



# Sun StorageTek™ Enterprise Backup Software 7.5

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Release Notes

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The *Sun<sup>TM</sup> StorageTek Enterprise Backup Software<sup>TM</sup>, Release Notes* provides information on the latest updates, bug fixes and known limitations in the Sun StorageTek software.

For full install instructions, refer to the *Sun StorageTek Enterprise Backup Software, Release 7.5 Installation Guide*.

After you install the Sun StorageTek EBS<sup>®</sup> software, refer to the *Sun StorageTek Enterprise Backup Software<sup>TM</sup> Release 7.5, Administrator's Guide* and the program's online help for detailed instructions on how to configure, administer, and use the Sun StorageTek EBS software.

The information in this guide is intended for system administrators who are responsible for installing software and maintaining the servers and clients on a network. Operators who monitor the daily backups may also find this manual useful.

### Using UNIX Commands

This document may not contain information on basic UNIX commands and procedures such as shutting down the system, booting the system, and configuring devices.

See one or more of the following for this information:

- ◆ *Solaris Handbook for Sun Peripherals*
- ◆ AnswerBook2<sup>TM</sup> online documentation for the Solaris<sup>TM</sup> operating environment
- ◆ Other software documentation that you received with your system

## Conventions used in this guide

The following conventions for notes, cautions, warnings, and danger notices.

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**Note:** A note presents information that is important, but not hazard-related.

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## Typographical conventions

This guide uses the following type style conventions:

### **bold**

- User actions (what the user clicks, presses, or selects)
- Interface elements (button names, dialog box names)
- Names of keys, commands, programs, scripts, applications, utilities, processes, notifications, system calls, services, applications, and utilities in text

### *italic*

- Book titles
- New terms in text
- Emphasis in text

### `Courier`

- Prompts
- System output
- Filenames
- Pathnames
- URLs
- Syntax when shown in command line or other examples

### **`Courier, bold`**

- User entry
- Options in command-line syntax

### *`Courier italic`*

- Arguments in examples of command-line syntax
- Variables in examples of screen or file output
- Variables in pathnames

### <>

Angle brackets for parameter values (variables) supplied by user.

### []

Square brackets for optional values.

### |

Vertical bar symbol for alternate selections. The bar means or.

### ...

Ellipsis for nonessential information omitted from the example.

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## Chapter 1

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These release notes contain supplemental information about the Sun StorageTek EBS® 7.5 release.

Topics include:

- ◆ “Revision history” on page -10
- ◆ “Product description” on page -10
- ◆ “New features and changes” on page -10
- ◆ “Fixed problems” on page -25
- ◆ “Environment and system requirements” on page -31
- ◆ “Known problems and limitations” on page -36
- ◆ “Internationalization support” on page -139
- ◆ “Technical notes” on page -142
- ◆ “Documentation” on page -146
- ◆ “Installation” on page -149

## Revision history

The Sun StorageTek EBS® 7.5 Release Notes was originally published in December 2008.

**Table 4-1 Revision history**

Date	Description
February, 2009 B	<ul style="list-style-type: none"> <li>Removed support for VTL Replication from New Features section.</li> <li>Removed LGTsc16961, Sun StorageTek EBS must support Stoli Replication, from Fixed Bugs in Release 7.5 table.</li> </ul>
December, 2008 A	<ul style="list-style-type: none"> <li>Sun StorageTek EBS 7.5 released.</li> </ul>

## Product description

The Sun StorageTek EBS 7.5 release provides significant functional enhancements, including support for the following:

- ◆ More integration between features and the Sun StorageTek EBS software, including enhanced support for VMware features.
- ◆ Support for IPv6, a new internet protocol that allows for more unique IP addresses, and the interoperability of IPv6 and IPv4.
- ◆ Integration of the Client Configuration Wizard into the Sun StorageTek EBS Management Console (also referred to as Sun StorageTek EBS Console).

These new features and enhancements are described in [“New features and changes” on page -10](#).

Before installing Sun StorageTek EBS release 7.5, review the Sun StorageTek EBS release 7.5 installation guide, administration guide, and other documentation. [“Documentation” on page -146](#) lists the complete Sun StorageTek EBS release 7.5 documentation.

## New features and changes

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

## Sun StorageTek EBS release 7.5

Sun StorageTek EBS release 7.5 includes these new features and changes:

- ◆ "Update enabler code for updating from Sun StorageTek EBS releases prior to 7.5" on page -12
- ◆ "License expiration alerts" on page -12
- ◆ "Support for Probe-based backups" on page -12
- ◆ "License conformance summary report" on page -13
- ◆ "TruCluster is not supported in Sun StorageTek EBS release 7.5" on page -13
- ◆ "Lockbox password management" on page -13
- ◆ "No default username/password combination for NMC" on page -14
- ◆ "LDAP v3 authentication for Console server users" on page -14
- ◆ "Authorization for Console server users" on page -14
- ◆ "Enhanced VMware support" on page -15
- ◆ "Support for the IPv6 protocol" on page -17
- ◆ "Changes to the Client Backup Configuration Wizard" on page -18
- ◆ "Directed recovery of save sets" on page -19
- ◆ "Bootstrap report is sent to the default email account" on page -19
- ◆ "Script-less command line improvements for cloning" on page -20
- ◆ "Virtual tape to physical tape (Path-to-Tape) support with NDMP cloning" on page -20
- ◆ "Backing up renamed directories" on page -21
- ◆ "Improvements to the scanner command" on page -21
- ◆ "JRE is no longer packaged with the Sun StorageTek EBS software" on page -22
- ◆ "JRE version 1.6 is required to run NMC on Windows with IPv6" on page -22
- ◆ "Parallelism for backup groups" on page -22
- ◆ "Enhanced savegroup logging and log viewing" on page -22

- ◆ “httpd replaces gstdclsh as web server process for NMC” on page -23
- ◆ “Support for OS Implemented Device Persistent Naming” on page -24
- ◆ “DXUL Save function removed” on page -24
- ◆ “Solaris 8 platform no longer supported” on page -24
- ◆ “Message changes may impact custom scripts” on page -24

### Update enabler code for updating from Sun StorageTek EBS releases prior to 7.5

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

#### IMPORTANT

**Be sure to apply and authorize the update enabler *before* upgrading to Sun StorageTek EBS release 7.5. Contact EMC licensing to get the upgrade enabler permanently authorized.**

### License expiration alerts

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

#### **Changed in Sun StorageTek EBS 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 backups

Sun StorageTek EBS release 7.5 introduces support for probe-based backups, which can be set up from the **Configuration** tab of the **Sun StorageTek EBS Administration** window. Probe-based backups allow for backups to be driven by an event, rather than the current Sun StorageTek EBS 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 Sun StorageTek EBS administrators or Sun StorageTek EBS database modules. More information on creating probe-based backups is provided in the *Sun StorageTek EBS Release 7.5 Administration Guide*.

## License conformance summary report

In the course of using the Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS release 7.5

Sun StorageTek EBS release 7.5 does not support the TruCluster environment.

## Lockbox password management

The Sun StorageTek EBS server provides Sun StorageTek EBS 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 **Sun StorageTek EBS Administration** window.

## 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 Sun StorageTek EBS 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

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

### New in Sun StorageTek EBS 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 Sun StorageTek EBS server to enable privileges on the Sun StorageTek EBS server.

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

## Authorization for Console server users

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

### New in Sun StorageTek EBS 7.5

A third user role, Console Security Administrator, has been added. The three Console server user roles are described in [Table 4-2 on page -15](#). 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 *Sun StorageTek EBS Administration Guide*.

**Table 4-2 Console user roles**

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

## Enhanced VMware support

Support for VMware has been significantly enhanced with the features described in this section. More information about using VMware is provided in the Support for VMware chapter in the *Sun StorageTek EBS Administration Guide*.

### New in Sun StorageTek EBS 7.5: automatic discovery of VMware environments

The Sun StorageTek EBS 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.

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

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### **New in Sun StorageTek EBS 7.5: visual representation of VMware environments**

After performing auto-discovery of VMware environments, the Sun StorageTek EBS 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 Sun StorageTek EBS client is created using the **New** dialog instead of the Client Configuration Wizard.
- ◆ The Sun StorageTek EBS 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 Sun StorageTek EBS 7.5: notification of new virtual machines**

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

### **New in Sun StorageTek EBS 7.5: support for traditional file system backups and VMware Consolidated Backups**

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

### **New in Sun StorageTek EBS 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.

### **New in Sun StorageTek EBS 7.5: support for VMotion and Dynamic Resource Scheduling**

VMotion and Dynamic Resource Scheduling (DRS) are supported for Sun StorageTek EBS servers, storage nodes, and clients.

### **Installation of Sun StorageTek EBS Server or Storage Node in a virtual system**

Installation of the Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS.

### New in Sun StorageTek EBS 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

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

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

### Additional IPv6 resources

More information on IPv6, as well as supported Sun StorageTek EBS client/server configurations, is provided in the *Sun StorageTek EBS 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](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 Sun StorageTek EBS 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 Sun StorageTek EBS 7.5

The Client Backup Configuration Wizard is now fully integrated with the Sun StorageTek EBS 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 Sun StorageTek EBS packages installed. Note that the Sun StorageTek EBS 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 Sun StorageTek EBS client being configured. However, direct communication is required between the NMC server and the Sun StorageTek EBS client that is being configured.

- ◆ The host no longer requires authorization with an entry in the Sun StorageTek EBS 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 Sun StorageTek EBS server and client privileges can perform client configuration.

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**Note:** The Client Configuration Wizard cannot be used to configure a Sun StorageTek EBS NDMP client or a Sun StorageTek EBS client for NetWare.

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

### Directed recovery of save sets

Directed save set recoveries were not supported in Sun StorageTek EBS.

#### **New in Sun StorageTek EBS 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 *Sun StorageTek EBS Administration Guide*.

### Bootstrap report is sent to the default email account

The Sun StorageTek EBS server bootstrap report was sent to a printer.

#### **New in Sun StorageTek EBS 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 Sun StorageTek EBS 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 *Sun StorageTek EBS 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 Sun StorageTek EBS 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 saveset, if required.

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

## Virtual tape to physical tape (Path-to-Tape) support with NDMP cloning

The Path-to-Tape feature on VTL (Virtual Tape Library) appliances was not supported.

### New in Sun StorageTek EBS 7.5

Using NDMP cloning, the savesets from the VTL on a DL3D 1500 or 3000 appliance can be directly moved to the physical tape library, which is attached to it. This process frees up network bandwidth. The backup process manages the data movement and catalogs the physical tape copy with a new media ID. Sun StorageTek EBS can also directly restore both the virtual tape data and the physical tape copy.

For more information, refer to the NDMP cloning section in the chapter titled Sun StorageTek EBS Server Support for NDMP in the *Sun StorageTek EBS Administration Guide*.

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**Note:** This feature is available with DL3D models 1500 and 3000 at version 1.1 or higher.

---

## 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS server section in the chapter titled Recovering Data in the *Sun StorageTek EBS Administration Guide*.

### JRE is no longer packaged with the Sun StorageTek EBS 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 Sun StorageTek EBS installation if it was not detected on the system.

### New in Sun StorageTek EBS 7.5

The JRE version 1.6 or 1.5 is required to access the Sun StorageTek EBS Management Console. JRE version 1.4.2 and earlier are not supported with Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS in a Windows environment with IPv6, JRE version 1.6 is required for running NMC. 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 saveset parallelism for a backup group.

#### **New in Sun StorageTek EBS 7.5**

In the backup group resource, you can specify the maximum number of savesets 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, Sun StorageTek

`EBS_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 Sun StorageTek EBS 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, Sun StorageTek `EBS_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 Sun StorageTek EBS 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 Sun StorageTek EBS server. For more information, refer to the chapter titled Sun StorageTek EBS Server Management in the *Sun StorageTek EBS 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 gstclsh as web server process for NMC**

The Sun StorageTek EBS Management Console web server process was named gstclsh.

#### **New in Sun StorageTek EBS 7.5**

The Sun StorageTek EBS Management Console for Sun StorageTek EBS release 7.5 uses httpd as the web server process instead of gstclsh.

On Windows, httpd is registered as the 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 Sun StorageTek EBS 7.5

Sun StorageTek EBS 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 Sun StorageTek EBS environment variables in a Sun cluster

In a Sun Cluster environment, the Sun StorageTek EBS.start script is used instead of the /etc/init.d/networker script to start the **nsrd** process. Sun StorageTek EBS 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 Sun StorageTek EBS. Due to a conflict with the DXUL library, DXUL backup awareness can no longer be enabled. DXUL recovery awareness is still supported.

Sun StorageTek EBS 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 Sun StorageTek EBS software no longer supports the Solaris 8 OS platform.

## Message changes may impact custom scripts

If you have custom scripts that take Sun StorageTek EBS 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 Sun StorageTek EBS releases:

- ◆ [“Product issue details in Issue Tracker” on page -25](#)
- ◆ [“Fixed bugs in release 7.5” on page -26](#)

### **Product issue details in Issue Tracker**

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, 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.

**Note:** The most up-to-date product issues for Sun StorageTek EBS 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

Table 4-3 on page -26 lists customer reported defects resolved in release 7.5.

**Table 4-3 Fixed bugs in Sun StorageTek EBS release 7.5**

Issue number for Customer Service	Issue number	Description
LGTsc13842	13842nw_c	Bootstrap report is sent to the default email account.
LGTsc19551	19551nw_c	<b>nsrmon</b> locks the daemon.raw file and causes nsrd to hang.
LGTsc19552	19552nw_c	<b>gstd</b> crashes, faulting module gstnsm.dll.
LGTsc19943	19943nw_c	Mutex operation is unable to complete on nsrexecd and nsrd.
LGTsc20077	20077nw_c	<b>nsrd</b> memory and handlers increase and eventually cause Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 <b>nsrexecd.exe</b> service terminates unexpectedly.
LGTsc16770	16770nw_c	<b>nsrim -X</b> is deleting index entries for a particular client.
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	Sun StorageTek EBS is not resolving the alias for RSN as it does for SN.

Table 4-3 Fixed bugs in Sun StorageTek EBS release 7.5

Issue number for Customer Service	Issue number	Description
LGTsc17645	17645nw_c	Save.exe faults during a DFS Backup.
LGTsc17694	17694nw_c	<b>nsrwatch</b> does not display messages in Pending: section.
LGTsc17749	17749nw_c	VSS backup fails with "0x800704d0" ERROR.
LGTsc18053	18053nw_c	<b>mminfo</b> query for multiple barcodes causes a core dump.
LGTsc18996	18996nw_c	<b>Nsrmmgd</b> core dumps during processing of a partial lcp update from a load operation.
LGTsc19163	19163nw_c	<b>Mmgd</b> 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 <b>nsrlcpd</b> core occurs when allocating media.
LGTsc19892	19892nw_c	<b>nsrjobd</b> hangs in thread while in debug mode.
LGTsc20106	20106nw_c	gstclreport '-a Number of Files' does not work.
LGTsc20344	20344nw_c	<b>recover -u</b> 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 <b>nsrjobd</b> 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	Sun StorageTek EBS does not handle the drive empty error properly.
LGTsc15537	15537nw_c	<b>Nsrlcpd</b> 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	<b>Mminfo</b> 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	Sun StorageTek EBS 7.3 SP4 sporadically returns "media emergency" reports

Table 4-3 Fixed bugs in Sun StorageTek EBS release 7.5

Issue number for Customer Service	Issue number	Description
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	Sun StorageTek EBS does not report unlink failure on AFTD.
LGTsc19409	19409nw_c	<b>Nsrmmdbd</b> cores at startup.
LGTsc19846	19846nw_c	Savenpc ignoring tmp files.
LGTsc20091	20091nw_c	Misleading error message.
LGTsc20094	20094nw_c	<b>nsrjobd</b> leaking list element and duplicating list records.
LGTsc19849	19849nw_c	<b>Nsrmmgd</b> is dumping core.
LGTsc11577	11577nw_c	Sun StorageTek EBS to support more than 250 drives for DAS Silos.
LGTsc16254	16254nw_c	NDMP cloning of Sun StorageTek EBS save stream.
LGTpa43965	43965nw_c	Support keyboard shortcuts.
LGTpa78064	78064nw_c	Efficient way to backup lastlog file in Linux.
LGTsc09460	09460nw_c	Sun StorageTek EBS 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 Sun StorageTek EBS 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.

**Table 4-3 Fixed bugs in Sun StorageTek EBS release 7.5**

Issue number for Customer Service	Issue number	Description
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 Sun StorageTek EBS 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.
LGTsc17572	17572nw_c	Core changes to support dedupe in Sun StorageTek EBS 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	While trying to generate a backup report for backups completed in the past "1 day", the value "1 day" is switched to an actual date.
LGTsc19002	19002nw_c	Auto Discovery Configuration Dialog.
LGTsc19240	19240nw_c	LGTOclnt packaging should depend/warn on missing SUNWcry.

Table 4-3 Fixed bugs in Sun StorageTek EBS release 7.5

Issue number for Customer Service	Issue number	Description
LGTsc19248	19248nw_c	VMware Auto-Discovery.
LGTsc19373	19373nw_c	Add de-duplication 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 Sun StorageTek EBS 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 <b>nsrclone -J</b> does not enforce the read host selection.
LGTsc21031	21031nw_c	<b>Nsrlicpd</b> 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.
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 <b>nsrmmgd</b> core dump.
LGTsc21736	21736nw_c	The <b>nsrlicpd</b> process does not start due to slot tag corruption.
LGTsc21786	21786nw_c	Sun StorageTek EBS Fast Start License is not interoperable with DDS, so when a DDS license is entered the jukebox license becomes disabled.
LGTsc21825	21825nw_c	Sun StorageTek EBS 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	Sun StorageTek EBS daemons report their version information.

**Table 4-3 Fixed bugs in Sun StorageTek EBS release 7.5**

Issue number for Customer Service	Issue number	Description
LGTsc17245	17245nw_c	2nd phase formatting fixes for Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS server

[Table 4-5 on page -32](#) outlines the following:

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

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

**Table 4-4 Minimum system requirements for a dedicated Sun StorageTek EBS server**

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

**Table 4-5 Minimum system requirements for a dedicated Sun StorageTek EBS server**

	Minimum recommended configuration		
Kernel parameters	The following plimit values for all Sun StorageTek EBS 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 Sun StorageTek EBS 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 *Sun StorageTek EBS 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 Sun StorageTek EBS Console

After the Sun StorageTek EBS 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 Sun StorageTek EBS console will fail to launch.



### Workaround

Remove the Sun StorageTek EBS 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 **Sun StorageTek EBS 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**.

---

### 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 Sun StorageTek EBS 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](http://java.sun.com) for details.

---

### Write access to temp folders required when using the Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS on HP-UX RISC

The Sun StorageTek EBS services cannot be started on an HP-UX RISC 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 4-6 on page -35](#) lists the features that are available as part of Sun StorageTek EBS base enablers.

**Table 4-6 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 Sun StorageTek EBS server	64	32	32	32
Parallel datastreams per storage node <sup>a</sup>	64	32	N/A	N/A
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 <sup>b</sup>	512 <sup>c</sup>	4	4

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

b.Available in Sun StorageTek EBS 7.2.x and later. For Sun StorageTek EBS 7.1.x the maximum is 256.

c.Available in Sun StorageTek EBS 7.2.x and later. For Sun StorageTek EBS 7.1.x the maximum is 256.

## Additional features available with base enablers

[Table 4-7 on page -35](#) lists the features that are available for support with Sun StorageTek EBS base enablers.

**Table 4-7 Additional features available with base enablers (Sheet 1 of 2)**

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 <sup>a</sup> for heterogeneous environments	Yes	Yes	Yes	Yes
Sun StorageTek EBS NDMP Client Connections	Yes	Yes	No	Maximum 2 NDMP client connections

**Table 4-7 Additional features available with base enablers (Sheet 2 of 2)**

Feature	Support by edition			
	Power	Network	Workgroup	Business
Dynamic Drive Sharing Option	Yes	Yes	N/A	N/A
Sun StorageTek EBS DiskBackup Option	Yes	Yes	Yes	Yes
Sun StorageTek EBS 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
Sun StorageTek EBS Application Modules	Yes	Yes	Yes	Yes
Sun StorageTek EBS Windows Server 2003 Open File Option	Yes	Yes	Yes	Yes
Open File Manager	Yes	Yes	Yes	Yes
Sun StorageTek EBS PowerSnap Modules	Yes	Yes	No	No
Sun StorageTek EBS 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 Sun StorageTek EBS 7.4.1 and later.

## Known problems and limitations

This section describes known limitations found in the entire Sun StorageTek EBS family of releases:

- ◆ [“Problems and limitations discovered in release 7.5” on page -37](#)
- ◆ [“Problems and limitations discovered in releases previous to 7.5” on page -55](#)
- ◆ [“Problems and limitations discovered in releases previous to 7.4” on page -102](#)

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

## Problems and limitations discovered in release 7.5

Table 4-9 on page -55 identifies problem issues and limitations discovered in Sun StorageTek EBS release 7.5.

**Table 4-8 Limitations discovered in Sun StorageTek EBS release 7.5 (Sheet 1 of 4)**

Defect number	Issue Tracker Issue number	Description of limitation
"LGTsc24327, Sun Bug ID 6787141" on page -40	24327nw	Cannot switch back to native authentication mode in Management Console
"LGTsc24103" on page -40	24103nw	AES Encryption Recovery Fails On HP-UX Itanium 64.
"LGTsc23661" on page -41	23661nw	Monitor activity status displays failure after updating using software distribution, even if update was successful.
"LGTsc23484" on page -41	23484nw	Media label verification may fail in NDMP drive of DDS configuration.
"LGTsc22595" on page -41	22595nw	VCB image-level backup cannot be recovered in <b>Winworkr</b> GUI after file system backup is performed.
"LGTsc21704" on page -41	21704nw	Authentication error displays when Sun StorageTek EBS connecting to client.
"LGTsc21575" on page -42	21575nw	NMC GUI hangs when terminating "Operation in progress" window.
"LGTsc15759" on page -42	15759nw	Memory leak occurs during group backup and recover on SuSE version 10.
"LGTsc24368" on page -42	24368nw	Upgrading from a localized platform that had Sun StorageTek EBS language packs installed will display partial localized text.
"LGTsc24110" on page -42	24110nw	Language pack install option still appears on Tru64 but is no longer supported.
"LGTsc24076" on page -43	24076nw	New client's global attributes do not inherit existing client values after upgrading NMC.

Table 4-8 Limitations discovered in Sun StorageTek EBS release 7.5 (Sheet 2 of 4)

Defect number	Issue Tracker Issue number	Description of limitation
<a href="#">“LGTsc24019” on page -43</a>	24019nw	<b>dbgcommand</b> does not work on Windows Vista or Windows 2008.
<a href="#">“LGTsc23645” on page -43</a>	23645nw	<b>dbgcommand</b> does not work on Windows when logged in through remote desktop connection.
<a href="#">“LGTsc23961” on page -43</a>	23961nw	Save/NMO backups fail if <b>nsrauth</b> only authentication used for non-root user on HP-UX 11i v3.
<a href="#">“LGTsc23714” on page -44</a>	23714nw	<b>Savegroup</b> initiated with “@” symbol at beginning of name does not trigger desired group.
<a href="#">“LGTsc23366” on page -44</a>	23366nw	Sun StorageTek EBS attempts to back up NFS4 file systems.
<a href="#">“LGTsc22735” on page -44</a>	22735nw	<b>mminfo</b> query ignores “!” on non-boolean fields.
<a href="#">“LGTsc13785” on page -44</a>	13785nw	Quantum PX500 series jukebox cannot be configured on multiple hosts.
<a href="#">“LGTsc23049” on page -44</a>	23049nw	Slow shutdown time on Mac OS X if IPv6 is enabled.
<a href="#">“LGTsc22164” on page -45</a>	22164nw	Software distribution feature cannot be used to perform upgrade on some platforms
<a href="#">“LGTsc23081” on page -45</a>	23081nw	Sun StorageTek EBS Console unable to generate reports in pure IPv6 environment
<a href="#">“LGTsc20179” on page -45</a>	20179nw	Optimizing DNS lookups on IPv4-only AIX machines
<a href="#">“LGTsc22013” on page -46</a>	22013nw	Sun StorageTek EBS requires an ipnodes entry in /etc/nsswitch.conf on HP-UX
<a href="#">“LGTsc21253” on page -46</a>	21253nw	<b>nsrjobd</b> may consume large amount of memory depending on backup environment
<a href="#">“LGTsc12672” on page -47</a>	12672nw	<b>nsrck -L7 -t</b> must be performed with additional steps in order to recover client index with save sets passed browse period.
<a href="#">“LGTsc10723” on page -47</a>	10723nw	AFTD direct file recover option may yield incomplete volume information
<a href="#">“LGTsc20723” on page -48</a>	20723nw	<b>Ctime</b> attribute not modified on AIX version 5.3 and later, Mac OS X version 10.4 and later.

**Table 4-8      Limitations discovered in Sun StorageTek EBS release 7.5 (Sheet 3 of 4)**

<b>Defect number</b>	<b>Issue Tracker Issue number</b>	<b>Description of limitation</b>
<a href="#">"LGTsc19690" on page -48</a>	19690nw	Sun StorageTek EBS programs may experience delays on SuSE Linux Enterprise Server version 9.x using IPv6.
<a href="#">"LGTsc18543" on page -49</a>	18543nw	Relabeling volume after deleting remote client resource does not purge file index.
<a href="#">"LGTsc18350" on page -49</a>	18350nw	Console server cannot be installed on Solaris server if running only LDAPS without native Sun StorageTek EBS user authentication.
<a href="#">"LGTsc17805" on page -49</a>	17805nw	Sun StorageTek EBS installation directory path longer than 160 characters returns error, but installation still completes successfully.
<a href="#">"LGTsc17588" on page -50</a>	17588nw	Log data may not be written when recovering a de-duplication node
<a href="#">"LGTsc11811" on page -50</a>	11811nw	Do not perform client backups using temporary IPv6 addresses.
<a href="#">"LGTsc15176" on page -50</a>	15176nw	VCB backup of multiple virtual machines simultaneously may fail.
<a href="#">"LGTsc14761" on page -50</a>	14761nw	Connecting to web server through IPv6 fails using Internet Explorer 6.
<a href="#">"LGTsc14530" on page -51</a>	14530nw	VCB fails with custom pre-freeze script error.
<a href="#">"LGTsc14319" on page -51</a>	14319nw	SSL key length limitation on Solaris AMD64.
<a href="#">"LGTsc12407" on page -51</a>	12407nw	Cannot recover data using an Isilon NAS Filer and a DAR backup.
<a href="#">"LGTsc12061" on page -51</a>	12061nw	Cannot dismiss events in the events table until the event is resolved.
<a href="#">"LGTsc11447" on page -51</a>	11447nw	Hosts file entries for IPv6 must contain localhost before aliases.
<a href="#">"LGTsc11274" on page -52</a>	11274nw	Backup fails when save set list has a very large number of save sets defined.
<a href="#">"LGTsc09692" on page -52</a>	09692nw	Out-of-date output files in the savegroup completion report are not automatically deleted.
<a href="#">"LGTsc09460" on page -52</a>	09460nw	Troubleshooting connection issues between the server and storage node.

Table 4-8 Limitations discovered in Sun StorageTek EBS release 7.5 (Sheet 4 of 4)

Defect number	Issue Tracker Issue number	Description of limitation
<a href="#">"LGTsc07321" on page -53</a>	07321nw	Inquire command does not detect tape drive on HP-UX.
<a href="#">"LGTsc08415" on page -53</a>	08415nw	A user cannot be a member of more than 512 groups.
<a href="#">"LGTsc21070" on page -53</a>	21070nw	Save jobs may terminate prematurely or later than desired if Sun StorageTek EBS server and clients time settings differ
<a href="#">"LGTsc24548" on page -54</a>	24548nw	Slow performance on Solaris 10 because asynchronous I/O is disabled
<a href="#">"LGTsc07111" on page -54</a>	07111nw	Solaris 9 users who upgrade from Sun StorageTek EBS 7.2.x may notice errors during cloning operations
<a href="#">"LGTsc24483" on page -55</a>	24483nw	Low system memory may cause unpredictable results

### Cannot switch back to native authentication mode in Management Console

#### LGTsc24327, Sun Bug ID 6787141

The Sun StorageTek EBS release 7.5 Management Console does not allow switching from external authentication to native authentication.

#### Workaround

If you need to switch to native mode authentication, perform the following:

1. Shut down the Console server
2. Delete the files `<Console install dir>/cst/csp.clb`, `<Console install dir>/cst/csp.clb.bak` and `<Console install dir>/cst/Config.xml`.
3. Copy the `<Console install dir>/cst/Config.xml.template` to `<Console install dir>/cst/Config.xml`.
4. Restart the Console server.

### AES Encryption Recovery Fails On HP-UX Itanium 64

#### 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.

**Monitor activity status displays failure after updating using software distribution, even if update was successful****LGTsc23661**

After updating the Sun StorageTek EBS 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**.
2. Click the **Version** tab to ensure the version is 7.5.

**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".

**VCB image-level backup cannot be recovered in Winworkr GUI after file system backup is performed****LGTsc22595**

On a virtual machine running Linux or Solaris, a VCB image-level backup cannot be recovered in the Sun StorageTek EBS 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 FULLVM> -d
    <relocation path>
```

**Authentication error displays when Sun StorageTek EBS connecting to client****LGTsc21704**

When trying to connect to a client to browse the client's file system, Sun StorageTek EBS 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.

### **NMC GUI hangs when closing "Operation in progress" window**

#### **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.

### **Memory leak occurs during group backup and recover on SuSE version 10**

#### **LGTsc15759**

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

### **Upgrading from a localized platform that had Sun StorageTek EBS language packs installed will display partial localized text**

#### **LGTsc24368**

Sun StorageTek EBS release 7.5 is not a localized release. However, if you upgrade to Sun StorageTek EBS release 7.5 from a previous version of Sun StorageTek EBS that had language packs installed on a localized host, you will see a mix of localized and non-localized text in the Sun StorageTek EBS interface. The new screen text in the interface will not be localized. Additionally, you may not be able to view help screens on some of the new features.

### **Language pack install option still appears on Tru64 but is no longer supported**

#### **LGTsc24110**

During installation of the Sun StorageTek EBS software on Tru64, the option to install language packs still appears, even though support for language packs on Tru64 was removed. If you select any language packs to install, you can still continue with the installation, however, error messages will display and the language packs will not be installed.

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

### LG Tsc24076

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 Sun StorageTek EBS 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 Sun StorageTek EBS 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**.

## dbgcommand does not work on Windows Vista or Windows 2008

### LG Tsc24019

Running **dbgcommand** does not work on a Windows Vista or Windows 2008 Server platform.

## dbgcommand does not work on Windows when logged in through remote desktop connection

### LG Tsc23645

Running **dbgcommand** does not work on a Windows platform when you log in to a Console session through a remote desktop connection.

### Workaround

Use Console mode logins when using **dbgcommand** with Windows platforms.

## Save/NMO backups fail if nsrauth only authentication used for non-root user on HP-UX 11i v3

### LG Tsc23961

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.

## 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.

## Sun StorageTek EBS attempts to back up NFS4 file systems

### LGTsc23366

The Sun StorageTek EBS software handles NFS4 file systems the same as local file systems and attempts to back up the NFS4 file systems

## 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 savesets for the specified client.

## 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 Sun StorageTek EBS 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".

## Slow shutdown time on Mac OS X if IPv6 is enabled

### LGTsc23049

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

```
ip6 -x
```

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

### LGTsc22164

You cannot perform a Sun StorageTek EBS upgrade using the software distribution feature on the linux\_ia64, linux\_ppc64, and solaris\_amd64 client platforms.

## Sun StorageTek EBS Console unable to generate reports in pure IPv6 environment

### LGTsc23081

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

## 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 Sun StorageTek EBS software relies on AIX for resolving address information, Sun StorageTek EBS 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 Sun StorageTek EBS services do not attempt to lookup IPv6 addresses against DNS.

Ensure that your AIX hosts use local name resolution ordering. The recommended 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**

### Sun StorageTek EBS requires an ipnodes entry in /etc/nsswitch.conf on HP-UX

#### LGTsc22013

Sun StorageTek EBS 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
```

### nsrjobd may consume large amount of memory depending on backup environment

#### LGTsc21253

The **nsrjobd** daemon runs on the Sun StorageTek EBS server and is responsible for monitoring Sun StorageTek EBS 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.

**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 the 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.

**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
```

## 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 Sun StorageTek EBS 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.

## Sun StorageTek EBS programs may experience delays on SuSE Linux Enterprise Server version 9.x using IPv6

### LGTsc19690

Sun StorageTek EBS 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 Sun StorageTek EBS client. The following example shows how an entry in the /etc/hosts file might appear:

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

**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.

**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 Sun StorageTek EBS 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.

**Sun StorageTek EBS installation directory path longer than 160 characters returns error, but installation still completes successfully****LGTsc17805**

In Windows 2003, when a Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS is 160 characters.

## Log data may not be written when recovering a de-duplication node

### **LGTsc17588**

When recovering data from a de-duplication 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, de-duplication recovery log data will not be created.

## 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.

## Do not perform client backups using temporary IPv6 addresses

### **LGTsc11811**

Temporary or randomly generated IPv6 TCP/IP addresses are not supported in Sun StorageTek EBS. 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, Sun StorageTek EBS 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 the Internet Explorer 7 web browser. This problem does not occur when using IE7.

## 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

### **LGTsc14319**

The default OpenSSL library on the Solaris operating system for AMD 64 does not support key lengths greater than 128 bits.

### **Workaround**

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.

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

### **LGTsc12407**

Recovery operations fail when a Sun StorageTek EBS DAR backup is performed with an Isilon NAS Filer.

### **Workaround**

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

## 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.

## 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 the alias was "loopback", the entry for this 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 *Sun StorageTek EBS 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.

## 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 Sun StorageTek EBS **nsrd** process loops when trying to connect to **nsrmmgd** on the Sun StorageTek EBS server. Because the Sun StorageTek EBS **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 Sun StorageTek EBS 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 Sun StorageTek EBS Portmapper **nsrrpc**, add its port number to the services file.

## 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.

## 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 Sun StorageTek EBS. 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
```

## Save jobs may terminate prematurely or later than desired if Sun StorageTek EBS 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 Sun StorageTek EBS server and clients. [“A backup might fail if the system clocks for the Sun StorageTek EBS server and client differ more than the default of one day or the user specified interval” on page -76](#) provides more information on synchronizing clock times between hosts.

## 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.

## Solaris 9 users who upgrade from Sun StorageTek EBS 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. Shutdown Sun StorageTek EBS
2. Set the **DISABLE\_SOL\_ASYNC\_IO** environment variable in the Sun StorageTek EBS startup script. The default location of the startup script is /etc/init.d/networker.
3. Re-start Sun StorageTek EBS using the Sun StorageTek EBS startup script

---

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

---

## Low system memory may cause unpredictable results

### LGTsc24483

If your Sun StorageTek EBS server runs low on system memory, unpredictable behavior could result. [“Environment and system requirements” on page -31](#) has information on minimum recommended system requirements.

## Problems and limitations discovered in releases previous to 7.5

[Table 4-9 on page -55](#) identifies problem issues and limitations discovered previously to Sun StorageTek EBS release 7.5.

**Table 4-9 Limitations discovered in Sun StorageTek EBS releases previous to 7.5 (Sheet 1 of 8)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">“LGTsc19401” on page -62</a>	19401nw	Removable Storage Manager (RSM) not supported.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTsc19241” on page -63</a>	19241nw	For Microsoft Windows Server 2008 raw devices are not saved under the virtual client's index	Microsoft Windows
<a href="#">“LGTsc19916” on page -63</a>	19916nw	The contents of the /opt, /var, /etc directories are not excluded when the -B option is used.	Linux, Microsoft Windows, and Solaris
<a href="#">“LGTsc19557” on page -64</a>	19557nw	For Microsoft Windows 2000, the Support Tools must be installed in order to run the HomeBase Agent installation script	Microsoft Windows
<a href="#">“LGTsc20558” on page -64</a>	20558nw	After a BMR recovery operation the root password might change.	Linux, Microsoft Windows, and Solaris
<a href="#">“LGTsc20557” on page -65</a>	20557nw	The Homebase Agent is not supported in a Cluster environment.	Linux, Microsoft Windows, and Solaris
<a href="#">“LGTsc20517” on page -65</a>	20517nw	For each Sun StorageTek EBS client that is BMR enabled, set the save set attribute in the client resource to ALL.	Linux, Microsoft Windows and Solaris
<a href="#">“LGTsc16423” on page -65</a>	16423nw	nsrbmr does not give proper error messages under certain conditions.	Linux, Microsoft Windows and Solaris

**Table 4-9 Limitations discovered in Sun StorageTek EBS releases previous to 7.5  
(Sheet 2 of 8)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">"LGTsc19916" on page -66</a>	19916nw	Extended profile not included in file system recover when using recover -B option.	Solaris
<a href="#">"LGTsc19682" on page -66</a>	19682nw	mcclimcs.xml files not updated when using change-passwords utility to modify password for MCUser.	Microsoft Windows
<a href="#">"LGTsc19676" on page -66</a>	19676nw	Broker connects to first available storage node if no device or mmd available on first host.	Solaris
<a href="#">"LGTsc18397" on page -67</a>	18397nw	Cannot set nsrdir parameter for virtual server using remote Microsoft Management Console (MMC).	Microsoft Windows
<a href="#">"LGTsc17737" on page -67</a>	17737nw	Error message does not display for annotations with similar characters at end.	Microsoft Windows
<a href="#">"LGTsc09483" on page -68</a>	09483nw	Not all save sets listed after running mminfo command with dedupe option.	Solaris
<a href="#">"LGTsc19514" on page -68</a>	19514nw	Delay in cancelling savegroups in NMC for BMR enabled clients.	Linux, Microsoft Windows, and Solaris
<a href="#">"LGTsc19513" on page -68</a>	19513nw	HomeBase installation files are automatically extracted during a Sun StorageTek EBS client install.	Linux, Microsoft Windows, and Solaris
<a href="#">"LGTsc19364" on page -69</a>	19364nw	Last-modified date changed for files recovered to Sun Cluster global file system.	Solaris
<a href="#">"LGTsc19388" on page -69</a>	19388nw	Sun StorageTek EBS and the HomeBase agent (BMR) licenses work independently.	Linux, Microsoft Windows, and Solaris
<a href="#">"LGTsc16831" on page -70</a>	16831nw	For Microsoft Windows, ensure that the HomeBase agent software installed in the same installation path as the Sun StorageTek EBS software.	Microsoft Windows
<a href="#">"LGTsc18023" on page -70</a>	18023nw	For UNIX, only install the Sun StorageTek EBS HomeBase agent software in the Sun StorageTek EBS default installation directory.	Linux and Solaris
<a href="#">"LGTsc18641" on page -71</a>	18641nw	Before restoring the base profile, manually edit the fields in the recovery-configuration.xml file.	Linux, Microsoft Windows, and Solaris
<a href="#">"LGTsc19402" on page -71</a>	19402nw	The -e <i>exclude file</i> option behaves differently for files and directories.	Linux, Microsoft Windows, and Solaris



**Table 4-9 Limitations discovered in Sun StorageTek EBS releases previous to 7.5  
(Sheet 3 of 8)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">"LGTsc20332" on page -72</a>	20332nw	Files and directories should be in specific order in exclude file.	Linux, Microsoft Windows, and Solaris
<a href="#">"LGTsc14945" on page -73</a>	14945nw	The recover -e exclude file option does not exclude any files if the directory is incorrectly specified in the exclude file.	Linux, Microsoft Windows, and Solaris
<a href="#">"LGTsc19084" on page -73</a>	19084nw	The recover -e <i>exclude file</i> option does not support NDMP file systems.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc19405" on page -74</a>	19405nw	No filename checks for remote clients when using the --e <i>exclude file</i> option with a directed recovery operation.	Linux, Microsoft Windows, and Solaris
<a href="#">"LGTsc18925" on page -74</a>	18925nw	Unable to launch the Sun StorageTek EBS Dashboard software with Sun StorageTek EBS Release 7.4 Service Pack 3.	Microsoft Windows
<a href="#">"LGTsc13933" on page -75</a>	13933nw	VSS system fileset backups fail on Windows Server 2008 Hyper-V role implementation.	Microsoft Windows
<a href="#">"LGTsc16575" on page -75</a>	16575nw	A backup might fail for CIFS shares on Microsoft Windows hosts.	Microsoft Windows
<a href="#">"LGTsc18589" on page -76</a>	18589nw	A backup might fail if the system clocks for the Sun StorageTek EBS server and client differ more than the default of one day or the user specified interval.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc17703" on page -77</a>	17703nw	How to back up a Sun StorageTek EBS Windows client that has multiple domains that are part of both an AD domain, and a DNS domain.	Microsoft Windows
<a href="#">"LGTsc10295" on page -78</a>	10295nw	De-dup recover sessions do not display in the NMC GUI.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTpa72839" on page -78</a>	72839nw	Sun StorageTek EBS support for Solaris 9 HBAs and drivers.	Solaris
<a href="#">"LGTsc14700" on page -79</a>	14700nw	Support for Windows Change Journal Manager with Microsoft Windows 2008.	Microsoft Windows
<a href="#">"LGTsc08756" on page -79</a>	08756nw	Text searched for in the Sun StorageTek EBS Console Help program does not get highlighted correctly if using JRE 1.5.x for Asian languages.	Solaris
<a href="#">"LGTsc10796" on page -79</a>	10796nw	Do not recover identical save sets with different ssids to the same target directory.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc15337" on page -80</a>	15337nw	Marking volumes as Recyclable might slow system performance.	Linux, UNIX, and Microsoft Windows

**Table 4-9 Limitations discovered in Sun StorageTek EBS releases previous to 7.5  
(Sheet 4 of 8)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">"LGTsc18716" on page -81</a>	18716nw	Deploying Sun StorageTek EBS with a Hyper-V Guest on Microsoft Windows Server 2008 is not supported.	Microsoft Windows
<a href="#">"LGTsc04870" on page -81</a>	04870nw	The <b>nsr_shutdown</b> command fails when a large number of savegroups are running.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc10292" on page -81</a>	10292nw	Incorrectly configured NPS role results in failed backup of VSS SYSTEM SERVICES of Windows Server 2008.	Microsoft Windows
<a href="#">"LGTsc11158" on page -81</a>	11158nw	Cannot create an advanced file-type device on a remote storage node device.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc11914" on page -82</a>	11914nw	Active Directory Lightweight Directory Services backup fails for Windows 2008 client.	Microsoft Windows
<a href="#">"LGTsc13139" on page -82</a>	13139nw	VMware Consolidated Backup not terminating completely.	Microsoft Windows
<a href="#">"LGTsc13141" on page -82</a>	13141nw	Save Operation attribute not functioning correctly with VMware Consolidated Backup.	Microsoft Windows
<a href="#">"LGTsc13799" on page -83</a>	13799nw	Antivirus programs block recovery.	Microsoft Windows
<a href="#">"LGTsc13933" on page -83</a>	13933nw	VSS system state backups may fail if programs were not cleanly uninstalled.	Microsoft Windows
<a href="#">"LGTsc14023" on page -84</a>	14023nw	Package requirement for Linux platforms.	Linux
<a href="#">"LGTsc14352" on page -84</a>	14352nw	Incorrect path suggested during <b>jbconfig</b> of ACSLS silo for HP Tru64.	HP Tru64
<a href="#">"LGTsc14577" on page -84</a>	14577nw	Sun StorageTek EBS interactive recover does not recover the registry and the com+ regdb writers.	Microsoft Windows
<a href="#">"LGTsc14872" on page -85</a>	14872nw	Global directives not supported with VMware Consolidated Backup.	Microsoft Windows
<a href="#">"LGTsc14930" on page -85</a>	14930nw	An uninstall that uses the Add/Remove Programs functionality in Windows does not function correctly with User Account Control enabled.	Microsoft Windows
<a href="#">"LGTsc14956" on page -85</a>	14956nw	Not all drives in a VCB file level backup are browsable.	Microsoft Windows
<a href="#">"LGTsc15061" on page -86</a>	15061nw	Savegroup completion report for VCB backups does not contain expected information about save sets.	Microsoft Windows

**Table 4-9 Limitations discovered in Sun StorageTek EBS releases previous to 7.5  
(Sheet 5 of 8)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">"LGTsc15157" on page -86</a>	15157nw	Microsoft Windows Server 2008 Registry System hive is not recovered correctly.	Microsoft Windows
<a href="#">"LGTsc15172" on page -86</a>	15172nw	Microsoft Windows Server 2008 COM+ Registry database is not recovered correctly.	Microsoft Windows
<a href="#">"LGTsc15236" on page -86</a>	15236nw	Incorrect error during recovery of VCB backups.	Microsoft Windows
<a href="#">"LGTsc15258" on page -87</a>	15258nw	Installation of Microsoft Windows Server 2008 does not grant correct permissions to nsr/tmp directory.	Microsoft Windows
<a href="#">"LGTsc15490" on page -87</a>	15490nw	Linux upgrade using <b>rpm -Uvh</b> not working correctly.	Linux
<a href="#">"LGTsc15782" on page -88</a>	15782nw	Cannot register a highly available Sun StorageTek EBS server in x64 MSCS environments.	Microsoft Windows
<a href="#">"LGTsc19665" on page -88</a>	19665nw	Replicated dedupe savesets are not deleted	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc12970" on page -88</a>	12970nw	Backups of /dev directory fail in HP-UX 11i v3 on PA_RISC and IA64.	UNIX
<a href="#">"LGTsc12500" on page -89</a>	12500nw	Sun StorageTek EBS release 7.4 SP1 must be installed using the --nodeps option on SuSE 8.	Linux
<a href="#">"LGTsc11618" on page -89</a>	11618nw	Restoring full VM image on ESX server fails.	Linux
<a href="#">"LGTsc10950" on page -89</a>	10950nw	VMware Consolidated Backup 1.0.x is not supported on Windows Server 2003, Enterprise Edition (x64) Service Pack 2.	Microsoft Windows
<a href="#">"LGTsc11734" on page -89</a>	11734nw	Unable to restore files encrypted with both Microsoft Windows Encrypting File System & AES encryption.	Microsoft Windows
<a href="#">"LGTsc08054" on page -90</a>	08054nw	Erroneous error message may be generated by Linux operating systems when performing an I/O to a volume.	Linux
<a href="#">"LGTsc10665" on page -90</a>	10665nw	Cannot view log files created with the <b>nsr_render_log</b> command.	UNIX, Microsoft Windows
<a href="#">"LGTpa94794" on page -90</a>	94794nw	The <b>nsrlcpd</b> process does not start for an ACSLS jukebox when DDS is implemented.	Linux, UNIX, and Microsoft Windows

**Table 4-9 Limitations discovered in Sun StorageTek EBS releases previous to 7.5  
(Sheet 6 of 8)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">"LGTsc06809" on page -91</a>	06809nw	Clients running pre-7.4 releases cannot use the <b>mminfo -N</b> command to query save set names longer than 255 bytes.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc06585" on page -91</a>	06585nw	Running the Linux 64 bit package with the 2.6.x kernel may result in crashes.	Linux
<a href="#">"LGTsc06312" on page -92</a>	06312nw	The <b>nsr_render_log</b> program doesn't accept input from STDIN.	UNIX
<a href="#">"LGTsc09257" on page -95</a>	09257nw	A user cannot be a member of more than 512 groups.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc08978" on page -95</a>	08978nw	New pdksh package required on SuSE 10 x86.	Linux
<a href="#">"LGTsc08958" on page -95</a>	08958nw	JRE version mismatch causes authentication failure, stops GSTD.	Linux
<a href="#">"LGTsc06577" on page -97</a>	06577nw	The <b>nwrecover</b> program might fail to launch on a Solaris Sparc V240 server.	UNIX
<a href="#">"LGTsc03478" on page -95</a>	03478nw	Incorrect error message reported when starting the Sun StorageTek EBS console on Red Hat 64-bit Enterprise Server 4.	UNIX
<a href="#">"LGTsc06288" on page -96</a>	06288nw	Error states you need to perform an uninstall when updating from Sun StorageTek EBS 7.2.2 32-bit to Sun StorageTek EBS 7.5 64-bit.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc06172" on page -96</a>	06172nw	Testing large number of groups in parallel causes core dumps.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc05990" on page -96</a>	05990nw	FSRM Disk Quota may not be restored to previous settings after recovery.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc06358" on page -99</a>	06358nw	Sun StorageTek EBS becomes unresponsive when attempting an invalid clone operation.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc01923" on page -101</a>	01923nw	Cannot query UNIX non-ASCII save sets in the Sun StorageTek EBS Management Console.	UNIX
<a href="#">"LGTsc02903" on page -99</a>	02903nw	Sun StorageTek EBS Management Console may become unresponsive when opened using Exceed.	UNIX and Linux
<a href="#">"LGTpa91475" on page -101</a>	91475nw	The <b>savepnpc</b> command fails if the precommand and post command contains any non-ASCII characters.	Linux, UNIX, and Microsoft Windows

**Table 4-9 Limitations discovered in Sun StorageTek EBS releases previous to 7.5  
(Sheet 7 of 8)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">"LGTsc00365" on page -100</a>	00365nw	On HP-UX the Sun StorageTek EBS Server window does not appear.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc01115" on page -101</a>	01115nw	Cannot copy and paste Japanese characters using the Sun StorageTek EBS Management Console.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTpa95162" on page -100</a>	95162nw	Newly created groups are not displayed by the Sun StorageTek EBS Console GUI after moving system date back in time.	Linux and UNIX
<a href="#">"LGTpa88188" on page -100</a>	88188nw	Scan for Devices configures all devices as a regular storage node device.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc00850" on page -109</a>	00850nw	Restrictions associated with the ZFS file system.	UNIX
<a href="#">"LGTsc01587" on page -109</a>	01587nw	Group details window is empty after upgrading from Sun StorageTek EBS release 7.2.2.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc01446" on page -99</a>	01446nw	The Virtual Jukebox attribute for a CDL virtual tape library is not automatically set after upgrading to release 7.4.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTpa96168" on page -99</a>	96168nw	Cannot launch Sun StorageTek EBS Console Help program on Solaris 10 with a JRE earlier than version 1.5.0_09.	UNIX
<a href="#">"LGTpa95406" on page -98</a>	95406nw	The <b>jbverify</b> command is not supported on Solaris 10.	UNIX
<a href="#">"LGTsc06325" on page -124</a>	06325nw	An ASR recovery might fail on Microsoft Windows 2003.	Microsoft Windows
<a href="#">"LGTpa93001" on page -125</a>	93001nw	Virtual tapes are listed as "full" after mounting.	Microsoft Windows
<a href="#">"LGTpa95900" on page -125</a>	95900nw	On NetApps files, filenames ending with special characters might be renamed.	Microsoft Windows
<a href="#">"LGTpa94966" on page -124</a>	94966nw	The <b>winworkr</b> program fails to retrieve successfully archived files if a slash (\) character was entered in the annotation string.	Microsoft Windows
<a href="#">"LGTpa95019" on page -126</a>	95019nw	When upgrading from release 7.3.1 the Virtual jukeboxes attribute will not be set correctly.	Microsoft Windows

**Table 4-9 Limitations discovered in Sun StorageTek EBS releases previous to 7.5  
(Sheet 8 of 8)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">"LGTpa83927" on page -127</a>	83927nw	Directed recover using the CLI fails with permission errors on Windows.	Microsoft Windows
<a href="#">"LGTsc00167" on page -126</a>	00167nw	The <b>winworkr</b> program will not relocate to a partition not existing on the initiating host if the Sun StorageTek EBS server is running release 7.4 and the client is running release 7.2.	Microsoft Windows
<a href="#">"LGTpa57158" on page -125</a>	57158nw	Current user locale is used With JRE 1.4.2 on Microsoft Windows.	Microsoft Windows
<a href="#">"LGTsc03894" on page -141</a>	03894nw	The garbled characters may appear in the Sun StorageTek EBS Console GUI on Solaris.	UNIX
<a href="#">"LGTpa88887" on page -141</a>	88887nw	Entering non-ASCII characters in Sun StorageTek EBS user interfaces.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc05339" on page -140</a>	05339nw	Recovering a large number of files may take longer in the French locales on Solaris.	UNIX
<a href="#">"LGTsc05879" on page -97</a>	05879nw	NMC version 3.4 and NWD version 1.0 cannot be installed on the same host.	Linux, UNIX, and Microsoft Windows
<a href="#">"LGTsc06280" on page -98</a>	06280nw	Inventory operation in Software Administration Wizard delays for unreachable clients.	UNIX
<a href="#">"LGTsc05166" on page -97</a>	05166nw	DiskXtender Data Manager file systems get archived on Sun StorageTek EBS.	Microsoft Windows
<a href="#">"LGTsc04862" on page -140</a>	04862nw	Mixed locales appear in Sun StorageTek EBS installation wizards on Windows.	Microsoft Windows
<a href="#">"LGTsc02814" on page -141</a>	02814nw	Problem with highlighted text in the Sun StorageTek EBS Console Help program after search using JRE 1.5.x in Japanese or Chinese Languages.	UNIX

## Removable Storage Manager (RSM) not supported

### LGTsc19401

The Sun StorageTek EBS software does not support RSM. You cannot use the Sun StorageTek EBS software to allocate one or more volumes in an RSM library.

## 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 Sun StorageTek EBS installation directory, for example:

```
c:\Program Files\Legato\nsr\bin
```

## 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.

### **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.

### **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 **riskkey**.
- ◆ 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

### The Homebase Agent is not supported in a Cluster environment

#### LGTsc20557

For Sun StorageTek EBS Release 7.5, the Homebase Agent is not supported in a Cluster environment.

### For each Sun StorageTek EBS 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 Sun StorageTek EBS data set, a recovery or migration of the source to the target system cannot be performed.

For each Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS installation files.

---

### 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.

### 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`

### 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.

### Cannot set `nsrdir` parameter for virtual server using remote Microsoft Management Console (MMC)

#### LGTsc18397

When configuring a virtual Sun StorageTek EBS server on Windows Server 2008 Core using a remote Microsoft Management Console (MMC), the `nsrdir` parameter for the Sun StorageTek EBS server service cannot be set because the service's Properties tab is not visible.

#### Workaround

It is necessary to register the Sun StorageTek EBS 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 Sun StorageTek EBS 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"`

---

### 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.

## 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 de-duplication, 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 de-duplicated save sets.

## 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.

## HomeBase installation files are automatically extracted during a Sun StorageTek EBS client install

### LGTsc19513

As part of the Sun StorageTek EBS client install, the HomeBase agent binary and setup files are always extracted to the standard location for all supported Sun StorageTek EBS 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:  
`\NWInstall\DIR\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.

## 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](http://bugs.opensolaris.org/bugdatabase/view_bug.do?bug_id=6540206)

## Sun StorageTek EBS and the HomeBase agent (BMR) licenses work independently

### LGTsc19388

The software licenses for the Sun StorageTek EBS 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 Sun StorageTek EBS server where the client is configured is *enabled*, the following occurs when a savegroup is run:

- ◆ The BMR profiling fails
- ◆ The Sun StorageTek EBS backup succeeds

**Example 2**

If the Bare Metal Recovery (BMR) license is *enabled* and the base enabler license for the Sun StorageTek EBS server where the client is configured is *disabled*, the following occurs when a savegroup is run:

- ◆ The BMR profiling succeeds
- ◆ The Sun StorageTek EBS backup fails

**For Microsoft Windows, ensure that the HomeBase agent software is installed in the same installation path as the Sun StorageTek EBS software**

**LGTsc16831**

For Microsoft Windows, ensure that the HomeBase agent software is installed in the same installation path as the Sun StorageTek EBS software.

It is not recommended to manually install the HomeBase agent software into a location that was not specified during the Sun StorageTek EBS 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 Sun StorageTek EBS software is installed under:

- ◆ *C:\Program Files\Legato* which is the default location for the Sun StorageTek EBS 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 Sun StorageTek EBS software, then the HomeBase agent software is installed under the following location: *C:\Legato\HomebaseAgent*

**For UNIX, only install the Sun StorageTek EBS HomeBase agent software in the Sun StorageTek EBS default installation directory**

**LGTsc18023**

On all UNIX platforms, ensure that the Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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.

---

**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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 `/'`:

`/?*`

### 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 saveset 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*
```

**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 Sun StorageTek EBS 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 Sun StorageTek EBS 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.

## Unable to launch the Sun StorageTek EBS Dashboard software with Sun StorageTek EBS installed

### LGTsc18925

If the Sun StorageTek EBS Dashboard software is installed on a computer with the Sun StorageTek EBS software already installed, the Sun StorageTek EBS 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</pa
  ram>
```

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.

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

### LGTsc13933

Sun StorageTek EBS 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_31bf3
856ad364e35_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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 saveset:
  - a. Edit the Client resource for the Sun StorageTek EBS 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 saveset from the command line. For example:

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

- Backup the CIFS shares:
  - a. Ensure that the Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS Windows client that has multiple domains that are part of both an AD domain, and a DNS domain

### LGTsc17703

To back up a Sun StorageTek EBS 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 Sun StorageTek EBS server's */etc/hosts* file.
- ◆ Define the AD domain, which is the Full Computer Name, in the Active Directory DNS. Also, on the Sun StorageTek EBS server, open the Client resource and add the Full Computer Name in the alias list.

## De-dup recover sessions do not appear in the NMC GUI

### LGTsc10295

De-dup recover sessions do not appear in the Monitoring window of the Sun StorageTek EBS Management Console. However, de-dup save sessions appear.

To view the Monitoring window:

1. From the **Administration** window, click **Monitoring**.
2. Click **Session**.

## Sun StorageTek EBS support for Solaris 9 HBAs and drivers

### LGTpa72839

In order to ensure correct Sun StorageTek EBS operation on Solaris 9 systems, the environment variable definition **USE\_LUS\_NO=YES** must be set.

Sun StorageTek EBS for Solaris uses the Solaris **cfgadm** utility to obtain device information. In environments where the **cfgadm** utility works correctly, the Sun StorageTek EBS software will work correctly. If the **cfgadm** utility does not see the devices, the Sun StorageTek EBS software will not see the devices.

### Workaround

To work around this issue:

1. Set this environment variable definition:

**USE\_LUS\_NO=YES**

This forces Sun StorageTek EBS to use the **cfgadm** utility.

2. Ensure that the **USE\_LUS\_NO=YES** environment variable is made available to:
  - The Sun StorageTek EBS daemons
  - Any command shell in which Sun StorageTek EBS CLI commands are run

---

**Note:** When **USE\_LUS\_NO** is set, do **not** run the **lus\_add\_fp\_devs.sh** script.

---

## 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.

## Text searched for in the Sun StorageTek EBS 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 Sun StorageTek EBS Console Help program, the search is completed but the keyword is not highlighted correctly.

## 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.

## 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
```



## Deploying Sun StorageTek EBS with a Hyper-V Guest on Microsoft Windows Server 2008 is not currently supported

### LGTsc18716

Deploying Sun StorageTek EBS with a Hyper-V Guest on Microsoft Windows Server 2008 is not currently supported.

## 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 Sun StorageTek EBS software. As a result, the backup of the VSS SYSTEM SERVICES fails.

The Microsoft defect number for this issue is 872233.

## Cannot create an advanced file-type device on a remote storage node device

### LGTsc11158

If the `nsrmmd` daemon has not started on the storage node, creation of an advanced file-type device (AFTD) on the storage node will fail because the `nsrmmd` 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.

## 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.

## Antivirus programs block recovery

### LG7sc13799

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, reenale the program's protection properties.

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

### LG7sc13933

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.

## 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.

## 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]
```

The correct path should be:

```
/usr/opt/networker/lib/libstlstk.so
```

#### Workaround

Identify the correct path for the STL library, rather than selecting the incorrect default path.

## Sun StorageTek EBS 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 Sun StorageTek EBS User program.

## 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.

## 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.

## 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 Sun StorageTek EBS 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.

### **Microsoft Windows Server 2008 and Windows Vista Registry System hive is not recovered correctly**

#### **LGTsc15157**

Sun StorageTek EBS System State restores on Windows Server 2008 and Windows Vista do not correctly recover the Registry System hive database.

### **Microsoft Windows Server 2008 and Windows Vista COM+ Registry database is not recovered correctly**

#### **LGTsc15172**

Sun StorageTek EBS System State restores on Windows Server 2008 and Windows Vista do not correctly recover the COM+ Registry database.

### **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 Sun StorageTek EBS User Program (winworkr).

#### Workaround

These error messages are incorrect and should be ignored.

### Installation of Microsoft Windows Server 2008 does not grant correct permissions to nsr\tmp directory

#### LGTsc15258

During installation of the Sun StorageTek EBS 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 Sun StorageTek EBS startup script, */etc/init.d/networker*, is not installed.

#### Workaround

To upgrade on Linux systems, use the following steps:

1. Uninstall Sun StorageTek EBS packages using **rpm -e**.
2. Install the new versions of Sun StorageTek EBS packages using **rpm -ivh**.

## Cannot register a highly available Sun StorageTek EBS server in x64 MSCS environments

### LGTsc15782

Runtime components of Visual C++ libraries are not included in the Sun StorageTek EBS installation. As a result, the Sun StorageTek EBS 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 Sun StorageTek EBS server can be registered as a highly available server.

## Replicated dedupe savesets are not deleted

### LGTsc19665

Sun StorageTek EBS 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 saveset creation operation, the snap is replicated to the secondary Avamar server. These snapups have infinite retention time.

When the Sun StorageTek EBS software deletes the dedupe saveset, 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.

### **Sun StorageTek EBS 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 Sun StorageTek EBS 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
```

### **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).

### **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.

### **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 Sun StorageTek EBS 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.

## 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 Sun StorageTek EBS releases, this warning from the kernel will stop.

## 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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.

### Running the Linux 64-bit package with the 2.6.x kernel may result in crashes

#### LGTsc06585

A compatibility issue with libc and pthreads 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.

## 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 -
```

## Limitations in Sun StorageTek EBS support for Novell's OES Linux

Limitations to support for Novell's OES Linux with Sun StorageTek EBS are as follows:

- ◆ [“Metadata modifier field not recovered” on page -92](#)
- ◆ [“Creating eDirectory backup files for Sun StorageTek EBS backup and recovery” on page -92](#)
- ◆ [“Creating GroupWise backup files for Sun StorageTek EBS backup and recovery” on page -93](#)

### 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 Sun StorageTek EBS software, it does not recover the metadata modifier field for NSS files or directories.

## Creating eDirectory backup files for Sun StorageTek EBS 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 Sun StorageTek EBS software, Sun StorageTek EBS does not recover eDirectory data as it was backed up.

### Workaround

Sun StorageTek EBS 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 Sun StorageTek EBS 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 savepnpc, 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 Sun StorageTek EBS 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 Sun StorageTek EBS software. The nds.log file contains messages for the successful creation or errors.

3. Using the Sun StorageTek EBS 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 Sun StorageTek EBS backup and recovery

When you perform backup and recovery using the Sun StorageTek EBS software, you need to create a pre-and-post script to backup GroupWise so that Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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:

```
./dbcoppy -m -d -v /backup /gw
```

4. Run the following command to copy the Post office (-p) from the backup directory to the GroupWise directory:

```
./dbcoppy -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
```

## 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 Sun StorageTek EBS 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
```

## 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.

## JRE version mismatch causes authentication failure, stops GSTD

### LGTsc08958

After updating to Sun StorageTek EBS version 7.5, if the JRE version installed on the system is lower than the JRE version required by Sun StorageTek EBS, 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.

## Incorrect error message reported when starting the Sun StorageTek EBS 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 Sun StorageTek EBS 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 error message. To start the Sun StorageTek EBS Console, click the Start link in the line of "If you have installed JRE1.4.2 and 1.5, then click here to start Sun StorageTek EBS Management Console" from the Mozilla browser.

## **Error states you need to perform an uninstall when updating from Sun StorageTek EBS 7.2.2 32-bit to Sun StorageTek EBS 7.5 64-bit**

### **LGTsc06288**

When updating from Sun StorageTek EBS release 7.2.2 32-bit on x64 to Sun StorageTek EBS 7.5 64-bit, an error message is displayed stating that the 32-bit Sun StorageTek EBS software is already installed and should be uninstalled.

### **Workaround**

It is not necessary to do a complete uninstall of Sun StorageTek EBS release 7.2.2 to perform this update. Perform a partial uninstall of Sun StorageTek EBS release 7.2.2 32-bit, then install Sun StorageTek EBS 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 Sun StorageTek EBS release 7.3.x is the only version of 32-bit Sun StorageTek EBS software that is supported on nt64. Sun StorageTek EBS release 7.4 and later does not allow 32-bit Sun StorageTek EBS to be installed on nt64.

---

## **The nsrjob 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**.

## **FSRM Disk Quota may not be restored to previous settings after recovery**

### **LGTsc05990**

The Sun StorageTek EBS 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.



## 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**

## DiskXtender Data Manager file systems get archived on Sun StorageTek EBS

### 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 Sun StorageTek EBS, and no error message is displayed. With DiskXtender running on UNIX, Sun StorageTek EBS 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.

## NMC version 3.4 and NWD version 1.0 cannot be installed on the same host

### LGTsc05879

If Sun StorageTek EBS Dashboard (NWD) 1.0 is installed on the Sun StorageTek EBS 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 Sun StorageTek EBS release 7.4.

## 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 Sun StorageTek EBS 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
<sever name>
```

This dialog box will remain till the save set query is complete blocking you from performing any other operations on the Sun StorageTek EBS server.

### Workaround

Perform the save set query using the **mminfo** command from the command line.

## 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**).

## The jbverify command is not supported on Solaris 10

### LGTpa95406

The **jbverify** command is not supported on Solaris 10. The Sun StorageTek EBS software has an autoconfiguration option provided that ensures a jukebox is configured correctly.

## Sun StorageTek EBS Management Console may become unresponsive when opened using Exceed

### **LGTsc02903**

When using Exceed to launch the Sun StorageTek EBS 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.

## Sun StorageTek EBS becomes unresponsive when attempting an invalid clone operation

### **LGTsc06358**

You cannot put multiple instances of the same clone onto a single volume. Sun StorageTek EBS should prevent the operation and provide an error message. Instead, if this operation is attempted, Sun StorageTek EBS becomes unresponsive.

### **Workaround**

Ensure that multiple instances of a clone are placed on different volumes.

## Cannot launch Sun StorageTek EBS Console Help program on Solaris 10 with a JRE earlier than version 1.5.0\_09

### **LGTpa96168**

The Sun StorageTek EBS Console Help program will not launch if the JRE version is earlier than 1.4.2\_11 and 1.5.0\_09.

## 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 Sun StorageTek EBS Console to scan only the Sun StorageTek EBS storage node on which the VTL is configured. The Sun StorageTek EBS software will update all VTL related attributes utilizing the new VTL license.

This behavior does not occur when using the auto-configuration option.

### **Newly created groups are not displayed by the Sun StorageTek EBS 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 Sun StorageTek EBS Console.

#### **Workaround**

Select the Archive Request tab from within the Monitoring task window and the Groups table will refresh.

### **On HP-UX the Sun StorageTek EBS Server window does not appear**

#### **LGTsc00365**

On HP-UX, the following error message appears if the Sun StorageTek EBS Management Console **Setup > Setup System Options** attribute is selected and the Sun StorageTek EBS server window does not appear:

```
"Unable to connect to server: Failed to contact using UDP
ping."
```

#### **Workaround**

1. Open the Sun StorageTek EBS Management Console window and select **Setup > Setup System Options**.
2. Ensure that **RPC ping using UDP when connecting to Sun StorageTek EBS** is cleared.

### **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.

### Cannot copy and paste Japanese characters by using the Sun StorageTek EBS Management Console

#### **LGTsc01115**

On UNIX platforms, cannot copy and paste Japanese characters with **Ctrl+C** and **Ctrl+V** using the Sun StorageTek EBS Management Console.

### 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.

### Cannot query UNIX non-ASCII save sets in the Sun StorageTek EBS 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 Sun StorageTek EBS 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.

### The **savenpc** command fails if the precommand and post command contains any non-ASCII characters

#### **LGTPa91475**

The **savenpc** command fails if the precommand and post command contains any non-ASCII characters. When editing the `<group-name>.res` file for the **savenpc** 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**.

## Problems and limitations discovered in releases previous to 7.4

Table 4-10 on page -102 identifies problem issues and limitations discovered in Sun StorageTek EBS release prior to 7.4 that continue to be applicable.

**Table 4-10 Limitations discovered in Sun StorageTek EBS releases prior to 7.4 (Sheet 1 of 6)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">“LGTpa89947” on page -107</a>	89947nw	Cannot deposit volumes in a DAS silo.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa89946” on page -107</a>	89946nw	Cannot configure a DAS silo using the Sun StorageTek EBS Management Console.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa87308” on page -107</a>	87308nw	Using the withdraw command to withdraw a volume on a partitioned library fails.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa91299” on page -108</a>	91299nw	ZFS file systems are not automatically backed up when performing a savegroup backup of ALL.	Linux and UNIX
<a href="#">“LGTpa88065” on page -108</a>	88065nw	If a connection is lost during an NDMP backup to a NAS filer the Sun StorageTek EBS software stops responding.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa91406” on page -109</a>	91406nw	The <b>ls -l</b> command does not display files recovered from a NetApp Data ONTAP 6.5 file system.	Linux and UNIX
<a href="#">“LGTpa87730” on page -109</a>	87730nw	Cannot launch the Sun StorageTek EBS Console from a Linux PowerPC client.	Linux
<a href="#">“LGTpa83579” on page -110</a>	83579nw	Device operations using the right click option might be lost.	Linux and UNIX
<a href="#">“LGTpa83273” on page -111</a>	83273nw	Misleading error message reported if an invalid NDMP storage node password is entered when labeling a volume.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa83221” on page -110</a>	83221nw	Backup might default to an incorrect server If the <b>-s</b> option is not specified with the <b>save</b> command.	Linux, UNIX, and Microsoft Windows

**Table 4-10 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 2 of 6)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">“LGTpa82503” on page -110</a>	82503nw	Media capacity notification not logged in the media database.	Linux and UNIX
<a href="#">“LGTpa81024” on page -110</a>	81024nw	Fatal error incorrectly reported no printer available to print a bootstrap on AIX 5.3.	Linux and UNIX
<a href="#">“LGTpa83273” on page -111</a>	83273nw	Misleading error message reported if an invalid NDMP storage node password is entered when labeling a volume.	Linux and UNIX
<a href="#">“LGTpa80901” on page -111</a>	80901nw	Labeling volumes concurrently might fail when using the Sun StorageTek EBS Console.	Linux and UNIX
<a href="#">“LGTpa80764” on page -111</a>	80764nw	No alternative location provided for the java14.sdk.tar file if the /tmp directory is full.	Linux and UNIX
<a href="#">“LGTpa87657” on page -122</a>	87657nw	The <b>udev</b> tool is unsupported on Emulex running Linux RedHat AS 4 using default kernel 2.6.	Linux
<a href="#">“LGTpa82503” on page -110</a>	82503nw	Media capacity notification not logged in the media database.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa80901” on page -111</a>	80901nw	Labeling volumes concurrently might fail when using the Sun StorageTek EBS Console.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa74492” on page -129</a>	74492nw	The jbconfig command might fail on Windows 2003 with a multidrive jukebox.	Microsoft Windows
<a href="#">“LGTpa77990” on page -130</a>	77990nw	Cannot run commands in nsradmin without the <b>nsrexecd</b> daemon.	Microsoft Windows
<a href="#">“LGTpa82436” on page -129</a>	82436nw	VSS on windows server 2003 x64 is unsupported without a Microsoft Hotfix.	Microsoft Windows
<a href="#">“LGTpa82555” on page -129</a>	82555nw	Remote client save sets with japanese characters are displayed incorrectly.	Microsoft Windows
<a href="#">“LGTpa83706” on page -129</a>	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.	Microsoft Windows
<a href="#">“LGTpa83820” on page -128</a>	83820nw	Files backed up from a VSS system filesset appear in the file system tree.	Microsoft Windows
<a href="#">“LGTpa88065” on page -108</a>	88065nw	If a connection is lost during an NDMP backup to a NAS filer the Sun StorageTek EBS software stops responding.	UNIX
<a href="#">“LGTpa76457” on page -112</a>	76457nw	The <b>mminfo</b> command does not display a weekly summary of save set usage during the change to daylight savings time.	Linux, UNIX, and Microsoft Windows

**Table 4-10 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 3 of 6)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">“LGTpa75719” on page -112</a>	75719nw	Save set status is displayed as invalid if A DSA backup is terminated due to an invalid backup path.	Linux and UNIX
<a href="#">“LGTpa75339” on page -130</a>	75339nw	Backup will fail with remote exec service if passwords are not configured correctly.	Microsoft Windows
<a href="#">“LGTpa74026” on page -112</a>	74026nw	The <b>scanner</b> command might stop responding if it encounters an aborted save set backed up to an NDMP device.	Linux and UNIX
<a href="#">“LGTpa73509, Sun Bug ID 6192129” on page -113</a>	73509nw	The /system/object and /system/contract directories are not skipped during a backup on Solaris 10.	UNIX Only
<a href="#">“LGTpa70320” on page -112</a>	70320nw	Automatic cloning might fail when using a single staging policy.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa68867” on page -113</a>	68867nw	Tape gets stuck in a drive when labeling Linux Red Hat.	Linux
<a href="#">“LGTpa66196” on page -131</a>	66196nw	Warning when using AlphaStor 3.0x with SR2 on a Windows server with a Sun StorageTek EBS for Windows 2000 storage node.	Microsoft Windows
<a href="#">“LGTpa66140” on page -131</a>	66140nw	The jbcconfig command reports a BNCHMARKVS640 DLT drive as 4mm.	Microsoft Windows
<a href="#">“LGTpa62490” on page -114</a>	62490nw	Cloning on an EMC DART CFS 5.2 is unsupported.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa61643” on page -114</a>	61643nw	Package installation on Linux IA64 Red Hat results in an error.	Linux
<a href="#">“LGTpa54632” on page -115</a>	54632nw	Error message appears in daemon log when labeling a volume that contains PowerSnap save sets.	Linux and UNIX
<a href="#">“LGTpa55566” on page -115</a>	55566nw	When recovering data from multiple volumes the Sun StorageTek EBS software might stop responding.	Linux and UNIX
<a href="#">“LGTpa54165” on page -115</a>	54165nw	Error message generated if the snapshot policy is configured to request more snapshots than a Savegroup can generate.	Linux and UNIX
<a href="#">“LGTpa53364” on page -116</a>	53364nw	SCSI device ID displayed differently than Sun StorageTek EBS NDMP devices.	Linux and UNIX
<a href="#">“LGTpa55128” on page -116</a>	55128nw	Slow Solaris tape operations when using an IBMtape driver with IBM LTO-2 Tape drives and the Sun StorageTek EBS CDI.	UNIX Only



**Table 4-10 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 4 of 6)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">“LGTpa51725” on page -117</a>	51725nw	Sun StorageTek EBS software attempts to eject a stuck tape.	Linux and UNIX
<a href="#">“LGTpa66565” on page -114</a>	66565nw	Volume retention information does not apply to volumes that contain snapshots.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa51184” on page -117</a>	51184nw	Increase server parallelism to complete concurrent operations.	Linux and UNIX
<a href="#">“LGTpa51045” on page -118</a>	51045nw	Perform a save set recovery when using the save command with the -l input_file option.	Linux and UNIX
<a href="#">“LGTpa50807” on page -118</a>	50807nw	Error downgrading to business edition.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa50485” on page -119</a>	50485nw	Increase the value of the save mount timeout attribute when auto media management is enabled and a corrupt tape is encountered.	Linux and UNIX
<a href="#">“LGTpa45470” on page -120</a>	45470nw	Volume remains in the tape drive if the storage node nsrmmid is not responding in a shared drive environment with DDS.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa44863” on page -120</a>	44863nw	Files larger than 2 GB can break the save set consolidation process.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa43135” on page -120</a>	43135nw	System log notifications fail on SuSE 8.0.	Linux
<a href="#">“LGTpa37996” on page -121</a>	37996nw	The nsrjb -L and -l operations fail with an Exabyte Mammoth-2 tape drive with Fibre Channel device.	Linux and UNIX
<a href="#">“LGTpa65644” on page -121</a>	65644nw	NDMP save sets in status recyclable are not recoverable.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa62224” on page -131</a>	62224nw	Sun StorageTek EBS License Manager allowance limitation.	Microsoft Windows
<a href="#">“LGTpa61694” on page -131</a>	61694nw	SHAREPOINT save set cannot be excluded with directives when a save set of ALL is specified.	Microsoft Windows
<a href="#">“LGTpa58888” on page -132</a>	58888nw	Command-Line Backup and Recovery of SYSTEM Save Sets.	Microsoft Windows
<a href="#">“LGTpa58422” on page -133</a>	58422nw	VSS backups of raw devices unsupported.	Microsoft Windows
<a href="#">“LGTpa58356” on page -122</a>	58356nw	Label tape operation fails on an HP-UX platform if CDI is turned on and IBM tape driver is used.	Linux and UNIX

**Table 4-10 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 5 of 6)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">“LGTpa58215” on page -133</a>	58215nw	Jukebox fails to allocate enough devices.	Microsoft Windows
<a href="#">“LGTpa57709” on page -133</a>	57709nw	Removable storage manager jukebox configures all devices automatically.	Microsoft Windows
<a href="#">“LGTpa54620” on page -137</a>	54620nw	Microsoft VSS backups on a FAT32 partition take longer than on an NTFS partition.	Microsoft Windows
<a href="#">“LGTpa50089” on page -134</a>	50089nw	Entering the inquire command during tape activity causes a device error.	Microsoft Windows
<a href="#">“LGTpa48556” on page -134</a>	48556nw	Preventing duplicate filenames during recovery.	Microsoft Windows
<a href="#">“LGTpa48322” on page -134</a>	48322nw	Windows error message during automated system recovery.	Microsoft Windows
<a href="#">“LGTpa48374” on page -123</a>	48374nw	Managing optical drives with Solaris 9.	Linux and UNIX
<a href="#">“LGTpa50279” on page -124</a>	50279nw	Cannot label a tape if CDI is enabled on a tape drive on HP Tru64 5.1.	Linux and UNIX
<a href="#">“LGTpa41039” on page -135</a>	41039nw	Windows management instrumentation database might stop responding.	Microsoft Windows
<a href="#">“LGTpa37996” on page -121</a>	37996nw	The <b>nsrjb -L</b> and <b>-I</b> operations fail with an Exabyte Mammoth-2 tape drive with Fibre Channel device.	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa37508” on page -121</a>	37508nw	Limitation on browse and retention policy dates	Linux, UNIX, and Microsoft Windows
<a href="#">“LGTpa35856” on page -135</a>	35856nw	No message is logged if resource files are missing.	Microsoft Windows
<a href="#">“LGTpa36367” on page -137</a>	36367nw	Tape Drive Requires Cleaning Error Message.	Microsoft Windows
<a href="#">“LGTpa35407” on page -135</a>	35407nw	Change journal manager problems with multiple servers.	Microsoft Windows
<a href="#">“LGTpa35171” on page -138</a>	35171nw	Hot fix required to operate the Sun StorageTek EBS software in a Windows 2000 Clustered Environment running service Pack 1 or 2.	Microsoft Windows

**Table 4-10 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 6 of 6)**

Defect Number	Issue Tracker Issue number	Description of limitation	Limitation in operating system
<a href="#">“LGTpa23372” on page -138</a>	23372nw	Concurrent multiclient recovery on Windows 2000.	Microsoft Windows
<a href="#">“LGTpa28717” on page -137</a>	28717nw	A backup fails if the servers file lists only the virtual Sun StorageTek EBS server.	Microsoft Windows
<a href="#">“LGTpa33868” on page -138</a>	33868nw	Windows 2000 server cannot handle large numbers of concurrent saves.	Microsoft Windows

### Cannot configure a DAS silo using the Sun StorageTek EBS Management Console

#### **LGTpa89946**

The Sun StorageTek EBS Management Console cannot be used to configure a DAS silo. To configure a DAS silo, use the **jbconfig** command.

### 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
```

### 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
```

## 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
```

## If a connection is lost during an NDMP backup to a NAS filer the Sun StorageTek EBS 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 **nsrmmd** processes stop responding. The tape device also appears in writing mode, but stops responding.

### Workaround

Stop the **nsrndmp\_save**, **ndmp2fh** and **nsrmmd** processes by using **kill -9** command, and restart Sun StorageTek EBS daemons to free the tape device.

## 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.

## Group details window is empty after upgrading from Sun StorageTek EBS release 7.2.2

### LGTsc01587

After upgrading to Sun StorageTek EBS release 7.4 from release 7.2.2, savegroups details run prior to the upgrade do not appear in the Group Details window.

## 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.

## Cannot launch the Sun StorageTek EBS Console from a Linux PowerPC client or using the browser of another supported Operating System

### LGTpa87730

The Sun StorageTek EBS Console client GUI is unsupported on a PowerPC Linux client. Client operations must be performed from the Sun StorageTek EBS 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.

### **Backup might default to an incorrect server if the -s option is not specified with the save command**

#### **LGTPa83221**

On a Sun StorageTek EBS 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 Sun StorageTek EBS server.

### **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 Sun StorageTek EBS 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.

### **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.

### **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
```

### **Labeling volumes concurrently might fail when using the Sun StorageTek EBS Management Console**

#### **LGTpa80901**

When labeling a volume by using the Sun StorageTek EBS 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 *Sun StorageTek EBS Command Reference Guide* or the UNIX man pages has more information on the **nsrjb** command.

### **No alternative location provided for the java14.sdk.tar file if the /tmp directory is full**

#### **LGTpa80764**

After installing the Sun StorageTek EBS 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/uontdicn.tar. Remove unnecessary files from the
disk and try again, or try saving in a different
location.
```

## 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.

## 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.

## 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 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.

## Automatic cloning might fail when using a single staging policy

### LGTPa70320

Automatic cloning will fail 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)
```

## The `/system/object` and `/system/contract` directories are not skipped during a backup on Solaris 10

### **LGTpa73509, Sun Bug ID 6192129**

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
```

## Tape gets stuck in a drive when labeling Linux Red Hat

### **LGTpa68867**

While labeling tape in a DDS configuration by using a Sun StorageTek EBS 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).

### Volume retention information does not apply to volumes that contain snapshots

#### 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 snapshots.

### 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.

### Package installation on Linux IA64 Red Hat results in an error

#### LGTPa61643

During installation of Sun StorageTek EBS packages on Linux IA64, the **rpm** program incorrectly reports these missing library errors:

```
rpm -i lgtocln1-1.ia64.rpm
error: Failed dependencies:
ld-linux-ia64.so.2 is needed by lgtocln1-1
libc.so.6.1 is needed by lgtocln1-1
libc.so.6.1(GLIBC_2.2) is needed by lgtocln1-1
libncurses.so.5 is needed by lgtocln1-1
```

#### 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 lgtocln1-1.ia64.rpm
```
4. Repeat this procedure for each required Sun StorageTek EBS package, **lgtonode**, **lgtoserv**, or **lgtodrvr**.

## 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.

## When recovering data from multiple volumes the Sun StorageTek EBS software might stop responding

### LGTPa55566

When recovering data from multiple volumes, the recovery client might receive repeated server busy messages if the Sun StorageTek EBS software cannot simultaneously mount all of the volumes.

### Workaround

Disable the striped recovery on the server.

---

**Note:** To disable striped recovery, create the file `/nsr/debug/no_striped_recover` in the `/nsr/debug` directory on the server. All recoveries started after this file is created will not use the striped recovery.

---

## 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. Sun StorageTek EBS 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 *Sun StorageTek EBS Administration Guide* contains more information on modifying the Start Time and Interval attributes and snapshot policies.

### SCSI device ID displayed differently than Sun StorageTek EBS NDMP devices

#### LGTpa53364

For Sun StorageTek EBS 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 Sun StorageTek EBS 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.

### Slow Solaris tape operations when using an IBMtape driver with IBM LTO-2 tape drives and the Sun StorageTek EBS 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.

## **Sun StorageTek EBS software attempts to eject a stuck tape**

### **LGTPa51725**

If a hardware problem results in a tape becoming stuck in a drive, the Sun StorageTek EBS 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 Sun StorageTek EBS 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).

## **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.

---

**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.

---

## 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.

## 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 **Sun StorageTek EBS Administrator** program on the Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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**.

**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:

- ◆ Automedia management is enabled and a backup is initiated.
- ◆ The Sun StorageTek EBS software encounters a corrupted tape during label operations.

The Sun StorageTek EBS 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 **Sun StorageTek EBS 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 `nsrmmd` 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 Sun StorageTek EBS server is unable to communicate with the `nsrmmd` daemon on any storage node.
- ◆ The storage node has loaded or mounted volumes onto shared drives.

## Files larger than 2 GB can break the save set consolidation process

### **LGTpa44863**

The Sun StorageTek EBS software cannot consolidate save sets when either the full or Level 1 save set contains a file larger than 2 GB.

## 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`.



## 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 Sun StorageTek EBS 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.

## Element status feature must be manually enabled for jukeboxes that support the feature

### LGTPa26003, Sun Bug ID: 4306035

When a jukebox supports the element status feature, but that feature is not enabled in the Autochanger resource of the Sun StorageTek EBS 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 Sun StorageTek EBS Administration program under the tab preferences in the Jukebox Features section before using the `nsrjb` command.

## 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**.

## 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 Sun StorageTek EBS 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 Sun StorageTek EBS Archive feature. Archived data is never subject to automatic recycling, so it cannot be accidentally overwritten.

### **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.

### **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.

### **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 *Sun StorageTek EBS Hardware Compatibility Guide* contains more information and is available at <http://Powerlink.EMC.com>

**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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 jbcconfig Command Reports More Drives Than Are Connected to the Node

#### **LGTPa45055, Sun Bug ID: 4783090, 4758993**

The **jbcconfig** command does not allow the user to configure fewer drives than are physically present in the autochanger or library. All drives in the library must be accessible (included in zones accessible by the server) by the Sun StorEdge EBS backup server at the time of installation. 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 *Sun StorageTek EBS Disaster Recovery Guide* contains full details on recovering the ASR recovery.

### 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.

**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 Sun StorageTek EBS 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 Sun StorageTek EBS installation software.

**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.

**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  $\sim n$  (where  $n$  is a number) might be renamed with  $\sim 1$  appended at the end of the name. For example, a file named  $C\sim 1$  might be restored with the name  $C\sim 1\sim 1$ .

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 will not relocate to a partition not existing on the initiating host if the Sun StorageTek EBS server is running release 7.4 and the client is running release 7.2**

**LGTsc00167**

If the Sun StorageTek EBS 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.

**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.

## 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 Sun StorageTek EBS server is running Windows and the client where the files are to be recovered to is also running Windows.

### Workaround

To perform a directed recover, one of the two following conditions must be met based on your environment:

- ◆ If the Sun StorageTek EBS server and target recover client are in the same domain:
  - Start the Sun StorageTek EBS server (**nsrd**) as a domain user that is in the Windows Administrators group on the Sun StorageTek EBS 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 Sun StorageTek EBS server machine.
  - Start the Sun StorageTek EBS server (**nsrd**) as a domain user that is in the Windows Administrators group on the Sun StorageTek EBS server machine.

## Cannot configure a DAS silo using the Sun StorageTek EBS Management Console

### LGTPa89946

The Sun StorageTek EBS Management Console cannot be used to configure a DAS silo. To configure a DAS silo, use the **jbconfig** command.

## Microsoft Windows username cannot contain a '!' character

### LGTPa86214

The Sun StorageTek EBS 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"
```

Sun StorageTek EBS Management Console can be launched from the same machine when logged in as a user with no special characters in the name.

### 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.

### Unable to configure an ACSLS silo on Windows with lib\_attach 1.4.1

#### LGTPa89859

The Sun StorageTek EBS software is unable to configure an ACSLS silo on Windows with lib\_attach 1.4.1. If the Sun StorageTek EBS **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 Sun StorageTek EBS **nsrexecd** process will simply not service portmapper requests on port 111, allowing both products to coexist without problems.

#### Workaround

1. Shut down the Sun StorageTek EBS 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 Sun StorageTek EBS and Microsoft Windows Services for UNIX is available at <http://Powerlink.EMC.com>
3. Restart the Sun StorageTek EBS daemons.



## 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.

## 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 Sun StorageTek EBS Console.

## VSS on Windows Server 2003 x64 is unsupported

### LGTPa82436

Due to problems that Microsoft is encountering with certain VSS writers, this release of the Sun StorageTek EBS 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>.

## 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.

### Cannot run commands in nsradmin without the nsrexecd daemon

#### LGTPa77990

To increase datazone security, running the **nsradmin** program, or any other Sun StorageTek EBS 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.

### Backup will fail with remote exec service if passwords are not configured correctly

#### LGTPa75339

A backup will fail if the following is true:

- ◆ A Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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.

## 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.

## Warning when using AlphaStor 3.0x with SR2 on a Windows server with a Sun StorageTek EBS 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 Sun StorageTek EBS services. This problem only occurs with the AlphaStor SR2 release when both the Sun StorageTek EBS storage node and server are running Windows 2000.

## Sun StorageTek EBS License Manager allowance limitation

### LGTPa62224

If Sun StorageTek EBS 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.

## 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS 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 *Sun StorageTek EBS Administration Guide* contains more information about editing Client resources, using the Sun StorageTek EBS Administrator program or the Sun StorageTek EBS User program.

### Jukebox fails to allocate enough devices

#### LGTPa58215

When the Sun StorageTek EBS jukebox control command (**nsrjb**) attempts to access an eligible drive to complete a Sun StorageTek EBS 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.

### VSS backups of raw devices unsupported

#### LGTPa58422

Sun StorageTek EBS release 7.4 does not support the VSS backups of raw devices.

### Removable storage manager jukebox configures all devices automatically

#### LGTPa57709

When using the **jbcconfig** 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.

### **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.

### **Preventing duplicate filenames during recovery**

#### **LGTpa48556**

Because of the case-sensitive nature of Portable Operating System Interface (POSIX) compliance, Sun StorageTek EBS 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.

## Sun StorageTek EBS software might stop responding when running SQL server 2000 and Sun StorageTek EBS client

### LGTPa41044

On systems running both SQL Server 2000 and the Sun StorageTek EBS client, the Sun StorageTek EBS 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.

## 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.

## No message is logged if resource files are missing

### LGTPa35856

If one or more resource files are somehow removed from the Sun StorageTek EBS resource database directories (as a result of disk corruption or manual deletion, for example), no error message is logged in the daemon log file.

## Change journal manager problems with multiple servers

### LGTPa35407

Configuring multiple Sun StorageTek EBS 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 Sun StorageTek EBS server backs up the same client while Change Journal is enabled, a second registry key is created. These keys are named for the Sun StorageTek EBS 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
Sun StorageTek EBS
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 Sun StorageTek EBS 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 as described in this section.

---

If you experience this problem, perform these procedure on the client:

1. Stop the Sun StorageTek EBS services.
2. Start the **regedit** program.
3. Expand the  
**HKEY\_LOCAL\_MACHINE>SOFTWARE>Legato>Sun StorageTek EBS>Change Journal**.
4. As an optional precaution, select the Sun StorageTek EBS 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 Sun StorageTek EBS services.

Use Change Journal Manager to enable or disable the Change Journal on each of the client computer's volumes.



## Sun StorageTek EBS 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 Sun StorageTek EBS software does not use the tape.

To ensure that Sun StorageTek EBS 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.

## A backup fails if the servers file lists only the virtual Sun StorageTek EBS server

### LGTPa28717

If the virtual Sun StorageTek EBS server is listed in the `\nsr\res\servers` file, the physical nodes must also be listed there. A backup fails if a virtual Sun StorageTek EBS server is listed in the **servers** file and you create a savegroup to which you add a physical node that does not own the Sun StorageTek EBS Server resource. To avoid this problem, do one of the following:

- ◆ Leave the **servers** file blank.

---

**Note:** If the **servers** file is blank, any Sun StorageTek EBS server can back up the client.

---

- ◆ Ensure that if the virtual Sun StorageTek EBS server is added to the servers file, all physical nodes are also added to the list.

## 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.

## 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.

### Hot fix required to operate the Sun StorageTek EBS software in a Windows 2000 Clustered Environment running Service Pack 1 or 2

#### LGTPa35171

To run Sun StorageTek EBS 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.

### Concurrent multiclient recovery on Windows 2000

#### LGTPa23372

In the Sun StorageTek EBS Administration window, the Parallelism attribute specifies the maximum number of clients that the Sun StorageTek EBS 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 Sun StorageTek EBS 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 **Sun StorageTek EBS Administration** window, reduce the **Parallelism** attribute to 25 or less.
- ◆ Increase the virtual memory on the Sun StorageTek EBS server host to 2 GB or more (or enough to accommodate at least 15 MB per client).
- ◆ Use a multiprocessor computer as the Sun StorageTek EBS server host.

### Cannot change the browse time if there are files for recovery

#### LGTpa38176

This 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 information and known limitations pertaining to the internationalized Sun StorageTek EBS release:

## Known limitations

This section describes known limitations when using internationalized Sun StorageTek EBS software.

### 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

### Mixed locales display in Sun StorageTek EBS installation wizards on Windows

#### **LGTsc04862**

In the Sun StorageTek EBS 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 Sun StorageTek EBS installation language that is the same as the one specified in the **Regional** Option.
3. Continue the Sun StorageTek EBS 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 Sun StorageTek EBS Console GUI font list on Solaris**

#### **LGTsc03894**

Garbled characters may appear in the Sun StorageTek EBS 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 Sun StorageTek EBS 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 Sun StorageTek EBS Console Help program after a search has been performed will not be highlighted correctly.

### **Entering non-ASCII characters in Sun StorageTek EBS 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 Sun StorageTek EBS Management Console do not prevent the user from entering non-ASCII characters for other attributes in Sun StorageTek EBS 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.

#### **Workarounds**

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.

### **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.

# The XAPPLRESDIR environment variable must be set to operate the Sun StorageTek EBS Console on HP-UX

## LGTPa79450

To operate the Sun StorageTek EBS 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 Sun StorageTek EBS software.

### Open File Management on Microsoft Windows

Sun StorageTek EBS 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 Sun StorageTek EBS server.

Sun StorageTek EBS clients prior to release 7.4 Service Pack 2 also automatically use VSS for file systems backups, whether or not the Sun StorageTek EBS VSS Client for Microsoft Windows is installed. However, those clients will require a Sun StorageTek EBS VSS Client Connection license.

**Table 4-11 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 Sun StorageTek EBS, use Open File Manager to back up open files.	Use VSS to back up open files. <ul style="list-style-type: none"> <li>If both client and server are using release 7.4 Service Pack 2 or later, no VSS Client Connection license is required.</li> <li>If client or server are at using a release prior to 7.4 Service Pack 2, a VSS Client Connection license is required.</li> </ul>	Use VSS to back up open files. <ul style="list-style-type: none"> <li>If both client and server are Windows 2008, no VSS Client Connection license is required.</li> <li>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.</li> <li>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.</li> </ul>

---

## Sun StorageTek EBS License Manager not supported on Solaris Opteron platform

The 7.5 Sun StorageTek EBS release does not support the Sun StorageTek EBS License Manager on the Solaris Opteron platform.

---

## Sun StorageTek EBS 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 Sun StorageTek EBS client running release 7.2.x or earlier

A Sun StorageTek EBS server does not support a Sun StorageTek EBS client running 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

Sun StorageTek EBS release 7.5 is qualified with VMware. The VMware documentation contains the most current information on VMware support with Sun StorageTek EBS 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.

---

## Sun StorageTek EBS connections through a firewall

The **NSR\_KEEPAIVE\_WAIT** variable sets the timeout limit that the **nsrexecd** daemon uses to keep messages active once a connection to the Sun StorageTek EBS server has been established through a firewall. The period that **nsrexecd** will send keep-alive messages to **nsrexec** is adjustable by the **NSR\_KEEPAIVE\_WAIT** environment variable. Set this environment variable to the desired number of seconds between keep-alive wait messages. If the **NSR\_KEEPAIVE\_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.

---

## Older versions of Intel unsupported on Sun StorageTek EBS 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 Sun StorageTek EBS release 7.5 for Linux does not support older versions of Intel, such as 486.

---

**Note:** Sun StorageTek EBS release 6.1.x for Linux fully supports older versions of Intel architecture, including 386 and 486.

---



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## 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 Sun StorageTek EBS 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.

---

## Client retries setting with VMware Consolidated Backups

When using 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, 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 Sun StorageTek EBS 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 Sun StorageTek EBS releases 7.2.x and earlier, the save set would have expired on May 1, 2010 at 1:00 P.M. With Sun StorageTek EBS releases 7.3.x and later, the save set will expire on May 1, 2010 at 11:59:59 P.M.

## Documentation

These sections describe documentation and any documentation corrections or additions to the 7.5 Sun StorageTek EBS release:

- ◆ [“Related documentation” on page -146](#)
- ◆ [“Documentation errata” on page -147](#)

## Related documentation

The following documents contain more information on the Sun StorageTek EBS software:

- ◆ *Sun StorageTek EBS Release 7.5 Administration Guide*
- ◆ *Sun StorageTek EBS Release 7.5 Installation Guide*
- ◆ *EMC NetWorker Release 7.5 Disaster Recovery Guide*
- ◆ *EMC NetWorker Command Reference Guide*
- ◆ *EMC NetWorker Error Message Guide*
- ◆ *EMC NetWorker Cross-Platform Version Performance Tuning Guide*
- ◆ *EMC NetWorker Security Configuration Guide*
- ◆ *EMC NetWorker License Manager Installation and Administration Guide*
- ◆ *EMC NetWorker License Manager Release Notes*
- ◆ UNIX man pages

- ◆ Software compatibility guide

---

## Documentation errata

The following section outlines documentation corrections or additions to the Sun StorageTek EBS release 7.5 documentation.

### Command line reporting requires that the JAVA\_HOME environment variable be set

The *Sun StorageTek EBS Release 7.5 Administration Guide* on page 569, 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 Sun StorageTek EBS 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.

### Updated information for NDMP Path-to-Tape cloning of regular save sets

The *Sun StorageTek EBS Release 7.5 Administration Guide* on page 832-834, has the following updated information, especially with respect to requirements for NDMP cloning.

#### NDMP Path-to-Tape cloning for regular save sets

Sun StorageTek EBS 7.5 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 Virtual Tape Library (VTL) on a DL3D host can be directly moved to a physical tape library, which is attached to it. This process, also known as path-to-tape, frees up network bandwidth and offloads Sun StorageTek EBS storage node I/O resources because save set data does not go through the storage nodes. Sun StorageTek EBS 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 Sun StorageTek EBS storage node and restores can be performed directly from either copy.

---

**Note:** This feature is available with DL3D models 1500 and 3000 at version 1.1 or later.

---

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 the following are configured before starting the NDMP cloning process:

- ◆ A regular storage node and an NDMP storage node are required for the VTL. The VTL must have drives configured for SCSI and for NDMP.
- ◆ A regular storage node and an NDMP storage node are required for the physical tape library. The physical tape library must have drives configured for SCSI and 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 (where 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 same media types. However, if you have different media types, make sure that the block sizes match on the source and destination volumes.

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 ndmpclone -S  
4200263274
```

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 Sun StorageTek EBS 7.5.
- ◆ The **-b** option is used to specify the pool type.
- ◆ The **-S** option is used to specify the save set ID.

If multiplexing is enabled for backups, clones may be larger than the original backups. This is expected behavior.

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. The recover process automatically loads 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.

---

## Installation

This section provides information on installing and updating the Sun StorageTek EBS software. More information on installation and updating procedures is provided in the *Sun StorageTek EBS Release 7.5 Installation Guide*.

### Sun StorageTek EBS Release 7.5

This section provides information on installing and updating the Sun StorageTek EBS Release 7.5 software:

- ◆ [“Sun StorageTek EBS client location and space requirements” on page -150](#)
- ◆ [“::1 entry required in hosts file on Linux, UNIX, AIX platforms” on page -150](#)
- ◆ [“Java not included with Sun StorageTek EBS software” on page -150](#)
- ◆ [“Bare Metal Recovery \(BMR\) installation” on page -150](#)

## Sun StorageTek EBS client location and space requirements

This section specifies the location and space requirements for the Sun StorageTek EBS client software for Sun StorageTek EBS Release 7.5.

**Table 4-12**

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

**Table 4-13**

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, AIX platforms

All Linux, UNIX, and AIX platforms require a ::1 entry in the /etc/hosts file in order to run the Sun StorageTek EBS software. The entry should be in the form "::1 localhost aliases".

### Java not included with Sun StorageTek EBS software

Java is not included with the Sun StorageTek EBS 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 required JRE version. The NMC console cannot be started until the required JRE version is installed.

### Bare Metal Recovery (BMR) installation

The following section provides installation information on BMR:

- ◆ [“Supported BMR client platforms” on page -151](#)
- ◆ [“Installing the HomeBase Agent software” on page -151](#)

### Supported BMR client platforms

The BMR feature is included in the Sun StorageTek EBS Client installation for the platforms outlined in [Table 27 on page -151:](#)

**Table 27 BMR client supported platforms**

Operating system level	Additional notes
Windows 2000, with Service Pack 4 or later	x86 platforms
Windows Server 2003, with Service Pack 1 or later	x86 and x64 platforms
Windows XP Professional, with Service Pack 1 or later	x86 and x64 platforms
Sun Solaris 9	SPARC platforms
Sun Solaris 10	SPARC platforms
Red Hat Enterprise Linux 4	x86, and x64 platforms
Red Hat Enterprise Linux 5	x86 and x64 platforms
Windows or Red Hat Linux deployed in VMware, versions 1.0, 1.0.1, and 1.0.3	x86 and x64 platforms

**Note:** The latest service packs for Java support are required, especially on Solaris.

### Installing the HomeBase Agent software

As part of the Sun StorageTek EBS client install, the HomeBase agent binary and setup files are always extracted to the standard location for all supported Sun StorageTek EBS platforms.

To install the EMC HomeBase agent:

1. Run the HomeBase setup file. The location of the setup file for Microsoft Windows and UNIX is different. For example:
  - 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.

2. Run the `setup-homebase` file. The `setup-homebase` file for Microsoft Windows and UNIX is different. For example:
  - Microsoft Windows: **setup-homebase.bat**

- UNIX: **setup-homebase.sh**

The *Sun StorageTek EBS Installation Guide* provides complete information for installing a Sun StorageTek EBS client.

A BMR data recovery requires an EMC HomeBase Server, which is installed and licensed separately. The *EMC HomeBase Server Installation and Administration Guide* provides information about installing a HomeBase Server.

<http://Powerlink.EMC.com>