

Quest[®] NetVault[®] Backup 12.4, Revision 2

Release Notes

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These release notes provide information about the Quest[®] NetVault[®] Backup release.

Topics:

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About this release

Quest NetVault Backup (NetVault Backup) offers the most advanced, cross-platform data protection capabilities on the market and unsurpassed ease of use, out-of-the-box deployment, and pain-free scalability. NetVault Backup allows you to safeguard your data and applications in both physical and virtual environments from one intuitive user interface and to protect a massive number of servers that contain many petabytes of data. NetVault Backup also features heterogeneous support, so you can safeguard data on a wide range of operating systems, applications, databases, processor architectures, and networked storage devices. Such cross-platform versatility makes it easy for you to tailor NetVault Backup to match the ever-changing and growing landscape of your IT infrastructure.

NetVault Backup 12.4 is a minor release, with enhanced features and functionality. For complete product documentation, visit https://support.guest.com/technical-documents.

- NOTE: While upgrading from NetVault Backup 12.3 to NetVault Backup 12.4, you may face authentication issues at few places while performing various operations. This is due to a change in the algorithm from NetVault Backup 12.3 to NetVault Backup 12.4. For more information, see Upgrading from NetVault Backup 12.3
- CAUTION: NetVault Backup 12.4 has not been verified on HP-UX. Additionally, if you are using NetVault Backup 12.2 with HP-UX and QoreStor, Quest recommends that you do not upgrade to 12.4. (DNR3-799)

New Features

New features in NetVault Backup 12.4:

- Introduced storage tiers, which let you group storage devices and assign it in a target set. (ORBNVPOL-82)
- Added support for Plug-in for SAP HANA and Plug-in for Nutanix. (NV-17, NV-16)
- Added support for Quest QoreStor 5.1 as a storage target for the backups of macOS® NetVault Backup clients. The minimum version of macOS that QoreStor supports is 10.13. (DNR3-1310)
- Added support for Red Hat Enterprise Linux (RHEL) 8 and SUSE Linux Enterprise Server (SLES) 15 Linux operating systems. (NVBU-19265)
- Introduced direct-to-cloud object storage replication with StarWind Virtual Tape Library (StarWind VTL). (NVBU-19526)
- Added support for OpenSUSE 15.1. (NVBU-19705, NVBU-19780)

See also:

- Enhancements
- Resolved issues

Enhancements

The following is a list of enhancements implemented in NetVault Backup 12.4.

Table 1. Enhancements

Enhancement	Issue ID
Added support for Quest NetVault Backup Plug-in for Microsoft Office 365 version 12.4 or later to Catalog Search.	DNPO365-328
Improved performance on the Job Status and Manage Devices pages.	NV-692
Improved navigation to NetVault Server Settings page.	NVBU-18808
Replaced Oracle JAVA with OpenJDK due to a licensing change from Oracle, which resulted in the addition of an Upgrade button for the catalog search package.	NVBU-19263
Added UI improvements and changes in the form of an Advance Search Filter for the restore workflow using Catalog Search.	NVBU-19296
Updated the functionality of the Create Restore Job - Choose Saveset page so that when you click Search All / Search Selected Saveset(s), a details drawer opens instead of a popup.	NVBU-19315
Added an Advanced Search filter to the Catalog Search feature.	NVBU-19322
Added a tab in the Create Backup Job process UI to support Distributed Job Options for the VMware Plugin Options. For more information, see the <i>Quest NetVault Backup Plug-in for VMware User's Guide</i> .	NVBU-19328

Resolved issues

The following is a list of issues addressed in NetVault Backup 12.4.

Table 2. Resolved issues

Resolved issue	Issue ID	
If you are upgrading from a previous version of NetVault Backup, verify that none of the existing NetVault Backup users have an @ symbol in their User Name. Update the User Name for any users whose name does contain an @ symbol. NetVault Backup assumes that a name that contains @ is a domain user and automatically tries to authenticate it with AD when the user logs on. If an existing user tries to log on and NetVault Backup is unable to authenticate the user with AD because the credentials do not match, login fails.	DNAD-523, DNAD-562	
This is documented as designed.		
If you ran parallel backup or restore jobs on an AIX client with a QoreStor target, the jobs failed with a "Job Manger has lost the message channel unexpected" error message.	DNR3-870, QS-4252	
 When many backup jobs that target the same disk-based storage device are scheduled to start at the same time or within a small window of time, the following issues occur: The target device is underused regarding the number of streams. Some jobs remain in the "Waiting for media" state even if the device can run parallel jobs. The completion time for small jobs increases by a few seconds or minutes. For information on working around this issue, see "Troubleshooting" in the Quest NetVault Backup Administrator's Guide. 	DNR3-1072, NVBU-12089 (28204)	
Starting with NetVault Backup 10.0.1, the built-in plug-ins used four-digit version numbers (for example, 10.1.1.1). If you install the built-in plug-ins available with 10.0.1 and later on a machine running NetVault Backup 10.0, the About dialog box displayed the correct 4-digit version number, but the other WebUI pages (for example, the Manage Clients page) displayed 3-digit version numbers with incorrect release numbers (for example, 10.0.257 instead of 10.0.1). Similarly, if you installed a plug-in that used the old version format on NetVault Backup 10.0.1 and later, the About dialog box displayed the correct version number (for example, 2.6.5), but	NVBU-10927 (26687)	
the other WebUI pages displayed incorrect release and build numbers (for example, 2.6.0.5).		
The About dialog box displays the correct version number of a built-in plug-in. The Drive Transfer Buffer Size option is now set to 8 MiB by default. To ensure that this configuration is supported on your system, verify your OS settings before adding a tape device. If this value is too high, change it to 257 KiB in the template file. For information on working around this issue, see the "Changing the default Drive Transfer Buffer Size option" topic in the <i>Quest NetVault Backup Administrator's Guide</i> .	NVBU-11305 (27165)	
On Windows 2012, the Plug-in <i>for Databases</i> fails to restore a NetVault Database backup that is stored in a NetVault SmartDisk device. For information on working around this issue, see "Troubleshooting" in the <i>Quest NetVault Backup Administrator's Guide</i> .	NVBU-11307 (27167)	
Dual media requests were handled sequentially, which caused performance issues.	NVBU-11971, NVBU-19715, NVBU-19782, NVBU-19786	
If a deployment task was stopped—or the Deployment Manager or NetVault Backup Service shut down—while a task was still running, the task status was set to "Complete" and the individual targets were marked as "Completed with Errors" even if the software packages were successfully installed on the target machine.	NVBU-13433 (30274)	
The shared directory path for push installations could not contain non-English characters, such as on a Japanese Windows-based machine.	NVBU-13564 (30451)	

Table 2. Resolved issues

Resolved issue	Issue ID
NetVault Backup is unable to send reports as an email attachment in PDF format on RHEL 5.x platform. For information on working around this issue, see "Troubleshooting" in the <i>Quest NetVault Backup Administrator's Guide</i> .	NVBU-14529 (31878)
If you aborted a backup job while the job was in "Writing to the media" state, the media was marked as Full.	NVBU-18830, NVBU-19781
Data Copy jobs would hang when copying from an RAS device to tape.	NVBU-19122, NVBU-19783
Corrected the issue of when NetVault Backup 12.4 was used in the NetVault Backup Server, then Oracle CLI jobs from any NetVault Backup Client did not work and the Job Manager on the NetVault Backup Server quit after it attempted to access an oPluginOptionsScreen object that was null.	NVBU-19634
If multiple Data Copy jobs started at the same time and one of them went into a 'waiting' state, then all Data Copy jobs became stuck in a 'waiting for media' state.	NVBU-19682, NVBU-19784
Dual media requests and Scan media requests entered the queue with a priority of 0 instead of 1.	NVBU-19690, NVBU-19785
Job Status page would hang when 160 jobs were simultaneously in 'running' state.	NVBU-19694
Removed mini dual media requests from the Data Copy plug-in, as dual media requests make them unnecessary.	NVBU-19721
Reduced polling for Manage Devices and Job Status pages.	NVBU-19722
Corrected an issue where memory consumption gradually increased when the nvpmgr process was in an idle state.	NVBU-19758

Known issues

The following is a list of issues, including those issues attributed to third-party products, known to exist at the time of release.

Table 3. General known issues

Known issue	Issue ID
If you are using Huawei OceanStor Device Manager and a snapshot is mounted on multiple NetVault Backup clients, unmounting that snapshot from any one of the NetVault Backup Clients also unmounts the snapshot from all NetVault Backup Clients.	NV-64, NVBU-18684
While editing a restore selection set on the Edit Selection Set page, the Next button is disabled.	NVBU-16148
Workaround : Select or clear the data selection tree check box on the Edit Selection Set page.	
The diagnostic data for some NetVault Backup Client machines with an older configuration is intermittently collected only partially due to a timeout.	NVBU-15735
Workaround: Increase the value in the Physical Client Long Timeout field of the Web Service dialog box.	
Quest DR Device is not accessible after you change the DR Device user password.	NVBU-15843
CLI displaying non English characters incorrectly. For example,	NVBU-13974 (31104)
C:\Program Files\Quest\NetVault Backup\util>nvscanmedia.exe - medialabel "FOREIGN:VM_WIN2008R2_FR 14 avr 11:14-1" Sent scan media request Scan request failed - 'M Rdia inconnu'	

Table 3. General known issues

Known issue	Issue ID
The restore job from NDMP backup data copied to 256Kib drive fails and displays an "NDMP data does not start on a block boundary" error message.	DNNDMP-657 (31825)
Workaround: https://support.quest.com/netvault-backup/kb/212701	
On the Manage Devices page, in Tree View, clicking Scan starts scanning the selected slot, drive, or library immediately. It does not show the Minimum life for imported backups (days) dialog box or confirmation message.	NVBU-14745 (32197)
On the Manage Devices page, in Tree View, you cannot select multiple media from the list of available media for a bulk blank operation.	NVBU-14758 (32214)
On the Manage Devices page, in Tree View, you cannot select multiple media from the list of available media for a bulk label operation.	NVBU-14759 (32215)
When performing backups with the NetVault Backup Plug-in <i>for Teradata</i> , if the number of parallel streams exceeds the SoftStreamLimit set for the target NetVault SmartDisk, the backup job stops responding.	NVBU-389 (1948)
When a backup that is configured as "restartable" is duplicated, only the data backed up in the last restarted instance of the job is duplicated.	NVBU-1160 (3971, (NVG-4022)
In NetVault Backup with a non-English locale, the Running Status field does not display a current job status as the output of nvreport command and Report Job.	NVBU-1186 (3997) (NVG-4206)
On Linux- and UNIX-based systems, the progress message that is displayed during NetVault Backup installation is displayed correctly only if the system is configured to use the UTF-8 character set.	NVBU-10588 (26249)
If the Network Manager process (nvnmgr) stops responding due to any error and fails to exit properly, it prevents the NetVault Backup Service from starting on that machine.	NVBU-11005 (26778)
Workaround : If this error occurs, manually stop or end the nvnmgr process before restarting the NetVault Backup Service.	
After upgrading to Firefox 31, if you try to log in to the NetVault Backup WebUI, the following error message is displayed:	NVBU-11321 (27189)
Issuer certificate is invalid. (Error code: sec_error_ca_cert_invalid)	
The new security library security.use_mozillapkix_verification raises this certification error when you try to access a self-signed certificate.	
Workaround: To resolve this issue, do the following:	
1 Type about: config in the Firefox address bar.	
2 Locate the preference security.use_mozillapkix_verification, and set it to false.	
3 To save the setting, close the browser window.	
On Windows, if a copy of a ".cfg" file is created in the < <i>NetVault Backup home</i> >/config directory, the WebUI may display empty or partly empty dialog boxes when the settings are accessed from the Change Settings page after restarting the service.	NVBU-12734 (29149)
Under certain conditions, the NetVault Backup Server may be unable to determine the status of the push installation task on a remote client. In such cases, the task status may remain in the "Running" state. This error can occur under the following conditions:	NVBU-13610 (30508)
The deployment agent (nvclientinstaller) exits unexpectedly.	
The deployment agent fails to update its completion status to the server due to	

- The deployment agent fails to update its completion status to the server due to unknown errors.
- The deployment agent fails to send the status update messages to the correct IP address. This error can occur if the NetVault Backup Server is running on a multihomed machine and the preferred network address is not configured for the server.

Subsequent tasks remain in a "Pending" state until you cancel the previous task.

Known issue	Issue ID
When performing push installations, if you use any illegal characters in the machine password for a new client, the remote installer reports an error and fails to install the software on the client.	NVBU-13632 (30537)
If the server IP address is used to configure a local package store (for example, \\10.11.12.3\PkgStore), the user credentials are not validated when the package store is added or updated. If you specify invalid credentials, no errors are reported. However, the deployment task fails if the authentication fails and the packages cannot be retrieved from the store. Therefore, Quest recommends that you use the server name when configuring the path to a local store (for example, \\WinServer1\PkgStore).	NVBU-13647 (30558)
 Known issues related to Plug-in for RDA on Solaris: Backing up file system data from Solaris clients to DR Series Systems: When you perform file system backups to DR Series systems, the backups run in the 	NVBU-13678 (30596)

- Backing up file system data from Solaris clients to DR Series Systems: when you
 perform file system backups to DR Series systems, the backups run in the
 Passthrough mode by default. You can change the default setting on the DR Series
 system to run backups in the Dedupe mode, but you may experience slow backup
 performance in this mode.
- Restoring data from a DR Series System to a Solaris Client: When you run multiple
 restore jobs at the same time, it can affect the performance of individual jobs and result
 in low aggregate throughput.

Known issues related to DR Series Systems:

- When performing optimized replication between two DR Series systems, if the source DR Series system becomes unavailable, a normal data copy operation using the NetVault Backup Server or Client is performed when the device becomes available again.
- When performing a backup using the NetVault Backup Plug-in for VMware (Plug-in for VMware), if you set the client mode type to dedupe, the throughput is lower when compared with the passthrough mode. If you do not set the client mode on the DR Series system, the Plug-in for RDA automatically chooses the best mode for the backup.
- Restore to a NFS location fails when a Duplicate saveset created using the optimized replication option is used for the job.

On a Linux system, NetVault Backup fails to access a DR Series system if you do the following:

- 1 Install the Plug-in for RDA.
- 2 Install NetVault Backup.
- 3 Stop NetVault Service.
- 4 Remove the Plug-in for RDA.

When you remove the plug-in, it deletes the directory /usr/local/oca-libs, which causes an error when NetVault Backup tries to access the device.

Workaround: After removing the plug-in, complete the following steps:

- 1 Ensure that the /usr/local/oca-libs directory has been removed. If not, remove the directory.
- 2 To create a symbolic link, type the following command:

ln -sf /usr/netvault/dynlib/oca-libs /usr/local/oca-libs

3 Restart the NetVault Backup Service.

The **Delete Non-Scheduled Jobs** option is intended to delete unscheduled jobs after a specified period. Because the jobs using the Triggered schedule type have no physical scheduled time, they are also deleted after the specified period elapses. If you are using Triggered jobs in your NetVault Backup environment, do not use the **Delete Non-Scheduled Jobs** option.

Known issue	Issue ID
When using NetVault Backup Plug-in for NDMP (Plug-in for NDMP), if you run multiple jobs with the auto-deletion option set to "On," the parent and child jobs may still be listed on the Job Status page.	
Workaround : To correct this issue, close the NetVault Backup WebUI, and start it again. There is no need to stop and restart the NetVault Backup Service.	
The canned report " Disk Storage Devices — General " is intended for the NetVault SmartDisk devices; this report does not show details about the DR Series systems and Data Domain Systems.	
After restoring the NetVault Database, when you restart the NetVault Backup Service, the job status shows "Scheduler Aborted Whilst Job Running." This message can be ignored.	
On a Solaris (SPARC or x86-64) system, when the LANG variable is set to en_US.UTF-8 , the restore job wizard does not display the filenames on the Create Selection Set page. This issue is not encountered when LANG is set to C .	
On Windows 2008 and Windows 7, if the OS firewalls are turned on, connectivity issues between the NetVault Backup Client and Server may be encountered occasionally even if the port exceptions have been correctly configured on the NetVault Backup Client. For more information, see https://support.quest.com/kb/SOL79286 .	
If the default locale is changed (for example, from UTF8 to EUC or from EUC to UTF8), the EULA may not be displayed properly.	
Workaround: To view the EULA, use a terminal that can display EUC character set.	
The Edit option on the Set Management page lets you select multiple backup sets while editing an existing set for a Data Copy backup job.	NVBU-14441 (31745)
Pre-configured reports, including Disk Storage Devices - General, Front Side Data, Storage Utilization, and Storage Utilization - RAS, did not report the correct value for Licensed Protected Capacity.	NVBU-14623
Job details are not displayed when you click a policy job in the Job Status widget on the NetVault Backup Dashboard page.	NVBU-17538
After running a job, when you go to the Job Status page to monitor the status of the job, it shows all the jobs with previously applied filters instead of showing all current activity.	NVBU-17582
Workaround: Select the Current Activity option in the View By job status filter option.	
You cannot restore the data items of a network share backup located using the catalog search feature.	NVBU-17632
If you perform multi-stream backups to tape, select the Archive and Migration options in Backup Life , and identify an expiration date, the savesets are corrupted after the expiration is reached.	NVBU-18297
Workarounds:	
 When you scan the media to recover data, select the Migrate (Discard) Original option. 	
Take the index offline and perform the restore.	
When a LUN is mounted on an unsupported volume and the disk information is retrieved for a snapshot, the disk properties shows for VMware disk and not Huawei or Compellent disk. This causes the snapshot to fail.	NV-47, NV-49, (NVBU-18642, DNFSP-1016)
If you use parallel streams for a backup job that targets an individual tape library or VTL, one stream begins writing the data to the library, while the other stream waits. If you cancel the backup job, the stream that was waiting starts running. If you continue to cancel and re-run the backup job, the library eventually becomes full.	NVBU-18830
In specific instances, changing the time window in the server monitor from 8 hours to another time range then back to 8 hours results in an incorrect graph.	NVBU-18975
Workaround: Use the 12-hour or 24-hour setting.	
The Unusable Media widget on the dashboard does not show media that must be recovered.	NVBU-19214

Table 3. General known issues

Known issue	Issue ID
The error "duplicate key value violates unique constraint" message appears multiple times in the pg_sql log files.	NVBU-19246
For LTO-7 tapes, the Explore Storage page inaccurately displays the size of an unused tape.	NVBU-19250
When running a historic job report by date on a Japanese Standard Time server, not all information displays in the report.	NVBU-19313
The NetVault Backup - Supported VTLs, Libraries, Tape and Optical Drives document does not include the latest versions of DD Boost and DD OS supported by NetVault Backup after release 12.0. with "certification" information.	NVBU-19348
Workaround: This information is available in the <i>Avamar, Data Domain, DDBEA, NetWorker and ProtectPoint Compatibility Guide</i> on the Dell EMC website.	
The Storage Utilization report shows the wrong licensed capacity for SmartDisk.	NVBU-19385
In a situation where you have one five-client license and one virtual client license, if five physical clients were added and you add one virtual client, then the virtual client addition shows as successful in the events list but does not appear under Manage Clients.	NVBU-19425
While choosing a default plug-in option after switching the language, the Web UI goes into deadlock, and performs no further operations.	NVBU-19427
When you try to reset the locale from French to English from the Server Change Setting page, the NetVault Backup Server goes into Safe Mode.	NVBU-19493

Table 4. QoreStor known issues

Known issue	Issue ID
QoreStor does not support multi-tenancy.	QS-437, DNR3-71
If you run parallel backup or restore jobs on an AIX client with a QoreStor target, the jobs fail with a "Job Manger has lost the message channel unexpected" error message.	QS-4252, DNR3-870

Table 5. Command-Line Interface known issues

Known issue	Issue ID
When the Broadcast details to machines on local networks setting is disabled on a client, the nvclient utility fails to add the client.	NVBU-12966 (28829)
$\begin{tabular}{ll} \textbf{Workaround:} \ \textbf{Use the} \ \texttt{nvclientadd} \ \ \textbf{-clientip} \ \ \textbf{ command to} \ \ \textbf{add the client.} \end{tabular}$	
The ast load media command fails if the machine name contains any snaces	

The **asf_load_media** command fails if the machine name contains any spaces.

When the asf_release_drive command is issued to various brands of library devices (for example, those containing various Exabyte or 9840 drives), a delay of up to eight (8) minutes may occur before a piece of media is unloaded.

Workaround: The workaround is to issue the "Unload" command from the NetVault Backup WebUI.

- 1 In the Navigation pane, click Manage Devices, and then in the list of devices, click the applicable drive or the corresponding Manage Device icon.
- 2 On the Tape Drive Management page, click Unload.

The drive remains in and "Idle" state, and media are not unloaded as expected. If the logs for the selected device are viewed, an entry stating "Unload media in drive <X> failed — Device unavailable" is displayed. Repeat Step 2 to unload the media.

The range function does not work properly for the **nvacsIsmedia** command.

Workaround: The workaround is to explicitly run this command for each media item that you want to allocate or deallocate. You can use a script to do this task.

Table 5. Command-Line Interface known issues

Known issue Issue ID When a space character is all that is specified for a library name with the nvcleandrive command, the first library on the Manage Devices page performs a clean operation on the specified drive. For example, if you run the command nvcleandrive libraryname "<space character only>" -librarydrivenumber <X>, NetVault Backup automatically targets the first library on the Manage Devices page and perform a clean operation on drive <X>. When a null value is specified with the nvexpiresaveset command, any random saveset is expired. When you run the nvjobmodify command, the job is submitted to run, even if you do not include the "-submit" option in the syntax. When a null string is specified with the nvremovemedia command, the first entry is deleted from the Media Database. The nvsetcleaninglives command does not report any errors if you configure incorrect values for the lives option. The "-include" option for nvsetcreate cannot be used to specify data selections below the "Fixed Drives" node in the selection tree. The nvsetmodify command cannot be used to modify Schedule Sets. You can create a set

using **nvsetcreate**, and assign it the same name to overwrite the existing set.

On Windows-based installations, the ${\bf nvsyncronizesilomedia}$ command does not update the media status on the ${\bf Manage\ Devices}$ page.

Table 6. Plug-in for FileSystem known issues

Known issue	Issue ID
On Snap Appliance Filers, data must only be relocated to existing directories. Items relocated to directories that do not exist cannot be accessed due to permissions settings on the newly created directories.	DNFSP-113 (13979, (FSG-188)
On ZFS, if the backup data contains ACLs on extended attributes, the restore job fails when you use the default restore options. If errors occur on restore of metadata, select the Discard Metadata option to restore the data.	DNFSP-456 (14324, (FSG-514)
The IIS Metabase node in the System State tree is not visible by default on Windows Vista, Windows 7, and Windows 2008 systems. To enable this node, install the IIS 6 compatibility pack, or create a selection set that includes the IIS config and schema files located under %windir%\system32\inetsrv\config .	DNFSP-508 (14376, FSG-563)
On Solaris ZFS and UFS file systems, the files and directories for which only the extended attributes have changed do not qualify for Incremental Backups.	DNFSP-636 (14504, FSG-684)
When restoring a Linux or UNIX backup to a Windows-based NetVault Backup Client, the items are restored successfully, but the job generates the following warning and log context: Log message: <num> items and their contents could not be restored</num>	DNFSP-718 (14586, FSG-760)
Log context: <filename>: writing to file: Incorrect function</filename>	
These messages can be ignored.	
NetVault Backup does not allow Apple Xsan restores when there are no affinity tags on the target server.	DNFSP-727 (14596, FSG-770)
The exclusion list is not enforced for a corrupt file in an Incremental Backup.	DNFSP-910
On Oracle Solaris hosts, enabling a multi-stream FileSystem backup causes Incremental Backup performance to appear similar or worse than a Full Backup.	DNFSP-921
If the name of a network share folder includes Japanese characters, NetVault Backup does not add it.	DNFSP-932

Known issue Issue ID

The FileSystem backup and restore job fails to write an entry into the log file when the **Path to** DNFSP-991 **Backup log** and **Path to Restore log** options are selected.

On Windows 2008 and Windows 2003, the System State node does not include the Removable Storage Manager Database node.

The Verify After Backup option does not work for a restarted job instance.

When you submit a policy job created for a UNIX file system on a Windows system, the job status shows "Completed with Warnings," but no data is backed up.

The following known issues apply to the **Backup Windows File Short Names** and **Restore Windows File Short Names** options:

- Restoring short names only works if an existing file with the same short name does not
 exist.
- Attempts to back up or restore short names fail if you enable Windows-based Compression or Encryption option on a target system.

Although VSS backups complete successfully, the message "Error deleting volume snapshot(s): VSS_E_BAD_STATE" is written to the NetVault Backup logs.

If a job restores a Windows symbolic link (file created using **mklink**, not Windows shortcut), where the symbolic link file exists on the target file system and the data file the symbolic link targets also exists, the data in the targeted data file is lost. Ensure that the data files targeted by symbolic links are included in backups. Quest recommends that you delete the existing symbolic links that you want to restore from the target file system before running a restore job. To avoid any risks of data loss, you can also perform backup of data files possibly at risk before running the restore job.

When a symbolic link is restored, GuardianOS applies the Xattr attribute user.SnACL to it. This behavior is expected and does not have any negative effects.

Backups on GFS and GFS2 can stop responding if the files or directories are frozen.

In an environment with many direct automounts on Solaris Clients, a backup job may remain at "Waiting for Job Options" status while the Plug-in for FileSystem attempts to load the automounts temporarily to determine whether they are on remote systems. This delay can be alleviated by selecting the "Backup through Remote Mounts" option. If necessary, clear or exclude remote mounts or add the following stanza to the file nvfs.cfg:

[Performance:DoRecursiveAutoMountScan]

Value=FALSE

Restore operation of multi-volume selection for an offhost backup fails after successful off-host backup for multi-volume selection.

NV-48 (NVBU)

NV-48 (NVBU-18349)

Table 7. Managed Service Provider (MSP) known issues

Known issue Issue ID

The nvreport utility does not work in the MSP environment.

NVBU-18346

System requirements

Before installing NetVault Backup 12.4, ensure that your system meets the following minimum hardware and software requirements.

Table 8. System requirements

Requirement	Details
Platform	For complete supported platform information, see the <i>Quest NetVault Backup Compatibility Guide</i> available at https://support.quest.com/technical-documents.
Memory	Memory requirements on a target system can vary based on the intended use.
Hard disk space	A NetVault Backup server installation requires about 800 MB of disk space on Windows-based systems and 800 MB of disk space on Linux-based systems.
Operating system	NetVault Backup Server
	The server can be installed on the following operating systems:
	 Linux (x86 and x86-64)
	CentOS
	Debian
	 Red Hat Enterprise Linux (RHEL)
	SUSE Linux Enterprise Server (SLES)
	 Windows (x86 and x86-64)
	NetVault Backup Client
·	
	• Linux
	Mac OS X
	• Solaris
	 Windows
	For more information, see the <i>Quest NetVault Backup Compatibility Guide</i> available at https://support.quest.com/technical-documents.
Web browser	The NetVault Backup WebUI supports the following browsers:
	 Internet Explorer 11 and later
	Firefox 20 and later
	Chrome 28 and later
	Safari 6 and later

Upgrade and compatibility

NetVault Backup Server OS requirements: The NetVault Backup Server installation is supported on
Windows and Linux operating systems. The NetVault Backup Server installation is not supported on Mac
OS X and UNIX operating systems. For information about supported operating system versions, see the
Quest NetVault Backup Compatibility Guide available at https://support.quest.com/technical-documents.
For information on migrating NetVault Backup Server 9.2 from Mac OS X or UNIX to Windows or Linux, see
https://support.quest.com/kb/SOL126805.

- **NetVault Database migration:** Upgrade from 9.2 involves the migration of NetVault Database from proprietary format to the PostgreSQL database. The migration can take a significant amount of time depending on the size of your NetVault Database and other factors such as system performance.
- NOTE: Before upgrading from NetVault Backup 9.2, purging unnecessary logs can significantly reduce the database migration time. For more information about purging log files, see the *Quest NetVault Backup Administrator's Guide*.
- i IMPORTANT: Before upgrading from 9.2, verify that you created a backup of the NetVault Database. The database format introduced in 10.0 increases the importance of performing NetVault Database backups before upgrading from 9.2. For more information about backing up the NetVault Database with the Plug-in for Databases, see the Quest NetVault Backup Built-in Plug-ins User's Guide.
 - Select the correct installation package on Linux and Windows: NetVault Backup offers separate client-only and server-only installation packages for Linux- and Windows-based systems. Both the server and the client packages are available in hybrid and pure 64-bit versions:
 - Hybrid server and client packages: The hybrid packages are intended for users who do not have a pure 64-bit-only requirement.
 - These packages let you upgrade from pure 32-bit and hybrid installations of NetVault Backup. The hybrid packages retain binary compatibility with all previous versions of 32-bit and 64-bit plug-ins. These packages also work on 32-bit systems that do not have 64-bit capability.
 - Pure 64-bit server and client packages: The pure 64-bit packages are intended for pure 64-bit operating systems. If you have a specific reason that you cannot use any 32-bit components (for example, you are using a Linux distribution that does not run 32-bit code), use these packages.
 - The pure 64-bit packages cannot be used to upgrade existing pure 32-bit or hybrid NetVault Backup installations. You must remove the existing pure 32-bit or hybrid version and install the pure 64-bit version separately. To reduce confusion, warning messages have been added to both the upgrade and installation packages to ensure that you understand that they are incompatible.

Depending on your OS type, ensure that you select the correct installation package to install the NetVault Backup Server software:

- netvault-<RYYYYMMMDD>-vx.x.x.x-Server-{LinuxX86Hybrid|WindowsX86Hybrid}: Use this
 package to install or upgrade NetVault Backup Server on 32-bit or 64-bit systems.
- netvault-<RYYYYMMMDD>-vx.x.x.x-Server-{LinuxX86Pure64|WindowsX86Pure64}: Use this
 package to install or upgrade NetVault Backup Server on pure 64-bit systems.

For client installations, ensure that you select the appropriate package based on your system.

IMPORTANT: Before installing the hybrid package of NetVault Backup on 64-bit Linux machines, ensure that all the required 32-bit libraries are installed on the system. For more information about the requirements, see the *Quest NetVault Backup Installation Guide*. The installation process may fail silently if the installer is unable to find the required libraries on the system.

Table 9. Pure64 builds

os	Core Build	Plug-in				
		32-bit	64-bit	Hybrid	Itanium	Pure64
32-bit	32-bit	Х		Х		
	Hybrid	X		Χ		
64-bit	Itanium				Χ	
	64-bit		Χ	Χ		
	Hybrid	X	Χ	Χ		
	Pure64					X

i NOTE: X = Compatible

- Licensed plug-ins: After upgrading to the latest version of NetVault Backup, you may be unable to create
 new backup jobs with previously installed licensed plug-ins. This issue occurs in the following upgrade
 scenarios:
 - 9.2 -> 10.0 -> any later version
 - Pre-9.2 -> 9.x -> any later version

The issue can be fixed by reinstalling the plug-ins. The issue does not occur when you upgrade directly from 9.2 to 10.0.1 or a later version or when you upgrade from any 10.x version without a previous upgrade from 9.2.

- SNMP Trap Notification Object Identifier (OID): After you upgrade from NetVault Backup 9.2, the OID for the SNMP Trap Notification method is changed.
- NetVault Backup Plug-in for NetWare (Plug-in for NetWare): NetVault Backup 10.0 and later do not support Plug-in for NetWare.
- Plug-in for VMware and NetVault Backup Plug-in for Hyper-V (Plug-in for Hyper-V): After installing the
 Plug-in for VMware or Plug-in for Hyper-V, if you upgrade the NetVault Backup software, you must re-install
 the plug-in on that machine. If you do not reinstall the plug-ins, you cannot open the Drives node of a
 mounted virtual machine to create any new file-level backup jobs.
- Device names containing multibyte characters: After upgrading from NetVault Backup Server 9.2, a
 device that uses multibyte characters in its name must be removed and added again.

Upgrading from NetVault Backup 12.3

Due to a change in the encryption and decryption algorithm in NetVault Backup 12.3, you may experience authentication-related issues after upgrading from NetVault Backup 12.3.0.15 to NetVault Backup 12.3.0.16, or to NetVault Backup 12.4.

See the following table for known issues and their possible workarounds.

Table 10. Authentication error workarounds

Impacted Area	Resolution		
If "Bulk Blank" for Tape Library or Virtual Tape Library (VTL) fails with an authentication error	Reset the password using the same existing password. For more information, see "Changing NetVault Backup password" in the NetVault Backup 12.4 Administration Guide.		
If "Expire All" for DR fails with an authentication error	Reset the password using the same existing. For more information, see "Changing NetVault Backup password" in the <i>NetVault Backup 12.4 Administration Guide.</i>		
If backups are not cataloged after an upgrade	Reconfigure catalog search with the same existing password. For more information, see "Configuring catalog search" in the <i>NetVault Backup 12.4 Administration Guide</i> .		
If CLI utilities fails with an authentication error	Reset the password of the NetVault Backup user that you used for CLI using the same existing password. For more information, see "Modifying a user account" in the NetVault Backup 12.4 Administration Guide.		
If VMware backups or restores fail with an authentication error in the logs	Reset the password for vCenter or ESX Server using the Edit Server dialog box. For more information, see "Reconfiguring a server" in the NetVault Backup Plug-in for VMware 12.3 User's Guide.		

If you experience authentication issues in other areas of NetVault Backup, reconfigure the password and perform the action again. If the issue continues, contact NetVault Backup Support.

Product licensing

To obtain the license key for your NetVault Backup Server environment, determine the NetVault Machine ID of your main NetVault Backup Server. Also identify the machine IDs of any clients running application plug-ins, such as Oracle, MySQL, PostgreSQL, SQL Server, and Exchange.

You can use the NetVault Configuration Wizard to install the product license keys. Alternatively, you can install the license keys from the Manage Clients page.

- · Obtaining a machine ID
- Installing a license key using the configuration wizard
- Installing a license key from the Manage Clients page

Obtaining a machine ID

- 1 Start the NetVault Backup WebUI.
- 2 In the Navigation pane, click Manage Clients.
- 3 In the NetVault Backup Clients list, select the applicable machine, and click Manage.
- 4 On the View Client page, note the machine ID exactly as it is displayed in the Client Summary table.

Installing a license key using the configuration wizard

- 1 In the Navigation pane, click Guided Configuration.
- 2 On the NetVault Configuration Wizard page, click Install Licenses.
- 3 In the NetVault Backup Clients list, select the applicable machine, and click Next.
- 4 In the **Enter the license key string** box, type or copy and paste the license key, and click **Apply**. After the key is applied successfully, a message is displayed.

Installing a license key from the Manage Clients page

- 1 In the Navigation pane, click Manage Clients.
- 2 In the NetVault Backup Clients list, select the applicable machine, and click Manage.
- 3 On the View Client page, click Install License.
- 4 In the Install License dialog box, type or copy and paste the license key, and click Apply.
 After the key is applied successfully, a message is displayed.
- 5 To dismiss the dialog box, click Close.

Upgrade and installation instructions

- Before installing or upgrading NetVault Backup to version 11.4.5 or later, you must upgrade the attached DR appliance to version 4.0.3 or later.
- After upgrading NetVault Backup to version 11.4.5.15 or later, you must re-run Full Backup jobs before
 resuming the scheduled backup jobs (Incremental/Differential/Consolidated) using NetVault Backup Plug-in
 for FileSystem.
- To ensure the smooth operation of NetVault Backup, after upgrading NetVault Backup to version 12.0 or later, you must clear the browser cache.

For information about installing and upgrading the NetVault Backup Server and Client software, see the *Quest NetVault Backup Installation Guide*.

More resources

Additional information is available from the following:

- · Online product documentation
- · NetVault community

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release is Unicode-enabled and supports any character set. It supports simultaneous operation with multilingual data. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, and Japan.

The release is localized to the following languages: Chinese (Simplified), French, German, Japanese, and Korean.

This release has the following known capabilities or limitations: Previously in NetVault Backup, Quest predominantly supported Multibyte Character Sets, but had some Unicode Support. Starting with 10.0, Quest predominantly supports Unicode, however, Quest still supports MBCS sometimes.

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Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at https://support.quest.com.

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- Submit and manage a Service Request.
- View Knowledge Base articles.
- Sign up for product notifications.
- · Download software and technical documentation.
- · View how-to-videos.
- · Engage in community discussions.
- Chat with support engineers online.
- · View services to assist you with your product.

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This product contains the following third-party components. For third-party license information, go to http://www.quest.com/legal/license-agreements.aspx. Source code is available for some components on https://opensource.quest.com.

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Component	License or acknowledgment				
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Expat XML Parser 1.6.0	MIT N/A © 1998, 1999, 2000 Thai Open Source Software Center Ltd and Clark Cooper © 2001, 2002, 2003, 2004, 2005, 2006 Expat maintainers.				

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freetype 6.8.1	FreeType Project License 1.0
	© 1996-2002, 2006 David Turner, Robert Wilhelm, and Werner Lemberg
	Portions of this software are © 2006 The FreeType Project (www.freetype.org). All rights reserved.
Getopt 1.12.8.1	GetOpt 1.12.8.1
Iconv 1.9.1	GNU Library General License 2
	© 2003 Free Software Foundation, Inc.This file is part of the GNU CHARSET Library.
	The GNU CHARSET Library is free software; you can redistribute it and/or modify it under the terms of the GNU Library General Public License as published by the Free Software Foundation; either version 2 of the License, or (at your option) any later version.
iquery-toastmessage- plugin 0.2.0	Apache 2.0
Kerberos client libraries 5	MIT Kerberos 5.0
libeay32.dll 1.0.0f	OpenSSL 1.0
	This product includes software developed by the OpenSSL Project
	for use in the OpenSSL Toolkit (http://www.openssl.org/).
ibedit 0.3	BSD-style license
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libintl 0.18.1	LGPL (GNU Lesser General Public License) 2.1
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	© 2000, 2001, 2002, 2003, 2004, 2006, 2007 Keith Packard
	© 2005 Patrick Lam
	© 2009 Roozbeh Pournader
	© 2008,2009 Red Hat, Inc.
	© 2008 Danilo Šegan
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Libpam 1.3.1	GNU General Public License (GPL) 3
libpng 1.2.10	zlib/libpng license 1.0
	This product contains portions of the PAWN scripting software (formerly known as SMALL).
libssh 0.7.5	LGPL (GNU Lesser General Public License) 2.1
libstdc++ 3.3.3 libstdc++ 4.1.1	GPL 2.0 with the 'runtime exception'
libtiff 5.0.6	libtiff 3.8.2
	© 1988-1997 Sam Leffler
	© 1991-1997 Silicon Graphics, Inc.
libuuid 16	LGPL (GNU Lesser General Public License) 2.1
libxml2 2.8	MIT
libxslt 1.0	© 1998-2012 Daniel Veillard. All Rights Reserved.
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Authentication Library (MSAL) 0.2.3	Copyright 2007 James Newton-King
Open Management Infrastructure 1.1.0	
MD5 1.0	Portions derived from the RSA Data Security, Inc. MD5 Message-Digest Algorithm
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OpenSSL 1.0.2k	OpenSSL 1.0
OpenSSL 1.0.2o	This product includes software developed by the OpenSSL Project
	for use in the OpenSSL Toolkit (http://www.openssl.org/).
pgAdmin 1.16.1	PostgreSQL
	Portions © 1996-2012, The PostgreSQL Global Development Group.
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	© 2002 - 2009, The pgAdmin Development Team
	PostgreSQL is released under the PostgreSQL License, a liberal Open Source license, similar to the BSD or MIT licenses.
	PostgreSQL Database Management System (formerly known as Postgres, then as Postgres95)
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