



# Sun StorageTek™ Enterprise Backup Software 7.6

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Release Notes

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The Sun™ StorageTek Enterprise Backup Software™, 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 7.6 Installation Guide*.

After you install the Sun StorageTek EBS® software, refer to the *Sun StorageTek Enterprise Backup Software™ Release 7.6 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™ online documentation for the Solaris™ 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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These release notes contain supplemental information about the Sun StorageTek EBS® 7.6 release.

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## Revision history

The Sun StorageTek EBS® 7.6 Release Notes was originally published in August 2009.

**Table 1**      **Revision history**

Date	Description
November 20, 2009	• Sun StorageTek EBS 7.6 released.

## Product description

The Sun StorageTek EBS 7.6 release provides significant functional enhancements, including support for the following:

- ◆ Increased Sun StorageTek EBS functionality for VMware support, including support for the new virtualization platforms and features from VMware (such as the ESX Server vSphere 4)
- ◆ ATMOS On Premise option (onsite) and ATMOS Online option (offsite) backup to Cloud capabilities
- ◆ Enhancements to the Sun StorageTek EBS Management Console, including the new monitoring task panel and event/log information visible on every page
- ◆ Reporting enhancements for deduplication and recovery operations in NMC.
- ◆ Improvements to license expiry notification and update enabler functionality

See [“New features and changes” on page -12](#) for more information.

Before installing Sun StorageTek EBS release 7.6, review the Sun StorageTek EBS release 7.6 installation guide, administration guide, and other documentation. [“Documentation” on page -182](#) lists the complete Sun StorageTek EBS release 7.6 documentation set.

## 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 Administrator's Guide*.

### Sun StorageTek EBS release 7.6

Sun StorageTek EBS release 7.6 includes these new features and changes:

- ◆ “Cloud functionality for onsite and offsite backup and recovery” on page -14
- ◆ “Upgrading from 7.4 to 7.6 for VCB backups on UNIX and Windows” on page -14
- ◆ “Only VCB Image backup required to perform image-based or file-based recovery” on page -15
- ◆ “Improved VCB File-level Backup capabilities” on page -15
- ◆ “VCB Proxy hosts on virtualization map” on page -15
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- ◆ “Applying file-level incremental backups to full image backups” on page -16
- ◆ “Monitoring docking panel added to NMC with event and log information permanently visible” on page -16
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- ◆ “Sun StorageTek EBS monitoring of Deduplication replication jobs” on page -21
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- ◆ “mminfo changed to allow query for valid save set copies in order to prevent data loss” on page -22
- ◆ “Support for index-only backup option in the NSR group resource options attribute list” on page -22

## Cloud functionality for onsite and offsite backup and recovery

The Sun StorageTek EBS software previously did not support sending backup save streams to the cloud, or the ability to perform backup or recovery using any current Cloud infrastructures from EMC or a third-party provider.

### New in Sun StorageTek EBS 7.6

You can now use Sun StorageTek EBS to back up systems to a cloud and recover from a cloud. When enabled, backups occur over a TCP/IP network and can be compressed and encrypted. Both ATMOS On Premise option (onsite) and ATMOS Online option (offsite) cloud configurations are supported. Cloud backups enable you to simplify backup operations by maintaining backup disks in an on premise cloud configuration or offload to the ATMOS Online option. In this way, you do not have to maintain a complex backup infrastructure.

Cloud backups are supported on Windows and Linux storage nodes only.

## Upgrading from 7.4 to 7.6 for VCB backups on UNIX and Windows

When upgrading from Sun StorageTek EBS Release 7.4 to Sun StorageTek EBS Release 7.6 for VCB related backups without using the Sun StorageTek EBS Integration module, run the following command on the Sun StorageTek EBS server:

```
nsrvcbserve_tool -p VCB proxy hostname or IP address
```

The upgrading chapter of the *Sun StorageTek EBS Release 7.6 Installation Guide* provides more information.

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**Note:** Sun StorageTek EBS 7.6 supports only Microsoft Windows 2003 (32-bit or 64-bit) OS on VCB Proxy.

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## Using VCB directives for backing up virtual machines

With Sun StorageTek EBS release 7.6, VCB directives are valid for backing up virtual machines using the VCB methodology. The VCB directive will skip saving the system folders "WINDOWS\SYSTEM" and "WINDOWS\SYSTEM32" when the save set is either "ALLVMFS" or when performing incremental file-level backups.

---

**Note:** VCB directives are not supported when performing a level 0 (full) Image backup or when performing specific saveset backups such as "C:\".

---

## Only VCB Image backup required to perform image-based or file-based recovery

Sun StorageTek EBS needed to perform *both* a VCB-based file-level backup (used to recover individual files for the host VM) and a VCB-based image backup of a full virtual machine (used to recover the virtual machine in a disaster recovery) if you wanted to perform a file-level or full image recovery.

### Changed in Sun StorageTek EBS 7.6

Sun StorageTek EBS now requires only the VCB-based image backup in order to perform either an image-based or file-based recovery. Therefore, the administrator is now able to browse the file system, locate the desired file and initiate recovery of only that file from a VCB image backup. More information on VCB-based backups is provided in Chapter 20 of the *Sun StorageTek EBS Release 7.6 Administration Guide*.

## Improved VCB File-level Backup capabilities

For VCB file-level backups, Sun StorageTek EBS was using the Legato Sun StorageTek EBS Integration Module (LNIM) technology, which has some limitations when communicating between the Sun StorageTek EBS server and the Sun StorageTek EBS client on the VCB proxy. These limitations include the difficulty in handling special files (such as encrypting sensitive files and compressing large files, due to the inability to use Sun StorageTek EBS directives when backing up VMs), and the inability to cancel VCB backups or receive completion status of VCB backups using LNIM technology.

### Changed in Sun StorageTek EBS 7.6

Sun StorageTek EBS now supports the file-level backup of virtual machines without using LNIM.

---

**Note:** In order to continue encrypting the backup data, use a VCB proxy instead of using Sun StorageTek EBS client agents in each VM.

---

## VCB Proxy hosts on virtualization map

Sun StorageTek EBS previously did not represent VCB proxy hosts or their relationship to the virtual machines being backed up by the proxy host, making it difficult to determine the proper load balancing of related VCB proxy hosts. Because relationships to virtual machines are not represented, you cannot determine which virtual disks are not being backed up.

**New in Sun StorageTek EBS 7.6**

Sun StorageTek EBS visually represents each VCB proxy host on the virtualization map, and visually represents the relationship between each VCB proxy host and the Virtual Machines it is configured to backup.

**Sun StorageTek EBS client resource creation for virtual machines**

You can now use the Client Backup Configuration wizard to configure a Sun StorageTek EBS client for virtual machines to perform either standard Sun StorageTek EBS file system backups, or VMware Consolidated Backups (VCB).

**Applying file-level incremental backups to full image backups**

Sun StorageTek EBS did not support incremental or differential backups of virtual machines. Each backup was a full image backup that would result in the consuming of resources (network bandwidth, CPU, Memory and long-term storage medium).

**New in Sun StorageTek EBS 7.6**

Sun StorageTek EBS now supports file-based incremental and differential backups, and you can recover the whole save set or a single file from those backups.

Sun StorageTek EBS

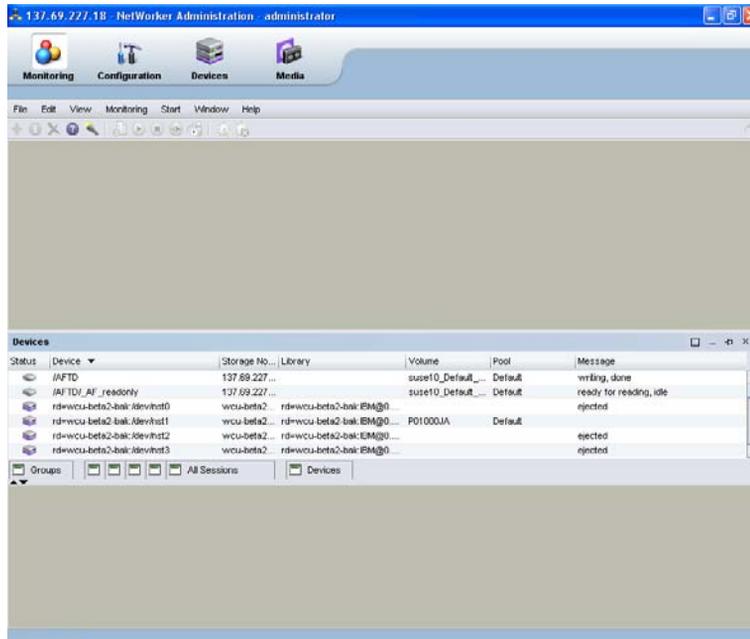
---

**Note:**

---

**Monitoring docking panel added to NMC with event and log information permanently visible**

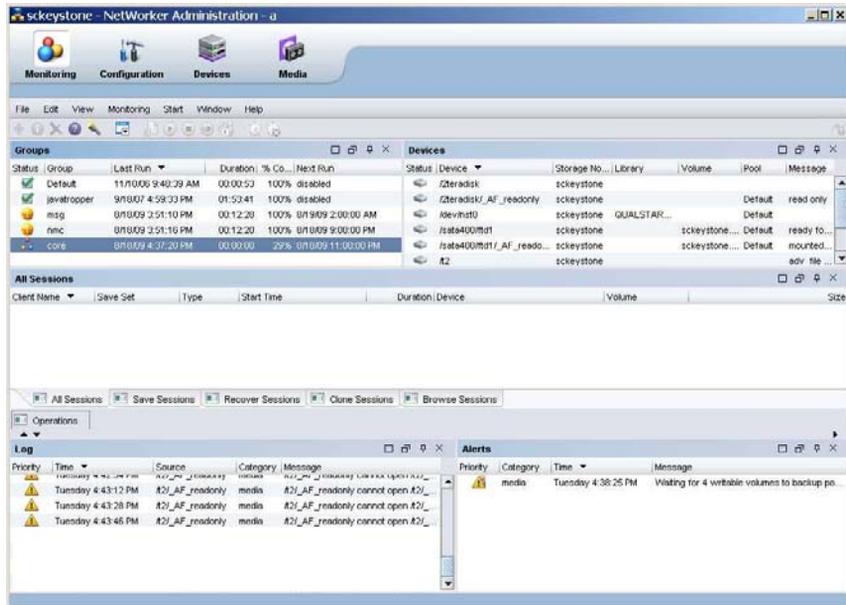
The Sun StorageTek EBS Management Console previously used one tab panel as in the following view, and you had to navigate to the Monitoring window in order to view status information. Also, only one window could be viewed at a time.



### Changed in Sun StorageTek EBS 7.6

The Monitoring window in NMC has been enhanced with a docking panel which enables you to view several monitoring windows at once. Each monitoring window is a floating window that can be repositioned to customize the view.

Also, a portion of the Monitoring window, known as the task monitoring area, is always visible across all windows. A splitter separates the task monitoring area from the rest of the window. You can click and move the splitter to resize the task monitoring area. The arrow icon in the top-right corner of the Monitoring window allows you to select which tasks you want to appear in this view.



## Changes to deduplication reporting in NMC

The category types for deduplication reports in NMC did not list the same information as the Avamar reports. The columns for capacity of backups, sizes of backups, and space utilized on the deduplication storage node did not match those on the Avamar report.

### Changed in Sun StorageTek EBS 7.6

The Sun StorageTek EBS NMC reports for deduplication have now been synchronized with the Avamar reports so that the type of data matches what is provided in the Avamar dpnsummary report.

## Changes to Recovery Reports in NMC

Four new recovery reports are available from the Reports task pane in NMC. These reports allow you to view the history of recovery operations that have been performed by Sun StorageTek EBS servers for any Sun StorageTek EBS server version 7.3 and later.

More information on recovery reports is provided in the *Sun StorageTek EBS Release 7.6 Administration Guide*.

## Deduplication support for Windows Server 2008 clients

The Sun StorageTek EBS deduplication workflow was not supported on client hosts running Windows Server 2008.

### New in Sun StorageTek EBS 7.6

Sun StorageTek EBS now supports deduplication workflow backups for both file systems and application-specific backups on Sun StorageTek EBS clients running any of the editions of the Windows Server 2008 operating system.

## Automation of Sun StorageTek EBS Update Enablers

Customers upgrading to newer versions of a Sun StorageTek EBS server require an update enabler. Previously it was required to refer to the documentation to access information and obtain the correct update enablers; only upon completion of the installation and attempting to start the Sun StorageTek EBS server would you receive an error message if you did not apply the update enabler.

### New in Sun StorageTek EBS 7.6

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

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

---

**Note:** If you are upgrading from a 7.5.x release to 7.6, an update enabler is not generated and not required. If you are upgrading from any release previous to 7.5 to release 7.6, the update enabler is auto-generated. However, the enabler indicates "Update enabler for 7.5" and will need to be authorized for a 7.6 server within 45 days.

---

## Licensing for NetWorker NMDA module

The NetWorker Module for Databases and Applications (NMDA) version 1.0 is a new product that offers the functionality of the following modules:

- ◆ NMO (NetWorker Module for Oracle)
- ◆ NMDB2 (NetWorker Module for DB2)
- ◆ NML (NetWorker Module for Lotus)
- ◆ NMS (NetWorker Module for Sybase)

- ◆ NMI (NetWorker Module for Informix)

A new enabler has been added for NMDA (either for Win/Lin, or for Unix). If NMDA is installed on a physical host, the new NMDA enabler allows the full functionality of NMDA for all five applications supported by NMDA.

If NMDA is installed in a virtualized environment (for example, VMs for ESX VMware or Microsoft Hyper-V, Solaris zones for Solaris, LPARs for AIX, and so on), one NMDA license will be required for each application on all VMs.

Authorization of the NMDA enabler code is the same as any other module enabler code. After the evaluation period, contact your EMC sales representative to authorize NMDA or to obtain a temporary enabler code.

### **Consolidation of Sun StorageTek EBS licensing across Windows and Linux platforms**

Sun StorageTek EBS Server, Storage Node and Application Modules have different model codes and license enablers for Windows, Solaris and Linux Operating Systems. The number of model codes and part numbers representing all three environments create unnecessary complexity.

#### **New in Sun StorageTek EBS 7.6**

The Sun StorageTek EBS Windows and Linux model codes are now combined into a single model code, which will be referred to as “Win/Lin”. Existing licenses are not impacted by this change. New licenses provided for Windows and/or Linux clients will use this new model code.

### **License Expiration Alert**

For license expiry, Sun StorageTek EBS sent notification to NMC Alerts tab on the actual day of license expiration, leaving no time to customer to rectify the situation. There is a need to increase the lead time of alert notification prior to the license expiration date.

#### **New in Sun StorageTek EBS 7.6**

Sun StorageTek EBS now displays the following color-coded alerts in the Alerts window of the Administration console, and these alerts continue to be visible on every page in the console starting from 30 days before the expiration of a license:

- ◆ Yellow indicates a license that is 30 days from its expiration date. This alert continues to appear on a daily basis until 10 days prior to expiration of the license.

- ◆ Red indicates a license that is 10 days from its expiration date. This alert continues to appear on a daily basis up to and including the expiration date.

Sun StorageTek EBS continues to operate as it did before after 30 days. However, you must type the phrase “grace” to extend the expiration date by an additional 15 days.

### **Dedicated Storage Node in Solaris local zone**

You cannot install and run a Sun StorageTek EBS Dedicated Storage Node in a local zone to direct the backup data stream directly to a physically attached device that avoids sending backup data across the network.

#### **New in Sun StorageTek EBS 7.6**

Sun StorageTek EBS supports a Dedicated Storage Node installed in a Solaris 10 local zone to backup directly to a physically attached device without sending data across the IP network, and manages the sharing of a device between multiple dedicated storage nodes or storage nodes that are installed in multiple local zones of a single physical host, as long as all are contained within a single Sun StorageTek EBS data zone.

### **Sun StorageTek EBS client now includes HomeBase Agent version 6.2**

Sun StorageTek EBS client shipped with HomeBase Agent version 6.1 SP3, which is not supported by the latest HomeBase Server, version 6.2

#### **New in Sun StorageTek EBS 7.6**

Sun StorageTek EBS release 7.6 includes the HomeBase Agent version 6.2. Sun StorageTek EBS currently does not support HomeBase Agent version 6.3.

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**Note:** If the HomeBase agent installed is version 6.2, the HomeBase server in your environment must also be version 6.2.

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### **Sun StorageTek EBS monitoring of Deduplication replication jobs**

Information and monitoring of replication jobs was not available within the Sun StorageTek EBS Management Console.

#### **New in Sun StorageTek EBS 7.6**

The Sun StorageTek EBS Management Console displays activity concerning replication operations performed by the deduplication node under **Events** in the console. Information on configuring the

Events pane to view deduplication operations is provided in Chapter of the Sun StorageTek EBS Release 7.6 Administration Guide.

### **Sun StorageTek EBS monitoring for Deduplication Node maintenance operations**

NMC now monitors the following deduplication operations in the **Events** pane:

- ◆ Status of hfscheck running on the deduplication node.
- ◆ Capacity thresholds on the deduplication node, along with an alert notification when the space threshold is reached.
- ◆ Hardware failures on the deduplication node

### **mminfo changed to allow query for valid save set copies in order to prevent data loss**

There was no convenient method to query for save sets with valid clone copies on other volumes using **mminfo**. This made certain tasks difficult to perform, such as determining if space could be cleared on the EDLs.

#### **Changed in Sun StorageTek EBS 7.6**

A single **mminfo** query can be used to check whether all completed save sets on a volume have at least one successful clone on other volumes. To query for save sets with valid clone copies on other volumes, run the following:

```
mminfo -q 'volume=<volumename>,validcopies>1'
```

### **Support for index-only backup option in the NSR group resource options attribute list**

Index-only backups could not be performed through the NSR group configuration.

#### **New in Sun StorageTek EBS 7.6**

Support for **-O** option is added to the NSR group options to perform index only backups through the NSR group configuration.

---

## Fixed problems

This section provides details on fixed bugs for the Sun StorageTek EBS releases:

- ◆ “Product issue details in Issue Tracker” on page -23
- ◆ “Fixed bugs in release 7.6” on page -24

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### Product issue details in Issue Tracker

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

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

- ◆ Issue number — Unique case number assigned to track the problem. If the problem was found during product test, 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 7.6 are detailed online in the Issue Tracker available on the Powerlink® website: <http://Powerlink.EMC.com> under **Support > Knowledgebase Search > Issue Tracker Search**.

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## Fixed bugs in release 7.6

Table 2 on page -24 lists customer reported defects resolved in release 7.6.

**Table 2 Fixed bugs in Sun StorageTek EBS release 7.6 (Sheet 1 of 4)**

Issue number for Customer Service	Issue Number for Issue Tracker	Description
LGTsc32251	32251nw	A nsrlcpd core occurs during reset operation on a silo jukebox.
LGTsc22272	22272nw	NetWorker server not using AFTD volume or jukebox volumes.
LGTsc26537	26537nw	NetWorker overwrites NDMP tape after tape gets full.
LGTsc29301	29301nw	Save set chunking observed during backup.
LGTsc30977	30977nw	Data recovered by nsrscsi_recover is corrupted.
LGTsc32547	32547nw	Volume % used in NMC Devices window resets to zero when the volume is manually marked read-only.
LGTsc32602	32602nw	Multiple read from AFTD does not work.
LGTsc21910	21910nw	nsrexecd is dumping core.
LGTsc24484	24484nw	Savegrp parallelism not honored when using expander jobs (NMO4.5).
LGTsc25887	25887nw	Environment variable required to customize the compress-period for nsrim run.
LGTsc26353	26353nw	Ansrld hang occurs, during which the daemon.log is locked.
LGTsc26395	26395nw	Load volume issue on highly shared (DDS) environment.
LGTsc26530	26530nw	nsrclone hangs when cloning expired save set.
LGTsc26745	26745nw	gst cluster scripts not properly working in EBS.
LGTsc27438	27438nw	nsrd hang-ups in deadlock with nsrmmmd.
LGTsc27688	27688nw	nsrexecd core dumps with segmentation fault (SEGV) error.
LGTsc28205	28205nw	NDMP size does not get reported upon backup completion.
LGTsc28789	28789nw	Each clone host needs at least two enabled devices
LGTsc29111	29111nw	nsrlcpd is unresponsive after temporary jukebox disconnection.
LGTsc29159	29159nw	Nsrlcpd can become unresponsive with a silo, resulting in incomplete media requests

Table 2 Fixed bugs in Sun StorageTek EBS release 7.6 (Sheet 2 of 4)

Issue number for Customer Service	Issue Number for Issue Tracker	Description
LGTsc29197	29197nw	mminfo: RPC authentication error
LGTsc29321	29321nw	Missing values for attributes in jobsdb for NDMP cloning.
LGTsc29504	29504nw	Defunct nsrsybcn after successful backup.
LGTsc29561	29561nw	NetWorker cannot manually recover space after SSID is deleted.
LGTsc29681	29681nw	Change Journal use not reported in Savegroup Completion report.
LGTsc29771	29771nw	LDAP error "Error Size limit exceeded" for large User Directory.
LGTsc30170	30170nw	Excessive jobsdb indication records overwhelm server.
LGTsc30195	30195nw	Save.exe Faults Due to liblocal.dll.
LGTsc30472	30472nw	Windows XP does not secure files in folder called C:c but backup succeeds.
LGTsc30475	30475nw	Cloning is slow from a local device to a remote device.
LGTsc30690	30690nw	Aliases field updated improperly in cluster configuration.
LGTsc30808	30808nw	When using nsrpush to upgrade clients, the nsr/res/servers file is being cleared/recreated.
LGTsc30903	30903nw	nsrscsi_recover dumps core.
LGTsc31127	31127nw	A MAC-OS save of millions of files fails with malloc() error.
LGTsc31280	31280nw	nsrmmdbd consumes 100% of CPU when backing up a client.
LGTsc31283	31283nw	Running nsrclone -J <storage node> fails to clone.
LGTsc31564	31564nw	nsrexecd leaves behind several defunct processes.
LGTsc32510	32510nw	Savegroup fails with "Too many open files Segmentation Fault(core dump)" error.
LGTsc32803	32803nw	A save output error creates a file in \nsr\tmp.
LGTsc32842	32842nw	nsrexecd intermittently dies at startup
LGTsc33000	33000nw	NetWorker cannot manually recover space after SSID is deleted
NW104850	NW104850	Cannot unmount tape from tape device in service mode
NW104920	NW104920	VSS System files fails on Windows 2008.
NW105186	NW105186	There are multiple nsrmmmd processes for the same device on the same storage node.

Table 2 Fixed bugs in Sun StorageTek EBS release 7.6 (Sheet 3 of 4)

Issue number for Customer Service	Issue Number for Issue Tracker	Description
LGTsc07681	07681nw	NDMP fbf recover only recovers from incr level backup not full.
LGTsc09318	09318nw	A tape unmount fails when the mail cap is in use.
LGTsc17128	17128nw	Unable to autoconfigure NDMP Drives on SUN NAS 5320.
LGTsc20118	20118nw	Save fails in connecting directory section.
LGTsc20439	20439nw	Recover does not start all ssid in parallel.
LGTsc20477	20477nw	Volumes marked full prematurely with "verify label on unload".
LGTsc20776	20776nw	nsrlcpd fails to initialize on a multi-homed storage node.
LGTsc22381	22381nw	Subfolders not being backed up in folder containing mount points.
LGTsc23887	23887nw	NDMP: client cannot restore files with french characters in name.
LGTsc23900	23900nw	nsrclone -J does not enforce Read-Host selection in certain cases.
LGTsc24392	24392nw	ssi-ACSLs communication fails after migration.
LGTsc25669	25669nw	Powersnap media does not expire automatically.
LGTsc26209	26209nw	A silent failure occurs where AFTD Volumes are dismounting.
LGTsc27174	27174nw	Due to a nsrmmgd issue, NetWorker can not manage Jukebox.
LGTsc27421	27421nw	Location field of non-barcode jukebox volumes not updated by inventory
LGTsc28160	28160nw	nsrmmdbd updates to the media database hang when purging staged save sets.
LGTsc28455	28455nw	tape_bsf failed: drive status is The beginning of medium.
LGTsc28482	28482nw	NDMP ghost index issue.
LGTsc28659	28659nw	Entries over 200 characters get truncated from the notification action field.
LGTsc28818	28818nw	Avamar deduplication backup of the Windows client fails.
LGTsc29069	29069nw	Inquire on Solaris 10 skips devices at double digit LUNs.
LGTsc29934	29934nw	Savepsm fails when there is an NMC instance other than legato in the folder.
LGTsc29969	29969nw	nwrecover GUI Status showing "offline" instead of "near-line".
LGTsc30176	30176nw	A device becomes busy and eventually goes into service mode during clone.

Table 2 Fixed bugs in Sun StorageTek EBS release 7.6 (Sheet 4 of 4)

Issue number for Customer Service	Issue Number for Issue Tracker	Description
LGTsc30271	30271nw	Volume marked as "Unlabeled" after NetWorker is restarted.
LGTsc30876	30876nw	Nsrmmmd infinitely loops in insert_frag() when update_volume fails.
LGTsc31214	31214nw	NetWorker does not resynchronize upon receiving a "source empty" and "destination full" status from the silo.
LGTsc31416	31416nw	Install of NetWorker Client on Windows 2000 - No Service created.
LGTsc31457	31457nw	"Server network interface" not used for VCB/proxy backup.
LGTsc32258	32258nw	If /nsr directory is not created then nsrexecd fails to start.
LGTsc08694	08694nw	When mounting a tape that contains NDMP data into a tape device and running the scanner -v command, the "written/used" field of the media doubles.

## Environment and system requirements

This section describes specific environment and system requirements.

### System configuration requirements for a dedicated Sun StorageTek EBS server

Table 3 on page -28 and Table 4 on page -29 outline 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 3** 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 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.			

### 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.

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### 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>.

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### 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>.

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### 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.

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### Features provided with base enablers

[Table 5 on page -31](#) lists the features that are available as part of Sun StorageTek EBS base enablers.

**Table 5** 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 6 on page -31](#) lists the features that are available for support with Sun StorageTek EBS base enablers.

**Table 6** 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
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

**Table 6 Additional features available with base enablers (Sheet 2 of 2)**

Feature	Support by edition			
	Power	Network	Workgroup	Business
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.

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## Known problems and limitations

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

- ◆ “Sun StorageTek EBS 7.6” on page -33
- ◆ “Sun StorageTek EBS releases previous to 7.6 problems and limitations” on page -62
- ◆ “Sun StorageTek EBS releases previous to 7.5 problems and limitations” on page -85
- ◆ “Sun StorageTek EBS releases previous to 7.4 problems and limitations” on page -132

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

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

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### Sun StorageTek EBS 7.6

Table 7 on page -34 identifies problem issues and limitations discovered in Sun StorageTek EBS 7.6.

The known limitations are separated into the following categories:

- ◆ “Backup problems and limitations” on page -39
- ◆ “Cloning and Staging problems and limitations” on page -43
- ◆ “CLI problems and limitations” on page -45
- ◆ “Cloud device problems and limitations” on page -47
- ◆ “Configuration problems and limitations” on page -47
- ◆ “Installation and upgrading problems and limitations” on page -48
- ◆ “Messaging problems and limitations” on page -50
- ◆ “Performance problems and limitations” on page -51

- ◆ “Restore problems and limitations” on page -51
- ◆ “VMware Consolidated Backup (VCB) limitations and descriptions” on page -53
- ◆ “General problems and limitations” on page -60

For known limitations related to internationalization support in Sun StorageTek EBS 7.6, see “Internationalization support” on page -169.

**Table 7 Limitations discovered in Sun StorageTek EBS release 7.6**

Customer Service defect number	Issue tracker issue number	Description of limitation	Operating System Affected	Product Feature
<a href="#">“LGTsc30233” on page -39</a>	30233nw	AIX deduplication client fails with AVCTL error due to case-sensitivity	AIX	Backup
<a href="#">“LGTsc31729” on page -40</a>	31729nw	Savegroup fails when backing up VSS save sets with deduplication enabled	Windows	Backup
<a href="#">“LGTsc31933” on page -40</a>	31933nw	Multiple passphrases cannot be used for Cloud-based encrypted backup and recovery	Windows	Backup
<a href="#">“LGTsc31401” on page -41</a>	31401nw	Selecting “Discover” option in Software Administration wizard causes nsrccd process to hang	Solaris	Backup
<a href="#">“LGTsc28262” on page -41</a>	28262nw	Sun StorageTek EBS Server may take a long time to restart if size of media management database is very large	Windows	Backup
<a href="#">“LGTsc08220” on page -41</a>	08220nw	Limits in Sun StorageTek EBS support for NTFS	Windows	Backup
<a href="#">“LGTpa88903” on page -42</a>	88903nw	Cannot backup two Sun StorageTek EBS clients with the same hostname but different fully qualified domain names (FQDNs)	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Backup
<a href="#">“LGTsc32100” on page -42</a>	32100nw	DFS backup failure under certain conditions if VSS is enabled	Windows	Backup
<a href="#">“LGTsc19011” on page -42</a>	19011nw	Savegrp may fail if a client has more than 1116 savesets	AIX, Solaris	Backup
<a href="#">“LGTsc29210” on page -43</a>	29210nw	Backups may fail if server parallelism is set to maximum value	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Backup
<a href="#">“NW105699” on page -43</a>	NW105699	NDMP Path-to-Tape cloning fails to clone save sets spanning across two volumes	Linux	Cloning

Table 7 Limitations discovered in Sun StorageTek EBS release 7.6

Customer Service defect number	Issue tracker issue number	Description of limitation	Operating System Affected	Product Feature
<a href="#">"NW105306" on page -43</a>	105306nw	Status of aborted clone is not shown under Show Manual Clone History in NMC	Solaris	Cloning
<a href="#">"NW105684" on page -43</a>	NW105684	Path-to-Tape cloning check fails if spanning of first fragment of the source image and destination spanning occur simultaneously during cloning	Linux	Cloning
<a href="#">"LGTsc31283" on page -44</a>	31283nw	Running nsrclone -J <storage node> hangs for any source device type	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Cloning
<a href="#">"LGTsc29276" on page -44</a>	29276nw	Path-to-tape cloning requires a separate volume to write the end notes	Linux	Cloning
<a href="#">"LGTsc31929" on page -45</a>	31929nw	Sun StorageTek EBS does not support cloning of a Path-To-Tape clone instance that is cloned from a tape of different block or device file size than that of the original source tape.	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Cloning
<a href="#">"LGTsc29190" on page -45</a>	29190nw	Using nsrclone to clone an NDMP clone hangs if source volume is not mounted	Solaris	Cloning
<a href="#">"LGTsc32017" on page -46</a>	32017nw	nsrlic output may not list all connected clients to NMDA UNIX enabler	UNIX	CLI
<a href="#">"LGTsc24102" on page -46</a>	24102nw	Storage nodes on AIX may encounter issues when running the inquire or dvdetect commands	AIX	CLI
<a href="#">"NW105390" on page -46</a>	NW105390	Directed recover initiated from server may fail with machines in different domains from CLI on Windows	Windows	CLI
<a href="#">"NW104933" on page -47</a>	NW104933	Cloud device created with target session attribute of 1 even if another value is specified	Windows	Cloud device
<a href="#">"LGTsc32171" on page -47</a>	32171nw	NDMP target session value changed to 32 when evaluation mode expires	Linux	Configuration
<a href="#">"LGTsc29940" on page -47</a>	29940nw	Device file size value cannot be reset to default unless nsrmmnd or Sun StorageTek EBS services are restarted	Solaris	Configuration
<a href="#">"LGTsc28693" on page -47</a>	28693nw	Quantum DXi: May not be able to configure library from a particular node in a DDS configuration	Solaris	Configuration
<a href="#">"LGTsc30786" on page -48</a>	30786nw	Default client parallelism should be set to 4 except for the Sun StorageTek EBS server	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Configuration

Table 7 Limitations discovered in Sun StorageTek EBS release 7.6

Customer Service defect number	Issue tracker issue number	Description of limitation	Operating System Affected	Product Feature
"NW110327" on page -48	NW110327	nsrjobd running after uninstallation of Sun StorageTek EBS on Windows	Windows	Installation
"LGTsc32047" on page -49	32047nw	ConnectEMC software cannot be installed in non-default location	Windows	Installation
"LGTsc32944" on page -49	32944nw	Library disabled after upgrading from Sun StorageTek EBS 7.4 release to Sun StorageTek EBS 7.6	AIX	Upgrading
"NW105501" on page -50	NW105501	Usage error does not appear when nsrda binaries run from command line	Solaris	Messaging
"NW105414" on page -50	NW105414	Logging and warning messages not sufficient when reaching soft runtime limit	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Messaging
"LGTsc29953" on page -50	29953nw	Running ndmpsup with full disk specified for output location does not return error	Windows	Messaging
"NW105832" on page -50	NW105832	No warning message appears when staging is started for disabled destination device	Windows	Messaging
"NW105777" on page -51	NW105777	Save output error and parse error messages appear in Savegroup log and NMC Group Details upon backup with directives turned on	Windows	Messaging
"LGTsc29791" on page -51	29791nw	NMC may consume increasing amounts of memory on Windows	Windows	Performance
"LGTsc24128" on page -51	24128nw	HP TruCluster with DNS enabled may result in slow connections to the Sun StorageTek EBS server	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Performance
"LGTsc29958" on page -51	29958nw	Empty directory for NDMP is not recovered during Direct Recover	Linux	Restore
"LGTsc33060" on page -52	33060nw	Volume mount point is recovered as a folder	Windows	Restore
"LGTsc30685" on page -52	30685nw	Recovery reports are not generated immediately after a successful recover	Solaris	Restore
"LGTsc17739" on page -52	17739nw	Host name resolution changes on the Sun StorageTek EBS server can cause recover items to become unbrowsable	HP-UX	Restore

Table 7 Limitations discovered in Sun StorageTek EBS release 7.6

Customer Service defect number	Issue tracker issue number	Description of limitation	Operating System Affected	Product Feature
<a href="#">"LGTsc00742" on page -52</a>	00742nw	The recover command may fail if the Sun StorageTek EBS server's short name cannot be resolved from the client	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Restore
<a href="#">"LGTsc24329" on page -52</a>	24329nw	Client file index recovery fails for NDMP client on Windows	Windows	Restore
<a href="#">"LGTsc25674" on page -53</a>	25674nw	Windows file permissions may be changed after a full recovery	Windows	Restore
<a href="#">"LGTsc31671" on page -53</a>	31671nw	Unable to recover savesets on NDMP path-to-tape clone volume that has been deleted and then restored using scanner command	Solaris	Restore
<a href="#">"LGTsc30685" on page -52</a>	30685nw	Recovery reports are not generated immediately after a successful recover	Solaris	Restore
<a href="#">"LGTsc17739" on page -52</a>	17739nw	Host name resolution changes on the Sun StorageTek EBS server can cause recover items to become unbrowsable	HP-UX	Restore
<a href="#">"LGTsc00742" on page -52</a>	00742nw	The recover command may fail if the Sun StorageTek EBS server's short name cannot be resolved from the client	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Restore
<a href="#">"LGTsc24329" on page -52</a>	24329nw	Client file index recovery fails for NDMP client on Windows	Windows	Restore
<a href="#">"LGTsc25674" on page -53</a>	25674nw	Windows file permissions may be changed after a full recovery	Windows	Restore
<a href="#">"LGTsc31671" on page -53</a>	31671nw	Unable to recover savesets on NDMP path-to-tape clone volume that has been deleted and then restored using scanner command	Solaris	Restore
<a href="#">"LGTsc32763" on page -53</a>	32763nw	RECOVER_FULL_PATHS variable for NetApp filer recovery not supported	UNIX	Restore
<a href="#">"NW105846, NW105379" on page -54</a>	NW105846 NW105379	Index browsing fails when the VCB backups are performed with traditional backups	Windows	VCB
<a href="#">"NW105962" on page -54</a>	NW105962	Single step recovery of VM on Virtual Center or ESX server does not work if non-default port number used	Windows	VCB
<a href="#">"NW105583" on page -54</a>	NW105583	Backup with VCB Directive applied to Windows 2000 VM does not skip system32 folder under C:\WINNT	Windows	VCB

Table 7 Limitations discovered in Sun StorageTek EBS release 7.6

Customer Service defect number	Issue tracker issue number	Description of limitation	Operating System Affected	Product Feature
<a href="#">"NW105298" on page -55</a>	NW105298	Incorrect error messages are displayed during full image recovery or drive letter recovery	Windows	VCB
<a href="#">"NW105265" on page -55</a>	NW105265	Single-file recovery is not supported for VMs containing non-ASCII filenames	Windows	VCB
<a href="#">"NW105098" on page -55</a>	NW105098	Performance is slow on Windows VMs when multiple disaster recovery sessions are performed simultaneously	Windows	VCB
<a href="#">"NW105095" on page -55</a>	NW105095	Stopping the savegroup does not stop the VCB mounter operation	Windows	VCB
<a href="#">"LGTsc32604" on page -56</a>	32604nw	Single-step recovery has limitation to restore VMs with thin disks to ESX 4.0 Server.	Windows	VCB
<a href="#">"LGTsc32380" on page -56</a>	32380nw	File-level recovery of an encrypted file is not supported	Windows	VCB
<a href="#">"LGTsc30075" on page -57</a>	30075nw	Recovery of a VM host with multiple drives displays "Directory not empty" in the recover GUI	Windows	VCB
<a href="#">"LGTsc30810" on page -57</a>	30810nw	Additional system generated or user files are recovered during save set recovery from an incremental backup	Windows	VCB
<a href="#">"LGTsc30813" on page -58</a>	30813nw	Restored virtual machine starts in forceful powered off state during FULLVM restore	Windows	VCB
<a href="#">"LGTsc31164" on page -58</a>	31164nw	nsr resource takes default values if invalid application information inputs are provided for the proxy server	Windows	VCB
<a href="#">"LGTsc30927" on page -58</a>	30927nw	GPT disks are not supported for single file recovery (SFR)	Windows	VCB
<a href="#">"LGTsc31190" on page -58</a>	31190nw	Single file recovery (SFR) cannot be performed on disks with no drive letter	Windows	VCB
<a href="#">"LGTsc31499" on page -59</a>	31499nw	Single file recovery (SFR) is not supported for VM's configured with dynamic disks	Windows	VCB
<a href="#">"LGTsc31545" on page -59</a>	31545nw	Memory footprint for nsrvcb_save is huge during VMware backups	Windows	VCB
<a href="#">"LGTsc31562" on page -59</a>	31562nw	VM should be in the "powered on" state for the first backup	Windows	VCB

Table 7 Limitations discovered in Sun StorageTek EBS release 7.6

Customer Service defect number	Issue tracker issue number	Description of limitation	Operating System Affected	Product Feature
<a href="#">"LGTsc31575" on page -60</a>	31575nw	Shared folder settings are not restored from a file-level restore on the VM	Windows	VCB
<a href="#">"LGTsc31651" on page -60</a>	31651nw	Any system changes to the VM requires a full backup	Windows	VCB
<a href="#">"LGTsc31735" on page -60</a>	31735nw	Save set consolidation is not supported for VCB backups	Windows	VCB
<a href="#">"LGTsc31737" on page -60</a>	31737nw	No directives are supported for VCB backup when save set is "*FULL*" and the level is "FULL"	Windows	VCB
<a href="#">"LGTsc31971" on page -60</a>	31971nw	Backup of a powered off VM is only possible if the VM was turned off gracefully	Windows	VCB
<a href="#">"NW110377" on page -61</a>	NW110377	Secure Storage Library not initialized during Lockbox entry creation due to missing library	HP-UX	General problems
<a href="#">"NW105048" on page -61</a>	NW105048	Sun StorageTek EBS does not save or recover DFS empty directories	Windows	General problems
<a href="#">"LGTsc32722" on page -61</a>	32722nw	Archived data not properly indexed on MAC-OS	MAC	General problems
<a href="#">"LGTsc30717" on page -61</a>	30717nw	Sun StorageTek EBS services might not start due to lock files	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	General problems
<a href="#">"LGTsc32410" on page -61</a>	32410nw	Compression asm does not work with other asms	Windows	General problems

### Backup problems and limitations

This section details the problems and limitations related to backups.

#### AIX deduplication client fails with AVCTL error due to case-sensitivity

##### LGTsc30233

Deduplication backup of a Sun StorageTek EBS client on AIX may fail with an AVCTL error. This is because client names or domains on the Avamar server are not case-sensitive at the creation time, but are case-sensitive when logging on to a particular domain account.

### Workaround

Keep the same naming convention of client name or domain (case-sensitive) after the first client record creation.

### Savegroup fails when backing up VSS save sets with deduplication enabled

#### LGtsc31729

When backing up the VSS save sets on Windows 2008 with deduplication enabled, the savegroup fails with the following error in NMC and the savegroup log upon completion:

```
vm20-win-6:VSS OTHER:\ 57803:save: Saving with  
De-Duplication enabled  
vm20-win-6:VSS OTHER:\ VSS OTHER: No writers found for  
this saveset: VSS OTHER.
```

### Multiple passphrases cannot be used for Cloud-based encrypted backup and recovery

#### LGtsc31933

Multiple passphrases cannot be used for Cloud-based encryption and decryption, due to the difficulty of specifying a passphrase for decryption that is different from the one that was used for encrypting that data. The passphrase used when backing up encrypted data must be the same one used when performing a recovery and decrypting the data.

The **recover -p** option, which provides a way to specify a passphrase different from the one currently configured on the Sun StorageTek EBS server, cannot be used for encrypted Cloud backups.

The following limitations also apply to passphrase use in Sun StorageTek EBS:

- ◆ A Cloud device can only support one single passphrase for both backup and recovery when encryption is enabled.
- ◆ Changing the datazone passphrase impacts all newly initiated backup and recovery operations and should be avoided.
- ◆ If a backup using an old passphrase needs to be recovered, that old passphrase must be restored on the Sun StorageTek EBS server during the recovery process.

## Selecting “Discover” option in Software Administration wizard causes nsrccd process to hang

### LGTsc31401

When you perform “Add products to the repository” using the Software Administration Wizard in NMC and select **Discover** after successful completion of the task, the **nsrccd** process becomes unresponsive and the application hangs.

### Workaround

To avoid this issue, perform one of the following:

- ◆ Kill the **nsrccd** process, then restart the daemons. Selecting the **Discover** option in NMC now completes successfully.
- ◆ Run the command line utility **nsrpush** to perform the operation instead of using NMC.

## Sun StorageTek EBS Server may take a long time to restart if size of media management database is very large

### LGTsc28262

If the Sun StorageTek EBS media management database is very large, the Sun StorageTek EBS server may take a long time to establish client connections when it is restarted. The reason is that a consistency check of the media management database is triggered when the server is restarted.

To reduce the size of the media management database, run the **nsrim -C** command. Be aware that this command may take a long time to run and that the Sun StorageTek EBS server will be unavailable during this time. Run the command when the Sun StorageTek EBS server is not busy.

More information about reducing the media management database is provided in Chapter 17, Sun StorageTek EBS Server Management, of the Sun StorageTek EBS *Release 7.6 Administration Guide*.

## Limits in Sun StorageTek EBS support for NTFS

### LGTsc08220

The Sun StorageTek EBS software supports the backup and recovery of NTFS using Win32 API-defined subsystem. Besides Win32 Subsystem, NTFS also support other subsystems like POSIX. The Win32 subsystem supports certain file naming conventions, and does not have ability to support file naming conventions of other

subsystems like POSIX, such as the ability to differentiate between filenames that are identical except for uppercase and lowercase characters (for example, temp.txt and TEMP.txt) and the ability to have multiple dots (.) in filenames.

POSIX applications that access NTFS file systems may implement file naming convention differently than the Win32 subsystem. It is possible that certain file naming features may be present that are not part of the Win32 subsystem. If this is the case, the Sun StorageTek EBS software will not correctly back up these files.

### **Cannot backup two Sun StorageTek EBS clients with the same hostname but different fully qualified domain names (FQDNs)**

#### **LGTpa88903**

Sun StorageTek EBS cannot cope with two different machines that have the same hostname but different FQDNs. For example, if two divisions of a company have a machine named "mailserver.abc.com" and "mailserver.xyz.com," they will be unable to back up the second host.

### **DFS backup failure under certain conditions if VSS is enabled**

#### **LGTsc32100**

If VSS is enabled, a DFS backup or a VSS SYSTEM BOOT backup may fail under the following conditions:

- ◆ The namespace folder is not a shared folder target.
- ◆ Replication is configured for the namespace.
- ◆ Files exist in the namespace folder and have replicated to the member server.

#### **Workaround**

To avoid this issue, create a namespace in the folder target or do not enable replication.

### **Savegrp may fail if a client has more than 1116 savesets**

#### **LGTsc19011**

A savegrp operation may fail when client is configured with more than 1116 saveset files. The following message may appear:

```
Probe job had unrecoverable failure(s), please refer to
daemon.raw for further details
```

## Backups may fail if server parallelism is set to maximum value

### LGTsc29210

Index backups may fail with the following error message if the maximum server parallelism is set to 400 and there were 400 simultaneous sessions running:

```
server-name:index 1 retry attempted  
server-name:index P?: No such file or directory
```

### Workaround

Reduce the server parallelism value.

## Cloning and Staging problems and limitations

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

### NDMP Path-to-Tape cloning fails to clone save sets spanning across two volumes

#### NW105699

NDMP Path-to-Tape cloning of a volume fails to clone save sets that span across two volumes. However, when that save set is cloned individually, cloning is successful.

### Status of aborted clone is not shown under Show Manual Clone History in NMC

#### NW105306

When the `nsrndmp_clone` operation is aborted from the command line, **Show Manual Clone History** in NMC does not display the status.

### Path-to-Tape cloning check fails if spanning of first fragment of the source image and destination spanning occur simultaneously during cloning

#### NW105684

The Path-to-Tape cloning check, which checks the consistency of the source tape file size while cloning is in progress, fails if spanning of the first fragment of the source image and destination spanning occur at the same time during cloning. A series of `nsrndmp_clone` error messages similar to the following will display, indicating the tape file size error and identifying which save set failed cloning.

```
nsrndmp_clone: Tape server paused: reached the end of
file
nsrndmp_clone: Error - Incorrect tape file size
1073741824
nsrndmp_clone: Tape server halted: The backup is aborted
by operator.
nsrndmp_clone: Failed to clone /Builds (ssid 3119103906)
nsrndmp_clone: Failed to clone the following save sets:
3119103906
```

### Workaround

Manually clone the failed save set to another destination volume that has enough free space to accommodate the save set.

### Running `nsrclone -J <storage node>` hangs for any source device type

#### LGtsc31283

If `nsrclone` is specified with `-J <storage node>` for any source device type and that storage node is not permitted for use based on the affinity lists, `nsrclone` will loop indefinitely and a failure level error displays.

### Path-to-tape cloning requires a separate volume to write the end notes

#### LGtsc29276

During path-to-tape cloning, `mminfo` does not display end notes as part of the clone image.

For example, configure Sun StorageTek EBS Server, Client, or Storage node for path-to-tape. Configure the source and target jukeboxes with the same type of device and default size. Manually save multiple savesets to the source volume so that one of the volume spans to another volume. Using the following command, execute path-to-tape cloning for all the savesets including the spanned save sets in the same sequence as they are backed up:

```
nsrndmp_clone -b "Default Clone"-J <clone storage node>
-p -S <ssid>
```

When the save sets span across 2 volumes and writes only end notes in the third volume, then the clone completion message and the `mminfo` command displays only the first 2 volumes and skips the third volume as it does not contain any save sets.

---

**Note:** The third volume is not required in order to complete the restore.

**Sun StorageTek EBS does not support cloning of a path-to-tape clone instance that is cloned from a tape of different block or device file size than that of the original source tape**

**LGTsc31929**

Cloning of path-to-tape (opaque) clone is not supported for destination tapes with different block or device file size from that of the original source

*Example*

Create a backup saveset (Clone instance 0) on a LTO-3 tape with a block size of 128KB and a device file size of 4 GB. Using path-to-tape, create a clone saveset (Clone instance 1) to another LTO-1 tape with a block size of 64KB and a device file size of 1 GB. When attempting to create a new instance from Clone instance 1, cloning fails with the following error:

```
nsrndmp_clone: Incorrect tape file size
<current_tape_file_size>
nsrndmp_clone: Set device file size to
<recommended_value> in source device properties
```

**Workaround**

Change the source device file to the value suggested by the nsrndmp\_clone message. Once cloning is complete, change the source device file to its original value.

**Using nsrclone to clone an NDMP clone hangs if source volume is not mounted**

**LGTsc29190**

If you perform an NDMP Clone of a saveset and then use nsrclone to clone the NDMP clone, the operation will hang if the source volume is not mounted.

**Workaround**

Mount the source volume manually before starting the nsrclone operation.

**CLI problems and limitations**

This section details the problems and limitations related to command line use.

### **nsrlic output may not list all connected clients to NMDA UNIX enabler**

#### **LGTsc32017**

The output produced by running **nsrlic -v** may not list all Virtual clients as connected clients to the NMDA UNIX enabler.

#### **Workaround**

Add the NMDA UNIX enabler, then back up the virtual client for the Solaris host first.

### **Storage nodes on AIX may encounter issues when running the inquire or dvdetect commands**

#### **LGTsc24102**

The following issues may be encountered when running the **inquire** or **dvdetect** commands on an AIX storage node:

- ◆ Operating system unresponsive
- ◆ File system unresponsive
- ◆ Errors in the errpt (the AIX system error log)

Some of the errors seen in the errpt include but are not limited to the following:

```
DISK OPERATION ERROR
I/O ERROR DETECTED BY LVM
META-DATA I/O ERRORR
FILE SYSTEM RECOVERY REQUIRED
LOG I/O ERROR
```

If you experience these issues when running the **inquire** or **dvdetect** commands, contact EMC Customer Service.

### **Directed recover initiated from server may fail with machines in different domains from CLI on Windows**

#### **NW105390**

Directed recovery may fail when performing the directed recover on the Windows Sun StorageTek EBS server to the remote client when the Sun StorageTek EBS server and client are in different domains. In this case, perform the directed recovery from the Sun StorageTek EBS User program.

## Cloud device problems and limitations

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

### **Cloud device created with target session attribute of 1 even if another value is specified**

#### **NW104933**

When a Cloud device is created using `nsradmin` or NMC with a target sessions attribute other than 1, the NSR device resource is always created with a target sessions attribute of 1 rather than the specified value.

## Configuration problems and limitations

This section details the problems and limitations related to configuration.

### **NDMP target session value changed to 32 when evaluation mode expires**

#### **LGTsc32171**

The NDMP device target session attribute is changed to 32 after the expiration of evaluation mode.

#### **Workaround**

Manually change the Target session attribute from 32 to 1 and then enable the NDMP drives.

### **Device file size value cannot be reset to default unless `nsrmmmd` or Sun StorageTek EBS services are restarted**

#### **LGTsc29940**

There is no way to reset the value of "device file size" in NMC to the default value without restarting `nsrmmmd` or restarting the Sun StorageTek EBS services.

### **Quantum DXi: May not be able to configure library from a particular node in a DDS configuration**

#### **LGTsc28693**

When virtual devices, tape libraries and drives exported from the DXi host are configured in a DDS (Dynamic Drive Sharing) configuration and one of the DXi libraries is deleted from the DDS configuration and subsequently rescanned and reconfigured, the operation may fail with the error message "Storage node `xxxxx` is not part of storage

node list associated with NSR unconfigured library". This can occur due to a DXi SCSI reserve/release issue after a new install or server/storage node reboot.

#### **Workaround**

Perform one of the following:

- ◆ Reboot the DXi hosts, then perform a re-scan from the storage node that encountered the initial failure. The reboot of the DXi forces a release of the SCSI reservation.
- ◆ Configure the failed DXi library from another storage node in the DDS configuration.

#### **Default client parallelism should be set to 4 except for the Sun StorageTek EBS server**

##### **LGTsc30786**

The client parallelism attribute for a Sun StorageTek EBS client is set to 12 by default. This value can cause problems with interoperability features such as Avamar, EMC Celerra backups, and VSS backups.

#### **Workaround**

Set the client parallelism attribute on Sun StorageTek EBS clients to 4. However, keep the Sun StorageTek EBS server client parallelism attribute set to 12.

### **Installation and upgrading problems and limitations**

This section details the problems and limitations related to new installations of the Sun StorageTek EBS software, or upgrades from a previous release.

#### **nsrjobd running after uninstallation of Sun StorageTek EBS on Windows**

##### **NW110327**

The nsrjobd process continues to run after Sun StorageTek EBS has been uninstalled on Windows. As a result, the Sun StorageTek EBS Installation folder cannot be deleted.

#### **Workaround**

Using Task Manager, kill the **nsrjobd** process manually and then delete the Sun StorageTek EBS installation folder.

**ConnectEMC software cannot be installed in non-default location****LGTsc32047**

The ConnectEMC software is installed under C:\Program Files by default, and cannot be installed to a non-default location.

**Library disabled after upgrading from Sun StorageTek EBS 7.4 release to Sun StorageTek EBS 7.6****LGTsc32944**

After upgrading from a Sun StorageTek EBS 7.4 release to Sun StorageTek EBS 7.6, configured libraries may not become available and, after several unsuccessful connection attempts, may be disabled. This may be due to a Control Port change.

**Workaround**

To work around this issue:

1. Disable the library
2. Re-scan the Storage node where the failure occurred.
3. Re-enable the library.

The Library now appears in the Ready State.

## Messaging problems and limitations

This section details the problems and limitations related to error messages.

### **Usage error does not appear when nsrdsa binaries run from command line**

#### **NW105501**

nsrdsa binaries are not meant to be run from the command line. However, when this is attempted, Sun StorageTek EBS hangs and does not display an error notifying the user of the incorrect usage.

### **Logging and warning messages not sufficient when reaching soft runtime limit**

#### **NW105414**

When a soft runtime limit is reached for any operation, the logging and warning messages do not provide any information about the limit being exceeded.

### **Running ndmpsups with full disk specified for output location does not return error**

#### **LG7sc29953**

When **ndmpsups** is run (**ndmpsups -c client -o <disk>**) and the location specified for the output file is a disk that is full, no error message displays indicating that the disk is full, and only a partial output file is created.

### **No warning message appears when staging is started for disabled destination device**

#### **NW105832**

No warning or error message appears when staging is started and the destination device is disabled. An error message should display indicating that Sun StorageTek EBS is waiting for 1 writable device.

#### **Workaround**

Check the device configuration prior to staging and enable the device if necessary.

### **Save output error and parse error messages appear in Savegroup log and NMC Group Details upon backup with directives turned on**

#### **NW105777**

When backing up a client with directives turned on, the savegroup passes successfully. However, parse error messages and save output errors appear in the Savegroup log file and NMC Group Details window, such as "bad directory specification for /nsr/tmp".

## **Performance problems and limitations**

This section details the problems and limitations related to performance of the Sun StorageTek EBS software.

### **NMC may consume increasing amounts of memory on Windows**

#### **LGTsc29791**

Over a period of time, NMC may consume large amounts of memory that could result in the system becoming unresponsive.

### **HP TruCluster with DNS enabled may result in slow connections to the Sun StorageTek EBS server**

#### **LGTsc24128**

If DNS is enabled on TruCluster, connections to the Sun StorageTek EBS Server are delayed about 30 seconds each. Also the initial start of the Sun StorageTek EBS server may take longer.

#### **Workaround**

Disable DNS on the TruCluster server.

## **Restore problems and limitations**

This section details the problems and limitations related to recoveries.

### **Empty directory for NDMP is not recovered during Direct Recover**

#### **LGTsc29958**

Performing a Directed recover of an empty directory for NDMP does not recover the empty directory, even though the operation is reported as successful.

### **Volume mount point is recovered as a folder**

#### **LGTsc33060**

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

#### **Workaround**

To recover the data within the mount point:

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

This procedure is documented in the Sun StorageTek EBS Release 7.6 Administration Guide in the section "Recover the mounted volume's data" of the chapter "Recovering Data."

### **Recovery reports are not generated immediately after a successful recover**

#### **LGTsc30685**

After a successful recover, a subsequent savegroup completion is required to generate the recovery report as the index is updated only after the completion of a save group.

### **Host name resolution changes on the Sun StorageTek EBS server can cause recover items to become unbrowsable**

#### **LGTsc17739**

Changes to the etc/hosts file on the Sun StorageTek EBS server may cause recover items to become unbrowsable.

### **The recover command may fail if the Sun StorageTek EBS server's short name cannot be resolved from the client**

#### **LGTsc00742**

The recover operation may fail if the short name of the Sun StorageTek EBS server cannot be resolved from the client performing the recover.

### **Client file index recovery fails for NDMP client on Windows**

#### **LGTsc24329**

Recovery of the client file index fails when running **nsrck -L7** for an NDMP client that was running on Windows.

### **Windows file permissions may be changed after a full recovery**

#### **LGTsc25674**

If all of the system files are recovered and “overwrite existing files” was selected, some system configuration permissions and security settings may be changed.

### **Unable to recover savesets on NDMP path-to-tape clone volume that has been deleted and then restored using scanner command**

#### **LGTsc31671**

You may be unable to recover savesets from a volume that has been restored using the scanner command in the following situation:

1. Perform a multiplexed backup.
2. Perform an NDMP Path-to-tape clone of the volume.
3. Delete the volume containing the clone instance.
4. Run the scanner command on the deleted volume.
5. Try to recover a saveset.

### **RECOVER\_FULL\_PATHS variable for NetApp filer recovery not supported**

#### **LGTsc32763**

When performing a DAR recovery for a NetApp filer, the NetApp specific environment setting "RECOVER\_FULL\_PATHS" is not supported for Sun StorageTek EBS release 7.6. Setting or unsetting the environment variable "NSR\_NDMP\_RECOVER\_NO\_FULL\_PATHS" no longer has any effect on this NetApp specific environment setting (for example, RECOVER\_FULL\_PATHS) for the DAR recovery.

## **VMware Consolidated Backup (VCB) limitations and descriptions**

This section details problems and limitations related to VCB operations.

---

**Note:** Sun StorageTek EBS 7.6 supports only Microsoft Windows 2003 (32-bit or 64-bit) OS on the VCB Proxy.

---

### **Index browsing fails when the VCB backups are performed with traditional backups**

**NW105846, NW105379**

When VCB backups \*FULL\* and ALLVMFS are performed along with traditional backups, index browsing of the backup fails.

#### **Workaround**

Perform one of the following:

- ◆ In the command line interface, browse to a particular folder to view the index. For example, if C:\test-data\D1 was the new folder created for \*FULL\* incremental backup that you want to browse, type **recover>cd C:\test-data\D1** from the command line to view the index.
- ◆ Use the **nsrim** command to make browsable save sets to recoverable save sets for traditional backups in order to view the full index of the backup. For example, **nsrim -c 10.31.79.12 -N C:\F1 -l**.

### **Single step recovery of VM on Virtual Center or ESX server does not work if non-default port number used**

**NW105962**

Single step recovery of a VM cannot be performed on the Virtual Center or ESX server if a non-default port number (a port number other than 443) is used.

#### **Workaround**

Recover the VM image to a staging location and use VMware Converter to export the VM image to the ESX server.

### **Backup with VCB Directive applied to Windows 2000 VM does not skip system32 folder under C:\WINNT**

**NW105583**

When VCB Directive is applied to a Windows 2000 VM, the **system32** folder under C:\WINNT is not skipped during backup. File-level full and incremental backups with VCB Directive enabled should skip the system and system32 folders in the Windows install folder.

### **Incorrect error messages are displayed during full image recovery or drive letter recovery**

#### **NW105298**

When using the recover command or the Sun StorageTek EBS User program (winworkr), saveset recovery of full image or browsable recovery of an entire drive letter displays incorrect error messages, such as “cannot write to <directory\_location>: The directory is not empty.”

#### **Workaround**

Ignore the incorrect error messages.

### **Single-file recovery is not supported for VMs containing non-ASCII filenames**

#### **NW105265**

If VMs contain filenames with non-ASCII characters, single-file recovery is not possible and the full-image backup implementation is used for backup.

#### **Workaround**

Perform the ALLVMFS backup and recover.

### **Performance is slow on Windows VMs when multiple disaster recovery sessions are performed simultaneously**

#### **NW105098**

When performing disaster recovery of multiple Windows VMs simultaneously from the same proxy machine, the recovery time increases due to VMware VDDK limitation.

#### **Workaround**

Perform disaster recovery of multiple VMs in a sequential manner instead of performing recovery simultaneously.

### **Stopping the savegroup does not stop the VCB mounter operation**

#### **NW105095**

When you stop the savegroup, the VCB mounter does not stop until the operation is completed.

#### **Workaround**

Stop the VCB mounter operation manually.

### **Savegroup log error message for Hypervisor user without VCB privileges is not descriptive**

#### **LGTsc30913**

The error message that displays if a Hypervisor user attempts a VCB operation but does not have VCB privileges does not fully describe the problem. The message indicates:

```
nsrvcb_save: Error: Other error encountered:  
vim.fault.NoPermission
```

### **Only full level VCB backups can be performed when Backup renamed directories attribute is enabled**

#### **LGTsc30843**

When enabling the **Backup renamed directories** attribute for a VM client instance, you can only perform full level VCB backups. You cannot perform incremental and differential file-level backups with the attribute enabled.

### **Single-step recovery has limitation to restore VMs with thin disks to ESX 4.0 Server**

#### **LGTsc32604**

Due to the VMware Converter 3.0.3 limitation, single-step recovery always restores the VM with thick disks irrespective of whether the VM was configured with thin disks before.

#### **Workaround**

To restore the VM with thin disks to ESX 4.0, first perform recovery to a staging location and then use the VMware Converter 4.x to perform Disaster Recovery (DR) with thin disks.

### **File-level recovery of an encrypted file is not supported**

#### **LGTsc32380**

Due to Microsoft Windows limitation, browsable recovery of a NTFS encrypted file to a local file system on a proxy machine is not supported.

#### **Workaround**

Share a CIFS folder from the VM and perform a recovery of the encrypted file from the VCB proxy to the CIFS share directly or install Sun StorageTek EBS Client on the VM to recover encrypted file to a local file system of the VM.

### **Limitations when performing file-level recovery of image-level backup**

The following considerations apply when performing a file-level recovery of an image-level backup:

- ◆ Support for file-level recovery from image based backup is available only on Windows.
- ◆ File-level recovery is supported only on VMs having Windows OS with NTFS5 file system.
- ◆ File-level incremental backup of a VM is not supported after a hardware change in the VM. Perform a full image level backup after every change in the VM hardware.
- ◆ In case of a remote VCB proxy client, single step recover requires the members of the VCB proxy clients administrator group to be part of the remote access list of the VM clients or should have the "Remote access all clients" privilege.

### **Recovery of a VM host with multiple drives displays "Directory not empty" in the recover GUI**

#### **LGTsc30075**

During a ALLVMFS backup on a VM host with multiple drives, select all the drives to be recovered in the recovery GUI and start the recovery to the relocated target location. Recovery is completed successfully to the target location with "Directory not empty" error at the end of each selected drive.

#### **Workaround**

Ignore the error. Recovery is successful.

### **Additional system generated or user files are recovered during save set recovery from an incremental backup**

#### **LGtsc30810**

During VCB incremental backup, additional files modified since the last backup, including system generated files or user files, are backed up.

#### **Workaround**

Ensure sufficient disk space is available for recovery. Ignore the additional files that are recovered.

**Restored virtual machine starts in forceful powered off state during FULLVM restore****LGTsc30813**

During a FULLVM restore using the GUI or Command Line Interface, the restored virtual machine will start in forceful powered off state due to VCB snapshot limitations.

**nsr resource takes default values if invalid application information inputs are provided for the proxy server****LGTsc31164**

When wrong inputs are provided in the Application Information tab for the proxy server, nsr resource will take the default values by default. For example, if VCB\_TRANSPORT\_MODE=ncd and the user types VCB\_TRANSPORTMODE=ncd, then the nsr resource takes the default mode of transport VCB\_TRANSPORT\_MODE=san.

**Workaround**

Ensure to provide the correct values.

**GPT disks are not supported for single file recovery (SFR)****LGTsc30927**

During an image based backup, GPT disks are not supported for file-level recovery. If the VM has any GPT disk then the backup will always be image based backup without support for file-level recovery.

**Workaround**

Ensure there are no GPT disks.

**Single file recovery (SFR) cannot be performed on disks with no drive letter****LGTsc31190**

When a disk is formatted with NTFS partition without a drive letter, file systems which are candidates for SFR backup will adopt FULLVM method of backup.

**Workaround**

Ensure each disk partition is associated with a drive letter.

**Single file recovery (SFR) is not supported for VM's configured with dynamic disks****LGTsc31499**

When VM's are configured with dynamic disks, SFR is not supported.

**Workaround**

Ensure there are no dynamic disks.

**VCB implementation is not supported on VM's configured on or with RDM physical disks****LGTsc31500**

VCB (FULLVM or SFR) implementation is not supported when VM's are configured on RDM physical disks or disks which are attached to RDM physical disks.

**Memory footprint for nsrvcb\_save is huge during VMware backups****LGTsc31545**

When VCB backups are performed, nsrvcb\_save binary consumes huge amount of memory. For example, to backup a VM with 200GB vmdk, nsrvcb\_save binary can consume up to 1.15 GB of RAM.

Therefore, it is recommended to provision a minimum of 1 GB or more memory space for nsrvcb\_save binary.

---

**Note:** For every VM backup, one nsrvcb\_save binary is spawned. Memory consumed by the nsrvcb\_save binary should be released once the VM backup is complete.

---

**VM should be in the “powered on” state for the first backup****LGTsc31562**

When running the first backup, the VM should be in the powered on state irrespective of whether the VCB\_VM\_LOOKUP\_METHOD is based on the IP address or the display name.

### **Shared folder settings are not restored from a file-level restore on the VM**

#### **LGTsc31575**

When a file-level restore is performed from a full image or incremental or differential backup of a shared folder on the VM, the share settings on the folder is not restored.

#### **Workaround**

Manually reset the share settings for the folder.

### **Any system changes to the VM requires a full backup**

#### **LGTsc31651**

When you add or delete hard disks, install or uninstall applications, or update OS patches to the VM, perform a full level backup manually.

### **Save set consolidation is not supported for VCB backups**

#### **LGTsc31735**

For any VCB backup, either full image or file-level, save set consolidation is not supported.

### **No directives are supported for VCB backup when saveset is “\*FULL\*” and the level is full**

#### **LGTsc31737**

During VCB backups, when the saveset is “\*FULL\*” and the level is full, no directives are supported. For example, directives such as **skip** are not supported for VCB image level backup because disaster recovery is not possible after using this directive.

### **Backup of a powered off VM is only possible if the VM was turned off gracefully**

#### **LGTsc31971**

Before performing a VCB backup with file-level recovery for a VM in powered off state, complete the shutdown process of the VM gracefully.

## **General problems and limitations**

This section details the problems and limitations related to backups.

### **Secure Storage Library not initialized during Lockbox entry creation due to missing library**

#### **NW110377**

When you create a lockbox entry (using either **nsradmin**, NMC, or the client configuration wizard) on HP-UX ia64, lockbox entry creation fails with an error indicating that the Secure Storage Library was not initialized. This is due to a missing library, **libccme.sl**.

A hot fix containing the missing library **libccme.sl** has been provided in `/usr/src/patches/2009/NW110377/NW/7.6/hp11ia64`. Instructions for installing the hot fix are provided in the ReadMe file at `/usr/src/patches/2009/NW110377/README`.

### **Sun StorageTek EBS does not save or recover DFS empty directories**

#### **NW105048**

DFS empty directories are not backed up or recovered by Sun StorageTek EBS.

### **Archived data not properly indexed on MAC-OS**

#### **LGTsc32722**

When data is archived using **nsrchive** on a MAC-OS platform, Sun StorageTek EBS adds a "/" to the name of the save set in the index. For example, the path `/Volumes/sat-tree/scip2c217/backup/qgO` becomes `/Volumes/sat-tree/scip2c217/backup/qgO/`, and the data can only be retrieved if "/" is added to the end of the name.

### **Sun StorageTek EBS services might not start due to lock files**

#### **LGTsc30717**

If the **nsrmmgd** process is terminated and a message similar to the following appears, ensure that all **nsrmmgd** processes have been shutdown. The Sun StorageTek EBS software keeps the locks in place until all instances of **nsrmmgd** are gone.

```
nsrmmgd SYSTEM error: Lock file `C:\Program
Files\Legato\nsr\tmp\nsrmmgd.lck' cannot be locked.
```

### **compression asm does not work with other asms**

#### **LGTsc32410**

The compression asm does not work in conjunction with any other asms.

## Sun StorageTek EBS releases previous to 7.6 problems and limitations

Table 8 on page -62 identifies problem issues and limitations discovered in Sun StorageTek EBS release 7.5.

The known limitations are separated into the following categories:

- ◆ “Backup problems and limitations descriptions” on page -66
- ◆ “CLI problems and limitations descriptions” on page -68
- ◆ “Cloning and staging problems and limitations descriptions” on page -69
- ◆ “Configuration problems and limitations descriptions” on page -69
- ◆ “Devices and media problems and limitations descriptions” on page -73
- ◆ “GUI problems and limitations descriptions” on page -74
- ◆ “Installation problems and limitations descriptions” on page -76
- ◆ “Licensing problems and limitations descriptions” on page -76
- ◆ “Localization problems and limitations descriptions” on page -77
- ◆ “Messaging problems and limitations descriptions” on page -78
- ◆ “Performance problems and limitations descriptions” on page -79
- ◆ “Restore problems and limitations descriptions” on page -80
- ◆ “Security problems and limitations descriptions” on page -83
- ◆ “Upgrading problems and limitations descriptions” on page -84

**Table 8**      **Limitations discovered in Sun StorageTek EBS releases previous to 7.6**  
(Sheet 1 of 5)

Customer Service defect number	Issue Tracker issue number	Description of limitation	Operating System affected	Product Feature
<a href="#">“LGTsc25711” on page -68</a>	25711nw	Running nsravatar directly from the command line might fail	AIX	CLI
<a href="#">“LGTsc27302” on page -69</a>	27302nw	nsrjobd memory consumption may cause Sun StorageTek EBS services to hang if running on low RAM	Linux	Configuration

**Table 8**      **Limitations discovered in Sun StorageTek EBS releases previous to 7.6**  
**(Sheet 2 of 5)**

Customer Service defect number	Issue Tracker issue number	Description of limitation	Operating System affected	Product Feature
<a href="#">"LGTsc26202" on page -70</a>	26202nw	Cannot configure Windows Firewall Support in the Sun StorageTek EBS Installation Wizard	Windows	Configuration
<a href="#">"LGTpa94658" on page -70</a>	94658nw	NMC cannot connect to GSTDB if EMC AlphaStor or EMC DPA is installed	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Configuration
<a href="#">"LGTsc28059" on page -73</a>	28059nw	Multiplexing must be disabled for save sets to be cloned from the DXi/DL3D using NDMP path-to-tape	Tru64 UNIX, AIX, Solaris, HP-UX, Linux, Windows	Devices and Media
<a href="#">"LGTsc27571" on page -73</a>	27571nw	Tapes left in "Ejecting" state after labelling large number of volumes in a Windows virtual environment	Windows	Devices and Media
<a href="#">"LGTsc27106" on page -75</a>	27106nw	Querying large numbers of save sets in the Sun StorageTek EBS user interface may cause a Java heap space error	Windows	GUI
<a href="#">"LGTsc26673" on page -76</a>	26673nw	Inconsistent license information displayed for NDMP Workstation Client	Windows	Licensing
<a href="#">"LGTsc26980" on page -175</a>	26980nw	Non-ASCII hostnames are not supported by Sun StorageTek EBS	Windows	Localization
<a href="#">"LGTsc26965" on page -78</a>	26965nw	Single step recovery of a full virtual machine: some error messages are cyptic	Windows	Messaging
<a href="#">"LGTsc27063" on page -78</a>	27063nw	Single step recovery of a full virtual machine: some messages are non-standard	Windows	Messaging
<a href="#">"LGTsc24358" on page -84</a>	24358nw	When upgrading to Sun StorageTek EBS Release 7.5 on Windows, reboot NMC	Windows	Upgrading
<a href="#">"LGTsc24329" on page -80</a>	24329nw	Recovering client file index fails if NDMP attribute is selected on client resource	Windows	Restore
<a href="#">"LGTsc27447" on page -81</a>	27447nw	Single step recovery of a full virtual machine: VCB restore must use Virtual Center IP/name and password/username combination if Virtual Center used for backup	Windows	Restore
<a href="#">"LGTsc26268" on page -81</a>	26268nw	Single step recovery of a full virtual machine: Validation of the VC/ESX server credentials are validated once the Sun StorageTek EBS recover complete	Windows	Restore
<a href="#">"LGTsc22164" on page -66</a>	22164nw	Software distribution feature cannot be used to perform upgrade on some platforms	Linux, Solaris	Backup

**Table 8 Limitations discovered in Sun StorageTek EBS releases previous to 7.6 (Sheet 3 of 5)**

Customer Service defect number	Issue Tracker issue number	Description of limitation	Operating System affected	Product Feature
<a href="#">"LGTsc24483" on page -66</a>	24483nw	Low system memory may cause unpredictable results	Solaris	Backup
<a href="#">"LGTsc15176" on page -66</a>	15176nw	VCB backup of multiple virtual machines simultaneously may fail	***	
<a href="#">"LGTsc11447" on page -67</a>	11447nw	Hosts file entries for IPv6 must contain localhost before aliases.	AIX	Backup
<a href="#">"LGTsc11274" on page -67</a>	11274nw	Backup fails when save set list has a very large number of save sets defined.	Solaris	Backup
<a href="#">"LGTsc21070" on page -67</a>	21070nw	Save jobs may terminate prematurely or later than desired if Sun StorageTek EBS server and clients time settings differ	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup
<a href="#">"LGTsc14530" on page -68</a>	14530nw	VCB fails with custom pre-freeze script error.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
<a href="#">"LGTsc14319" on page -68</a>	14319nw	SSL key length limitation on Solaris AMD64.	Solaris	Backup
<a href="#">"LGTsc23714" on page -68</a>	23714nw	<b>Savegroup</b> initiated with "@" symbol at beginning of name does not trigger desired group.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	CLI
<a href="#">"LGTsc10723" on page -69</a>	10723nw	AFTD direct file recover option may yield incomplete volume information	Solaris	CLI
<a href="#">"LGTsc24548" on page -69</a>	24548nw	Slow performance on Solaris 10 because asynchronous I/O is disabled	Solaris	Cloning and Staging
<a href="#">"LGTsc23081" on page -72</a>	23081nw	Sun StorageTek EBS Console unable to generate reports in pure IPv6 environment	HP-UX	Configuration
<a href="#">"LGTsc18543" on page -72</a>	18543nw	Relabeling volume after deleting remote client resource does not purge file index.	Windows	Configuration
<a href="#">"LGTsc11811" on page -72</a>	11811nw	Do not perform client backups using temporary IPv6 addresses.	Linux, Windows	Configuration
<a href="#">"LGTsc14761" on page -72</a>	14761nw	Connecting to web server through IPv6 fails using Internet Explorer 6.	Windows	Configuration

**Table 8 Limitations discovered in Sun StorageTek EBS releases previous to 7.6 (Sheet 4 of 5)**

Customer Service defect number	Issue Tracker issue number	Description of limitation	Operating System affected	Product Feature
<a href="#">"LGTsc17146" on page -74</a>	17146nw	Raw disk backup and restore not supported on Sun StorageTek EBS with Microsoft Windows 2008.	Windows	Devices and Media
<a href="#">"LGTsc07321" on page -74</a>	07321nw	Inquire command does not detect tape drive on HP-UX.	HP-UX	Devices and Media
<a href="#">"LGTsc12061" on page -75</a>	12061nw	Cannot dismiss events in the events table until the event is resolved.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	GUI
<a href="#">"LGTsc08415" on page -75</a>	08415nw	A user cannot be a member of more than 512 groups.	Windows	GUI
<a href="#">"LGTsc17805" on page -76</a>	17805nw	Sun StorageTek EBS installation directory path longer than 160 characters returns error, but installation still completes successfully.	Windows	Installation
<a href="#">"LGTsc26210" on page -76</a>	26210nw	License Conformance Summary displays incorrect base license type.	Solaris	Licensing
<a href="#">"LGTsc21657" on page -174</a>	21657nw	In a non-English environment, the character encoding used for the NMC client and Sun StorageTek EBS client must be the same	Windows	Localization
<a href="#">"LGTsc26288" on page -175</a>	26288nw	JRE 1.6 users cannot export reports as PDF documents for non-English locales on AIX and HPUX	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Localization
<a href="#">"LGTsc22735" on page -79</a>	22735nw	<b>mminfo</b> query ignores "!" on non-boolean fields.	Windows	Messaging
<a href="#">"LGTsc21253" on page -79</a>	21253nw	<b>nsrjobd</b> may consume large amount of memory depending on backup environment	Windows	Performance
<a href="#">"LGTsc19690" on page -79</a>	19690nw	Sun StorageTek EBS programs may experience delays on SuSE Linux Enterprise Server version 9.x using IPv6.	Linux	Performance
<a href="#">"LGTsc12672" on page -82</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.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore
<a href="#">"LGTsc20723" on page -83</a>	20723nw	<b>Ctime</b> attribute not modified on AIX version 5.3 and later, Mac OS X version 10.4 and later.	AIX, Mac OS X	Restore
<a href="#">"LGTsc21704" on page -84</a>	21704nw	Authentication error displays when Sun StorageTek EBS connecting to client.	Solaris	Security

**Table 8**      **Limitations discovered in Sun StorageTek EBS releases previous to 7.6 (Sheet 5 of 5)**

Customer Service defect number	Issue Tracker issue number	Description of limitation	Operating System affected	Product Feature
<a href="#">"LGTsc24076" on page -84</a>	24076nw	New client's global attributes do not inherit existing client values after upgrading NMC.	Windows	Upgrading

### Backup problems and limitations descriptions

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

#### **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.

#### **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 -28](#) has information on minimum recommended system requirements.

#### **VCB backup of multiple virtual machines simultaneously may fail**

##### **LGTsc15176**

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

#### **Workaround**

There are two possible workarounds for this limitation:

1. Upgrade to VMware Consolidated Backup version 1.5.
2. Update the following settings in the config.js file used by VCB on the VCB proxy host:
  - a. Set MAX\_RETRIES to a number greater than 0.

- b. Set `PREEXISTING_MOUNTPOINT` to **delete** to attempt to remove the pre-existing mount point.

### **Hosts file entries for IPv6 must contain localhost before aliases**

#### **LGTsc11447**

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

### **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.

## 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.

## CLI problems and limitations descriptions

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

## Running nsravatar directly from the command line might fail

### LGTsc25711

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

`LD_LIBRARY_PATH`

### Workaround

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

## 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.

**AFTD direct file recover option may yield incomplete volume information****LGTsc10723**

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

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

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

**Cloning and staging problems and limitations descriptions**

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

**Slow performance on Solaris 10 because asynchronous I/O is disabled****LGTsc24548**

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

**Configuration problems and limitations descriptions**

This section details the problems and limitations related to configuration.

**nsrjobd memory consumption may cause Sun StorageTek EBS services to hang if running on low RAM****LGTsc27302**

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

**Workaround**

Ensure that there is sufficient RAM available for all Sun StorageTek EBS services to run.

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

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

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

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

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

---

**Note:** Windows Firewall is not supported on Windows 2000.

---

**Workaround**

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

To turn on the firewall service on:

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

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

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

### Workaround

To change the service port used by the Sun StorageTek EBS Console database:

1. Stop the GST Service.
2. Stop any other products that are using the iAnywhere database, for example EMC AlphaStor or EMC DPA.
3. Ensure that no **dbsrv9** processes are running. If the **dbsrv9** processes are running, stop them.
4. Open a terminal or command prompt window.
5. Depending on the shell you are using, use the appropriate command (for example, **setenv** for csh, **export** for sh) to update the library path environment variable in the terminal window to the following location:

- Solaris: `/opt/LGTONmc/bin:/opt/LGTONmc/sybase/lib`
- Linux/AIX/HPUX:  
`/opt/lgtonmc/bin:/opt/lgtonmc/sybase/lib`
- Microsoft Windows (assumes default installation location):  
`C:\Program Files\Legato\Management\GST\sybase\bin`

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

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

**db\_svc\_port**=*port\_number*

For example:

`db_svc_port=2639`

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

- Solaris: `/opt/LGTONmc/etc`
  - Linux/AIX/HP-UX: `/opt/lgtonmc/etc`
  - Microsoft Windows: `C:\Program Files\Legato\Management\GST\etc`
7. Run the **gstconfig** command to update the port value in the Sun StorageTek EBS Console. The `gstconfig` command is located in the following locations:

- Solaris: /opt/LGTONmc/bin
  - Linux/AIX/HP-UX: /opt/lgtonmc/bin
  - Windows: C:\Program Files\Legato\Management\GST\bin
8. Close the terminal or command prompt window.
  9. Restart the GST Service.

### **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.

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

#### **LGTsc18543**

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

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

#### **Workaround**

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

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

#### **LGTsc11811**

Temporary or randomly generated IPv6 TCP/IP addresses are not supported in 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.

## Devices and media problems and limitations descriptions

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

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

#### **LGTsc28059**

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

---

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

---

#### **Workaround**

Device properties must be set to disable multiplexing capability.

To disable multiplexing of save sets:

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

---

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

---

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

#### **LGTsc27571**

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

#### **Workaround**

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

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

---

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

---

### **Raw disk backup and restore not supported on Sun StorageTek EBS with Microsoft Windows 2008**

#### **LGTsc17146**

Sun StorageTek EBS does not support backup and restore of raw disks with Windows Server 2008.

### **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.

## **GUI problems and limitations descriptions**

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

## Querying large numbers of save sets in the Sun StorageTek EBS user interface may cause a Java heap space error

### LGTsc27106

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

#### Workaround

Increase the Java heap size used by the Sun StorageTek EBS Management Console application:

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

```
<Console_install_dir>\web
```

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

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

---

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

---

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

### LGTsc12061

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

## A user cannot be a member of more than 512 groups

### LGTsc08415

A user cannot be a member of more than 512 groups when running any operation with 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
```

## Software distribution wizard does not appear

### LGTsc24286

The software distribution wizard does not appear in Sun StorageTek EBS.

## Installation problems and limitations descriptions

This section details the problems and limitations related to installation.

### 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 pathname currently supported by Sun StorageTek EBS is 160 characters.

## Licensing problems and limitations descriptions

This section details the problems and limitations related to licensing.

### Inconsistent license information displayed for NDMP Workstation Client

#### LGTsc26673

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

### License Conformance Summary displays incorrect base license type

#### LGTsc26210

The License Conformance Summary, accessed through the Configuration tab of the **Sun StorageTek EBS Administration**

window, incorrectly displays the base license type as "Eval" when it should be "Data Backup Utility".

## Localization problems and limitations descriptions

This section details the problems and limitations related to localization.

For more information on localization important notes and tips, see [“Internationalization support” on page -169](#).

### **Non-ASCII hostnames are not supported by Sun StorageTek EBS**

#### **LGTsc26980**

Sun StorageTek EBS does not support hosts that have non-ASCII characters in the hostname.

### **In a non-English environment, the character encoding used for the NMC client and Sun StorageTek EBS client must be the same**

#### **LGTsc21657**

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

#### **Workaround**

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

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

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

#### **LGTsc26288**

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

## Messaging problems and limitations descriptions

This section details the problems and limitations related to messaging.

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

#### LGTsc26965

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

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

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

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

#### LGTsc27063

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

```
[2009-02-17 14:27:37.380 'Libs' 4380 info] HOSTINFO:
Seeing Intel CPU,
numCoresPerCPU 4 numThreadsPerCore 1.
[2009-02-17 14:27:37.380 'Libs' 4380 info] HOSTINFO:
This machine has 2 physical CPUS, 8 total cores, and 8
logical CPUs.
[2009-02-17 14:27:37.802 'Libs' 4380 info] System
libeay32.dll library is older than our library (90709F
< 9070AF)
[2009-02-17 14:27:49.850 'Libs' 4380 warning]
SSLVerifyCertAgainstSystemStore: Subject mismatch:
VMware vs 10.31.236.60
[2009-02-17 14:27:49.850 'Libs' 4380 warning]
SSLVerifyCertAgainstSystemStore: The remote host
certificate has these problems:
* The host name used for the connection does not match
the subject name on the host certificate
* A certificate in the host's chain is based on an
untrusted root.
```

```
[2009-02-17 14:27:49.850 'Libs' 4380 warning]
SSLVerifyIsEnabled: failed to open the product registry
key. Assuming verification is disabled. LastError = 0
[2009-02-17 14:27:49.850 'Libs' 4380 warning]
SSLVerifyCertAgainstSystemStore: Certificate
verification is disabled, so connection will proceed
despite the error p2vTool version 3.0.3 build-89816
```

### **mminfo query ignores “!” on non-boolean fields**

#### **LGTsc22735**

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

## **Performance problems and limitations descriptions**

This section details the problems and limitations related to performance.

### **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.

### **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`:

```

geol> 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

```

## Restore problems and limitations descriptions

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

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

#### LGTsc24329

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

### Workaround

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

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

**LGTsc27447**

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

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

**LGTsc26268**

The VC/ESX server credentials are validated once the Sun StorageTek EBS recover operation completes:

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

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

**Workaround**

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

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

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

### LGTsc27559

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

#### Error 1:

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

#### Error 2:

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

## 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.

### **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.

## **Security problems and limitations descriptions**

This section details the problems and limitations related to security.

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

#### **LGTsc24327**

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.

## **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.

## **Upgrading problems and limitations descriptions**

This section details the problems and limitations related to upgrading.

### **When upgrading to Sun StorageTek EBS Release 7.5 on Windows, you might need to reboot the system**

#### **LGTsc24358**

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

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

#### **LGTsc24076**

After upgrading to the latest version of NMC and launching the Console for the first time, the **Configuration** window appears, prompting you to set the configuration for the Console and to add 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**.

---

## Sun StorageTek EBS releases previous to 7.5 problems and limitations

Table 9 on page -86 identifies problem issues and limitations discovered previously to Sun StorageTek EBS release 7.5

The known limitations are separated into the following categories:

- ◆ “Archiving problems and limitations descriptions” on page -93
- ◆ “Backup problems and limitations descriptions” on page -94
- ◆ “CLI problems and limitations descriptions” on page -101
- ◆ “Cloning and Staging problems and limitations descriptions” on page -104
- ◆ “Compatibility problems and limitations descriptions” on page -105
- ◆ “Configuration problems and limitations descriptions” on page -106
- ◆ “Devices and Media problems and limitations descriptions” on page -107
- ◆ “GUI problems and limitations descriptions” on page -112
- ◆ “Installation problems and limitations descriptions” on page -114
- ◆ “Licensing problems and limitations descriptions” on page -118
- ◆ “Localization problems and limitations descriptions” on page -119
- ◆ “Messaging problems and limitations descriptions” on page -120
- ◆ “Sun StorageTek EBS support for Novell’s OES Linux limitations” on page -122
- ◆ “Sun StorageTek EBS Management Console problems and limitations descriptions” on page -125
- ◆ “Restore problems and limitations descriptions” on page -126
- ◆ “Upgrading problems and limitations descriptions” on page -131

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

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTsc05166" on page -93</a>	05166nw	DiskXtender Data Manager file systems get archived on Sun StorageTek EBS	Windows	archiving
<a href="#">"LGTsc20517" on page -94</a>	20517nw	For each Sun StorageTek EBS client that is BMR enabled, set the save set attribute in the client resource to ALL.	Linux, Windows Solaris	Backup
<a href="#">"LGTsc19514" on page -94</a>	19514nw	Delay in cancelling savegroups in NMC for BMR enabled clients.	Linux, Windows, Solaris	Backup
<a href="#">"LGTsc16575" on page -95</a>	16575nw	A backup might fail for CIFS shares on Microsoft Windows hosts.	Windows	Backup
<a href="#">"LGTsc17703" on page -96</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.	Windows	Backup
<a href="#">"LGTsc10292" on page -96</a>	10292nw	Incorrectly configured NPS role results in failed backup of VSS SYSTEM SERVICES of Windows Server 2008.	Windows	Backup
<a href="#">"LGTsc11914" on page -97</a>	11914nw	Active Directory Lightweight Directory Services backup fails for Windows 2008 client.	Windows	Backup
<a href="#">"LGTsc13933" on page -94</a>	13933nw	VSS system state backups may fail if programs were not cleanly uninstalled.	Windows	Backup
<a href="#">"LGTsc14956" on page -97</a>	14956nw	Not all drives in a VCB file level backup are browsable.	Windows	Backup
<a href="#">"LGTsc15236" on page -98</a>	15236nw	Incorrect error during recovery of VCB backups.	Windows	Backup
<a href="#">"LGTsc19665" on page -98</a>	19665nw	Replicated dedupe save sets are not deleted	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
<a href="#">"LGTsc12970" on page -99</a>	12970nw	Backups of /dev directory fail in HP-UX 11i v3 on PA_RISC and IA64.	AIX, Solaris, HP-UX, Tru64 UNIX	Backup
<a href="#">"LGTsc06312" on page -99</a>	06312nw	The <code>nsr_render_log</code> program doesn't accept input from STDIN.	AIX, Solaris, HP-UX, Tru64 UNIX	Backup

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

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTsc09257" on page -99</a>	09257nw	A user cannot be a member of more than 512 groups.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
<a href="#">"LGTpa91475" on page -100</a>	91475nw	The <b>savenpc</b> command fails if the precommand and post command contains any non-ASCII characters.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Backup
<a href="#">"LGTsc00850" on page -100</a>	00850nw	Restrictions associated with the ZFS file system.	AIX, Solaris, HP-UX, Tru64 UNIX	Backup
<a href="#">"LGTsc19916" on page -101</a>	19916nw	The contents of the /opt, /var, /etc directories are not excluded when the -B option is used.	Linux, Windows, Solaris	CLI
<a href="#">"LGTsc09483" on page -101</a>	09483nw	Not all save sets listed after running mminfo command with dedupe option.	Solaris	CLI
<a href="#">"LGTsc19402" on page -102</a>	19402nw	The -e <i>exclude file</i> option behaves differently for files and directories.	Linux, Windows, Solaris	CLI
<a href="#">"LGTsc19084" on page -103</a>	19084nw	The recover -e <i>exclude file</i> option does not support NDMP file systems.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	CLI
<a href="#">"LGTsc19405" on page -103</a>	19405nw	No filename checks for remote clients when using the --e <i>exclude file</i> option with a directed recovery operation.	Linux, Windows, Solaris	CLI
<a href="#">"LGTsc10665" on page -103</a>	10665nw	Cannot view log files created with the <b>nsr_render_log</b> command.	AIX, Solaris, HP-UX, Tru64 UNIX, Windows	CLI
<a href="#">"LGTsc06809" on page -103</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.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	CLI
<a href="#">"LGTpa95406" on page -104</a>	95406nw	The <b>jbverify</b> command is not supported on Solaris 10.	AIX, Solaris, HP-UX, Tru64 UNIX	CLI
<a href="#">"LGTsc15337" on page -104</a>	15337nw	Marking volumes as Recyclable might slow system performance.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Cloning and Staging

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

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTsc19401" on page -105</a>	19401nw	Removable Storage Manager (RSM) not supported.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Compatibility
<a href="#">"LGTsc20557" on page -105</a>	20557nw	The Homebase Agent is not supported in a Cluster environment.	Linux, Windows, Solaris	Compatibility
<a href="#">"LGTsc14700" on page -105</a>	14700nw	Support for Windows Change Journal Manager with Microsoft Windows 2008.	Windows	Compatibility
<a href="#">"LGTsc18397" on page -106</a>	18397nw	Cannot set nsrdir parameter for virtual server using remote Microsoft Management Console (MMC).	Windows	Configuration
<a href="#">"LGTsc06585" on page -106</a>	06585nw	Running the Linux 64 bit package with the 2.6.x kernel may result in crashes.	Linux	Configuration
<a href="#">"LGTsc19241" on page -107</a>	19241nw	For Microsoft Windows Server 2008 raw devices are not saved under the virtual client's index	Windows	Devices and Media
<a href="#">"LGTsc19676" on page -107</a>	19676nw	Broker connects to first available storage node if no device or mmd available on first host.	Solaris	Devices and Media
<a href="#">"LGTpa72839" on page -108</a>	72839nw	Sun StorageTek EBS support for Solaris 9 HBAs and drivers.	Solaris	Devices and Media
<a href="#">"LGTsc11158" on page -108</a>	11158nw	Cannot create an advanced file-type device on a remote storage node device.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Devices and Media
<a href="#">"LGTsc14352" on page -109</a>	14352nw	Incorrect path suggested during <b>jbconfig</b> of ACSLS silo for HP Tru64.	HP Tru64	Devices and Media
<a href="#">"LGTsc10950" on page -109</a>	10950nw	VMware Consolidated Backup 1.0.x is not supported on Windows Server 2003, Enterprise Edition (x64) Service Pack 2.	Windows	Devices and Media
<a href="#">"LGTsc06358" on page -109</a>	06358nw	Sun StorageTek EBS becomes unresponsive when attempting an invalid clone operation.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Devices and Media
<a href="#">"LGTsc01923" on page -110</a>	01923nw	Cannot query UNIX non-ASCII save sets in the Sun StorageTek EBS Management Console.	AIX, Solaris, HP-UX, Tru64 UNIX	Devices and Media

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

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTpa93001" on page -110</a>	93001nw	Virtual tapes are listed as "full" after mounting.	Windows	Devices and Media
<a href="#">"LGTpa88188" on page -110</a>	88188nw	Scan for Devices configures all devices as a regular storage node device.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Devices and Media
<a href="#">"LGTsc01446" on page -111</a>	01446nw	The Virtual Jukebox attribute for a CDL virtual tape library is not automatically set after upgrading to release 7.4.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Devices and Media
<a href="#">"LGTsc10295" on page -112</a>	10295nw	dedup recover sessions do not display in the NMC GUI.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	GUI
<a href="#">"LGTsc08756" on page -112</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	GUI
<a href="#">"LGTsc00365" on page -112</a>	00365nw	On HP-UX the Sun StorageTek EBS Server window does not appear.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	GUI
<a href="#">"LGTsc01115" on page -113</a>	01115nw	Cannot copy and paste Japanese characters using the Sun StorageTek EBS Management Console.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	GUI
<a href="#">"LGTpa95162" on page -113</a>	95162nw	Newly created groups are not displayed by the Sun StorageTek EBS Console GUI after moving system date back in time.	Linux, AIX, Solaris, HP-UX, Tru64 UNIX	GUI
<a href="#">"LGTpa96168" on page -113</a>	96168nw	Cannot launch Sun StorageTek EBS Console Help program on Solaris 10 with a JRE earlier than version 1.5.0_09.	AIX, Solaris, HP-UX, Tru64 UNIX	GUI
<a href="#">"LGTsc19557" on page -114</a>	19557nw	For Microsoft Windows 2000, the Support Tools must be installed in order to run the HomeBase Agent installation script	Windows	Installation
<a href="#">"LGTsc19513" on page -114</a>	19513nw	HomeBase installation files are automatically extracted during a Sun StorageTek EBS client install.	Linux, Windows, Solaris	Installation
<a href="#">"LGTsc16831" on page -115</a>	16831nw	For Microsoft Windows, ensure that the HomeBase agent software installed in the same installation path as the Sun StorageTek EBS software.	Windows	Installation

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

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTsc18023" on page -115</a>	18023nw	For UNIX, only install the Sun StorageTek EBS HomeBase agent software in the Sun StorageTek EBS default installation directory.	Linux, Solaris	Installation
<a href="#">"LGTsc18641" on page -116</a>	18641nw	Before restoring the base profile, manually edit the fields in the recovery-configuration.xml file.	Linux, Windows, Solaris	Installation
<a href="#">"LGTsc18925" on page -116</a>	18925nw	Unable to launch the Sun StorageTek EBS Dashboard software with Sun StorageTek EBS Release 7.4 Service Pack 3.	Windows	Installation
<a href="#">"LGTsc14023" on page -117</a>	14023nw	Package requirement for Linux platforms.	Linux	Installation
<a href="#">"LGTsc15490" on page -117</a>	15490nw	Linux upgrade using <b>rpm -Uvh</b> not working correctly.	Linux	Installation
<a href="#">"LGTsc12500" on page -118</a>	12500nw	Sun StorageTek EBS release 7.4 SP1 must be installed using the --nodeps option on SuSE 8.	Linux	Installation
<a href="#">"LGTsc19388" on page -118</a>	19388nw	Sun StorageTek EBS and the HomeBase agent (BMR) licenses work independently.	Linux, Windows, Solaris	Licensing
<a href="#">"LGTpa57158" on page -119</a>	57158nw	Current user locale is used with JRE 1.4.2 on Microsoft Windows	Windows	Localization
<a href="#">"LGTsc05879" on page -113</a>	05879nw	NMC version 3.4 and NWD version 1.0 cannot be installed on the same host.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Localization
<a href="#">"LGTsc06280" on page -111</a>	06280nw	Inventory operation in Software Administration Wizard delays for unreachable clients.	AIX, Solaris, HP-UX, Tru64 UNIX	Localization
<a href="#">"LGTsc05166" on page -93</a>	05166nw	DiskXtender Data Manager file systems get archived on Sun StorageTek EBS.	Windows	Localization
<a href="#">"LGTsc02862" on page -175</a>	02862nw	The NMC Japanese Online Help displays incorrect characters on Linux systems	Linux	Localization
<a href="#">"LGTsc02808" on page -175</a>	02808nw	The nwrecover program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed	Linux	Localization
<a href="#">"LGTsc05339" on page -176</a>	05339nw	Recovering a large number of files may take a long time in the French locales on Solaris	Solaris	Localization

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

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTsc03894" on page -176</a>	03894nw	Garbled characters may appear in the Sun StorageTek EBS Console GUI font list on Solaris	Solaris	Localization
<a href="#">"LGTsc02814" on page -176</a>	02814nw	Problem with highlighted text in the Sun StorageTek EBS Console Help program after performing a search using JRE 1.5.x for Asian languages	Solaris	Localization
<a href="#">"LGTpa88887" on page -176</a>	88887nw	Entering non-ASCII characters in Sun StorageTek EBS user interfaces	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Localization
<a href="#">"LGTpa92833" on page -176</a>	92833nw	Non-ASCII save set names are displayed incorrectly in nsradm visual mode on Linux	Linux	Localization
<a href="#">"LGTsc16423" on page -120</a>	16423nw	nsrbmr does not give proper error messages under certain conditions.	Linux, Windows Solaris	Messaging
<a href="#">"LGTsc17737" on page -121</a>	17737nw	Error message does not display for annotations with similar characters at end.	Windows	Messaging
<a href="#">"LGTsc08054" on page -121</a>	08054nw	Erroneous error message may be generated by Linux operating systems when performing an I/O to a volume.	Linux	Messaging
<a href="#">"LGTsc08978" on page -121</a>	08978nw	New pdksh package required on SuSE 10 x86.	Linux	Messaging
<a href="#">"LGTsc03478" on page -121</a>	03478nw	Incorrect error message reported when starting the Sun StorageTek EBS console on Red Hat 64-bit Enterprise Server 4.	AIX, Solaris, HP-UX, Tru64 UNIX	Messaging
<a href="#">"LGTsc06288" on page -122</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.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Messaging
<a href="#">"LGTsc02903" on page -125</a>	02903nw	Sun StorageTek EBS Management Console may become unresponsive when opened using Exceed.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	NMC
<a href="#">"LGTsc19364" on page -126</a>	19364nw	Last-modified date changed for files recovered to Sun Cluster global file system.	Solaris	Restore
<a href="#">"LGTsc10796" on page -126</a>	10796nw	Do not recover identical save sets with different sssids to the same target directory.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore

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

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTsc13799" on page -127</a>	13799nw	Antivirus programs block recovery.	Windows	Restore
<a href="#">"LGTsc14577" on page -127</a>	14577nw	Sun StorageTek EBS interactive recover does not recover the registry and the com+ regdb writers.	Windows	Restore
<a href="#">"LGTsc11618" on page -127</a>	11618nw	Restoring full VM image on ESX server fails.	Linux	Restore
<a href="#">"LGTsc11734" on page -128</a>	11734nw	Unable to restore files encrypted with both Microsoft Windows Encrypting File System & AES encryption.	Windows	Restore
<a href="#">"LGTsc06577" on page -128</a>	06577nw	The <b>nwrecover</b> program might fail to launch on a Solaris Sparc V240 server.	AIX, Solaris, HP-UX, Tru64 UNIX	Restore
<a href="#">"LGTsc05990" on page -128</a>	05990nw	FSRM Disk Quota may not be restored to previous settings after recovery.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore
<a href="#">"LGTsc20558" on page -128</a>	20558nw	After a BMR recovery operation the root password might change.	Linux, Windows, Solaris	Restore
<a href="#">"LGTpa95900" on page -129</a>	95900nw	On NetApps files, filenames ending with special characters might be renamed.	Windows	Restore
<a href="#">"LGTpa94966" on page -129</a>	94966nw	The <b>winworkr</b> program fails to retrieve successfully archived files if a slash (\) character was entered in the annotation string.	Windows	Restore
<a href="#">"LGTpa83927" on page -130</a>	83927nw	Directed recover using the CLI fails with permission errors on Windows.	Windows	Restore
<a href="#">"LGTsc00167" on page -130</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.	Windows	Restore
<a href="#">"LGTsc05053" on page -131</a>	05053nw	Performing a save set query can take a long time if the query parameter in the Query Save Set tab is set to "Save Time" and From and To calendars for 3 or more days	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore
<a href="#">"LGTpa96554" on page -131</a>	96554	For recoveries operations using Celerra filers, misleading error messages might display	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Restore

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

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTsc08958" on page -131</a>	08958nw	JRE version mismatch causes authentication failure, stops GSTD.	Linux	Upgrading
<a href="#">"LGTpa95019" on page -132</a>	95019nw	When upgrading from release 7.3.1 the Virtual jukeboxes attribute will not be set correctly.	Windows	Upgrading
<a href="#">"LGTsc01587" on page -132</a>	01587nw	Group details window is empty after upgrading from Sun StorageTek EBS release 7.2.2.	AIX, Solaris, Windows, Tru64 UNIX, Linux, HP-UX	Upgrading

### Archiving problems and limitations descriptions

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

#### **DiskXtender Data Manager file systems get archived on 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.

## Backup problems and limitations descriptions

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

**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.

---

## Delay in cancelling savegroups in NMC for BMR enabled clients

### LGTsc19514

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

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

### LGTsc13933

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\_31bf3856ad364e35\_6.0.6001.18000\_none\_1db986a6500c51a0\
2. Save the copied `slanaccel.exe` file to the following location:  
 C:\windows\system32\

**A backup might fail for CIFS shares on Microsoft Windows hosts****LGTsc16575**

A backup might fail for CIFS shares on a Microsoft Windows host. When `nsrexecd` is started as a service (context account), it cannot obtain the CIFS path because of access restrictions to its security credentials from the 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 save set:
    - 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 save set 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
```

### **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.

### **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.

## 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.

## 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
```

### **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.

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

## Backups of /dev directory fail in HP-UX 11i v3 on PA\_RISC and IA64

### LGTsc12970

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

#### Workaround

To work around this issue:

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

## The nsr\_render\_log does not accept input from STDIN

### LGTsc06312

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

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

After the error message the usage information is listed.

#### Workaround

Type the following command:

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

## A user cannot be a member of more than 512 groups

### LGTsc09257

A user cannot be a member of more than 512 groups when running any operation with 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
```

## 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`.

## Restrictions associated with the ZFS file system

### LGTsc00850

The following are restrictions associated with the ZFS file system:

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

## CLI problems and limitations descriptions

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

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

#### LGTsc19916

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

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

- ◆ `/opt`
- ◆ `/var`
- ◆ `/etc`

To recover application files installed under `/var` or `/opt`, you must manually recover the data to the appropriate directories for the application. To recover configuration files or service binaries under `/etc`, you must manually recover those files and directories.

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

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

#### LGTsc09483

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

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

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

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

### LGTsc19402

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

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

- ◆ Filenames that start with the character **a** are excluded.
- ◆ Directory names that start with the character **a** are excluded only when the directories are empty.
- ◆ The 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 '/':  
`/?*`

## 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.

## 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.

## Clients running pre-7.4 releases cannot use the mminfo -N command to query save set names longer than 255 bytes

### LGTsc06809

Clients running pre-7.4 releases cannot use the **mminfo -N** command to query save set names longer than 255 bytes. This issue is caused by the enhancement in release 7.4 for supporting longer save set names for to up to 1024 bytes (was 255 bytes in release 7.3) to accommodate non-ASCII save set names, which will take more bytes.

### Workaround

There are two workarounds for this issue if you are using a pre-7.3 client:

- ◆ Do not specify **-N** option on pre-7.4 **mminfo** to query save set names longer than 255 bytes. For example, the **mminfo -avot** command can be issued, but will only display the first 255 bytes of save set name.
- ◆ Use the **mminfo -N** command with a 7.4 client to view save set names longer than 255 bytes.

### The **jbverify** command is not supported on Solaris 10

#### **LGTpa95406**

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

### Cloning and Staging problems and limitations descriptions

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

### Marking volumes as recyclable might slow system performance

#### **LGTsc15337**

The following factors might slow system performance when marking a volume as recyclable.

For each volume that is to be marked as recyclable:

1. The number of save set clone instances that reside on that particular volume and are required to be marked as expired.
2. The number of clones or clone instances for each of the save set clone instances on that particular volume, that reside on other volumes.

The number of clones that are created for a save set, equal the number of save set clone instances. Each save set clone instance has the same **ssid** and unique clone ID. Each save set clone instance resides on a separate volume. The first instance of backup also has a clone ID.

Thus, the volume being marked as recyclable might contain save sets that have multiple clone instances that reside on other volumes. These clone instances need to be checked before the

save sets are marked as expired. A save set, identified by the ssid, only expires when all of the clone instances, which are identified by a clone ID, expire.

To mark a volume as recyclable:

- ◆ From the server's **Administration** window, click **Media**.
  - a. In the navigation tree, select **Volumes**. The **Volumes** detail table appears.
  - b. Right-click a volume in the **Volumes** detail table, and select **Recycle**. The **Recycle** window appears. It names the selected volume.
  - c. Select the recycle policy: **Auto** (default) or **Manual**.
  - d. Click **OK**.
- ◆ From the command prompt, type the following:

```
nsrmm -o recyclable volume
```

## Compatibility problems and limitations descriptions

This section details the problems and limitations related to software compatibility.

### Removable Storage Manager (RSM) not supported

#### LGTsc19401

The 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.

### 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.

### Support for Windows Change Journal Manager with Microsoft Windows 2008

#### LGTsc14700

When VSS is used, the Microsoft Change Journal is not used. Microsoft Windows 2008 is VSS only, so Windows 2008 does not use the Windows Change Journal.

## Configuration problems and limitations descriptions

This section details the problems and limitations related to software configuration.

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

#### LGTsc18397

When configuring a virtual 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"**

---

### 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.

## Devices and Media problems and limitations descriptions

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

### For Microsoft Windows Server 2008 raw devices are not saved under the virtual client's index

#### LGTsc19241

When performing a savegroup of save set "All" for the virtual client, raw device are excluded from the backup list, even when directives are used. When a backup of the raw device is performed from the command line, the raw device is saved under the physical host's index, rather than the virtual client's.

#### Workaround

To work around the problem and back up the raw devices under the physical node's index:

1. Edit the client resource for the virtual client:
  - a. Update the save set list to include the raw device, for example:

```
\\.\M:
```

- b. For the Backup Command attribute, set the following value to force the save sets go to the correct index:

```
save -c virtual_client_name
```

- c. Create a directive using **rawasm**, for example:

```
rawasm: \\.\M:
```

2. On all nodes in the cluster, create the pathownerignore file. Ensure that the pathownerignore file is created in the Sun StorageTek EBS installation directory, for example:

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

### Broker connects to first available storage node if no device or mmd available on first host

#### LGTsc19676

If there is no device or mmd available on the first host in the affinity list, the broker continues through the affinity list until the first available storage node is located. Since the broker is not designed for file and AFTD devices, it does not recognize that the volume and the device are inseparable (for example, the broker could request an AFTD volume to be mounted on a different host). This is only a

problem with stand-alone devices, because volumes are not associated with storage nodes.

#### **Workaround**

To work around the problem, assign different devices to different pools. If the volume is not in a jukebox, the server has no way of knowing which volume can be mounted on which storage node.

### **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.

---

### **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.

**Incorrect path suggested during jbcnfig of ACSLS silo for HP Tru64****LGTsc14352**

When using **jbcnfig** to configure an ACSLS silo on HP Tru64, the default location for the path to the STL library is incorrect. Currently, **jbcnfig** states:

```
=>Pathname of the STL library for the ACSLS silo?
  [/usr/opt/networker/bin/libstlstk.so]
```

**Workaround**

Identify the correct path for the STL library, rather than selecting the incorrect default path. The correct path should be:

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

**VMware Consolidated Backup 1.0.x is not supported on Windows Server 2003, Enterprise Edition (x64) Service Pack 2****LGTsc10950**

VMware Consolidated Backup 1.0.x is not supported on Windows Server 2003, Enterprise Edition (x64) Service Pack 2.

**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 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.

## Virtual tapes are listed as full after mounting

### LGTpa93001

In a Windows environment when using virtual IBM tape drives, virtual tapes are listed as "full" even though 0 KB have been written to the tape. This can be observed after labeling and mounting the tape.

### Workaround

Change the system configuration to use an equivalent tape drive from a manufacturer other than IBM. For example, type HP LTO-3, instead of IBM LTO-3.

## Scan for Devices configures all devices as a regular storage node device

### LGTpa88188

When adding a new device to a jukebox, the scan operation detects a device, but incorrectly displays it as a storage node device. Attempting to configure the device as standalone device fails with the following error message:

```
cannot create the device, storage node enabler is
required
```

### Workaround

1. Using the Console, create a new device. For example:  

```
rd=Storage_Node: /dev/rmt/. . .
```
2. Specify the device is a Dedicated Storage Node by using the **Configuration** tab.
3. Use **jbedit** command to add a new drive to this device. The **jbedit** man page contains more information regarding the use of the **jbedit** command.

## The Virtual Jukebox attribute for a CDL Virtual Tape Library is not automatically set after upgrading

### LGTsc01446

If the `jbconfig` command was used to configure a CDL VTL in the 7.3.2 release, the Virtual Jukebox attribute is not automatically set after upgrading to the current release.

#### Workaround

After upgrading to the current release, initiate a Scan for Devices operation using the 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.

## Inventory operation in Software Administration Wizard delays for unreachable clients

### LGTsc06280

When starting an inventory operation using the Software Administration Wizard, there is a delay of 7 to 8 minutes for each client configured on the server that is unreachable (for example, if a NSR Installed Software resource entry does not exist) and has not previously been inventoried. Once started, you cannot cancel the inventory operation and must wait until the **Select Clients for Inventory** window displays to continue the operation.

#### Workaround

Ensure there are no unreachable clients on the server. Also, if you want to perform an inventory operation but do not need to inventory specific clients, inventory all clients using the `nsrpush` command with the `-all` option; for example, `nsrpush -i -all`.

## GUI problems and limitations descriptions

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

### **Deduplication recover sessions do not appear in the NMC GUI**

#### **LGTsc10295**

Deduplication recover sessions do not appear in the Monitoring window of the Sun StorageTek EBS Management Console. However, deduplication save sessions appear.

To view the Monitoring window:

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

### **Text searched for in the 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.

### **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.

### **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.

### **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.

### **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.

### **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.

## Installation problems and limitations descriptions

This section details the problems and limitations related to installation.

### **For Microsoft Windows 2000, the Support Tools must be installed in order to run the HomeBase Agent installation script**

#### **LGTsc19557**

To run the HomeBase Agent installation script (setup-homebase.bat) on Microsoft Windows 2000:

1. Install the Microsoft Windows 2000 Support Tools. This installs **REG.exe** which is not included with the Microsoft Windows 2000 operating system.
2. Once the Microsoft Windows 2000 Support Tools have been installed, verify that the path has been set. If not, manually set the path. This step is required to run HomeBase Agent installation script.
3. Run the following HomeBase Agent installation script:

```
setup-homebase.bat
```

For all other Microsoft Windows operating systems, REG.exe is installed as part of the operating system.

### **HomeBase installation files are automatically extracted during a 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:  
`\NWInstallDIR\HomeBaseAgent\setup_homebase.bat`
- ◆ UNIX: `/opt/homebase-agent/setup-homebase`

**Note:** For Microsoft Windows, the install directory **HomeBaseAgent** is at the same peer level as the **nsr** directory.

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

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

#### LGTsc18925

If the NetWorker Dashboard software is installed on a computer with the Sun StorageTek EBS software already installed, the NetWorker Dashboard software will not start.

The following errors might occur:

- ◆ At the end of the NWD server installation process, a warning message might appear stating that the NWD server could not start.
- ◆ After starting the NWD Server process, either manually through Microsoft Windows Services or automatically on system start up, the NWD server process might stop shortly afterwards.
- ◆ When launching the NWD GUI, a message might appear stating that the NWD server process is not running.

#### Workaround

To work around this issue:

1. Open and edit the serverproperties.xml file. The file is located in:  
*NWD\_Install\_Dir\classes\serverproperties.xml*

**Note:** Where *NWD\_Install\_Dir* is the installation directory where the NWD server software was installed.

2. Locate the text specifying the **dbport** value. For example:

```
<param
name="dbport">2638;DoBroadcast=NONE;HOST=myhost</param>
```

3. Edit the text string so that it contains only the port information. For example:

```
<param name="dbport">2638</param>
```

4. Save the serverproperties.xml file.
5. Restart the NWD server process.

### Package requirement for Linux platforms

#### LGTsc14023

During installation on all supported Linux platforms, the installation will fail with a package dependency error if the `compat-libstdc++` package is not installed.

#### Workaround

Prior to installation, install the appropriate `compat-libstdc++` for your platform:

- ◆ 32 bit Intel platforms: install the `compat-libstdc++-33-3.2.3-47.3.i386.rpm` package.
- ◆ 64 bit Intel platforms: install the `compat-libstdc++-33-3.2.3-47.3.x86_64.rpm` package.

### 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`.

## 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 lgtocInt-7.4.1-1.i686.rpm
```

## Licensing problems and limitations descriptions

This section details the problems and limitations related to licensing.

### 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

## Localization problems and limitations descriptions

This section details the problems and limitations related to localization.

For more information on localization important notes and tips, see [“Internationalization support” on page -169](#).

### **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.

### **The NMC Japanese Online Help displays incorrect characters on Linux systems**

#### **LGTsc02862**

The NMC Japanese Online Help displays incorrect characters on Linux systems due to limitations with the Javahelp software. These limitations affect the software’s ability to display fonts in the help viewer content pane.

Due to this limitation in Javahelp the only character encoding that displays is the system default; not the font defined by the user.

### **The nwrecover program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed**

#### **LGTsc02808**

The `nwrecover` program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed.

#### **Workaround**

Install the following font packages:

- ◆ `ttf-founder-simplified-0.20040419-6.1.noarch.rpm`
- ◆ `ttf-founder-traditional-0.20040419-6.1.noarch.rpm`

## Non-ASCII save set names are displayed incorrectly in nsradmin visual mode on Linux

### LGTpa92833

Non-ASCII save set names are displayed incorrectly in **nsradmin** visual mode on Linux.

#### Workaround

To work around this limitation, do one of the following:

- ◆ Use the **print nsr client** command in **nsradmin** window to view the non-ASCII save set.
- ◆ Use the Console GUI on the Linux client to view the non-ASCII save set.

## Messaging problems and limitations descriptions

This section details the problems and limitations related to messaging.

### nsrbmr does not give proper error messages under certain conditions

#### LGTsc16423

An appropriate error message is not displayed when both BMR profiling status and **savegrp** status fail due to one of the following:

- ◆ The Homebase agent is uninstalled and a **savegrp** with BMR enabled client is performed.
- ◆ A communication issue occurs between **nw serv** and **nw clnt**.

An error message appears but BMR profiling still completes with a status of "pass" in the following scenarios:

- ◆ The Homebase agent services are stopped during or after profiling. In this case, **nsrbmr** completes without any errors.
- ◆ Incorrect options are specified in the BMR options field under client properties. A command usage error appears, but profiling status indicates "pass".
- ◆ After installation, when the first **savegrp** is performed with BMR enabled client, the HomeBase server name is specified in the server properties and the BMR options field is left blank.

Once the **savegrp** is completed for the BMR enabled client, it is recommended to check the status of the BMR profile completion to ensure that BMR profiling has completed successfully.

### **Error message does not display for annotations with similar characters at the end**

#### **LGTsc17737**

Nsrretrieve does not display an error message when a retrieve is performed using regular expressions for two annotations with similar characters at the end.

### **Erroneous error message may be generated by Linux operating systems when performing an I/O to a volume**

#### **LGTsc08054**

The following erroneous error message may be generated by Linux operating systems when performing an I/O to a volume:

```
kernel: program nsrmmmd is using deprecated SCSI ioctl,  
please convert it to SG_IO.
```

Ignore this message. In upcoming Sun StorageTek EBS releases, this warning from the kernel will stop.

### **New pdksh package required on SuSE 10 x86**

#### **LGTsc08978**

A failed dependencies error occurs on the SuSE 10 x86 platform if the required version of the pdksh package is not installed. The following is displayed:

```
error: Failed dependencies: /bin/ksh is needed by  
lgtoclnr-7.4-1
```

#### **Workaround**

Install **pdksh-5.2.14-801.i586.rpm**, which can be downloaded from the SuSE/Novell website.

You could alternatively install the packages with the **--nodeps** option.

### **Incorrect error message reported when starting the 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 message. To start the Sun StorageTek EBS Console, click the Start link in the line "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 ntx64. Sun StorageTek EBS release 7.4 and later does not allow 32-bit Sun StorageTek EBS to be installed on ntx64.

---

### **Sun StorageTek EBS support for Novell's OES Linux limitations**

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

- ◆ ["Metadata modifier field not recovered" on page -123](#)
- ◆ ["Creating eDirectory backup files for Sun StorageTek EBS backup and recovery" on page -123](#)
- ◆ ["Creating GroupWise backup files for Sun StorageTek EBS backup and recovery" on page -124](#)

#### **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 savepnp, 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:

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

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

```
./dbcopy -m -p -v /backup /gw
```

5. Run the following command to start GroupWise:

```
./rcgrpwise start
```

6. Run the following command to view the status of GroupWise and confirm that the recovery was successful:

```
./rcgrpwise status
```

## Sun StorageTek EBS Management Console problems and limitations descriptions

This section details the problems and limitations related to the Sun StorageTek EBS Management Console (NMC).

### 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.

## Restore problems and limitations descriptions

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

### Last-modified date changed for files recovered to Sun Cluster global file system

#### LGTsc19364

The last-modified date for files recovered to the SUN Cluster global file system may be displayed as the current time instead of the last date the files were changed, due to an issue with Sun Cluster version 3.2.

#### Workaround

Disable `pxfs_fastwrite` by performing the following:

1. On all cluster nodes, run:

```
# echo "pxfs_fastwrite_enabled/W 0" |mdb -kw
```

2. Unmount, then mount the global file systems for the change to appear.

To re-enable fastwrite:

1. Set the variable `pxfs_fastwrite_enabled` to 1.
2. Unmount, then mount the global file systems.

More information on this issue is provided at the following website: [http://bugs.opensolaris.org/bugdatabase/view\\_bug.do?bug\\_id=6540206](http://bugs.opensolaris.org/bugdatabase/view_bug.do?bug_id=6540206)

### Do not recover identical save sets with different ssids to the same target directory

#### LGTsc10796

Do not perform a save set recovery from the command prompt, with multiple save set IDs that all point to the same file/directory path and will be recovered into the original location.

Data corruption might occur when the same dir/file path is backed up multiple times. This creates multiple save sets, each with a different save set ID. For example, `ssid1` and `ssid2` are save set IDs created for the same file/directory path, at different save or backup times.

When the `recover` command or the `nsrretrieve` command is run to retrieve more than one instance of the save set, each with a different

save set ID, into the original location, the recovered instance of the directory/file from *ssid1* might be overwritten by the recovered data of the same directory/file from *ssid2*, or vice-versa.

### Example

Data corruption might occur in the following scenario:

```
recover -s server -c client -S ssid1 -S ssid2  
nsrretrieve -s server -S ssid1 -S ssid2
```

where *ssid1* and *ssid2*, are save set IDs of the same file/directory.

### Antivirus programs block recovery

#### LGTsc13799

During recovery, antivirus programs may block the recovery of certain files. Antivirus programs are designed to protect their own program files and settings from external threats that may be attempting to disable the program. The antivirus program may not be able to distinguish between a recovery and an attack.

#### Workaround

Prior to recovery, disable the antivirus program's protection properties. Consult your anti-virus program's documentation for further information. After recovery, reenble the program's protection properties.

### 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.

### Restoring full VM image on ESX server fails

#### LGTsc11618

When attempting to restore a full VM image directly onto the ESX server, the recovery fails.

#### Workaround

Recover to the proxy host and use VirtualCenter tools (VMware Converter).

## Unable to restore files encrypted with both Microsoft Windows Encrypting File System & AES encryption

### LGTsc11734

When AES encryption is applied to a file that is also encrypted using the Microsoft Windows Encrypting File System (EFS), the backup will be reported as successful. However, recovery of the file fails and the following message is written to the 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.

## The nwrecover program might fail to launch on a Solaris Sparc V240 server

### LGTsc06577

The `nwrecover` program might fail to launch on a Solaris Sparc V240 server if the following CDE/Motif patch is not installed:

**Solaris 10 CDE 1.6 Runtime update:**

**sparc: 119280**

**x86: 119281**

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

### LGTsc05990

The 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.

## After a BMR recovery operation the root password might change

### LGTsc20558

After BMR recovery (base profile) operation, the root password might change. For example:

- ◆ On UNIX, the root password might be reset to **riskey**.

- ◆ On Microsoft Windows a new admin username and password is created. You can log in as administrator with the profiled servers password or as the indigostone user. For example:
  - Admin username: indigostone
  - Admin username password: H0meBase

### **On NetApps files, filenames ending with special characters might be renamed**

#### **LGTpa95900**

On NetApps filers, the recovery of filenames ending with the special character sequence `~n` (where `n` is a number) might be renamed with `~1` appended at the end of the name. For example, a file named `C~1` might be restored with the name `C~1~1`.

This behavior might occur when the `DIRECT=Y` application parameter has been defined in the NetApps client instance.

#### **Workaround**

To perform a file level recovery of a file with a special character sequence, perform one of the following:

- ◆ Set the following environment variable prior to performing a file level recovery:

```
NSR_NDMP_RECOVER_NO_DAR=y
```

- ◆ Redefine the NetApps client application parameters:

```
DIRECT=Y.
```

---

**Note:** This will not address the recovery of legacy backups performed prior to the `DIRECT=Y` parameter removal. In this case, you must set the `NSR_NDMP_RECOVER_NO_DAR=y` environment variable before performing the recovery operation.

---

### **The winworkr program fails to retrieve successfully archived files if a slash (\) character was entered in the annotation string**

#### **LGTpa94966**

The `winworkr` program fails to retrieve successfully archived files if a slash (\) character was entered in the annotation string.

#### **Workaround**

Enter a double slash (\\) into the annotation string and the files will be archived and retrieve operations perform successfully.

## Directed recover fails with permission errors on Windows

### LGTpa83927

A directed recover operation fails when using the command line interface (CLI) and the **winworkr** program. Permission errors display if the Sun StorageTek EBS server and the client where the files are to be recovered to are running Windows.

### Workaround

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

- ◆ If the 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.
- ◆ If neither machine is 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 the local user existing on both systems with the same password.

## 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.

### **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.

### **For recoveries operations using Celerra filers, misleading error messages might display**

#### **LGTpa96554**

On Celerra filers, the recovery of a backup containing a recursive directory can result in the generation of log messages:

```
NDMP Service Debug: Too much retry on header research
```

This log message can be intermittent in nature as subsequent recoveries of the same back might not result in the generation of a log message.

This log message does not affect the recovery and can be ignored.

## **Upgrading problems and limitations descriptions**

This section details the problems and limitations related to upgrading the software.

### **JRE version mismatch causes authentication failure, stops GSTD**

#### **LGTsc08958**

After updating to 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.

#### **When upgrading from release 7.3.1 the Virtual Jukeboxes attribute will not be set correctly**

##### **LGTpa95019**

When upgrading from the 7.3.1 release, the Virtual Jukeboxes attribute will not be set if you previously configured a Virtual Tape Library (VTL) using the 7.3.1 release. After upgrading to 7.5, the Virtual Jukeboxes attribute uses the normal jukebox license instead of a VTL license. The VTL still functions normally using the normal jukebox license.

The Virtual Jukeboxes attribute will function normally if upgrading to the 7.5 release from 7.3.2.

#### **Group details window is empty after upgrading from 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.

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## **Sun StorageTek EBS releases previous to 7.4 problems and limitations**

[Table 12 on page -133](#) identifies problem issues and limitations discovered in Sun StorageTek EBS release prior to 7.4 that continue to be applicable.

The known limitations are separated into the following categories:

- ◆ ["Backup operations problems and limitations descriptions" on page -139](#)
- ◆ ["CLI problems and limitations descriptions" on page -145](#)
- ◆ ["Cloning problems and limitations descriptions" on page -146](#)
- ◆ ["Compatibility problems and limitations descriptions" on page -146](#)
- ◆ ["Configuration problems and limitations descriptions" on page -147](#)

- ◆ “Devices and media problems and limitations descriptions” on page -149
- ◆ “GUI problems and limitations descriptions” on page -157
- ◆ “Installation problems and limitations descriptions” on page -160
- ◆ “Licensing problems and limitations descriptions” on page -162
- ◆ “Localization problems and limitations descriptions” on page -162
- ◆ “Messaging problems and limitations descriptions” on page -163
- ◆ “NDMP problems and limitations descriptions” on page -165
- ◆ “Restore problems and limitations descriptions” on page -166

**Table 12 Limitations discovered in Sun StorageTek EBS releases prior to 7.4 (Sheet 1 of 7)**

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">“LGTpa91299” on page -144</a>	91299nw	ZFS file systems are not automatically backed up when performing a savegroup backup of ALL.	AIX, Linux, Solaris, HP-UX, Tru64 UNIX	Backup
<a href="#">“LGTpa83221” on page -140</a>	83221nw	Backup might default to an incorrect server if the <b>-s</b> option is not specified with the <b>save</b> command.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup
<a href="#">“LGTpa82436” on page -142</a>	82436nw	VSS on Windows Server 2003 x64 requires a Microsoft hotfix if Windows is running MSSQL Server or MSDE.	Windows	Backup
<a href="#">“LGTpa75719” on page -141</a>	75719nw	Save set status is displayed as invalid if a DSA backup is terminated due to an invalid backup path.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Backup
<a href="#">“LGTpa75339” on page -142</a>	75339nw	Backup will fail with remote exec service if passwords are not configured correctly.	Windows	Backup
<a href="#">“LGTpa73509, Sun Bug ID 6192129” on page -141</a>	73509nw	The /system/object and /system/contract directories are not skipped during a backup on Solaris 10.	AIX, Solaris, HP-UX, Tru64 UNIX	Backup
<a href="#">“LGTpa51184” on page -141</a>	51184nw	Increase server parallelism to complete concurrent operations.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Backup
<a href="#">“LGTpa61694” on page -143</a>	61694nw	SHAREPOINT save set cannot be excluded with directives when a save set of ALL is specified.	Windows	Backup

**Table 12 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 2 of 7)**

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTpa58888" on page -143</a>	58888nw	Command-Line Backup and Recovery of SYSTEM Save Sets.	Windows	Backup
<a href="#">"LGTpa58422" on page -144</a>	58422nw	VSS backups of raw devices unsupported.	Windows	Backup
<a href="#">"LGTpa44863" on page -142</a>	44863nw	Files larger than 2 GB can break the save set consolidation process.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup
<a href="#">"LGTpa41039" on page -139</a>	41039nw	Windows management instrumentation database might stop responding.	Windows	Backup
<a href="#">"LGTpa54620" on page -140</a>	54620nw	Microsoft VSS backups on a FAT32 partition take longer than on an NTFS partition.	Windows	Backup
<a href="#">"LGTpa35171" on page -140</a>	35171nw	Hot fix required to operate the Sun StorageTek EBS software in a Windows 2000 Clustered Environment running Service Pack 1 or 2.	Windows	Backup
<a href="#">"LGTpa33868" on page -140</a>	33868nw	Windows 2000 server cannot handle large numbers of concurrent saves.	Microsoft Windows	Backup
<a href="#">"LGTpa83221" on page -140</a>	83221nw	Backup might default to an incorrect server if the -s option is not specified with the save command.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup
<a href="#">"LGTpa79664" on page -141</a>	79664nw	The /var/log/lastlog file causes a save process to appear to hang on RedHat AS4 x86_64.	Linux, Solaris	Backup
<a href="#">"LGTpa75719" on page -141</a>	75719nw	Save set status is displayed as invalid if a DSA backup is terminated due to an invalid backup path.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX,	Backup
<a href="#">"LGTpa73509, Sun Bug ID 6192129" on page -141</a>	73509nw	The /system/object and /system/contract directories are not skipped during a backup on Solaris 10.	Linux, Solaris	Backup
<a href="#">"LGTpa51184" on page -141</a>	51184nw	Increase server parallelism to complete concurrent operations.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX,	Backup
<a href="#">"LGTpa44863" on page -142</a>	44863nw	Files larger than 2 GB can break the save set consolidation process.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Backup

**Table 12 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 3 of 7)**

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTpa75339" on page -142</a>	75339nw	Backup will fail with remote exec service if passwords are not configured correctly.	Windows	Backup
<a href="#">"LGTpa61694" on page -143</a>	61694nw	SHAREPOINT save set cannot be excluded with directives when a save set of ALL is specified.	Windows	Backup
<a href="#">"LGTpa58888" on page -143</a>	58888nw	Command line backup and recovery of SYSTEM save sets.	Windows	Backup
<a href="#">"LGTpa58422" on page -144</a>	58422nw	VSS backups of raw devices unsupported	Windows	Backup
<a href="#">"LGTpa91299" on page -144</a>	91299nw	ZFS file systems are not automatically backed up when performing a savegrp backup of.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX	Backup
<a href="#">"LGTpa87308" on page -145</a>	87308nw	Using the withdraw command to withdraw a volume on a partitioned library fails.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	CLI
<a href="#">"LGTpa91406" on page -145</a>	91406nw	The <b>ls -l</b> command does not display files recovered from a NetApp Data ONTAP 6.5 file system.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	CLI
<a href="#">"LGTpa76457" on page -145</a>	76457nw	The <b>mminfo</b> command does not display a weekly summary of save set usage during the change to daylight savings time.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	CLI
<a href="#">"LGTpa51045" on page -146</a>	51045nw	Perform a save set recovery when using the save command with the <b>-l input_file</b> option.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	CLI
<a href="#">"LGTpa62490" on page -146</a>	62490nw	Cloning on an EMC DART CFS 5.2 is unsupported.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Cloning and Staging
<a href="#">"LGTpa70320" on page -146</a>	70320nw	Automatic cloning might fail when using a single staging policy.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Cloning and Staging
<a href="#">"LGTpa41044" on page -147</a>	41044nw	Sun StorageTek EBS software might stop responding when running SQL server 2000 and Sun StorageTek EBS client.	Windows	Compatibility
<a href="#">"LGTpa89947" on page -147</a>	89947nw	Cannot deposit volumes in a DAS silo.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Configuration

**Table 12 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 4 of 7)**

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTpa66196" on page -147</a>	66196nw	Warning when using AlphaStor 3.0x with SR2 on a Windows server with a Sun StorageTek EBS for Windows 2000 storage node.	Windows	Configuration
<a href="#">"LGTpa57709" on page -148</a>	57709nw	Removable storage manager jukebox configures all devices automatically.	Windows	Configuration
<a href="#">"LGTpa35407" on page -148</a>	35407nw	Change journal manager problems with multiple servers.	Windows	Configuration
<a href="#">"LGTpa83273" on page -150</a>	83273nw	Misleading error message reported if an invalid NDMP storage node password is entered when labeling a volume.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
<a href="#">"LGTpa83579" on page -150</a>	83579nw	Device operations using the right click option might be lost.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
<a href="#">"LGTpa82503" on page -150</a>	82503nw	Media capacity notification not logged in the media database.	AIX, Solaris, Windows, HP-UX, Tru64 UNIX, Linux	Devices and Media
<a href="#">"LGTpa80901" on page -150</a>	80901nw	Labeling volumes concurrently might fail when using the Sun StorageTek EBS Console.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
<a href="#">"LGTpa87657" on page -151</a>	87657nw	The <b>udev</b> tool is unsupported on Emulex running Linux RedHat AS 4 using default kernel 2.6.	Linux	Devices and Media
<a href="#">"LGTpa74492" on page -151</a>	74492nw	The <b>jbconfig</b> command might fail on Windows 2003 with a multidrive jukebox.	Windows	Devices and Media
<a href="#">"LGTpa68867" on page -151</a>	68867nw	Tape gets stuck in a drive when labeling Linux Red Hat.	Linux	Devices and Media
<a href="#">"LGTpa66140" on page -152</a>	66140nw	The jbconfig command reports a BNCHMARKVS640 DLT drive as 4mm.	Windows	Devices and Media
<a href="#">"LGTpa54632" on page -152</a>	54632nw	Error message appears in daemon log when labeling a volume that contains PowerSnap save sets.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
<a href="#">"LGTpa55128" on page -152</a>	55128nw	Slow Solaris tape operations when using an IBMtape driver with IBM LTO-2 Tape drives and the Sun StorageTek EBS CDI.	AIX, Solaris, HP-UX, Tru64 UNIX	Devices and Media
<a href="#">"LGTpa51725" on page -153</a>	51725nw	Sun StorageTek EBS software attempts to eject a stuck tape.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media

**Table 12 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 5 of 7)**

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTpa66565" on page -153</a>	66565nw	Volume retention information does not apply to volumes that contain snapsets.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
<a href="#">"LGTpa50485" on page -153</a>	50485nw	Increase the value of the save mount timeout attribute when auto media management is enabled and a corrupt tape is encountered.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
<a href="#">"LGTpa45470" on page -154</a>	45470nw	Volume remains in the tape drive if the storage node nsrmmid is not responding in a shared drive environment with DDS.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
<a href="#">"LGTpa37996" on page -156</a>	37996nw	The nsrjb -L and -I operations fail with an Exabyte Mammoth-2 tape drive with Fibre Channel device.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
<a href="#">"LGTpa58356" on page -154</a>	58356nw	Label tape operation fails on an HP-UX platform if CDI is turned on and IBM tape driver is used.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Devices and Media
<a href="#">"LGTpa58215" on page -155</a>	58215nw	Jukebox fails to allocate enough devices.	Windows	Devices and Media
<a href="#">"LGTpa50089" on page -155</a>	50089nw	Entering the inquire command during tape activity causes a device error.	Windows	Devices and Media
<a href="#">"LGTpa48374" on page -155</a>	48374nw	Managing optical drives with Solaris 9.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
<a href="#">"LGTpa50279" on page -156</a>	50279nw	Cannot label a tape if CDI is enabled on a tape drive on HP Tru64 5.1.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Devices and Media
<a href="#">"LGTpa36367" on page -157</a>	36367nw	Tape Drive Requires Cleaning Error Message.	Windows	Devices and Media
<a href="#">"LGTpa89859" on page -157</a>	89859nw	Unable to configure an ACSLS silo on Windows with lib_attach 1.4.1.	Windows	Devices and Media
<a href="#">"LGTpa87730" on page -158</a>	87730nw	Cannot launch the Sun StorageTek EBS Console from a Linux PowerPC client.	Linux	GUI
<a href="#">"LGTpa77990" on page -158</a>	77990nw	Cannot run commands in <b>nsradmin</b> without the <b>nsrexecd</b> daemon.	Windows	GUI
<a href="#">"LGTpa82555" on page -158</a>	82555nw	Remote client save sets with japanese characters are displayed incorrectly.	Windows	GUI

**Table 12 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 6 of 7)**

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTpa83820" on page -159</a>	83820nw	Files backed up from a VSS system fileset appear in the file system tree.	Windows	GUI
<a href="#">"LGTpa53364" on page -159</a>	53364nw	SCSI device ID displayed differently than Sun StorageTek EBS NDMP devices.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	GUI
<a href="#">"LGTpa56231" on page -159</a>	56231nw	All client file index entries might appear not to have been deleted.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	GUI
<a href="#">"LGTpa86214" on page -160</a>	86214nw	Microsoft Windows username cannot contain a '!' character.	Windows	GUI
<a href="#">"LGTpa80764" on page -160</a>	80764nw	No alternative location provided for the java14.sdk.tar file if the /tmp directory is full.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Installation
<a href="#">"LGTpa83706" on page -160</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.	Windows	Installation
<a href="#">"LGTpa61643" on page -161</a>	61643nw	Package installation on Linux IA64 Red Hat results in an error.	Linux	Installation
<a href="#">"LGTpa50807" on page -161</a>	50807nw	Error downgrading to business edition.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Installation
<a href="#">"LGTpa62224" on page -162</a>	62224nw	Sun StorageTek EBS License Manager allowance limitation.	Windows	Licensing
<a href="#">"LGTpa79450" on page -177</a>	79450nw	The XAPPLRESDIR environment variable must be set to operate the Sun StorageTek EBS Console on HP-UX	HP-UX	Localization
<a href="#">"LGTpa81024" on page -163</a>	81024nw	Fatal error incorrectly reported no printer available to print a bootstrap on AIX 5.3.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Messaging
<a href="#">"LGTpa54165" on page -163</a>	54165nw	Error message generated if the snapshot policy is configured to request more snapshots than a Savegroup can generate.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	Messaging
<a href="#">"LGTpa43135" on page -164</a>	43135nw	System log notifications fail on SuSE 8.0.	Linux	Messaging
<a href="#">"LGTpa88065" on page -165</a>	88065nw	If a connection is lost during an NDMP backup to a NAS filer the Sun StorageTek EBS software stops responding.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	NDMP

**Table 12 Limitations discovered in Sun StorageTek EBS releases prior to 7.4  
(Sheet 7 of 7)**

Customer Service defect number	Issue Tracker Issue number	Description of limitation	OS affected	Product Feature
<a href="#">"LGTpa74026" on page -165</a>	74026nw	The <b>scanner</b> command might stop responding if it encounters an aborted save set backed up to an NDMP device.	AIX, Solaris, HP-UX, Tru64 UNIX, Linux	NDMP
<a href="#">"LGTpa28778" on page -165</a>	28778nw	Sun StorageTek EBS software fails to use tapes preinitialized in NDMP-enabled tape devices.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	NDMP
<a href="#">"LGTpa65644" on page -166</a>	65644nw	NDMP save sets in status recyclable are not recoverable.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Restore
<a href="#">"LGTpa48556" on page -166</a>	48556nw	Preventing duplicate filenames during recovery.	Windows	Restore
<a href="#">"LGTpa48322" on page -166</a>	48322nw	Windows error message during automated system recovery.	Windows	Restore
<a href="#">"LGTpa37508" on page -167</a>	37508nw	Limitation on browse and retention policy dates	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Restore
<a href="#">"LGTpa35856" on page -167</a>	35856nw	No message is logged if resource files are missing.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Restore
<a href="#">"LGTpa23372" on page -167</a>	23372nw	Concurrent multiclient recovery on Windows 2000.	Microsoft Windows	Restore
<a href="#">"LGTpa38176" on page -168</a>	38176nw	Cannot change the browse time if there are files for recovery.	AIX, Linux, HP-UX, Solaris, Tru64 UNIX, Windows	Recovery

### Backup operations problems and limitations descriptions

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

#### Windows management instrumentation database might stop responding

##### LGTpa41039

While performing a save of the Windows Management Instrumentation (WMI) database, the **save** process stops responding

during a Microsoft application programming interface (API) call. A Microsoft API call should be nonblocking.

To work around this issue, obtain the hot fix for the Microsoft operating system bug. The Microsoft Knowledgebase article Q319579, *COM Activity Deadlock Causes IIS to Stop Responding*, contains more information on this hot fix.

### **Microsoft VSS backups on a FAT32 partition take longer than on an NTFS partition**

#### **LGTpa54620**

VSS backups of files on a FAT32 partition take longer than VSS backups of files on an NTFS partition. This is a known Microsoft issue.

### **Hot fix required to operate the 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.

### **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.

**The `/var/log/lastlog` file causes a save process to appear to hang on RedHat AS4 x86\_64****LGTpa79664**

RedHat AS4 x86\_64 creates a 4TB sparse file, `/var/log/lastlog`, during the install process. A save process that includes this file appears to hang while it reads the sparse file. The save process executes after the delay.

**Save set status is displayed as invalid if a DSA backup is terminated due to an invalid backup path****LGTpa75719**

If a DSA backup is terminated due to an invalid backup path, the save set status is displayed as invalid `ss` (for file type devices and tape devices) in the Volumes window. The Volume window should not display information about the save set status.

**The `/system/object` and `/system/contract` directories are not skipped during a backup on Solaris 10****LGTpa73509, 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
```

**Increase server parallelism to complete concurrent operations****LGTpa51184**

There may be a need to increase the server parallelism value to complete the concurrent operations with an advanced file type device (AFTD) device when the number of simultaneous save sessions reaches the maximum value for server parallelism.

For example, if the server parallelism is set to 4, and there are 4 simultaneous saves going to an AFTD, set the server parallelism to 5 to complete a concurrent clone/stage operation from this AFTD while the four saves are in progress.

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

#### **LGTpa44863**

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

### **VSS on Windows Server 2003 x64 requires a Microsoft hotfix if Windows is running MSSQL Server or MSDE**

#### **LGTpa82436**

Due to problems that Microsoft is encountering with certain VSS writers, VSS on Windows Server 2003 x64 requires a Microsoft hotfix if Windows is running MSSQL Server or MSDE. The Microsoft hot fix can be installed from the following:

<http://support.microsoft.com/default.aspx?scid=kb;en-us;913100>.

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

#### **LGTpa75339**

A backup will fail if the following is true:

- ◆ A 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.

## 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 *EMC 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.

### VSS backups of raw devices unsupported

#### LGTpa58422

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

### ZFS file systems are not automatically backed up when performing a savegrp backup of ALL

#### LGTpa91299

The `savefs` command fails to automatically backup a ZFS file system when performing a `savegrp` backup of ALL. The ZFS file systems do not appear in the `/etc/vfstab` file.

### Workaround

To workaround this issue do one of the following:

- ◆ Explicitly set the file systems for backup in the client's save set list.
- ◆ Set the ZFS file systems to legacy mount point behavior and add an entry to the `/etc/vfstab` file.

For example:

```
# zfs umount <zpool>
# zfs set mountpoint=legacy <zpool>
```

Add an entry to the `/etc/vfstab`. For example:

```
<zpool> - /mypool zfs - yes -
where /mypool is the mount point

# mount /mypool
```

## CLI problems and limitations descriptions

This section details the problems and limitations related to the Command Line Interface (CLI).

### Using the `withdraw` command to withdraw a volume on a partitioned library fails

#### LGTPa87308

The `withdraw` command fails when a volume is withdrawn from a partitioned library.

#### Workaround

When using the `withdraw` command, specify the port number also. For example,

```
nsrjb -w -S 1 -P 2 -vvv
```

### The `ls -l` command does not display files recovered from a NetApp Data ONTAP 6.5 file system

#### LGTPa91406

After performing a recovery from a NetApp Data ONTAP 6.5 file system mounted on a UNIX client (NFS share), the recovered files are not displayed if the `ls -l` command is entered.

#### Workaround

Unmount and remount the file system and the files are visible.

### The `mminfo` command does not display a weekly summary of save set usage during the change to daylight savings time

#### LGTPa76457

If you use `mminfo` query to get a weekly save set usage summary during the change to daylight saving time (last Sunday of October and first Sunday of April), there is no information for the day of the change.

### **Perform a save set recovery when using the save command with the -I input\_file option**

#### **LGTpa51045**

When using the **save** command with the **-I input\_file** option and one of the entries is deleted while the backup is running, the remaining entries in the input file are saved successfully. However, connecting directories are not saved and you are unable to perform index-based recoveries. The workaround is to perform a save set recovery.

### **Cloning problems and limitations descriptions**

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

#### **Cloning on an EMC DART CFS 5.2 is unsupported**

##### **LGTpa62490**

Cloning on an EMC DART CFS 5.2 is unsupported.

The source tape begins reading data after the clone tape is mounted and the clone operation fails. The source drive does not exit the reading data state.

A clone error is reported in the `/nsr/cores/nsrndmp_clone` file.

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

##### **LGTpa70320**

Automatic cloning fails when using a single staging policy if the following apply:

- ◆ Backup is to an advanced file type device.
- ◆ Server Parallelism value is set low (two or less).
- ◆ Recover space and check file system interval is approximately three and five minutes.
- ◆ High-water mark is set at a low value (approximately 10 percent).

This error message appears:

```
Error: nsrd: nonexistent cloneid (SSID) for
      saveset(ss_name)
```

### **Compatibility problems and limitations descriptions**

This section details the problems and limitations related to compatibility of the software.

## 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.

## Configuration problems and limitations descriptions

This section details the problems and limitations related to configuring the software.

### Cannot deposit a volume from the CAP (I/O Port) using `nsrjb -d` command

#### LGTpa89947

Cannot deposit a volume from the CAP (I/O Port) using `nsrjb -d` command. A silo volume deposit requires the `-T` and `-a` options in sequence to add a volume in the media database.

The sequence of operations is:

```
nsrjb -d -T BarCode
```

Ignore the error message that appears.

```
nsrjb -a -T Barcode
```

### 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 `nsrcnct` process terminates after loading a volume into the storage node tape devices. The `nsrcnct` process is contacted by the `nsrjb` program to perform a mount request. If the `nsrcnct` 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.

### **Removable storage manager jukebox configures all devices automatically**

#### **LGTPa57709**

When using the `jbconfig` command to configure a tape drive, a Removable Storage Manager (RSM) jukebox configures all devices automatically and picks the most generic device type available. For example, if you are configuring a 4 mm 20 GB tape drive, the RSM jukebox defines the device as a 4 mm type device, not 4 mm 20 GB. Likewise, if you are configuring a DLT8000 device, it is configured as DLT. Therefore, you might not receive the same performance and usage as with a fully defined device.

### **Change journal manager problems with multiple servers**

#### **LGTPa35407**

Configuring multiple 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 using the following.

---

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.

## Devices and media problems and limitations descriptions

This section details the problems and limitations related to device and media operations.

### The jbconfig Command Reports More Drives Than Are Connected to the Node

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

The jbconfig 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.

### **Misleading error message reported if an invalid NDMP storage node password is entered when labeling a volume**

#### **LGTPa83273**

If an invalid NDMP storage node password is entered when labeling a volume, the error message does not indicate that the password is incorrect. Instead, this error message is reported:

```
command operation `LOAD', command ID 231 is not connected
```

### **Device operations using the right-click option might be lost**

#### **LGTPa83579**

Device operations that use the Console are limited if a resource was created by a pre-7.4 release 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.

### **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 *EMC Sun StorageTek EBS Command Reference Guide* or the UNIX man pages has more information on the **nsrjb** command.

#### **The udev tool is unsupported on Emulex running Linux RedHat AS 4 using default kernel 2.6**

##### **LGTpa87657**

The **udev** tool is unsupported on Emulex running Linux RedHat AS 4 using default kernel 2.6.

#### **The jbconfig command might fail on Windows 2003 with a multidrive jukebox**

##### **LGTpa74492**

When configuring media libraries on Windows Server 2003, the **jbconfig** command might fail with this error:

```
jukebox error: scsi command MODE_SENSE failed.
```

If this error message appears:

1. Right-click **My Computer** and select **Manage**.
2. Select **Device Manager**.
3. Right-click the effected library and select **Disable**.
4. Rerun the **jbconfig** command.

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

##### **LGTpa68867**

While labeling tape in a DDS configuration by using a 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).

### **The jbconfig command reports a BNCHMARKVS640 DLT drive as 4mm**

#### **LGTPa66140**

When using the **jbconfig** command to configure an autodetected SCSI jukebox by selecting option 2, **Configure an Autodetected SCSI Jukebox**, a BNCHMARKVS640 DLT drive is incorrectly reported as a 4mm drive.

To work around this issue, select option 4, **Configure an SJI Jukebox**, to specify the drive.

### **Error message appears in daemon log file when labeling a volume that contains PowerSnap save sets**

#### **LGTPa54632**

When labeling a volume that contains PowerSnap save sets, this error message appears in the daemon log file:

```
nsrmmdbd: error, null
```

Ignore the error messages in the daemon log file. No actual error occurred.

### **Slow Solaris tape operations when using an IBMtape driver with IBM LTO-2 tape drives and the 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).

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

### LGTPa66565

The output produced by the **mminfo** command by using the **volretent** flag (the date the last save set on this volume expires) does not apply to volumes that contain snapsets.

## Increase the value of the save mount time-out attribute when auto media management is enabled and a corrupt tape is encountered

### LGTPa50485

**Note:** This issue has only been seen on SDLT110/220 drives.

A label operation may take more than 30 minutes before it fails under these conditions:

- ◆ 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 nsrmmmd is not responding in a shared drive environment with DDS**

##### **LGTpa45470**

In a shared drive environment, volumes remain in the physical drive when these conditions exist:

- ◆ The drives are accessed by multiple storage nodes through DDS.
- ◆ The Sun StorageTek EBS server is unable to communicate with the **nsrmmmd** daemon on any storage node.
- ◆ The storage node has loaded or mounted volumes onto shared drives.

#### **Label tape operation fails on an HP-UX platform if CDI is turned on and IBM tape driver is used**

##### **LGTpa58356**

On an HP-UX platform, a label tape operation fails with this error message if CDI is turned on and an IBM tape driver is used:

```
Error: while operating on slot `1': write open error:  
drive status is Drive reports no error - but state is  
unknown
```

#### **Workaround**

To avoid a failed label tape operation, turn off **CDI**.

The IBM Atape driver version 3.0.1.8 does not display this behavior. The *EMC Sun StorageTek EBS Hardware Compatibility Guide* contains more information and is available at <http://Powerlink.EMC.com>.

## 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.

## Entering the inquire command during tape activity causes a device error

### LGTPa50089

Issuing the **inquire** command from the command line while there is any tape activity, such as labeling of tapes or backing up of data, might cause an operating system crash or a device I/O error.

## Managing optical drives with Solaris 9

### LGTPa48374

With Solaris 9, the Volume Management daemon (**vold**) is changed so that it automatically attempts to manage all removable media devices. Because of this change, the Volume Management daemon may interfere with 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 rm SCSI drive /dev/rdsK/c*s2 dev_rm SCSI.so rm SCSI%d
```

After commenting out this line, the **Devices to Use** section of the configuration file looks similar to this:

```
# Devices to use
# use rm SCSI drive /dev/rdsK/c*s2 dev_rm SCSI.so
rm SCSI%d
```

3. Save the configuration file.
4. Reinitialize the **Volume Management** daemon with the new configuration file settings. One way to do this is to send a hang-up signal to the daemon, for example:

```
ps -ef | grep vold
kill -HUP vold_pid
```

where *vold\_pid* is the process ID of the volume management daemon, **vold**.

### Cannot label a tape if CDI is enabled on a tape drive on HP Tru64 5.1

#### LGTpa50279

To use the CDI feature with a storage node or server that is running on HP Tru64 UNIX version 5.1, install the latest patch kit available from Hewlett-Packard. If you choose not to install the patch kit on the Tru64 5.1 operating system, disable the CDI feature on any preconfigured devices.

### The nsrjb -L and -I operations fail with an Exabyte Mammoth-2 tape drive with Fibre Channel device

#### LGTpa37996

When using the **nsrjb -L** and **-I** commands to perform inventory and tape label operations, the 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.

## Tape drive requires cleaning error message

### LGTpa36367

When trying to create a tape backup, the Windows 2000 dlttape.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.

## 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 **nrsexecd** 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.

## GUI problems and limitations descriptions

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

## 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.

## 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.

## 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.

---

## Files backed up from a VSS system file set appear in the file system tree

### LGTPa83820

On a Windows 2003 operating system, saving a VSS save set, such as VSS SYSTEM FILESET: or VSS SYSTEM SERVICES: creates index entries for backed-up files as well as their parent directories. This can cause problems when browsing the recover items by displaying the version from the VSS backup as part of the file system.

---

**Note:** If the VSS system saves sets are marked along with the file system, the save sets will fail to recover and the status will indicate those folders failed (for example, you select **My Computer** using the **winworkr** program). This is expected behavior.

---

## SCSI device ID displayed differently than 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.

---

**Note:** This requirement might be more apparent with AFTD as it supports concurrent operations, but it is applicable to all other device types with a similar setup.

---

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

#### **LGTpa86214**

The 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.

## **Installation problems and limitations descriptions**

This section details the problems and limitations related to installing the software.

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

#### **LGTpa80764**

After installing the 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.
```

### **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 Sun StorageTek EBS Disaster Recovery Guide* contains more information on a Windows non-ASR recovery if the backup and the CD do not match.

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

#### LGTPa61643

During installation of 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 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**.

### Licensing problems and limitations descriptions

This section details the problems and limitations related to licensing the software.

#### 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.

### Localization problems and limitations descriptions

This section details the problems and limitations related to localization.

For more information on localization important notes and tips, see [“Internationalization support” on page -169](#).

### **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
```

## **Messaging problems and limitations descriptions**

This section details the problems and limitations related to messaging.

### **Fatal error incorrectly reported no printer available to print a bootstrap on AIX 5.3**

#### **LGTpa81024**

After a save group operation completed successfully, the Completed Successfully table of the Group Details window incorrectly reported a fatal error. This window indicates there is not a printer available to print the bootstrap.

### **Error message generated if the snapshot policy is configured to request more snapshots than a Savegroup can generate**

#### **LGTpa54165**

If a snapshot policy is configured to request more snapshots than a savegroup can generate for a group in a given time, the savegroup generates this error message when running the group, and does not back up that group:

```
timestamp savegrp: RAP error: Invalid snapshot policy
with number_of_requested_snapshots snapshot creation per
day. 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 *EMC Sun StorageTek EBS Administration Guide* contains more information on modifying the Start Time and Interval attributes and snapshot policies.

### **System log notifications fail on SuSE 8.0**

#### **LGTpa43135**

System log notifications might fail on the SuSE 8.0 and SuSE Linux Enterprise Server operating systems. The logger binary appears in the /bin directory instead of /usr/bin. This causes the log default notification to fail.

---

**Note:** The SuSE 7.3 distribution does not have this problem.

---

#### **Workaround**

To resolve this issue, do one of the following:

- ◆ Create a link in the /usr/bin directory to /bin/logger.  
Update the default Tape Mount Request 1 and Tape Mount Request 2 notifications if a link is not created.
- ◆ Modify the log default notification and change the /usr/bin/logger filepath to /bin/logger.

## NDMP problems and limitations descriptions

This section details the problems and limitations related to NDMP.

### **If a connection is lost during an NDMP backup to a NAS filer the 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 -9I` command, and restart Sun StorageTek EBS daemons to free the tape device.

### **The scanner command might stop responding if it encounters an aborted save set backed up to an NDMP device**

#### **LGTPa74026**

The `scanner` command might stop responding if:

- ◆ The `scanner` command encounters a save set backed up to an NDMP device.
- ◆ The save set aborts after the start note is written.
- ◆ The last complete save set was backed up to the device and cannot be scanned.

### **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.

## Restore problems and limitations descriptions

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

### NDMP save sets in status recyclable are not recoverable

#### LGTPa65644

NDMP save sets cannot be recovered if they are in the status eligible for recycling. This error message appears:

```
Failed save set, not recoverable
```

#### Workaround

Set the status of the save set to **recoverable**. More information on changing the status of a save set to recoverable is provided in the **nsrmm** and **mminfo** entries in the *NetWorker Command Reference Guide* or the UNIX man pages.

### 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.

## 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.

## 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.

## 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**

The following warning message is displayed if you attempt to change the browse time if files are marked for recovery.

```
There are files marked for recovery.
OK to ignore the marked files.
Cancel to stay with the current browse time.
OK / Cancel
```

Unmark files for recovery before attempting to change the browse time.

---

## Internationalization support

These sections describe important notes and tips pertaining to the internationalized Sun StorageTek EBS release.

Additional information on support for internationalization can also be found in the *EMC Sun StorageTek EBS Release 7.6 Administration Guide*, chapter 17, Sun StorageTek EBS Server Management.

---

### Important notes and tips

The Sun StorageTek EBS 7.6 software supports language packs, which can be installed as part of the Sun StorageTek EBS installation process, or can be installed separately after the Sun StorageTek EBS software has been installed. Note, however, that any program screens or messages that have changed since release 7.5 Service Pack 1 are not localized.

The following sections contain important notes and tips, as well as limitations, pertaining to the internationalized Sun StorageTek EBS software:

- ◆ [“Localized software contains some English Text” on page -170](#)
- ◆ [“Java Web Start cache path and non-English characters” on page -171](#)
- ◆ [“Fonts may not display correctly in UNIX Motif GUIs in non-english locales” on page -171](#)
- ◆ [“Solaris 9 does not support certain non-English code sets” on page -171](#)
- ◆ [“Locale settings with NDMP” on page -171](#)
- ◆ [“Display of an unsupported character in the current locale” on page -171](#)
- ◆ [“Man page locales” on page -172](#)
- ◆ [“Supported Locales” on page -172](#)
- ◆ [“Changing the Locale in the NMC GUI” on page -172](#)
- ◆ [“Scheduled backup or Archive Requests of non-ASCII files or directories” on page -174](#)
- ◆ [“Maximum Sun StorageTek EBS supported path” on page -174](#)

- ◆ “In non-English environment, character encoding used for NMC client and Sun StorageTek EBS client must be the same” on page -174
- ◆ “The NMC Japanese Online Help displays incorrect characters on Linux systems” on page -175
- ◆ “Non-ASCII hostnames are not supported by Sun StorageTek EBS” on page -175
- ◆ “JRE 1.6 users cannot export reports as PDF documents for non-English locales on AIX and HPUX” on page -175
- ◆ “JRE 1.6 users cannot export reports as PDF documents for non-English locales on AIX and HPUX” on page -175
- ◆ “The nwrecover program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed” on page -175
- ◆ “Recovering a large number of files may take a long time in the French locales on Solaris” on page -176
- ◆ “Garbled characters may appear in the Sun StorageTek EBS Console GUI font list on Solaris” on page -176
- ◆ “Problem with highlighted text in the Sun StorageTek EBS Console Help program after performing a search using JRE 1.5.x for Asian languages” on page -176
- ◆ “Entering non-ASCII characters in Sun StorageTek EBS user interfaces” on page -176
- ◆ “Non-ASCII save set names are displayed incorrectly in nsradmin visual mode on Linux” on page -176
- ◆ “The XAPPLRESDIR environment variable must be set to operate the Sun StorageTek EBS Console on HP-UX” on page -177

### Localized software contains some English Text

Messages and strings that were added after the Sun StorageTek EBS 7.5 release have not been localized. Some strings from the operating system have also been left intentionally unlocalized. The **nsrwatch** and **nsradmin** programs are not localized. The English language components do not affect the functionality of the software.

The only RAP value that supports non-ASCII characters is the Save Set attribute of the Client and Archive Request resources.

### **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.

### **Fonts may not display correctly in UNIX Motif GUIs in non-english locales**

If you are having trouble displaying fonts in the `nwrecover` program, for your current locale, ensure that the operating system is configured to display them.

### **Solaris 9 does not support certain non-English code sets**

Solaris 9 does not support certain code sets. The Sun website has a full list of supported code sets.

### **Locale settings with NDMP**

When running NDMP backups, the locale setting has to be consistent in your environment. All UNIX operating system locale settings on the filer (including UTF-8) must be the same and the NMC client can only be run on an UNIX client set to the exact same locale setting as the filer.

Backup and recovery operations can be run on any locale, but if you try and browse on a locale that is different from the original locale the filenames will show up as random characters.

### **Display of an unsupported character in the current locale**

If the Sun StorageTek EBS software encounters a character that is unsupported in the current locale, it replaces the character with a '?'.

## Man page locales

Man pages are displayed based on the locale setting for a specific language. The following EUC locales are supported:

- ◆ Chinese: **EUC-CN**
- ◆ French: **ISO8859-15**
- ◆ Korean: **EUC-KR**
- ◆ Japanese: **EUC-JP**

If the locale is not set to a specific language matching an installed language pack, the man pages will be displayed in English.

## Supported Locales

[Table 13 on page -172](#) lists the supported locales.

**Table 13 Supported Locales**

Language	Operating system				
	Windows	Solaris	HPUX	AIX	Linux
English	English	OS Default Locale	OS Default Locale	OS Default Locale	OS Default Locale
French	French (France)	UTF-8 ISO8859-1 ISO8859-15	UTF-8 ISO8859-1 ISO8859-15	UTF-8 ISO8859-1 ISO8859-15	UTF-8 ISO8859-1 ISO8859-15
Japanese	Japanese (Japan)	UTF-8 EUC-JP S-JIS	UTF-8 EUC-JP	UTF-8 EUC-JP	UTF-8 EUC-JP S-JIS
Chinese	Chinese (China)	UTF-8 EUC-CN GB18030 GBK BIG5	UTF-8 EUC-CN	UTF-8 EUC-CN	UTF-8 EUC-CN GB18030 GBK BIG5
Korean	Korean (Korea)	UTF-8	UTF-8	UTF-8	UTF-8

**Note:** Localization is not supported on the Mac OS, Tru 64 or SGI platforms.

## Changing the Locale in the NMC GUI

There are three conditions for the displayed textual elements (messages, dates, time and numbers) in the NMC GUI:

1. If there is an appropriate Sun StorageTek EBS language pack installed on the NMC server, all textual elements will be rendered to the current user locale.
2. If no Sun StorageTek EBS language pack is installed on the NMC server, all textual elements will be rendered to English.
3. If the locale is neither supported by the Sun StorageTek EBS software nor has an appropriate Sun StorageTek EBS language pack installed, all textual elements will be rendered to English, except dates, times and numbers which will appear in the current user locale that is supported by the installed JRE on the user host.

The NMC GUI must be restarted to apply any change to the locale.

### Example 1

There is a French language pack installed on the NMC server and the user locale is French. The user logs in to the NMC server. In the NMC GUI, all textual elements will be in French.

### Example 2

The installed JRE supports French and the user locale is French. There is no French (France) language pack installed on the NMC server. In the NMC GUI, all texts and messages will be in English, except dates, time and numbers will be in French.

It is the user's responsibility to change the locale and apply the change correctly to the operating system. For example, changing and applying the locale to Windows server 2003 and Solaris 5.9 are as follows:

Windows server 2003

- a. Click **Start**.
- b. Select **Control panel > Regional and Language Options > Regional Options**.
- c. Select the language.
- d. Select the location.
- e. Click **Ok**.

Solaris 5.9

- a. Logout to the **Welcome** dialog box.
- b. Click **Options > Language**.
- c. Select the language.

d. Log in.

---

**Note:** Date and times may be still in North American format. Not all date and time displayed are internationalized. This is a known deficiency that will be addressed in a future release.

---

### Scheduled backup or Archive Requests of non-ASCII files or directories

The value of the **Save Operations** attribute in Clients or Archive Requests resource should be set to:

- ◆ Sun StorageTek EBS UNIX clients at release 7.4 or higher:  
**I18N:mode=nativepath.**
- ◆ Sun StorageTek EBS UNIX clients at a release level prior to 7.4:  
**I18N:mode=utf8path.**
- ◆ Microsoft Windows clients: **I18N:mode=utf8path**

If the Client Configuration Wizard is used to create the Clients resource, the Save Operations attribute will be automatically filled-in based on the client platform when non-ASCII save sets are specified.

### Maximum Sun StorageTek EBS supported path

The maximum length of the Sun StorageTek EBS supported path has increased to 12 KB. The number of characters supported in the path is dependent on the language of the characters *and* any specific operating system limitations.

Non-English characters require more bytes than English characters. Ensure that the filepath and directory names remain within the limits imposed by the operating system and the Sun StorageTek EBS software.

### In non-English environment, character encoding used for NMC client and Sun StorageTek EBS client must be the same

#### **LGTsc21657**

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

#### **Workaround**

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

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

### **The NMC Japanese Online Help displays incorrect characters on Linux systems**

#### **LGTsc02862**

The NMC Japanese Online Help displays incorrect characters on Linux systems due to limitations with the Javahelp software. These limitations affect the software's ability to display fonts in the help viewer content pane.

Due to this limitation in Javahelp the only character encoding that displays is the system default; not the font defined by the user.

### **Non-ASCII hostnames are not supported by Sun StorageTek EBS**

#### **LGTsc26980**

Sun StorageTek EBS does not support hosts that have non-ASCII characters in the hostname.

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

#### **LGTsc26288**

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

### **The nwrecover program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed**

#### **LGTsc02808**

The `nwrecover` program will not start on Linux platforms for Asian Languages if the necessary fonts are not installed.

#### **Workaround**

Install the following font packages:

- ◆ `ttf-founder-simplified-0.20040419-6.1.noarch.rpm`
- ◆ `ttf-founder-traditional-0.20040419-6.1.noarch.rpm`

## 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 pathnames 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.

### Workaround

To work around this limitation, do one of the following:

- ◆ Use the **print nsr client** command in **nsradmin** window to view the non-ASCII save set.
- ◆ Use the Console GUI on the Linux client to view the non-ASCII save set.

## The XAPPLRESDIR environment variable must be set to operate the 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.

---

### Sun StorageTek EBS Cloud Backup Option and network connectivity

When writing to the Atmos onLine service, cloud backups are highly dependent on the network connection that is used to access the service. Any disruption in connectivity or a slowdown in network access speed may adversely affect cloud backups or recoveries.

Additionally, if you define large Network Write Sizes for the cloud device, make sure to set the Send/Receive Timeout attribute proportionally high to avoid read/write timeouts. Optimal values for send/receive timeouts vary depending on the network speed and bandwidth.

---

### 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 14 Recommended management of open files**

Windows 2000 and XP	Windows 2003	Windows 2008 and Vista
No VSS is available in the operating system. For all versions of 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>

### **EMC NetWorker License Manager not supported on Solaris Opteron platform**

The 7.6 Sun StorageTek EBS release does not support the EMC NetWorker 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.

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**Note:** This limitation does not apply to Microsoft Windows paths.

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## VMware qualification

Sun StorageTek EBS release 7.6 is qualified with VMware. Chapter 20 of the *Sun StorageTek EBS Release 7.6 Administration Guide* provides more information on support for VMware.

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## 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\_KEEPLIVE\_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\_KEEPLIVE\_WAIT** environment variable. Set this environment variable to the desired number of seconds between keep-alive wait messages. If the **NSR\_KEEPLIVE\_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 7.6 for Linux does not support older versions of Intel, such as 486.

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**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.

### **IMPORTANT**

**Authentication methods in the Sun StorageTek EBS 7.3.2 and later server have been changed to provide greater security. The 4.x client is no longer fully compatible with this version of the server.**

**Upgrade to the 7.2.1 Sun StorageTek EBS client for NetWare. For NetWare 5.1 systems, apply LGTpa86701. Netware 5.0 and older systems are not compatible with the Sun StorageTek EBS 7.2.1 client for NetWare.**

**Manual backups from the client interface via the NetWare Console can be successfully completed. Note that manual backups will only use media from the default pool.**

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## **Client retries setting with VMware Consolidated Backups**

When using Sun StorageTek EBS software with VMware Consolidated Backups (VCB), the Client Retries attribute for Group resources should be set to 0. If Client Retries is set to any value higher than 0 and the backup fails, the Sun StorageTek EBS software will retry the backup regardless of the state of the VCB backup itself. This can result in the VMware utility generating errors such as "mount point already exists" or "backup snapshot already exists."

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## **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

This section describes the documentation for the following NetWorker releases:

- ◆ [“Sun StorageTek EBS product documentation” on page -182](#)
- ◆ [“Sun StorageTek EBS related documentation” on page -183](#)

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### Sun StorageTek EBS product documentation

This section describes the additional documentation and information products that are available with Sun StorageTek EBS.

#### **Sun StorageTek EBS Release 7.6 Installation Guide**

Provides instructions for installing or updating the Sun StorageTek EBS software for clients, console and server on all supported platforms.

#### **Sun StorageTek EBS Release 7.6 Administration Guide**

Describes how to configure and maintain the Sun StorageTek EBS software.

#### **Sun StorageTek EBS Release 7.6 Release Notes**

Contain information on new features and changes, fixed problems, known limitations, environment and system requirements for the latest Sun StorageTek EBS software release.

#### **EMC NetWorker Licensing Process Guide, First Edition**

A brief guide that explains the process flow of NetWorker licensing to users (system administrators, mainly). Not yet officially part of the NetWorker doc set.

#### **EMC NetWorker 7.6 Error Message Guide**

Provides information on common NetWorker error messages.

#### **EMC NetWorker 7.6 Performance Tuning Guide**

Contains basic performance tuning information for NetWorker.

#### **EMC NetWorker 7.6 Command Reference Guide**

Provides reference information for NetWorker commands and options.

### **NetWorker Management Console Online Help**

Describes the day-to-day administration tasks performed in the NetWorker Management Console and the NetWorker Administration window. To view Help, click **Help** in the main menu.

### **NetWorker User Online Help**

The NetWorker User program is the Windows client interface. Describes how to use the NetWorker User program which is the Windows client interface connect to a NetWorker server to back up, recover, archive, and retrieve files over a network.

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## **Sun StorageTek EBS related documentation**

For more information about NetWorker software, refer to this documentation:

### **EMC Information Protection Software Compatibility Guide**

A list of supported client, server, and storage node operating systems for the following software products: AlphaStor, ArchiveXtender, DiskXtender for Unix/Linux, DiskXtender for Windows, Backup Advisor, AutoStart, AutoStart SE, RepliStor, NetWorker, and NetWorker Modules and Options.

### **E-lab Issue Tracker**

Issue Tracker offers up-to-date status and information on NetWorker known limitations and fixed bugs that could impact your operations. E-Lab Issue Tracker Query allows you to find issues in the Issue Tracker database by matching issue number, product feature, host operating system, fixed version, or other fields.

### **NetWorker Procedure Generator**

The NetWorker Procedure Generator (NPG) is a stand-alone Windows application used to generate precise user driven steps for high demand tasks carried out by customers, Support and the field. With the NPG, each procedure is tailored and generated based on user-selectable prompts. This generated procedure gathers the most critical parts of NetWorker product guides and combines experts' advice into a single document with a standardized format.

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**Note:** To access the E-lab Issue Tracker or the Procedure Generator, go to <http://www.Powerlink.emc.com>. You must have a service agreement to use this site.

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### **Technical Notes and White Papers**

Provides an in-depth technical perspective of a product or products as applied to critical business issues or requirements. Technical Notes and White paper types include technology and business considerations, applied technologies, detailed reviews, and best practices planning.

## 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 7.6 Installation Guide*.

### Sun StorageTek EBS Release 7.6

This section provides information on installing and updating the Sun StorageTek EBS Release 7.6 software:

- ◆ [“Sun StorageTek EBS client location and space requirements” on page -185](#)
- ◆ [“Update enablers automated when license expires” on page -186](#)
- ◆ [“Java not included with the Sun StorageTek EBS software” on page -186](#)
- ◆ [“Installing the Sun StorageTek EBS client in a failover zone” on page -186](#)

### 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 7.6.

#### Solaris location and space requirements

[Table 15 on page -185](#) specifies the location and space requirements for the Sun StorageTek EBS client software in a Solaris environment.

**Table 15 Solaris location and space requirements**

Sun StorageTek EBS files	Location	Space		
		Sparc	x86	amd64
Sun StorageTek EBS client files and Sun StorageTek EBS catalog	/usr/bin /usr/sbin /usr/lib/nsr /opt/nsr	200 MB	200 MB	200 MB
EMC HomeBase agent binary	/opt/homebase-agent/	440 MB	not applicable	not applicable
Temporary space required for EMC HomeBase agent	/tmp	440 MB	not applicable	not applicable

## Update enablers automated when license expires

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

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

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**Note:** If you are upgrading from a 7.5.x release to 7.6, an update enabler is not generated and not required. If you are upgrading from any release previous to 7.5 to release 7.6, the update enabler is auto-generated. However, the enabler indicates "Update enabler for 7.5" and will need to be authorized for a 7.6 server within 45 days.

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## Java not included with the 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 appropriate JRE version. The NMC console cannot be started until the appropriate JRE version is installed.

## Installing the Sun StorageTek EBS client in a failover zone

The Sun StorageTek EBS software supports installation of the Sun StorageTek EBS client in a failover zone. More information on failover zone setup is provided in the Sun Cluster Data Service for Solaris Containers Guide, available at:

<http://dlc.sun.com/pdf/819-3069/819-3069.pdf>

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**Note:** A Sun StorageTek EBS server or storage node cannot be installed in a failover zone. Also, an active/active configuration is not supported.

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To make the Sun StorageTek EBS client highly available, use the following steps:

1. After the zone has been set up as a failover zone with the SUNWsczone tool **sczbt**, install the Sun StorageTek EBS Client.
2. When setting up the **sczsh\_config** configuration file, make sure the following parameters are specified with these values:

```
"ServiceStartCommand="/etc/init.d/networker start"
"ServiceStopCommand="/usr/sbin/nsr_shutdown"
"ServiceProbeCommand="/usr/sbin/nsrzoneprobe"
```

3. Run `sczsh_register` to register.

---

**Note:** You must have Solaris 10 or later installed to use any zone functionality, and the SUN cluster must be installed in order to use the failover functionality.

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### Reconfiguring Console authentication for LDAP if NMC fails to start after update

If a Sun StorageTek EBS 7.5.x Console server is configured to use LDAP for authentication and you are updating to release 7.6, in some cases NMC may fail to start after the update. If this occurs, the `gstd.raw` file in the Console's logs directory contains the message "acm: External directory library initialization failed".

#### Workaround

Reset the Console authentication configuration and reconfigure LDAP by performing the following steps:

1. Ensure that the `gstd` service is not running. If `gstd` is running, stop the service.
2. Go to `<NMC install directory>/cst`.
3. Delete the files `Config.xml`, `csp.clb`, `csp.clb.bak` and `upgrade_cst.tag`, if present.
4. Copy `Config.xml.template` to `Config.xml`.
5. Start the Console.

The Console starts in native authentication mode.

6. Log in as Console's 'administrator' user with the password that was last set for this user before switching to LDAP mode.
7. Go to **Setup > Configure Login Authentication** and configure LDAP again.

