack 2 or later, no VSS Client Connection license is required. • If a Windows 2008 or Vista client is used with a server using a release prior to 7.4 Service Pack 2, a VSS Client Connection license is required.

EMC NetWorker License Manager not supported on Solaris Opteron platform

The 7.5 NetWorker release does not support the EMC NetWorker License Manager on the Solaris Opteron platform.

NetWorker Management Console does not support Microsoft Internet Explorer version 7.0

Microsoft Internet Explorer version 7.0 is not supported by NMC on any Windows platforms except Microsoft Vista.

A server does not support a NetWorker client running release 7.2.x or earlier

A NetWorker server does not support a NetWorker client release 7.2.x or earlier.

Single clients or archive requests resource for UNIX non-ASCII paths support only one locale

A single Clients or Archive Requests resource supports non-ASCII UNIX paths belonging to only one locale. If you have paths in multiple locales, you must create multiple Clients or Archive Requests resource. A Clients or Archive Requests resource supports paths only from a single locale on UNIX.

Note: This limitation does not apply to Microsoft Windows paths.

VMware qualification

NetWorker release 7.5 is qualified with VMware. The VMware documentation contains the most current information on VMware support with NetWorker software.

Symbolic links are not restored during DAR recovery with NetApp

During a DAR recovery, symbolic links for files, directories, and other specific files, such as device files or named pipes, cannot be recovered. To recover these files, use the NetApp **restore** command with the **-x** option. The Network Appliance documentation has more information about the NetApp restore command.

SYSTEM save set archive unsupported on Microsoft Windows

Archiving of SYSTEM or VSS SYSTEM save sets is not currently supported.

NetWorker connections through a firewall

The **NSR_KEEPA_LIVE_WAIT** variable sets the timeout limit that the **nsrexecd** daemon uses to keep messages active once a connection to the NetWorker server has been established through a firewall. The period that **nsrexecd** will send keep-alive messages to **nsrexec** is adjustable by the **NSR_KEEPA_LIVE_WAIT** environment variable. Set this environment variable to the desired number of seconds between keep-alive wait messages. If the **NSR_KEEPA_LIVE_WAIT** variable is not set or is set to an invalid value, (0, a negative number, or a nonnumeric string) then no keep-alive message is sent.

Pause recommended between file creation and backup with EMC IP4700

If a level 1 to 9 backup is run on an EMC IP4700 filer within five minutes of creating a file, more files than expected may be saved. For example, if a level 1 backup is run, followed by a level 2 backup, and both of these backups complete within five minutes of the file being created, the newly created file might appear on both the level 1 and level 2 backups, even though the files should only be added to the level 1 backup. To avoid this problem, wait at least five minutes after creating a file to run a backup.

Bus reset can rewind tape on Microsoft Windows

Tape devices shared by more than one computer can experience unpredictable bus resets from any of the computers. These reset commands can cause a tape on a shared bus (such as SCSI or Fibre Channel) to rewind. The results can include:

- ◆ Tapes that are prematurely treated as full.
- ◆ Corrupted data on tapes.

System configurations that do not properly protect tape devices shared by more than one computer can experience these bus resets. Some switching hardware can be configured to protect tape devices from resets. Certain operating systems include built-in protection (that can be turned on by the user) against stray bus resets.

To determine whether the switch or operating system includes such protection, and to learn how to use it, refer to the manufacturer's documentation or contact the manufacturer.

Note: Whatever solution you select *must* block the reset command from the tape drives, but *must not* block it from certain cluster-controlled disks. The reset is a necessary part of the disk arbitration process in some cluster environments. To determine whether this applies in your environment, refer to the cluster documentation.

The NetWorker software does *not* support configuring a tape device in a shared SCSI or Fibre Channel environment without using either a hardware switch or an appropriate operating system solution to handle the bus reset issue.

Microsoft does not support attaching any tape drive to any shared SCSI bus that also hosts cluster-controlled disks because of this issue.

Older versions of Intel unsupported on NetWorker software on Linux

To take advantage of IA-32 586 and 686 optimizations in the compiler, as well as the new instructions provided on these architectures, the NetWorker release 7.5 for Linux does not support older versions of Intel, such as 486.

NetWorker features that are unsupported for Windows NT 4.0, Windows 2000, and Windows Server 2003

These NetWorker features are unsupported on Windows:

- ◆ Directed recovery of Encrypting File Systems (EFS)
- ◆ Directed recovery of SYSTEM or VSS SYSTEM save sets
- ◆ Verified (-V) backup of the EFS
- ◆ Verified (-V) backup of SYSTEM or VSS SYSTEM save sets
- ◆ Archiving of SYSTEM or VSS SYSTEM save sets

Considerations when using an advanced file type device

The AFTD device can be deployed in varying environments with local disks, NFS and CIFS mounted/mapped disks. Operation of this feature is affected by the configuration. Ensure that the AFTD is fully operational in the production environment before you deploy it as part of regularly scheduled operations.

As part of the validation process, include these tests:

- ◆ Backup
- ◆ Recover
- ◆ Staging

- ◆ Cloning
- ◆ Maximum file-size compatibility between the operating system and a disk device
- ◆ Device behavior when the disk is full

Some versions of NFS or CIFS drop data blocks when a file system becomes full. Use versions of NFS, CIFS, and operating systems that fully interoperate and handle a full file system in a robust manner.

On some disk devices, the volume labeling process may take longer than expected. This extended labeling time depends on the type of disk device being used and does not indicate a limitation of the NetWorker software.

The upper limits of save set size depend on the upper limits supported by the operating system or the file size specified by the disk device vendor.

Configuration options to send write error alert if NFS mount of AFTD device fails silently while writing to AFTD

It is possible for the NFS mount of an AFTD device to silently fail during large writes to the AFTD. To prevent the possibility of writes in progress continuing on the underlying mount point in the local file system if this occurs, use one of the following configurations where a write error is sent at the point in time when the NFS mount fails.

- ◆ Ensure the local mount point permissions do not have local write permissions.
- ◆ Use the **overlay** mount option for operating systems that support this option (for example, **-O** on Solaris), so the local file system mount point is considered read-only.
- ◆ Create a sub-directory structure for the AFTD below the top-level mounted directory. This will result in the path becoming invalid if the NFS mount fails, producing a write error.

Disable a driver before configuring an a media library if the driver was automatically installed on Microsoft Windows 2000 or Server 2003

On a Windows 2000 or Server 2003 operating system, if a driver is automatically installed for a media library, first disable the driver before configuring a media library using the NetWorker software.

Enabling NetWare 4.22 clients on Windows

Support for a NetWare client is controlled by the environment variable **NSR_SUPPORT_NetWare_4X**. By default, the supported is disabled. To enable support for NetWare clients set the server system environment variable **NSR_SUPPORT_NetWare_4X** to 1:

1. Open **Control Panel** and select **System**.
2. In **System Properties** attribute, select the **Advanced** tab.
3. Select the **Environment Variables** option. A new window will appear called **System Variables**.
4. Click **New**.

- a. Type `NSR_SUPPORT_NetWare_4X` for the **Variable Name**.
- b. Type `1` for the **Variable Value**.
5. Reboot the computer.
6. Open a command prompt window and type this command:

```
set NSR_SUPPORT_NetWare_4X=1
```

When NetWare support is enabled and a NetWare client establishes connection with the `nsrd` process, this message will appear in the daemon log file:

```
Support for NetWare clients is enabled
```

IMPORTANT

Authentication methods in the NetWorker 7.3.2 and later server have been changed to provide greater security. The 4.x client is no longer fully compatible with this version of the server. Upgrade to the 7.2.1 NetWorker client for NetWare. For NetWare 5.1 systems, apply LGTpa86701. Netware 5.0 and older systems are not compatible with the NetWorker 7.2.1 client for NetWare.

Manual backups from the client interface via the NetWare Console can be successfully completed. Note that manual backups will only use media from the default pool.

Adjusting client parallelism to decrease VSS backup failures on Microsoft Windows

If VSS is licensed and enabled and timeout failures occur when backing up save sets, try decreasing the value of the client Parallelism setting.

During a VSS backup, a snapshot is taken of each specified save set. The client Parallelism setting determines how many snapshots are taken concurrently. Since snapshots consume system resources, the more snapshots that are taken concurrently, the more likely it is that a snapshot will fail.

After a failed attempt, NetWorker software waits ten minutes before attempting another snapshot, as recommended by Microsoft. After three unsuccessful snapshot attempts, the backup of the save set fails.

When backing up a large number of save sets, decreasing the value of the client Parallelism helps to ensure successful snapshots.

Using the `NSR_NDMP_RESTORE_LIMIT` environment variable on Microsoft Windows

The `NSR_NDMP_RESTORE_LIMIT` environment variable is used to limit memory consumption during recoveries involving a large number of index entries (millions). This is specifically useful if there is not enough swap space or memory for the number of index entries selected for the recovery. If the variable is not set, the recovery might fail with an "out of memory" error message.

To avoid a failure:

1. In the NetWorker startup script, set the `NSR_NDMP_RESTORE_LIMIT` environment variable to an appropriate value.

2. The value of the **NSR_NDMP_RESTORE_LIMIT** environment variable determines the maximum number of entries that the **recover** program can allocate memory to. For example, if the total number of entries is 3 million, then the **NSR_NDMP_RESTORE_LIMIT** can be set to 50,000 or 1,000,000, but less than 3,000,000.
3. In the **NetWorker Administration** window, select **Recover**.
4. Select the files to recover, and click **OK**.

The recovery is divided into multiple recoveries, where each has the **NSR_NDMP_RESTORE_LIMIT** entries successfully recovered in their respective sessions.

Manually removing data left behind from a partial uninstall of NetWorker software on Microsoft Windows

When performing a partial uninstall of the NetWorker software by using the **Add/Remove Programs** option in the Windows Control Panel, if **Change** is selected, certain folders, files, and registry keys remain on the system. This occurs when the **Remove NetWorker Metadata** checkbox was left unselected.

To remove this data:

1. Open Windows Explorer, and delete **%SystemDrive%\Program Files\Legato\nsr**.
2. Open the Windows Registry Editor, and delete `<\HKEY_CURRENT_USER\Software\Legato>`.

If **Remove** is selected, the checkbox will not appear and a partial uninstall is performed.

Client retries setting with VMware Consolidated Backups

When using NetWorker software with VMware Consolidated Backups (VCB), the Client Retries attribute for Group resources should be set to 0. If Client Retries is set to any value higher than 0 and the backup fails, the NetWorker software will retry the backup regardless of the state of the VCB backup itself. This can result in the VMware utility generating errors such as "mount point already exists" or "backup snapshot already exists."

Change to save set expiration time

When a save set reaches its scheduled browse or retention policy deadline (the day when the save set expires or becomes no longer browsable), the time of expiration on that day is 23:59:59 (11:59:59 P.M.). For NetWorker releases 7.2.x and earlier, the time of expiration for the save set matches the time of day the save set was originally created.

For example, if a save set was backed up on May 1, 2005 at 1:00 P.M. and the browse or retention policy is set to 5 years, with NetWorker releases 7.2.x and earlier, the save set would have expired on May 1, 2010 at 1:00 P.M. With NetWorker releases 7.3.x and later, the save set will expire on May 1, 2010 at 11:59:59 P.M.

Documentation

This section describes the documentation errata for the following NetWorker releases:

- ◆ [“NetWorker product documentation” on page 162](#)
- ◆ [“NetWorker related documentation” on page 163](#)
- ◆ [“NetWorker 7.5 Service Pack 3 documentation errata” on page 164](#)
- ◆ [“NetWorker 7.5 Service Pack 2 documentation errata” on page 164](#)
- ◆ [“NetWorker 7.5 Service Pack 1 documentation errata” on page 166](#)
- ◆ [“NetWorker 7.5 documentation errata” on page 176](#)

NetWorker product documentation

This section describes the additional documentation and information products that are available with NetWorker.

EMC NetWorker Release 7.5 Installation Guide

Provides instructions for installing or updating the NetWorker software for clients, console and server on all supported platforms.

EMC NetWorker Release 7.5 Cluster Installation Guide

Contains information related to installation of the NetWorker software on cluster server and clients.

EMC NetWorker Release 7.5 Administration Guide

Describes how configure and maintain the NetWorker software.

EMC NetWorker Release 7.5 Release Notes

Contain information on new features and changes, fixed problems, known limitations, environment and system requirements for the latest NetWorker software release.

EMC NetWorker Licensing Process Guide, First Edition

A brief guide that explains the process flow of NetWorker licensing to users (system administrators, mainly). Not yet officially part of the NetWorker doc set.

NetWorker 7.5 Security Configuration Guide

Provides information on NetWorker security configuration options.

NetWorker License Manager 8th Edition Installation and Administration Guide

Provides installation, set up, and configuration information for the NetWorker License Manager product.

NetWorker License Manager 8th Edition Release Notes

Provides supplemental information about this release of EMC NetWorker License Manager software.

NetWorker 7.5 Error Message Guide

Provides information on common NetWorker error messages.

NetWorker 7.5 Performance Tuning Guide

Contains basic performance tuning information for NetWorker.

NetWorker 7.5 Command Reference Guide

Provides reference information for NetWorker commands and options.

NetWorker Management Console Online Help

Describes the day-to-day administration tasks performed in the NetWorker Management Console and the NetWorker Administration window. To view Help, click **Help** in the main menu.

NetWorker User Online Help

The NetWorker User program is the Windows client interface. Describes how to use the NetWorker User program which is the Windows client interface connect to a NetWorker server to back up, recover, archive, and retrieve files over a network.

NetWorker related documentation

For more information about NetWorker software, refer to this documentation:

EMC Information Protection Software Compatibility Guide

A list of supported client, server, and storage node operating systems for the following software products: AlphaStor, ArchiveXtender, DiskXtender for Unix/Linux, DiskXtender for Windows, Backup Advisor, AutoStart, AutoStart SE, RepliStor, NetWorker, and NetWorker Modules and Options.

E-lab Issue Tracker

Issue Tracker offers up-to-date status and information on NetWorker known limitations and fixed bugs that could impact your operations. E-Lab Issue Tracker Query allows you to find issues in the Issue Tracker database by matching issue number, product feature, host operating system, fixed version, or other fields.

NetWorker Procedure Generator

The NetWorker Procedure Generator (NPG) is a stand-alone Windows application used to generate precise user driven steps for high demand tasks carried out by customers, Support and the field. With the NPG, each procedure is tailored and generated based on user-selectable prompts. This generated procedure gathers the most critical parts of NetWorker product guides and combines experts' advice into a single document with a standardized format.

Note: To access the E-lab Issue Tracker or the Procedure Generator, go to <http://www.Powerlink.emc.com>. You must have a service agreement to use this site.

Technical Notes and White Papers

Provides an in-depth technical perspective of a product or products as applied to critical business issues or requirements. Technical Notes and White paper types include technology and business considerations, applied technologies, detailed reviews, and best practices planning.

NetWorker 7.5 Service Pack 3 documentation errata

Differences between File type devices (FTDs) and Advanced file type devices (AFTDs)

Chapter 11, “Device Operations”, of the *NetWorker Release 7.5 Administration Guide* discusses the differences between file type devices and advanced file type devices. Three enhancements to AFTDs should be added, including:

- ◆ Load balancing — selecting a volume based on lowest used space, rather than label time.
- ◆ Changes to device target sessions and max sessions default values
- ◆ Intelligent space management — the ability to define at what level NetWorker stops writing to the AFTD.

These enhancements are described in the section “[New features and changes](#)” for “[NetWorker release 7.5 Service Pack 3](#)” on page 5.

NetWorker 7.5 Service Pack 2 documentation errata

The following section outlines corrections and/or additions to the NetWorker release 7.5 Service Pack 2 documentation.

Added information to the topic “Resolvable names for multiple network interface cards”

The section “Resolvable names for multiple network interface cards” in Chapter 30, Troubleshooting of the *NetWorker Release 7.5 Administration Guide* should contain the following information:

“If any component of NetWorker (client, storage node, server) has multiple network interface cards (NICs) with unique IPs and hostnames, all NICs must be configured and must be resolvable names, even if one or more NICs are not being used. Failure to have all NICs resolvable may cause problems with host connectivity to the NetWorker server.

Follow these steps to configure NetWorker so that the appropriate hostname is used for the associated IP, and to ensure the hosts file and routing table on the machine are configured properly.

- ◆ Set up DNS so that a separate name is associated with each IP
- ◆ Configure the hosts file and routing table on each machine that has multiple interfaces with the appropriate IP
- ◆ Configure NetWorker to use the names configured in steps 1 and 2.

Example for configuring multiple NICs

In the following example, a dual-interface client connects to the NetWorker Server and Storage Node over **interface1** having IP **1.1.1.1** and has a dedicated connection to the Storage Node over **interface2** having IP **2.2.2.1**. The user wants to send all data to the Storage Node over **interface2** instead of the default **interface1**.

1. Configure DNS with unique hostnames for IPs **1.1.1.1** and **2.2.2.1**. For example, **client-1** maps to **1.1.1.1** and **client-2** maps to **2.2.2.1**. DNS should also be configured with unique hostnames for the IPs on the Storage Node. For example, **node-1** maps to **1.1.1.2** and **node-2** maps to **2.2.2.2**.
2. Configure the routing table on the client to route the traffic through the correct interface, and add the two IPs to the local hosts file.
3. In NetWorker, enter **node-2** in the Storage Node Affinity List of the client.”

Referenced Technical Bulletin 377 no longer available

The *EMC NetWorker License Manager 9th Edition Installation and Administration Guide* refers to the following technical bulletin on page 32:

EMC Technical Bulletin 377: How Host IDs Change on a Microsoft Windows Computer

This technical bulletin is no longer available.

Issues with replication node recovery and setting the RECOVER_FROM_REP_HOST environment variable

The *NetWorker Release 7.5 Administration Guide* should include the following information regarding replication node recovery and setting the environment variable `RECOVER_FROM_REP_HOST`:

“If recovery from a replication node fails and all of the prerequisites listed in the section [“Recovery from a replication node”](#) have been met, try one of the following workarounds:

Option 1: Set the RECOVER_FROM_REP_HOST environment variable

Set the `RECOVER_FROM_REP_HOST` environment variable to **Yes**. Setting this environment variable to **Yes** will cause NetWorker to attempt to recover from the replication node first before attempting to recover from the primary deduplication node. Be aware of the following when using this option:

- ◆ This environment variable only works with command line recoveries.
- ◆ Set and then export the variable value before using the `recover` command.

Option 2: use the recover -X option

If the replication node name has changed from the time when the backup was performed, you may need to use the `recover -X` command argument to recover from the replication node. For example:

```
recover -c scip2b081 -d /tmp -X "Replication Node=replication_node"
/usr/sbin/ansrd
```

Where *replication_node* is the name of the new replication node.

Note: You can also use `recover -X "Deduplication Node=deduplication_node"` to recover from a primary deduplication node whose name has changed since the original backup.”

Correction to NetWorker Cluster Installation Guide for Microsoft Failover Cluster on Windows 2008

The section “Installing only the NetWorker client software” on page 107 of the *NetWorker Release 7.5 Cluster Installation Guide* contains an error in step 3 of **Task 3: Configure clients under the NetWorker server** for Windows 2008 Microsoft Failover Cluster:

3. Make each virtual client within the cluster a client of the physical client.

Instead of **physical client**, this step should read:

3. Make each virtual client within the cluster a client of the **NetWorker server**.

More information required on nsrjb man page for ndmp volumes

The following information should be added to the `nsrjb` man page under the section ‘Mounting a volume after it has been labeled’:

The **-m** option command syntax fails for ndmp volumes. For ndmp volumes, additionally enter the corresponding client name or device name with the **-m** option, as in the following examples:

```
nsrjb -J <ndmp client name> -L -S 20 -m
```

or

```
nsrjb -L -S 20 -m -f <device name>
```

NetWorker 7.5 Service Pack 1 documentation errata

The following section outlines corrections and/or additions to the NetWorker release 7.5 Service Pack 1 documentation.

nwrecover -p not supported for recovering encrypted data

The *NetWorker Release 7.5 Administration Guide* on page 326 states that to recover AES encrypted data that was not encrypted with the current pass phrase, you can use the **-p** option with the command that is being used to recover data. For example:

- ◆ recover -p pass_phrase
- ◆ nwrecover -p pass_phrase
- ◆ winworkr -p pass_phrase

However, **nwrecover -p** is *not* supported for recovering encrypted data. The **winworkr -p** and **recover -p** options are supported.

UTF8=Y no longer required for NDMP client configuration

The *NetWorker Release 7.5 Administration Guide* on pages 569, 571 and 652 instructs the user to set the **UTF8=y** variable in the Application Information attribute during a NetWorker client configuration for NDMP clients if the data from the filer is in UTF8 format. However, it is no longer required to set the **UTF8=Y** variable.

References to setting the **UTF8=y** variable should be replaced with the following instructions:

“The UTF8=y variable is no longer required. If upgrading from any NetWorker release previous to 7.3 Service Pack 3, remove the **UTF8=y** variable from the client configuration in order to ensure successful backup and recovery operations.

If the UTF8=Y variable is set during an NDMP client backup and the backup contains pathnames with non-ascii characters, an index based recovery of this backup will fail with the error “RESTORE: could not create path <pathname>”

For existing backups that were run with **UTF8=y** set in NetWorker 7.3 Service Pack 3 or later, pathnames with non-ascii characters must be recovered using either a save set recovery from the command line, or NDMP Directory restore. Starting with NetWorker 7.3 Service Pack 3, **UTF8=n** is the default setting and should remain set.

Note: Ensure that the NAS filer is configured for UTF8 characters sets. Contact your NAS vendor for configuration requirements.”

AFTD must be configured on sub-directory of mount point if NAS device mounted on local directory

The following procedure for configuring an AFTD on a sub-directory of the mount point should be added to the *NetWorker Release 7.5 Administration Guide*.

“If a NAS device has been mounted on a UNIX mount point and AFTD is configured to use that mount point as the device path, and the NAS device becomes unmounted during backup, the backup does not fail and NetWorker continues writing to the local file system. For example, if you mounted the NAS device on a local `/mnt` directory and configured `/mnt` as the AFTD, and the NAS device unmounts during backup, NetWorker continues to write to the local `/mnt` folder.

To solve this issue, create a sub-directory on a mounted NAS filesystem and configure the AFTD on a sub-directory of the mount point (using the above example, configure AFTD as `/mnt/directory1` instead of `/mnt`). If an unmount occurs, the backup will abort because this directory is not part of the local file system.”

Supplement to target session information for devices

The target session information on page 422 of the *EMC NetWorker Release 7.4 Service Pack 1 Multiplatform Version Administration Guide* should include the following note:

Note: When the NetWorker software assesses how many devices need to be involved in multiple savestreams assignments with the same storage node, the device with the lowest target session value is used as a reference. It does not make a difference if the device with the lowest target session value is associated with a different pool than the incoming savestreams.

New error messages for unsupported NDMP Path-to-Tape cloning operations

The *NetWorker Release 7.5 Error Message Guide* does not contain entries for some NDMP Path-to-Tape cloning errors. These error messages have been added for the following unsupported Path-to-Tape cloning operations:

- ◆ Cloning of opaque save sets using Path-To-Tape:


```
nsrndmp_clone: Clone of opaque save sets
(<ssid>/<clone_instance_#) not supported.
```
- ◆ Cloning of multiplexed save sets using Path-To-Tape:


```
nsrndmp_clone: Clone of multiplexed save set
(<ssid>/<clone_instance_#) not supported.
```
- ◆ Cloning a volume that is loaded into a drive that has a different block size:


```
nsrndmp_clone: Error: Source is loaded into a drive with different
block size Source device block size = %ld actual block size = %ld"
```
- ◆ Cloning a volume to another volume of different block size:


```
nsrndmp_clone: Error: Source's block size does not match with
destination's block size. Source media type is <media type>'
(block size: %ld); destination media type is <media type>' (block
size: %ld)\
```
- ◆ Cloning a volume to another volume of different device file size:

```
Error: Source's tape file size does not match with destination's
tape file size. Source tape file size is: %ld; destination tape
file size is: %ld
```

JRE version 1.4.x no longer supported

The NMC online help, *NetWorker Release 7.5 Installation Guide* and *NetWorker Release 7.5 Administration Guide* contain some references to support for the Java Runtime Environment version 1.4.x in addition to support for 1.5.x and later. Since JRE version 1.4.x software is not supported by the NetWorker 7.5 software, any references to support for JRE version 1.4.x are incorrect.

The Console online help and the *NetWorker Release 7.5 Administration Guide*, Chapter 1, “Overview”, should refer to the Installation Guide for supported JRE versions and web browsers. In Chapter 14, “Troubleshooting”, limitations specific to using JRE 1.4.2 do not apply to JRE 1.5.x and later versions.

Also, a reference in the *NetWorker Release 7.5 Installation Guide* to JRE version 1.4.2 support should be changed to indicate that only JRE 1.5.x or 1.6.x are supported.

Installation requirements for Microsoft Failover Cluster on Windows Server 2008

The *NetWorker Release 7.5 Cluster Installation Guide* indicates on page 100 under “Installation Requirements” for the Microsoft Failover Cluster on Windows Server 2008 that the version of NetWorker required is NetWorker release 7.4 Service Pack 3. This should read “NetWorker release 7.4 Service Pack 3 or later”.

Installation requirements for the MC/ServiceGuard cluster

The Software Requirements section for the MC/ServiceGuard cluster on page 66 of the *NetWorker Release 7.5 Cluster Installation Guide* indicates that the required version of NetWorker is release 7.4 This should read “NetWorker release 7.4 or later”.

Instructions for installing NetWorker packages to a nondefault location on Solaris

The instructions for installing NetWorker packages to a nondefault location on a Solaris system have been revised. The first step in the section “Installing to a nondefault location” on page 122 of the *NetWorker Release 7.5 Installation Guide* should now read:

1. Create a symbolic link between the default NetWorker location and the nondefault NetWorker location. For example:

```
ln -s /my_path/lib/nsr/ /usr/lib/nsr
```

Specifying browse policies for clone data

The *NetWorker Release 7.5 Administration Guide* on page 219 states that the browse policy for clone data can be specified independently of the original instance of the save set. However, this is not correct; you cannot set a browse time for a clone that is different from the original instance of the save set. Only the retention policy of the clone can be set independently. The paragraph should read:

“The retention policy for clone data can be specified independently. In this way, clone data can be recovered after the retention policy of the original save set instance has expired.”

Instructions should also be added to this section for using the command prompt to change the browse time for a cloned save set. After the sentence “To specify the browse policy for clone data, use the command prompt”, add the following:

“Using the command prompt to change the browse time for a cloned save set will also change the browse time for the original save set instance and all clones of that save set.”

Performing a single step recovery of the full VMware virtual machine

The following information replaces the section titled, *Performing a disaster recovery of the full virtual machine*, on page 532 in the *NetWorker Release 7.5 Administration Guide*.

There are two methods of restoring a full virtual machine:

- ◆ [“Perform a single step restore from the NetWorker User program” on page 169](#)
- ◆ [“Perform a single step restore from the command line” on page 170](#)

The following considerations apply when performing a single step restore of a full VMware virtual machine:

- ◆ The VMware Consolidated Backup (VCB) proxy system must be running Microsoft Windows 2003 SP1.
- ◆ Restore of the full virtual machine is only supported using save set recovery.
- ◆ The user must have the required VMware privileges to register and to create virtual machines.
- ◆ The VMware converter must be installed on the VCB proxy host machine. If the VMware converter is not installed, the save set of the full virtual machine (FullVM) can be recovered using a traditional NetWorker recovery.
- ◆ The ESX server must be at version 3.x or later.
- ◆ The VMware virtual machine will restore to the same VMware ESX server or VMware Virtual Center (VC) taken at the time of backup. Specifying another VMware ESX server or VMware VC server will cause the restore to fail.
- ◆ A restore of the VMware virtual machine will fail if the VMware virtual machine already exists in the specified VMware ESX or VMware VC server.

Perform a single step restore from the NetWorker User program

This procedure is supported on Windows XP and later Windows platforms only.

To perform a single step restore of a full VMware virtual machine to the VMware ESX server or VMware Virtual Center server:

1. Launch the NetWorker User program on the NetWorker client or VCB proxy.
2. From the **Operation** menu, select **Save Set Recover**.
3. In the **Source Client** dialog box, select the virtual machine client from where the save set originated and click **OK**.
4. In the **Save Sets** dialog box, select the **Save Set** name for the full virtual machine backup client (FULLVM) and click **OK**.

If the VMware converter is installed on the VCB proxy host machine:

- a. In the **VCB Restore** dialog box, type the required information.
 - **ESX or VC server name** - Specify the VMware ESX server or VC server name to which the VMware virtual machine will be restored. You must specify the server’s IP address or its fully qualified domain name (FQDN).

- **User name and Password** - Specify the user name and password of the VMware ESX server or VMware VC server.
 - **Restoring staging location** - Specify a staging location to recover the backed up FULL VM image before restoring it to the VMware ESX server or VMware VC server.
The restore staging location adds the "FULLVM" directory to the specified staging location.
- b. Select **Delete staging location on restore** to automatically delete the temporary staging location.
 - c. (Optional) **Data store name** - Use this field only if you want to restore the VMware virtual machine to a data store other than the one that was used at the time of backup. To do so, specify the name of the shared data store that is accessible by the VMware ESX server or VMware VC server.
 - d. Click **Restore**.

If NetWorker cannot access the VMware converter, a traditional save set recovery is attempted:

- a. In the **Recover Options** dialog box, enter a valid local path in the **Relocate recovered data to** attribute.
- b. Click **OK**.

Note: If the traditional recovery option fails with an error message indicating that the VMware converter failed to start, the most likely cause is that the VMware converter was uninstalled incorrectly. To remedy the problem, either re-install the VMware converter on the VCB proxy host machine or remove any remnants of the VMware converter program from the host machine. Then, re-attempt the single step recover operation.

Perform a single step restore from the command line

To perform a command line restore of a full VMware virtual machine to the VMware ESX server or VMware Virtual Center (VC) server:

1. Use the **mminfo** command to determine the save set ID of the full virtual machine (FULLVM) client, for example:

```
mminfo -avot -q "name=fullvm"
```

2. Restore the full VMware virtual machine by using the NetWorker **recover** command:

```
recover -S ssid -d staging-location -o VCB:host=ESX/VC  
host-name;VCB:user=ESX/VC username;VCB:password=ESX/VC  
password[;VCB:datastore=data-store-name;VCB:delstaging=<0|1>]
```

where:

- *ssid* is the save set identifier of the FULLVM.
- *staging-location* is the staging location path to recover the backed up FULLVM image. This is a temporary recover location and will be deleted if the VCB:delstage flag is set to 1.
- *VCB:host* is the VMware ESX/VC server machine name where the VMware virtual machine needs to be restored.
- *VCB:user* is the username of the VMware ESX/VC server.

- *VCB:password* is the password of the VMware ESX/VC server.
- *VCB:datastore* is the disk name that is accessible by the VMware ESX/VC server. This is an optional value. If specified, the virtual machine will be imported to the specified data store disk name.
- *VCB:delstaging* is an optional flag that specifies whether to delete the staging location after a restore operation. If this flag is set to '1' (True) the staging location will be deleted after restoring the virtual machine to the VMware ESX/VC server. The default value of this flag is 0 (False).

The following example depicts a command to restore the FULLVM with ssid 413546679 to the ESX server named esxDemo1.emc.com. The staging location is to be deleted after restoring it to the ESX server:

```
recover.exe -S 413546679 -d e:\mnt\ -o
VCB:host=esxDemo1.emc.com;VCB:user=root;
VCB:password=w5dft9s1;VCB:delstaging=1
```

If the restore operation fails with an error indicating that there was an issue with the VMware converter, you can attempt to restore the FULLVM save set by following the procedure described in the next procedure, [“Traditional command line recovery of the full VMware \(FULLVM\) save set”](#).

Traditional command line recovery of the full VMware (FULLVM) save set

If the steps listed in [“Perform a single step restore from the command line”](#) on [page 170](#) do not work, you can attempt to recover the FULLVM save set using a traditional command line recovery, for example:

```
recover -s server -S ssid -d local-path
```

where:

- ◆ *server* is the NetWorker server.
- ◆ *ssid* is the save set identifier of the FULLVM.
- ◆ *local-path* is a valid local path.

Note: If the traditional recovery option fails with an error message indicating that the VMware converter failed to start, the most likely cause is that the VMware converter was uninstalled incorrectly. To remedy the problem, either re-install the VMware converter on the VCB proxy host machine or remove any remnants of the VMware converter program from the host machine. Then, re-attempt the single step restore operation.

Saving the bootstrap and index to the same media pool

On page 186 of the *NetWorker Release 7.5 Administration Guide*, under “Directing client file indexes and bootstrap to a separate media pool”, a table of attributes indicates that in order to direct the NetWorker server’s bootstrap and client file index to the same media pool, use the following for the save set attribute:

```
Bootstrap
"index: *"
```

However, when you specify this value, only the bootstrap is saved to the index pool; the index is saved to a regular backup pool. To save both the bootstrap and index to the index pool, specify the following value for the save set attribute:

```
bootstrap
index
```

Configuration of CIFS-mounted AFTD on Microsoft Windows servers and storage nodes requires additional steps

During the NMC configuration of a UNC/CIFS device, the device is created but does not get labelled or mounted when using the procedure on page 257 of the *NetWorker Release 7.5 Administration Guide*. Additional steps are required in order to mount and label these devices.

The procedure on page 257 of the *NetWorker Release 7.5 Administration Guide* should be modified as follows:

Start the NetWorker service on Microsoft Windows

To start the NetWorker services as a user with administrator rights:

1. Create an Administrators account. For example: NWservice
2. Ensure the user account created for the NetWorker **Remote Exec** service has Full control on the share where the AFTD is used.
3. Ensure **User must change password at next logon** is unchecked.
4. Ensure **User cannot change password** is checked.
5. Ensure **Password never expires** is checked.
6. Do not set the **Administrator** account to an account that has **login as a service** rights.
7. From the Windows Start menu, select **Settings > Control Panel > Administrative Tools > Services**.
8. Right-click **Services**.
9. Stop the appropriate service:
 - For a NetWorker server, stop the NetWorker **Backup and Recover** service and NetWorker **Remote Exec** service.
 - For a NetWorker storage node, stop the NetWorker **Remote Exec** service.
10. Right-click the NetWorker **Remote Exec** service that was stopped in Step 9 and select **Properties**.
11. Select the **Log On** tab.
12. Select **This Account**.
13. Replace **Local System** with the Administrative user created (NWservice).
14. Type the administrator password in the appropriate field.
15. Select **OK**.

Once a service is given a user account to use, it is automatically given **login as a service** rights.

Updated information for NDMP Path-to-Tape cloning of regular save sets

The *NetWorker Release 7.5 Administration Guide* on page 568-569, has the following updated information, especially with respect to requirements for NDMP cloning.

NDMP Path-to-Tape cloning for regular save sets

NetWorker 7.5 Service Pack 1 and higher supports NDMP Path-to-Tape cloning of regular save sets by using the **-p** option with the **nsrndmp_clone** command.

Using NDMP cloning, the save sets from a DL3D 1500 or 3000 Virtual Tape Library (VTL) running version 1.1.2, can be copied directly to a physical tape library, which is attached to the VTL. This process, also known as path-to-tape, frees up network bandwidth and offloads NetWorker storage node I/O resources because save set data does not go through the storage nodes. NetWorker manages the data movement and catalogs the physical tape copy in the media database as a clone instance. Both the VTL and the physical tape devices are visible to the NetWorker storage node and restores can be performed directly from either copy.

IMPORTANT

This feature is available with EMC DL3D models 1500 and 3000 at version 1.1.2, Version 1.1.2 is available on request from your EMC DL3D account representative.

The path-to-tape feature can also be set up to move data from one physical tape library to another physical tape library. Additionally, all NDMP clone options work with the path-to-tape feature.

Requirements for NDMP cloning regular save sets

Ensure that the following are configured before starting the NDMP cloning process:

- ◆ An NDMP storage node resource is required for the VTL. The VTL must have drives configured for NDMP.
- ◆ An NDMP storage node resource is required for the physical tape library. The physical tape library must have drives configured for NDMP.
- ◆ The Client resource that corresponds to the source save sets or volumes must have its **Clone Storage Node** attribute set to the destination storage node host, which is where the clone data is to be written. The destination storage node is usually the hostname of the NDMP storage node for the physical tape library.
- ◆ This feature is supported only for the media types that have the same device block sizes and device file sizes. If you have different media types, ensure that the device block sizes and the device file sizes match on the source and destination volumes. Also ensure that the device block size and the device file size of the source volume matches the *actual* block size and the *actual* file size respectively.

IMPORTANT

If you need to configure the device file size of a device, do so with caution. If the device file size and the actual file size do not match, the resulting clone image may not be recoverable.

To check the block size of a labeled volume:

- Open the Device Properties dialog box and check the volume block size in the volume tab.

If the block sizes are different, do the following:

- a. Open the Device Properties dialog box > Advanced tab and change the **Device Block Size** attribute so that the source and destination volume block sizes match.
- b. Relabel the volumes so that the new block sizes take affect.

Using the `nsrndmp_clone` command for cloning regular save sets

For NDMP cloning of regular save sets, use the following command:

```
nsrndmp_clone -J ndmp_storage_node -p -b clone_pool -S ssid1 ssid2...
```

where:

- ◆ The **-J** option is used to specify the ndmp clone to load the source device on a specified host.
- ◆ The **-p** option is used to create a clone of regular save sets. This is a new option in NetWorker 7.5.
- ◆ The **-b** option is used to specify the pool type.
- ◆ The **-S** option is used to identify the save set ID(s).

Note: NDMP does not support the cloning of DSA, multiplexed, or opaque save sets.

Recover can be done from the original backup or from the clone copy. You can perform a regular file-by-file or save set recover. A regular storage node resource is required both for the VTL and the physical library. The VTL and the physical tape library must have drives configured for SCSI. The recover process will automatically load the volume from an NDMP drive to a non-NDMP drive (SCSI path).

Note: Once you clone to an NDMP device, recovering directly from the NDMP device is not supported. Instead, the recovery process automatically selects a SCSI path for recovery.

Configuring a deduplication node for replication

The *NetWorker Release 7.5 Administration Guide* on pages 103 - 104 describes how to set up access on NetWorker to a primary deduplication node and a replication node. In addition to the information provided on pages 103 - 104, ensure that the following steps are completed. These steps ensure that the replicated save sets are deleted from the replication node when their corresponding save sets expire and delete on the primary deduplication node.

To ensure that replicated save sets are deleted from the replication node:

1. Ensure that both the primary deduplication node and the replication node are created on the Avamar server. Contact EMC Customer Support for help with creating these nodes, if necessary.

IMPORTANT

To avoid ambiguity in name resolution, always specify the fully qualified domain name (FQDN) to identify the deduplication node and the replication node.

2. Create a deduplication node resource and a replication node resource on the NetWorker server as described in the *EMC NetWorker Release 7.5 Administration Guide* on page 103 - 104.
3. Open the NetWorker deduplication node resource to display its Properties.
 - a. Select the **General** tab.

- b. Make a note of the fully qualified domain name (FQDN) of the deduplication node. This value is displayed in the **Name** attribute.
 - c. Make a note of the FQDN of the replication node. This value is in the **Replication node** attribute.
 - d. Close the NetWorker deduplication node resource.
4. In the Avamar application, open the Avamar **Administration** interface for the deduplication node.
 - a. Select the **Services Administration** tab.
 - b. Right-click on the **Replication Cron job** attribute and select **View Properties**.
 - c. Ensure that the **Destination Directory:/REPLICATE/** attribute matches the exact value of the deduplication node that was noted in step 3b. If the value does not match, make the change and select **Apply**.

Note: For supported Avamar server releases prior to 4.1, the **Destination Directory:/REPLICATE/** attribute is known as the **System Name** attribute.

- d. Ensure that the **Destination** attribute matches the exact value of the replication node that was noted in step 3c. If the value does not match, make the change and select **Apply**.

Manual backup with non-administrative privileges of a Microsoft Cluster virtual client

The following section should be added to the *NetWorker Release 7.5 Administration Guide*, page 493, under the heading titled, Backing up cluster data:

Manual backup with non-administrative privileges of a virtual client

To perform a manual backup of data from a virtual client with non-administrator privileges, use the following command to modify the security descriptor properties on the cluster so that the user can access the cluster resources. Otherwise the data of the virtual client will be backed up under the physical node's index instead of the virtual client's index.

```
Cluster <ClusterName> /prop "security
descriptor"=<DOMAIN\USER>,grant,f:security
```

Resetting the administrator password (native authentication only)

The *NetWorker Release 7.5 Administration Guide*, chapter 16, Console Server Management, includes procedures for resetting the administrator password. Step 3 in the Windows and UNIX procedure require that you type the user name as **administrator** and type the password as **administrator**.

The complete and corrected procedures follow.

Note: These steps apply only when native Console authentication is being used.

Microsoft Windows

To reset the native Console security administrator password on Windows:

1. From the **Start** menu, go to **Control Panel > System** and set the **GST_RESET_PW** variable in the **Environment Variables** dialog box to a value of **1**.

Note: How you navigate to the **Environment Variables** dialog box differs depending on which Windows operating system you use. Consult the documentation that accompanies your operating system for details.

2. Restart the **GST Service**.
When the **GST Service** starts, the password resets.
3. Log in to the Console server and type **administrator** as the user name and type **administrator** as the password.
4. Return to the Environment Variables dialog box and delete the **GST_RESET_PW** variable.

This step prevents the password from being reset at each Console log in attempt.

UNIX systems

To reset the native administrator password on a UNIX system:

1. Set **GST_RESET_PW** to a non-null value using the appropriate command for your shell, for example, in ksh:

```
export GST_RESET_PW="non null value"
```
2. Stop and restart the Console server. This should be done in the same shell where the password was set.
3. Log in to the Console server and type **administrator** as the user name and type **administrator** as the password.
4. Set **GST_RESET_PW** back to **null** using the appropriate command for your shell, for example, in ksh:

```
export GST_RESET_PW=
```

The next time the Console server is restarted, the password will not be reset again.

Computer name should not be joined to domain name for disaster recovery

In the section “Reinstall the Windows Operating System” of the *EMC NetWorker Release 7.5 Disaster Recovery Guide*, step 2c incorrectly states that when performing a disaster recovery of a Windows client, the computer must be specified as a member of the domain in the Computer Name Changes dialog box. The computer should not be specified as part of the domain. The paragraph should read:

“In the Computer Name Changes dialog box, ensure that the computer name is correct and that the computer is installed into a workgroup, not into a domain. If the computer being recovered was previously a domain controller or a member of a domain, it will be restored to the correct domain when the recovery is complete.”

NetWorker 7.5 documentation errata

The following section outlines corrections and/or additions to the NetWorker release 7.5 documentation.

Only devices owned by the NetWorker server can be used for bootstrap backup

The *NetWorker Release 7.5 Cluster Installation Guide* incorrectly states on page 86 that “the NetWorker virtual server bootstrap and indexes can be also saved to a storage

node. The storage node device, in such a case, must be attached to the cluster node on which the NetWorker virtual server is currently running."

Currently, only devices owned by the NetWorker server can be used for bootstrap backup.

nsrlic output example for gathering licensing information is out-of-date

The `nsrlic` example output provided in the section "Using `nsrlic` to gather license information" on page 145 of the *EMC NetWorker Release 7.5 Installation Guide* is out-of-date.

Parallelism attribute for a deduplication client should not exceed 4

The *NetWorker Release 7.5 Administration Guide* on page 477 includes a note, which incorrectly states that the Parallelism attribute for a deduplication client should be set to less than or equal to 5. This note should state that the Parallelism attribute for a deduplication should be set to less than or equal to 4.

Port 514 is used as fallback connection and should not be blocked

The *NetWorker Release 7.5 Administration Guide* does not make mention that Port 514 is used as a fallback connection if communication with `nsrexecd` cannot be established. To avoid potentially slow performance with the connection, ensure that port 514 is not blocked.

Command line reporting requires that the JAVA_HOME environment variable be set

The *NetWorker Release 7.5 Administration Guide* on page 386, describes the JRE requirements for using the command line reporting command `gstclreport`. One additional requirement is that you must add an environment variable named `JAVA_HOME` to your NetWorker server host. Set the `JAVA_HOME` environment variable to the location of your JRE. For information about setting up environment variables, refer to your operating system documentation.

Tuning to increase NetWorker stability

Page 48 of the *NetWorker Release 7.5 Performance Tuning Guide* contains some typographical errors. This page should be replaced with the following information:

The following information concerning changes in default values can be used to add stability to NetWorker release 7.3 and later.

- ◆ Increase **client parallelism** of the server client (default: 4, recommended minimum: 12). The recommended value is due to a change in the behavior of NetWorker 7.3 and later compared to older releases.
- ◆ Increase **server parallelism** to the maximum allowed for the NetWorker Edition.
- ◆ Increase the **nsrmmd** polling interval (default: 2 minutes, recommended: 15 minutes (at a minimum, even more for large environments) since polling of unavailable **nsrmmd** (if storage nodes are down) is a blocking call.
- ◆ Increase the **nsrmmd** restart interval (default: 2 minutes, recommended: 10 minutes). If these two **nsrmmd** values are not fine tuned, the server can freeze because it will get too busy polling (RPC errors, backups will hang, and so on).

- ◆ Implement **savegrp parallelism** (default: 0, which is unlimited) so that no more than fifty clients (depends on the OS and HW) start at the same time because file descriptor resources can quickly become exhausted.
- ◆ Change scheduling so that no savegroups start at the identical time (splitting start time for different savegroups by only 5 minutes increases stability immensely to prevent file descriptor resource exhaustion and resource exhaustion on the OS). Prior to release 7.3 a single thread was invoked during the backup. Now with multithreading in NetWorker 7.3 and later, there can be up to six internal threads invoked at the start of a backup.

Note: Solaris 8 is not able to handle multiple threads effectively.

- ◆ Increase maximum size of **jobsdb** (default: 20mb, recommended: 60mb).
- ◆ Decrease retention of **jobsdb** (default 7 days, decrease to 4 days. These two changes ensure that purging by time is used instead of purging by size. Purging by size is much slower and can cause other problems because **nsrjobd** slows down significantly during a purge period. Purging by time avoids forcing NetWorker to check the size of the database continuously.

Note: Size can be set even higher to ensure that it never becomes a factor.

Installation

This section provides information on installing and updating the NetWorker software. More information on installation and updating procedures is provided in the *EMC NetWorker Release 7.5 Installation Guide*.

NetWorker Release 7.5 and Service Packs

This section provides information on installing and updating the NetWorker Release 7.5 and Service Packs software:

- ◆ [“NetWorker client location and space requirements” on page 178](#)
- ◆ [“:::1 entry required in hosts file on Linux, UNIX, and AIX platforms” on page 180](#)
- ◆ [“Java not included with the NetWorker software” on page 180](#)
- ◆ [“Reconfiguring Console authentication for LDAP if NMC fails to start after update” on page 180](#)
- ◆ [“UTF8=Y no longer required for NDMP client configuration” on page 180](#)
- ◆ [“Installing the NetWorker client in a failover zone” on page 181](#)

NetWorker client location and space requirements

This section specifies the location and space requirements for the NetWorker client software for NetWorker Release 7.5.

Microsoft Windows

Table 16 on page 179 specifies the location and space requirements for the NetWorker client software in a Microsoft Windows environment.

Table 16 Microsoft Windows location and space requirements

NetWorker files	Location	Space		
		x86	x64	ia64
NetWorker client files and NetWorker catalog	Legato\nsr\	110 MB	110 MB	110 MB
EMC HomeBase agent binary	Legato\HomebBaseAgent\	400 MB	400 MB	Not applicable
Temporary space required for EMC HomeBase agent	%TEMP%	400 MB	400 MB	Not applicable

Linux

Table 17 on page 179 specifies the location and space requirements for the NetWorker client software in a Linux environment.

Table 17 Linux location and space requirements

NetWorker files	Location	Space		
		x86	x64	ia64
NetWorker client files and NetWorker catalog	/usr/bin /usr/sbin /usr/lib/nsr /opt/nsr	110 MB	110 MB	110 MB
EMC HomeBase agent binary	/opt/homebase-agent/	400 MB	400 MB	not applicable
Temporary space required for EMC HomeBase agent	/tmp	400 MB	400 MB	not applicable

Solaris location and space requirements

Table 18 on page 179 specifies the location and space requirements for the NetWorker client software in a Solaris environment.

Table 18 Solaris location and space requirements

NetWorker files	Location	Space		
		Sparc	x86	amd64
NetWorker client files and NetWorker catalog	/usr/bin /usr/sbin /usr/lib/nsr /opt/nsr	200 MB	200 MB	200 MB
EMC HomeBase agent binary	/opt/homebase-agent/	440 MB	not applicable	not applicable
Temporary space required for EMC HomeBase agent	/tmp	440 MB	not applicable	not applicable

::1 entry required in hosts file on Linux, UNIX, and AIX platforms

All Linux, UNIX, and AIX platforms require a ::1 entry in the /etc/hosts file in order to run the NetWorker software. The entry should be in the form "::1 localhost aliases".

Java not included with the NetWorker software

Java is not included with the NetWorker install. When installing the Console server software, a minimum JRE version of 1.5 or 1.6 is required, depending on the operating system.

If you do not have the required Java version installed, go to the Java website to download and install the appropriate JRE version. The NMC console cannot be started until the appropriate JRE version is installed.

Reconfiguring Console authentication for LDAP if NMC fails to start after update

If a NetWorker 7.5.x Console server is configured to use LDAP for authentication and you are updating to NetWorker 7.5 Service Pack 2, in some cases NMC may fail to start after the update. If this occurs, the **gstd.raw** file in the Console's logs directory contains the message "acm: External directory library initialization failed".

Workaround

Reset the Console authentication configuration and reconfigure LDAP by performing the following steps:

1. Ensure that the **gstd** service is not running. If **gstd** is running, stop the service.
2. Go to *<NMC install directory>/cst*.
3. Delete the files **Config.xml**, **csp.clb**, **csp.clb.bak** and **upgrade_cst.tag**, if present.
4. Copy **Config.xml.template** to **Config.xml**.
5. Start the Console.

The Console starts in native authentication mode.

6. Log in as Console's 'administrator' user with the password that was last set for this user before switching to LDAP mode.
7. Go to **Setup > Configure Login Authentication** and configure LDAP again.

UTF8=Y no longer required for NDMP client configuration

It is no longer required to set the **UTF8=Y** variable in the Application Information attribute during a NetWorker client configuration for NDMP clients. If upgrading from any NetWorker release previous to 7.3 Service Pack 3, remove this variable from the client configuration in order to ensure successful backup and recovery operations. If the **UTF8=Y** variable is set during an NDMP client backup and the backup contains pathnames with non-ascii characters, an index based recovery of this backup will fail with the error "RESTORE: could not create path *<pathname>*".

For existing backups that were run with **UTF8=y** set in NetWorker 7.3 Service Pack 3 or later, pathnames with non-ascii characters must be recovered using either a save set recovery from the command line, or NDMP Directory restore. Starting with NetWorker 7.3 Service Pack 3, **UTF8=n** is the default setting and should remain set.

Note: Ensure that the NAS filer is configured for UTF8 characters sets. Contact your NAS vendor for configuration requirements.

Installing the NetWorker client in a failover zone

The NetWorker software supports installation of the NetWorker client in a failover zone. More information on failover zone setup is provided in the Sun Cluster Data Service for Solaris Containers Guide, available at:

<http://dlc.sun.com/pdf/819-3069/819-3069.pdf>

Note: A NetWorker server or storage node cannot be installed in a failover zone. Also, an active/active configuration is not supported.

To make the NetWorker client highly available, use the following steps:

1. After the zone has been set up as a failover zone with the SUNWsczone tool **sczbt**, install the NetWorker Client.
2. When setting up the **sczsh_config** configuration file, make sure the following parameters are specified with these values:

```
"ServiceStartCommand="/etc/init.d/networker start"
"ServiceStopCommand="/usr/sbin/nsr_shutdown"
"ServiceProbeCommand="/usr/sbin/nsrzoneprobe"
```

3. Run **sczsh_register** to register.

Note: You must have Solaris 10 or later installed to use any zone functionality, and the SUN cluster must be installed in order to use the failover functionality.

Troubleshooting and getting help

EMC support, product, and licensing information can be obtained as follows.

Product information — For documentation, release notes, software updates, or for information about EMC products, licensing, and service, go to the EMC Powerlink website (registration required) at:

<http://Powerlink.EMC.com>

Technical support — For technical support, go to EMC Customer Service on Powerlink. To open a service request through Powerlink, you must have a valid support agreement. Please contact your EMC sales representative for details about obtaining a valid support agreement or to answer any questions about your account.

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