Quest® NetVault® 13.2

CLI Reference Guide

Legend

■ **WARNING: A WARNING icon indicates a potential for property damage, personal injury, or death.**

❗ **CAUTION: A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.**

ⓘ **IMPORTANT NOTE**, **NOTE**, **TIP**, **MOBILE**, or **VIDEO:** An information icon indicates supporting information.

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Introduction

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About Quest® NetVault®

Quest NetVault (NetVault) offers the most advanced, cross-platform data protection capabilities on the market as well as unsurpassed ease of use, out-of-the-box deployment, and pain-free scalability.

NetVault 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 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 to match the ever-changing and growing landscape of your IT infrastructure.

Key benefits

* Simple, out-of-the-box deployment for fast time to value
* Fully automated installation manager that simplifies deployment of Windows clients
* Protection for both physical and virtual environments for cost savings
* Heterogeneous server support for unparalleled coverage in diverse IT environments
* Broad application support
* Disk-based backup and deduplication to significantly improve storage efficiency
* Seamless integration with the Quest DR Series Systems for source-side deduplication and WAN-optimized replication
* Comprehensive Network Attached Storage (NAS) protection to safeguard critical data
* Feature rich protection of virtual environments
* Bare metal recovery to drastically reduce the time it takes to recover a failed server
* Extensive storage attachment options to allow for distributed backup targets and workload
* Dynamic device sharing to optimize backup data transfers and reduce points of failure
* Fast file-system backups with high performance multi-streaming

Feature summary

- **Application protection:** Ensure the availability of business-critical applications such as Oracle, SQL Server, Exchange, SharePoint, MySQL, PostgreSQL, Domino, DB2, Informix, SAP, and Sybase with application plug-ins. These plug-ins complement native solutions to save you time on integration. No scripting is required to run backup and recovery jobs.

- **NAS protection:** Get advanced data protection for information stored on NAS appliances, including the devices made by Dell, EMC, Hitachi, IBM, NetApp, and Sun. You can reduce traffic over the LAN and maximize performance by backing up data using Network Data Management Protocol (NDMP). NetVault supports many different storage topologies and configurations, allowing you to perform backups directly to a locally attached SCSI device, a SAN-attached device, or a storage device elsewhere on the network.

- **Enterprise-wide control:** Use the web-based interface to configure, manage, and monitor your backup and recovery operations. Convenient wizards guide you through the common tasks, such as creating backup jobs, assigning policies, configuring storage devices, and generating reports.

- **Back up to disk and tape:** Leverage disk- and tape-based backups to a wide range of storage targets, including NAS devices and third-party deduplication appliances. NetVault also allows you to move data from one storage target to another for off-site storage and disaster recovery purposes.

- **Data deduplication:** Reduce your data storage footprint with powerful deduplication technologies. NetVault integrates seamlessly with the Quest DR Series system of deduplication appliances and the Rapid Data Access (RDA) client-side deduplication technology, enabling you to take full advantage of the appliance's powerful deduplication, compression and replication capabilities. NetVault also supports EMC Data Domain backup and recovery platform, as well as its DD Boost technology for deduplication.

- **Virtualization support:** Extend advanced data protection to VMware and Hyper-V environments. NetVault gives you consistent, reliable, point-and-click backup and restore for virtual environments without requiring you to be an expert.

- **High-performance multi-streaming:** Save time and ease management by backing up multiple workloads simultaneously.

- **Strong security:** Meet regulatory requirements without sacrificing backup windows or deduplication performance with encryption plug-ins for CAST-128, CAST-256, and AES-256 algorithm support. Flexible job-level encryption lets you easily select which data to encrypt.

- **Simple, straight-forward licensing:** License NetVault by capacity or by component. This option gives you incredible flexibility to choose the model that best meets the organization's needs. With component-based licensing, you can choose which modules you need. You can also license NetVault by capacity and deploy an unlimited number of clients or application plug-ins. Quest offers two capacity-based licensing editions for NetVault. One offers great value for growing businesses; the other offers comprehensive protection for large enterprises.

About this document

This guide provides information about using the NetVault command-line utilities. For information about using the NetVault WebUI, see the *Quest NetVault Administrator's Guide*.

i | **IMPORTANT:**

- NetVault stores the system data in a PostgreSQL database, which resides on the NetVault Server. You should not attempt to modify the NetVault Database directly using any PostgreSQL tools unless directed by Quest Technical Support personnel. Improper changes to the database can cause irrecoverable data corruption. Before modifying the NetVault Database, make sure that you create a backup copy of the database. For more information about backing up the NetVault Database, see the *Quest NetVault Built-in Plug-ins User's Guide*.

- NetVault stores the system configuration settings in **".cfg"** files, which reside in the **config** directory under the NetVault installation directory. The settings in these files should only be modified under the guidance of Quest Technical Support personnel. Improper changes to these files can cause errors and other unexpected behavior. Before modifying a configuration file, make sure that you create a backup copy of the file.

Target audience

This guide is intended for backup administrators and other technical personnel who are responsible for designing and implementing a backup strategy for the organization. A good understanding of the operating systems on which the NetVault Server and Clients are running is assumed.

Recommended additional reading

- *Quest NetVault Installation Guide:* This guide provides information about installing the NetVault Server and Client software.

- *Quest NetVault Administrator's Guide*: This guide describes how to configure and use NetVault to protect your data. It provides comprehensive information about all NetVault features and functionality.

- *Quest NetVault Plug-in for FileSystem User's Guide:* This guide provides information about installing, configuring, and using the Plug-in *for FileSystem*.

- *Quest NetVault Built-in Plug-ins User's Guide:* This guide provides information about configuring and using the following plug-ins:

  - Quest NetVault Plug-in *for Consolidation*

  - Quest NetVault Plug-in *for Data Copy*

  - Quest NetVault Plug-in *for Databases*

  - Quest NetVault Plug-in *for Raw Devices*

You can download these guides from https://support.quest.com/technical-documents.

Getting started

- About NetVault Command Line Interface
- Working with command-line utilities
- Starting or stopping the NetVault Service

About NetVault Command Line Interface

NetVault offers a Command Line Interface that can be used to configure and manage your NetVault system from command prompt or terminal session. You can use the NetVault CLI to perform various tasks such as the following:

- Start and stop the NetVault Service
- Configure performance, security, and other options
- Manage clients, storage devices, and storage media
- Perform backups and restores
- Generate and view reports

The NetVault CLI can be accessed from the NetVault Server and Client machines.

> **i** | **NOTE:** NetVault Command Line Interface (CLI) is not supported in Managed Service Providers (MSP) environment.

Working with command-line utilities

The command-line utilities are located in the **util** directory (<NetVault home>\util on Windows and <NetVault Home>/util on Linux). A few specialized utilities are also located in the **bin** directory <NetVault home>\bin on Windows and <NetVault Home>/bin on Linux). The CLI commands are non-blocking. The term "non-blocking" means that a response to the command is returned before the action has completed; this allows for continuous running of various commands.

Prerequisites

Before you start a CLI session, verify that the following requirements are met:

- To use the CLI utilities, you must be logged-in with Administrator privileges on Windows and root user privileges on Linux and UNIX.
- A NetVault user must have necessary privileges to access and use the CLI utilities. These privileges are assigned from the NetVault WebUI. For more information, see the *Quest NetVault Administrator's Guide*.

Command syntax

The syntax of a command takes the following form:

```
Command -option 1 <Value> -option 2 <Value> [-option 3 <Value> | -option 4 <Value>]
[-option 5], …
```

where

- <Value> is a user input variable for an option.

- Options enclosed within square brackets ("[ ]") are optional.

- A pipe ("|") character between two options indicates that only one of the multiple options listed in the syntax can be used in a command.

Important notes

- The command syntax format must be entered as one line, unless otherwise noted. The order of the options is not important in the syntax.

- Switches can be specified using only the initial letter in their name, provided this letter is unique and no other option for the selected command begins with the same letter.

  For example, the following is the command syntax for the nvbulkblankmedia utility:

  ```
  nvbulkblankmedia -libraryname <library name> -medialabel <media label>
  -allmedia -password <NetVault password> -wait
  ```

  All the options for this command begin with different letters. So, this command can also be specified as follows:

  ```
  nvbulkblankmedia -l MyLibrary1 -m MyBackupMedia* -p Mypassword -wait
  ```

  where

  - "-l" represents the "-libraryname" option

  - "-m" represents the "-medialabel" option

  - "-p" represents the "-password" option

- The CLI cannot recognize spaces in variable names. Variables that contain spaces must be enclosed within quotation marks (" "); otherwise, the command fails.

- The CLI sees the use of an underscore in its syntax as a replacement for a space. Conflicts arise when a NetVault Server, Client, or backup device name contains an underscore character ("_") and it is referenced in a CLI command.

  For example, if you include the name "Test_Server" in a CLI command, NetVault searches for a machine named "Test Server", and the command fails as it is unable to locate the machine.

  Variables that contain underscores must be enclosed within quotation marks (" ").

CLI help

To access help about a command, type the command followed by "-help" or "--help", or type the command and press **Enter**. For example, to access help for **nvblankmedia**, you can use the following methods:

```
nvblankmedia -help
```

```
nvblankmedia --help
```

```
nvblankmedia
```

Command exit status

Various CLI commands return a numeric value when you run them. The return value represents the actual exit status of the command as described in the following table:

Table 1. Command exit status

Exit status	Description
0	Command completed successfully.
1	Command failed.
2	Arguments given in the command are invalid. For example, a variable named in the command is inaccurate.

Environment variables

While using the CLI utilities in a script, you can use the following environment variables.

> **i** | **NOTE:** Not all CLI tools support every variable in the table. Some variables may not apply to the CLI tool you are using.

Table 2. Environment variables

Variable	Description
NETVAULTCLIACCOUNT	Specifies the NetVault user name. The specified account must have privileges to use the CLI utility. `NETVAULTCLIACCOUNT=<User Account Name>` This variable must be included in the script to access the CLI utility.
NETVAULTCLIPASSWORD	Specifies the password for the NetVault user account. `NETVAULTCLIPASSWORD=<Password>` This variable must be included in the script to specify the password for the user account.
NV_HOME	Returns the NetVault installation directory.
NV_JOBCLIENT	Specifies the target client for a job. `NV_JOBCLIENT=<Name of the NetVault Client>`
NV_JOBID	Specifies the Job ID number. `NV_JOBID=<Job ID>`
NV_JOBTITLE	Specifies the name of the job. `NV_JOBTITLE=<Job title>`

NV_JOB_WARNINGS	Returns TRUE if a job completes with warnings, else returns FALSE.
	
	• If a backup completes with warnings:
	`NV_JOB_WARNINGS=TRUE`
	• If a backup completes successfully:
	`NV_JOB_WARNINGS=FALSE`
	
	This variable can only be used in a post -script. The mail scripts use this variable, but the variable has general applicability.
	
	If a backup completes with warnings, the `NV_STATUS` variable returns `SUCCEEDED`, while the `NV_JOB_WARNINGS` variable returns `TRUE`.
	
	The return value is not localized; it is TRUE or FALSE in English.

NV_OUTPUT_FILE	Returns the user-defined output file for reports.

Table 2. Environment variables

Variable	Description
NV_SERVERNAME	Specifies the NetVault Server Name. `NV_SERVERNAME=<Name of the NetVault Server>`
NV_SESSIONID	Specifies the Session ID of a job. `NV_SESSIONID=<Session ID>`

NV_STATUS	Returns the exit status of a job. It returns either SUCCEEDED or FAILED.
	• If a backup job completes successfully or completes with warnings:
	`NV_STATUS=SUCCEEDED`
	• If a backup job fails:
	`NV_STATUS=FAILED`
	This variable can only be used in a post-script. The return value is not localized; it is SUCCEEDED or FAILED in English.

NV_USER_ARG	Specifies the user-defined arguments passed with the pre- or post-scripts.

Starting or stopping the NetVault Service

The NetVault Service is configured to start automatically on the server and client machines. To manually stop or start the service from CLI, you can use the following commands:

- **Linux-based systems:**

  `$NV_HOME/etc/startup.sh start`

  `$NV_HOME/etc/startup.sh stop`

- **Windows-based systems:**

  `C:\ net start "NetVault Process Manager"`

  `C:\ net stop "NetVault Process Manager"`

Using the command-line utilities

- Client-specific utilities
- Device-specific utilities
- Media-specific utilities
- Job-specific utilities
- Log-specific utilities
- Other utilities

Client-specific utilities

- nvclient
- nvclientaccess
- nvclientadd
- nvclientlist
- nvclientname
- nvclientremove

> **NOTE:** Virtual Clients can only be created from the WebUI. You cannot use the command-line utilities to create Virtual Clients.

nvclient

Description

Adds one or more NetVault Clients to the NetVault Server, and assigns the clients to the specified client groups.

Syntax

```
nvclient [-add] [-list] [-password <NetVault Password>]
[-file <Client List File>]
[-group <Client Group Name> ...]
[-log <Log File>] [-failure <Filename to Log Failed Clients List>]
[-quiet] [-verbose] [-abort] [-args] [-timeout <timeout period>]
```

Options

Table 3. nvclient

Option	Description
-add	Adds one or more clients to the NetVault Server.
-list	Lists clients added to the server.

Table 3. nvclient

Option	Description
-password	Specifies NetVault password of the client. This option is required if security is enabled on the client.

-file	Specifies the name of the input file for batch submission. You can specify client name, password, and group names in the file. Specify one client per line.
	Example: MyClientList
	`Client-A -password mypwd2 -group Group1`
	`Client-B`
	`Client-C -password mypwd2`

-client	Specifies NetVault names of clients that you want to add to the server.
-group	Specifies names of client groups to which you want to add the clients. Verify that the client groups are created before you add the client.
-log	Specifies the name of the log file.
-failure	Specifies the name of the failed clients list.
-quiet	Suppresses display of output messages on the screen.
-verbose	Displays status and error messages on the screen.
-abort	Aborts the command if licensing does not permit addition of all clients.
-args	Prints program parameters and exits without doing anything.
-timeout	Specifies the amount of time NetVault waits for a client to approve the "add" request. The timeout value is specified in seconds. The default value for this option is 30 seconds. If a client cannot be added within the specified period, an error message is displayed.

Notes

- Client names are case-sensitive.

- A client must be available and running a valid installation of NetVault before it can be added to a server.

- To locate a client that is unavailable, use the `nvclientlist -find <ipaddress>` command. For more information, see nvclientlist.

- Client groups can only be created from the NetVault WebUI. The CLI does not provide any utility to create client groups.

nvclientaccess

Description

Grants access to specified NetVault Clients.

Syntax

```
nvclientaccess [-client <Client Name>] | [-clients <Client Names>] |
[-tdclients <Teradata DBS name>] [-password <password>]
```

Options

Table 4. nvclientaccess

Option	Description
-client or -clients	Specifies the names of NetVault Clients to which access is granted.
-tdclients	Specifies the name of the Teradata DBS. You can use this option to grant access to all added clients.
-password	Specifies NetVault password of the client. This option is required if security is enabled on the client.

nvclientadd

Description

Adds a single NetVault Client to the server. You must run this utility on the NetVault Server.

Syntax

```
nvclientadd [-client <Client Name> | -clientip <Client IP address>]
[-clientgroup <Client Group Name>] [-password <password>]
[-timeout <timeout period>] [-version]
```

Options

Table 5. nvclientadd options

Option	Description
-client	Specifies NetVault name of the client that you want to add.
-clientip	Specifies IP Address of the NetVault Client that you want to add.
-clientgroup	Specifies the name of the client group to which you want to add the client. Verify that the client group is created before you add the client.
-password	Specifies NetVault password of the client. This option is required if security is enabled on the client.
-timeout	Specifies the amount of time NetVault waits for the client to approve the "add" request. The timeout value is specified in minutes. If a client cannot be added within the specified period, an error message is displayed
-version	Displays build date of the NetVault distribution installed on the machine.

Notes

- Client names are case-sensitive.

- A client must be available and running a valid installation of NetVault before it can be added to a server.

- To locate a client that is unavailable, use the `nvclientlist -find <ipaddress>` command. For more information, see nvclientlist.

- Client groups can only be created from the NetVault WebUI. The CLI does not provide any utility to create client groups.

nvclientlist

Description

Performs the following functions:

- Lists clients added to the NetVault Server.
- Lists available NetVault machines that can be added as clients.
- Locates a NetVault machine using its resolvable name or IP address.

Syntax

```
nvclientlist [-current [-name <Client Name>]] [-available [-name <Client Name>]]
[-find <Resolvable Name or IP address>] [-version]
```

Options

Table 6. nvclientlist

Option	Description
-current	Lists clients that are currently added to the NetVault Server.
-available	Lists available NetVault machines that can be added as clients.
-name	Specifies NetVault name of the client that you want to locate.
-find	Specifies the resolvable name or IP address of the machine that you want to locate.
-version	Displays build date of the NetVault distribution installed on the machine.

nvclientname

Description

Allows you to rename a NetVault Client. You cannot use this utility to change the name of a NetVault Server.

Syntax

```
nvclientname -clientname <New NetVault name>
```

Options

Table 7. nvclientname

Option	Description
-clientname	Specifies the new NetVault name for the client.

nvclientremove

Description

Removes a client from the NetVault Server. You must run this utility on the NetVault Server.

Syntax

```
nvclientremove [-client <NetVault name of the client>] [-version]
```

Options

Table 8. nvclientremove

Option	Description
-client	Specifies NetVault name of the client that you want to remove. You can only specify a single client name with this option.
-version	Displays build date of the NetVault distribution installed on the machine.

Device-specific utilities

- asf_load_media
- asf_release_drive
- nvacslsmedia
- nvaddfiler
- nvcheckdrive
- nvcleandrive
- nvclosedoor
- nvcloseeeport

- nvcloseeeportcleaning
- nvdav
- nvrda
- nvddboost
- nvdevice
- nvdeviceeject
- nvlibrarymodify
- nvopendoor

- nvopeneeport
- nvremovefiler
- nvresetdrivestats
- nvscandrives
- nvsetcleaninglives
- nvsetdrivecleaning
- nvsmartdisk
- nvsvtlgrow

asf_load_media

Description

Loads the specified media into the drive and locks it in the drive as Windows Advanced System Format (ASF) media.

Syntax

```
asf_load_media -m <Media Label> | -b <Barcode> -d <Device Name>
[-s <Server Name>] [-c <Client Name>] [-wait]
```

Options

Table 9. asf_load_media

Option	Description
-m	Specifies the label of the target media item.
-b	Specifies the barcode of the target media item
-d	Specifies the name of the target drive.
-s	Specifies the name of the NetVault machine to which the target device is locally attached. If the device is locally attached to a client (SmartClient), use this option to specify the client name.
-c	Specifies the name of the NetVault Client to which the target device is locally attached.
-wait	Waits until the task has completed.

asf_release_drive

Description

Releases lock placed by the **"asf_load_media"** command and allows NetVault to use the drive and the media.

Syntax

```
asf_release_drive -d <Device Name> [-s <Server Name>] [-c <Client Name>]
```

Options

Table 10. asf_release_drive

Option	Description
-d	Specifies the name of the target drive.
-s	Specifies the name of the NetVault Server. Use this option if the device is locally attached to the server.
-c	Specifies the name of the NetVault Client. Use this option if the device is attached to a client or remote NetVault Server.

nvacslsmedia

Description

Performs the following functions:

- Allocates media to an ACSLS Library.
- De-allocates specified media.
- Ejects a piece of media

Syntax

```
nvacslsmedia [-allocate | -deallocate | -eject] [-medialabel <Media Label>]
[-cap <acs>,<lsm>,<cap>] -libraryname <Library Name> [-servername <Server Name>]
[-range <range-media >] [-file <Filename >] [-version]
```

Options

Table 11. nvacslsmedia

Option	Description
-allocate	Allocates specified media items.
-deallocate	De-allocates specified media items.
-eject	Ejects the specified media items through the specified Cartridge Access Port (CAP).
-cap	Specifies the Cartridge Access Port (CAP) through which to eject the media items.
	Provide the ACS number of the library, LSM number of the robotic unit that controls the library, and physical number of the CAP. Use comma to separate the numeric values.
	Example: `-cap 0,0,0`
-medialabel	Specifies the label or barcode of the media items that you want to allocate, de-allocate, or eject from the library. For multiple labels or barcodes, provide a comma-separated list.
-libraryname	Specifies the name of the target library.
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-range	Specifies a range of media labels or barcode values that correspond to the pieces of media that you want to de-allocate. Use a hyphen (without any spaces) between the values.
-file	Specifies the name of the file that contains a list of media labels or barcodes corresponding to the set of media items that you want to de-allocate. Only one media label or barcode can be specified per line.
-version	Displays build date of the NetVault distribution installed on the machine.

nvaddfiler

Description

Adds an NDMP filer to the NetVault Server.

Syntax

```
nvaddfiler [-servername <Server Name>] [-clientname <Client Name>]
[-pluginname <Plug-in Name>] -filername <Filer Name> -address <IP address or FQDN>
[-port <Port number>] -account <User Name> -password <Password>
[-description <Description>] [-utf8 <Boolean>]
```

Options

Table 12. nvaddfiler

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-clientname	Specifies the name of the NetVault Client to which the filer is added.
	This option can be omitted if you want to add the filer to the local machine. If you specify **-servername**, you must also specify **-clientname** even if they are the same machine.
-pluginname	Specifies the plug-in name. It can be **NDMP Client** or **NDMP SnapMirror to Tape**. The default value is **NDMP Client**.
-filername	Specifies the filer name.
	The filer name must be unique. You can assign the actual name of the filer to easily identify it in the NetVault environment. The filer name cannot be changed once it is configured.
-address	Specifies the IP4 address or FQDN of the filer.
-port	Specifies the listen port for the filer. The default value is 10000.
	Unless otherwise required, do not change listener port for the filer.
-account	Specifies the name of the user account that can be used to log on to the filer. The user account must have necessary permissions to perform NDMP backups and restores.
-password	Specifies the password for the user account.
-description	Provides NDMP filer description when filer type needs to be selected. The description must match the corresponding entry in the **ndmpversions.cfg** file.
-utf8	Specifies whether UTF-8 conversions are required or not.
	The default value for this option is FASLSE. Set it to TRUE if you want to correctly display the directory and filenames in the set locale on NetVault WebUI. You can use this option only if the file supports UTF-8 encoding. To use this feature, do the following: • Enable UTF-8 conversion on the filer. • Set the appropriate language-type on each target volume. • Set the configuration option Codepage for UTF-8 Conversions for the Plug-in *for NDMP*. For more information about this option, see the *Quest NetVault Plug-in for NDMP User's Guide*.

Examples

- Add filer "f740" to the local NetVault machine:

```
nvaddfiler -filername f740 –address 10.11.22.53 -account root
-password mypassword
```

- Add filer "f740" to "Client-A" that is controlled by the local NetVault Server:

```
nvaddfiler -clientname Client-A-filername f740 -address 10.11.22.53 -account
root -password mypassword
```

- Add filter "f740" to the remote server named "Win-Server":

```
nvaddfiler -servername Win-Server -clientname Win-Server -filername f740
-address 10.11.22.53 -account root -password mypassword
```

nvcheckdrive

Description

Checks the status of a drive. For example, it can be used to check the status of a drive that was taken offline for some reason. If successful, the specified drive is brought back online so that it is available to NetVault for future jobs.

Syntax

```
nvcheckdrive -servername <Server Name> [-drivename <Drive Name>]
[-libraryname <Library Name>] [-drivenumber <Drive Number>]
```

Options

Table 13. nvcheckdrive

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.
-drivename	Specifies the name of the target drive that you want to check.
-drivenumber	Specifies the drive number of the target drive that you want to check.

Notes

• The option **-drivename** or **-drivenumber** must be used with **-libraryname** to specify the target drive.

Examples

• Check the status of standalone drive "D-1" that is locally attached to the server:

```
nvcheckdrive -drivename D-1
```

• Check the status of "Drive2" in library "NVLibrary" that is locally attached to the client "NVCLIENT1":

```
nvcheckdrive -servername NVCLIENT1 -libraryname NVLibrary -drivename Drive2
```

• Check the status of drive 2 in library "NVLib2" that is locally attached to the remote server "NVSERVER2":

```
nvcheckdrive -servername NVSERVER2 -libraryname NVLib2 -drivenumber 2
```

nvcleandrive

Description

Cleans a library drive. If the number of cleaning lives has been set for the cleaning tape, it is reduced by one when used for this process.

Syntax

```
nvcleandrive -libraryname <Library Name> -librarydrivenumber <Drive Number>
```

Options

Table 14. nvcleandrive

Option	Description
-libraryname	Specifies the name of the target library.
-drivenumber	Specifies the drive number of the target drive that you want to clean.

Examples

- Clean drive 1 of the library "SONY LIB-162" using predefined cleaning media:

```
nvcleandrive -libraryname "SONY LIB-162" librarydrivenumber 1
```

nvclosedoor

Description

Closes the door of the specified library.

Syntax

```
nvclosedoor [-servername <Server Name>] -libraryname <Library Name>
```

Options

Table 15. nvclosedoor

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.

nvcloseeeport

Description

Closes the entry/exit port (EEPort) of the specified library.

Syntax

```
nvcloseeeport [-servername <Server Name>] -libraryname <Library Name>
[-mediatype <Media Type>]
```

Options

Table 16. nvcloseeeport

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.
-mediatype	Specifies the type of media in the entry/exit slot.

nvcloseeeportcleaning

Description

Closes EE Port of the specified library for importing a cleaning tape.

Syntax

```
nvcloseeeportcleaning [-servername <Server Name>] -libraryname <Library Name>
[-mediatype <Media Type>]
```

Options

Table 17. nvcloseeeportcleaning

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.
-mediatype	Specifies the type of media in the entry/exit slot.

nvdav

Description

Performs the following WebDAV-related functions for a Quest NetVault SmartDisk instance:

- Configures WebDAV authentication details.
- Removes WebDAV authentication details.
- Retrieves the user name configured for WebDAV authentication.

Syntax

```
nvdav --server <IP address|hostname> [--set|--remove|--user]
```

Options

Table 18. nvdav

Option	Description
--server	Specifies the IP address or resolvable host name of a Quest NetVault SmartDisk instance.
--set	Sets WebDAV credentials for the specified Quest NetVault SmartDisk instance. This option replaces the existing values. The user name and password are requested interactively.
--remove	Removes any existing WebDAV credentials for the specified Quest NetVault SmartDisk instance.
--user	Retrieves the user name configured for WebDAV authentication for the specified Quest NetVault SmartDisk instance. If there are no WebDAV credentials configured for the specified instances, an error message is displayed.

nvrda

Description

Adds or removes a Quest DR Series system.

Syntax

```
nvrda --add --host <Host name or IP Address> [--force]
[--server <NetVault Server Name>] --user <username> --password <password>
--lsu <Container name> [--blocksize <blocksize>]
--storage-group <storage group name>
[--stream-limit <stream limit count>]

--update --device <name> --user <name> --password <password>
[--blocksize <blocksize>] [--server <name>]
[--stream-limit <stream limit count>]

nvrda --remove --device <name> [--force] [--server <name>]
```

Options

Table 19. nvrda

Option	Description

--add	Adds a Quest DR Series system. Use the following options with **--add**.
	
	• **--host:** Specifies the DNS name or IP address of the Quest DR Series system.
	  The device is not added if the NetVault Server is unable to resolve the host name.
	• **--force:** Adds a Quest DR Series system even if the device is already added to another NetVault Server with the same name.
	  This option can be useful if you have performed a disaster recovery to rebuild the NetVault Server.
	• **--server:** Specifies the name of the NetVault Server to which you want to add the Quest DR Series system.
	  This option is not required if you are running the command on the server.
	• **--user:** Specifies the user account that can be used to log on to the device.
	  On the Quest DR Series system, only one user account exists, and the user ID for that account is **backup_user**.
	• **--password:** Specifies the password for the user account.
	• **--lsu:** Specifies the name of the storage container.
	  Ensure that the container is created before you add the device. The device is not added if the specified container does not exist on the device.
	  Each Quest DR Series system added to NetVault represents a storage container.
	• **--storage-group:** Specifies storage group name where the container resides. This option is mandatory for add operation.
	  When a new container is added and if it is the first container from DR, that DR is also attached to the NetVault.
	• **--blocksize:** Specifies the block size for data transfers. The block size is specified in number of bytes. The default value for this option is 512KiB.
	• **--stream-limit:** The default value for this option is 256 streams. This setting applies to all NetVault Servers to which the container is added. If the number of data streams exceeds the defined limit for the container, the Media Manager reports an error ("Device has too many streams").
	  You can set the soft stream limit to any value between 1 and 512.
	  If the container is added to more than one NetVault Server, set the same soft stream limit on all servers.

--update	Modifies the settings for an existing Quest DR Series system. Use the following options with **--update**.
	
	• **--device:** Specifies the device name.
	• **--user:** Specifies the user account that can be used to log on to the device.
	  On the Quest DR Series system, only one user account exists, and the user ID for that account is **backup_user**. You can only change the password for this account; you cannot create an account or delete the existing account.
	• **--password:** Specifies the password for the user account.
	• **--blocksize:** Specifies the block size for data transfers. The block size in specified in number of bytes. The default value for this option is 512KiB.
	• **--server:** Specifies the name of the NetVault Server to which you want to add the Quest DR Series system.
	  This option is not required if you are running the command on the server.

Table 19. nvrda

Option	Description
	• **--stream-limit:** The default value for this option is 256 streams. This setting applies to all NetVault Servers to which the container is added. If the number of data streams exceeds the defined limit for the container, the Media Manager reports an error ("Device has too many streams"). You can set the soft stream limit to any value between 1 and 512. If the container is added to more than one NetVault Server, set the same soft stream limit on all servers.
--remove	Removes a Quest DR Series system. Use the following options with **--remove**. • **--device:** Specifies the name of the Quest DR Series system as it appears in the NetVault WebUI, CLI, and reports. • **--force:** Removes a Quest DR Series system even if the device cannot be contacted or some other errors block the removal. • **--server:** Specifies the name of the NetVault Server which you want to remove from the Quest DR Series system.

nvddboost

Description

Adds or removes an EMC Data Domain System.

Syntax

```
nvddboost --add --host <Host name or IP Address> [--force] [--user <username>]
[--password <password] [--lsu <LSU name>] [--blocksize <Block size>]
[--server <Server Name>]

nvddboost --remove --device <name> [--force] [--server <name>]
```

Options

Table 20. nvddboost

Option	Description
--add	Adds a Data Domain system. Use the following options with **-add**. • **--host:** Specifies the DNS name or IP address of the Data Domain system. The device is not added if the NetVault Server is unable to resolve the host name. • **--force:** Adds a Data Domain system even if the device is already added to another NetVault Server with the same name. This option can be useful if you have performed a disaster recovery to rebuild the NetVault Server. • **--user:** Specifies the DD Boost user account that can be used to log on to the device for backups and restores. Ensure that the user account is created on the Data Domain system before the device is added to the server. • **--password:** Specifies the password for the user account.

Table 20. nvddboost

Option	Description
	• **--lsu:** Specifies the name of the container for the Data Domain system. If the specified container does not exist on the Data Domain system, NetVault automatically creates it when you add the device to the server. You can configure multiple containers on a single Data Domain system. Each Data Domain system added to NetVault represents a container. The default value for this option is "NV." • **--blocksize:** Specifies the block size for data transfers. The block size in specified in number of bytes. The default value for this option is 131,072 bytes. • **--server:** Specifies the name of the NetVault Server to which you want to add the Data Domain system. This option is not required if you are running the command on the server.
--remove	Removes a Data Domain system. Use the following options with **-remove**. • **--device:** Specifies the name of the Data Domain system as it appears in the NetVault WebUI, CLI, and reports. • **--force:** Removes a Data Domain system even if the device cannot be contacted or some other errors block the removal.

Notes

- When you add a Data Domain system, NetVault creates several metadata files on the device. Each NetVault Server (to which you add the Data Domain system) creates is its own set of metadata files. NetVault also writes the data transfer statistics to the **stats.stnz** file. The **nvstatsmngr** process uses this file and requires that it is regularly updated. However, frequent updates can have a significant performance impact on the system. By default, NetVault updates the file after every 5 seconds or 10 blocks of data transfer. To change the default setting, see the *Quest NetVault Administrator's Guide*.

nvdevice

Description

Performs the following tasks:

- Checks drives
- Cleans drives
- Ejects media
- Brings a drive online
- Takes a drive offline

Syntax

```
nvdevice [-status] [-library <Library Name>] -drive <Drive Name>]

nvdevice [-status] [-check] [-clean] [-eject] [-online] [-offline]
[-library <Library Name>] -drive <Drive Name>

nvdevice -version
```

Options

Table 21. nvdevice

Option	Description
-status	Shows the status of the specified drive. Use the **-library** and **-drive** options to specify the target drive.
	If you do not specify the library and drive, the command displays the status of all devices attached to the machine.
-check	Checks status of the specified drive. For example, it can be used to check the status of a drive that was taken offline for some reason. If successful, the specified drive is brought back online so that it is available to NetVault for future jobs. Use the **-library** and **-drive** options to specify the target drive.
-clean	Sends request for cleaning the specified drive. If the number of cleaning lives has been set for the cleaning tape, it is reduced by one when used for this process. Use the **-library** and **-drive** options to specify the target drive.
-eject	Ejects a piece of media from the specified drive. Use the **-library** and **-drive** options to specify the target drive.
-online	Brings a drive back online. Use the **-library** and **-drive** options to specify the target drive.
-offline	Takes a drive offline. Use the **-library** and **-drive** options to specify the target drive.
-library	Specifies the name of the target library.
-drive	Specifies the drive name of the target drive.
-version	Displays the version number of the CLI tools.

Use the **-library** and **-drive** options to specify the target drive while performing **-offline**, **-online**, and **-check** operations on a drive unless the drive is a standalone drive.

Notes

- For Tape library/VTLs, Library Name is mandatory for nvdevice **-online**, **-offline**, and **-check** parameters.

nvdeviceeject

Description

Ejects a piece of media from the specified drive.

Syntax

```
nvdeviceeject -devicename <Device Name> [-servername <Server Name>]
[-librarydrivenumber <Drive Number>] [-wait]
```

Options

Table 22. nvdeviceeject

Option	Description
-devicename	Specifies the name of the target device or library.

Table 22. nvdeviceeject

Option	Description
-servername	Specifies the name of the NetVault Server to which the device is added.
	When you run this command on the server, this option can be omitted.
	The server name is case-sensitive.
-librarydrivenumber	Drive number of the target drive in the library
-wait	Waits until the task has completed.

Notes

- The option **-librarydrivenumber** must be used with **-devicename** to specify the target drive.

- The device names can be ascertained by inspecting the logs for the backup job.

nvlibrarymodify

Description

Use this utility to perform the following tasks:

- Change the drive status to online or offline

- Remove a library

- Map or unmap drives

- List all library drives

- Add a drive or shared drive

Syntax

```
nvlibrarymodify [-servername <server_name>] -libraryname <library_name>
[-online "DRIVE <drive_number>"] [-offline "DRIVE <drive_number>"]
[-remove "DRIVE <drive_number>" ]
[-map "DRIVE <drive_number> <lsm>,<panel>,<drive>" [-name "<Drive_Name>"] ]
[-unmap "DRIVE <drive_number>" ] [-list]

nvlibrarymodify [-servername <server_name>] -libraryname <library_name>
[-librarymachine <library_machine>] [-drivemachine <drive_machine>]
-drivepath <drive_path> -add "DRIVE <drive_number>"
-addshared "DRIVE <drive_number>"
```

Options

To change the drive status, map or unmap drives, display library drives, and remove a library, use the following options.

Table 23. nvlibrarymodify — 1

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name library that you want to modify. The library name is mandatory.

Table 23. nvlibrarymodify — 1

Option	Description
-online	Brings a drive back online. Use the **"DRIVE <drive_number>"** option to specify the target drive.
-offline	Takes a drive offline. Use the **"DRIVE <drive_number>"** option to specify the target drive.
-remove	Removes a drive. Use the **"DRIVE <drive_number>"** option to specify the target drive.
-map	Maps a drive to the appropriate LSM, Panel and Drive. Use the **"DRIVE <drive_number>"** option to specify the target drive. You can also use the optional **-name** option can be used to specify a drive name. Example: `-name "ACSLS_Drive-1"`
-unmap	Unmaps a drive. Use the **"DRIVE <drive_number>"** option to specify the target drive.
-list	Displays all drives in the specified library.

To add a drive or shared drive to an existing library configuration, use the following options.

Table 24. nvlibrarymodify — 2

Option	Description
-servername	Specifies the name of the target server.
-libraryname	Specifies the name library that you want to modify.
-librarymachine	Specifies the name of the NetVault Server or Client on which the library resides. It can be any NetVault machine, not necessarily the server. It can also be a NetVault Client with ACSLS drives attached to a third machine.
-drivemachine	Specifies the name of the NetVault Server or Client on which the drive resides. In an ACSLS environment, the drives can reside on a client; the NetVault Server or Client does not control the ACSLS library.
-drivepath	Specifies the name or path of the drive that you want to add. Depending on the drive type, the drive path can be a VTL directory or SCSI target. You can use the **nvscandrives** utility to obtain a list of available drives on a local or remote NetVault Client. The output of this command provides the drive path as it appears in the NetVault WebUI. For more information, see nvscandrives.
-add	Adds a drive. Use the **"DRIVE <drive_number>"** option to specify the target drive.
-addshared	Adds a shared drive. Use the **"DRIVE <drive_number>"** option to specify the target drive.

Notes

- When you add a drive using the **nvlibrarymodify** utility, the library configuration is changed as follows:
    - If one or more jobs are running, the drive is appended to the existing library configuration without affecting the running jobs.
    - If no jobs are running, the existing library configuration is removed and the library is re-added.
- This utility cannot be used to modify an existing drive in a library. It can only be used to modify an existing library configuration by adding a drive to it.
- If you omit the options "`-servername`", "`librarymachine`" and "`drivemachine`" then, by default, the local machine is used as the default for the target server.

Examples

- Add a drive to a VTL named "NewLibrary" located in the directory "/home/qauser1/" on a Linux-based NetVault Server "tstserver":

```
nvlibrarymodify -servername tstserver -libraryname "/home/qauser1/NewLibrary"
-librarymachine tstserver -drivemachine tstserver
-drivepath "/home/qauser1/NewLibrary/drives/2" -add "DRIVE 2"
```

- Add a drive to a SCSI library "winserver: 2-0.4.0 (SONY LIB-304)" that is connected to a Window-based NetVault Server "winserver":

```
nvlibrarymodify -servername winserver -libraryname "2-0.4.0 (SONY LIB-304)"
-librarymachine winserver -drivemachine winserver
-drivepath "2-0.2.0 (SONY SDX-500C)" -add "DRIVE 2"
```

- Add a drive to an NDMP filer-attached device. The device name is "Device f880:mc9(OVERLAND LXB)" and the NetVault Server name is "tstserver":

```
nvlibrarymodify -servername tstserver
-libraryname "Device f880:mc9(OVERLAND LXB)" -librarymachine tstserver
-drivemachine tstserver -drivepath "Tape f880:nrst17a(HP Ultrium 3-SCSI)"
-add "DRIVE 2"
```

- Add a SCSI drive to a Windows-based NetVault Client named "winclient." The ACSLS library is attached to a Linux-based NetVault Server "tstserver":

```
nvlibrarymodify -servername tstserver
-libraryname "ACS0(StorageTek ACSLS/LibStation)"
-librarymachine tstserver -drivemachine winclient
-drivepath "2-0.2.0 (SONY SDX-500C)" -add "DRIVE 2"
```

- Add a SCSI drive to a Windows-based NetVault Client named "winclient." The ACSLS library is attached to a Windows-based NetVault Client "client2" and controlled by NetVault Server "tstserver":

```
nvlibrarymodify -servername tstserver
-libraryname "ACS0(StorageTek ACSLS/LibStation)"
-librarymachine client2 -drivemachine winclient
-drivepath "2-0.2.0 (SONY SDX-500C)" -add "DRIVE 2"
```

nvopendoor

Description

Opens the door of the specified library.

Syntax

```
nvopendoor [-servername <server name>] -libraryname <library name>
```

Options

Table 25. nvopendoor

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.

nvopeneeport

Description

Opens the entry/exit port (EEPort).

Syntax

```
nvopeneeport [-servername <server name>] -libraryname <library name>
```

Options

Table 26. nvopeneeport

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.

nvremovefiler

Description

Removes filer-attached drives for the specified filer.

Syntax

```
nvremovefiler [-servername <server name >] -filername <filer name> [-wait]
```

Options

Table 27. nvremovefiler

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-filername	Specifies the name of the target filer.
-wait	Waits until the task has completed.

Notes

- This command removes only those drives that are idle or offline. After removing a drive, the message "Device removed DRIVE <#>:<Drive Name>" displayed on the screen and the **View Logs** page on WebUI.

- Only one attempt is made to remove a filer-attached drive. If the target drive is busy, the message "Failed to delete busy device DRIVE <#>:<Drive Name>" is displayed on the screen and the utility moves on to the next drive.

- If all drives in a library are removed, the node representing the library arm is also removed.

nvresetdrivestats

Description

Resets the statistics for a drive.

Syntax

```
nvresetdrivestats -servername <server name> [-libraryname <library name>]
[-drivename <drivename>] [-drivenumber <drivenumber>] -action <action>
```

Options

Table 28. nvresetdrivestats

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.
-drivename	Specifies the name of the target drive.
-drivenumber	Specifies the drive number of the target drive.
-action	Specifies the action that you want to perform. It can be:
	• **drive:** Resets only drive statistics.
	• **clean**: Resets only drive cleaning statistics.
	• **all:** Resets all statistics for the specified drive.

Notes

- The option **-drivename** or **-drivenumber** must be used with **-libraryname** to specify the target drive.

Examples

- Reset statistics for a standalone drive "TstDrive1" that is locally attached to the NetVault Server:

  ```
  nvresetdrivestats -drivename TstDrive1 -action drive
  ```

- Reset the cleaning statistics for "Drive 1" in library "NVLibrary" that is locally attached to the NetVault Client "NVCLIENT1":

  ```
  nvresetdrivestats -servername NVCLIENT1 -libraryname NVLibrary
  -drivename "Drive 1" -action clean
  ```

- Reset all statistics for "Drive 2" in library "NVLib2" that is attached to the remote NetVault Server "NVSERVER2":

  ```
  nvresetdrivestats -servername NVSERVER2 -libraryname NVLib2 -drivenumber 2
  -action all
  ```

nvscandrives

Description

Displays drives that are available on a local or remote NetVault Server or Client. The output does not include drives that are added as shared devices.

The output of this command provides the drive path as it appears on the NetVault WebUI. It can be used to add a drive to an existing library configuration using the **nvlibrarymodify** utility. For more information about this utility, see nvlibrarymodify.

Syntax

```
nvscandrives [-servername <server name>] [-clientname <client name>]
[-filername <filer name>]
```

Options

Table 29. nvscandrives

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-clientname	Use this option to view the drives attached to a NetVault Client. If you do not provide the client name, the drives available on the server are displayed.
-filername	Use this option view the drives attached to an NDMP filer.

nvsetcleaninglives

Description

Sets the number of lives for a cleaning tape in the specified library.

Before running the **nvsetcleaninglives** command, verify that the slot that you want to use is configured as a Cleaning Slot and a cleaning tape is placed in the slot. For more information about setting a cleaning slot, see the *Quest NetVault Administrator's Guide*.

Syntax

```
nvsetcleaninglives [-servername <server name>] -libraryname <library name>
[-slotnumber <slot number>] [-lives <lives>]
```

Options

Table 30. nvsetcleaninglives

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.
-slotnumber	Specifies the cleaning slot number in the library.
-lives	Specifies the number of lives for the cleaning tape.

Examples

- Set the number of lives to 7 for a piece of cleaning media residing in slot 6 of library "ADIC_Library_6"; the library is locally attached to "NVSERVER":

```
nvsetcleaninglives -server NVSERVER -libraryname ADIC_Library_6 -slotnumber 6
-lives 7
```

nvsetdrivecleaning

Description

Sets cleaning cycle for the specified library.

Syntax

```
nvsetdrivecleaning -libraryname <library name> -librarydrivenumber <drive number>
-days <number of days> -dataxfersize <data transfer size> -hours <number of hours>
-rwerrors <number of read/write errors> [-displayonly [-selectionstate]]
```

Options

Table 31. nvsetdrivecleaning

Option	Description
-libraryname	Specifies the name of the target library.
-librarydrivenumber	Specifies the drive number of the drive for which the cleaning cycle has to be set.
-days	Specifies the maximum number of days the drive can be used before a clean cycle.
-dataxfersize	Specifies the maximum amount of data that be transferred before a clean cycle.
-hours	Specifies the maximum number of hours that the drive can be used until a clean cycle.
-rwerrors	Specifies the maximum number of read/write errors that can occur before a clean cycle.

-displayonly	Displays the current settings for the specified drive.
	
	Without the **-selectionstate** option, the **-displayonly** option does not show if the settings are being used.
	
	Example:
	`nvsetdrivecleaning -libraryname "LIB1" -librarydrivenumber 2 -displayonly`
	Output:
	`Days = 22`
	`Data Transferred (Gb) = 22`
	`Hours of Use = 40`
	`Soft Read/Write Errors (x100) = 1`

-selectionstate	Displays selection state of the options (that is, TRUE or FALSE depending on if the option is selected in the WebUI). This option must be used with **-displayonly**.
	
	Example:
	`nvsetdrivecleaning -libraryname "LIB1" -librarydrivenumber 2 -displayonly -selectionstate`
	Output:
	`TRUE Days = 22`
	`FALSE Data Transferred (Gb) = 22`
	`TRUE Hours of Use = 40`
	`FALSE Soft Read/Write Errors (x100) = 1`

Notes

• You can use "-1" to disable any option.

Examples

• Set Drive 1 of library "SONY LIB-162" to clean itself at the following intervals: 200GB of data transfer, 100 hours of drive usage, or more than 100,000 read/write errors:

```
nvsetdrivecleaning -libraryname "SONY LIB-162" -librarydrivenumber 1 -days -1
-dataxfersize 200 -hours 100 -rwerrors 100000
```

nvsmartdisk

Description

Performs the following functions:

- Adds a Quest NetVault SmartDisk to the NetVault Server.

- Removes a Quest NetVault SmartDisk.

- Lists the machine names of Quest NetVault SmartDisk instances added to the NetVault Server.

Syntax

```
nvsmartdisk --add --host <Host name or IP Address> [--force] [--port <Port Number>]
[--server <Server Name>]

nvsmartdisk --remove --device <name> [--force] [--server <name>]

nvsmartdisk --list
```

Options

Table 32. nvsmartdisk

Option	Description
--add	Adds a Quest NetVault SmartDisk. Use the following options with **-add**. • **--host:** Specifies the DNS name or IP address of the host on which the Quest NetVault SmartDisk is installed. You must configure this option even if the device is deployed on the NetVault Server. The device is not added if the NetVault Server is unable to resolve the host name. • **--force:** Adds a Quest NetVault SmartDisk even if the device is already added to another NetVault Server with the same name. This option can be useful if you have performed a disaster recovery to rebuild the NetVault Server. • **--port:** Specifies the port for communicating with the Quest NetVault SmartDisk instance. This option is only required if device is configured to use a non-default port. • **--server:** Specifies the name of the NetVault Server to which you want to add the device. This option is not required if you are running the command on the server.
--remove	Removes a Quest NetVault SmartDisk. Use the following options with **-remove**. • **--device:** Specifies the name of the Quest NetVault SmartDisk as it appears in the NetVault WebUI, CLI, and reports. • **--force:** Removes a Quest NetVault SmartDisk even if the device cannot be contacted or some other errors block the removal.
--list	Lists the machine names of all Quest NetVault SmartDisk instances added to the NetVault Server.

nvsvtlgrow

Description

Performs the following functions:

- Displays status and usage details of a specific SVTL or all SVTLs on the current system.
- Performs a test or dummy expansion of an SVTL by a given number of media items of a given size.
- Performs an actual expansion of an SVTL by a given number of media items of a given size.

This utility is located in the **<NetVault home>\bin** directory.

Syntax

```
nvsvtlgrow display [-device <SVTL Device>]
nvsvtlgrow test -device <SVTL Device> -size <Media Size> -count <Media Count>
nvsvtlgrow grow -device <SVTL Device> -size <Media Size> -count <Media Count>
```

Options

Table 33. nvsvtlgrow

Option	Description
display	Displays all SVTLs on the machine.
	To display the status of a single SVTL on the machine, use the following command:
	`nvsvtlgrow display -device <svtl-device>`
test	Performs a test expansion. Use the following options with **test**.
	• **-device:** Specifies the name of the target SVTL.
	• **-size**: Specifies the size of the media (for example, 800m for 800MB, 40g for 40GB, 2t for 2TB).
	• **-count:** Specifies the number of media items that you want to add.
	The utility checks these values against the available space and reports whether it would be possible to create these media items. No changes are made to the SVTL.
grow	Expands the SVTL capacity. Use the following options with **grow**.
	• **-device**: Specifies the name of the target SVTL.
	• **-size**: Specifies the size of the media (for example, 800m for 800MB, 40g for 40GB, 2t for 2TB).
	• **-count**: Specifies the number of media items that you want to add.
	The **nvsvtlgrow** utility checks the options and on confirmation from the user adds new media items to expand the SVTL size. Re-add the SVTL or restart the NetVault Service to use the added media.

Media-specific utilities

- nvblankmedia
- nvsetmedia
- nvbulkblankmedia
- nvexportmedia
- nvlabelmedia

- nvlistblankmedia
- nvlistmedia
- nvloadmedia
- nvmakemedia
- nvmediadetails

- nvremovemedia
- nvreusemedia
- nvscanmedia
- nvsyncronizesilomedia
- nvupdateserialnumber

Important Notes

- To identify a piece of media in a CLI command, you can use its barcode, media label, or slot position within a library.

- If a media label contains spaces, enclose it within quotation marks ("").

- Various operating systems do not support special characters such as the following in a media label:

  ```
  : ! @ # $ % ^ & * ( ) > < \ [ ] { } " "
  ```

  Therefore, if a CLI command is issued to call out a piece of media whose label contains one of these characters, the command may fail with an error message. Media labels that include any of these characters can only be managed from the WebUI.

nvblankmedia

Description

Blanks a piece of media.

Syntax

```
nvblankmedia [-servername <Server Name>] [-libraryname <Library Name>]
-barcode <Barcode> | -medialabel <Media Label> |
-slotspec <Library Name::Slot Number> [-drivename <Standalone Drive Name>] [-wait]
```

Options

Table 34. nvblankmedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the library that contains the target media item.
-barcode	Specifies the barcode of the target media item.
-medialabel	Specifies the label of the target media item.
	Use this option only when searching by media label. If a media label contains spaces, enclose it within quotation marks ("").
	Example: `"Full DB Backups"`
	If the media label is not unique for media in all available devices, use this option with either **-libraryname** or **-drivename**.

Table 34. nvblankmedia

Option	Description
-slotspec	Specifies the name of the library and slot number where the target media item resides. These two values must be separated using a double colon delimiter ("::"). Use this option only when searching by library slot.
-drivename	Specifies the name of the drive that contains the target media item.
	This option is ignored when the target media is already loaded in a drive; the media item is blanked even if you specify an incorrect drive.
-wait	Waits until the task has completed.

Notes

- The blanking operation removes the NetVault header from a tape and deletes the media label and removes any group association. After blanking, a tape becomes available to NetVault for storing future backups.

- The blanking operation deletes or erases the backup data residing on a tape. To purposely destroy the data that is stored on a tape, you must blank it from NetVault and have its data securely removed by tools that are designed for such purposes.

- The blanking operation removes the indexes for backups stored on the selected tapes from the NetVault Database.

- When an incorrect library and media pair is specified, the following error message is displayed:

```
Blank request failed! - 'Unable to identify media'
```

Examples

- Blank a piece of media in slot 21 of the library "NV_Library_Large" that is locally attached to a client "NVCLIENT1":

```
nvblankmedia -servername NVCLIENT1 -slotspec 21::"NV_Library_Large"
```

- Blank a piece of media labeled "DB-Backup" in library "Lib-2" that is connected a client named "NVCLIENT2":

```
nvblankmedia -libraryname "NVCLIENT2: Lib-2" -medialabel "DB-Backup"
```

nvsetmedia

Description

Select or deselect the media to specify read-only, reusable, and read/write operation.

> **i** | **NOTE:** The `nvsetmedia` command accepts only one operation at a time.

Syntax

```
nvsetmedia [-readonly | -readwrite | -usable | -unusable]
[-servername servername][-libraryname libraryname]

[-drivename drivename]

-barcode | -medialabel | -slotspec
```

Options

Table 35. nvsetmedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the library that contains the target media item.
-drivename	Specifies the name of the drive that contains the target media item.
-barcode	Specifies the barcode of the target media item.
-medialabel	Specifies the label of the target media item.
	Use this option only when searching by media label. If a media label contains spaces, enclose it within quotation marks ("").
	Example: "Full DB Backups"
	If the media label is not unique for media in all available devices, use this option with either **-libraryname** or **-drivename**.
-slotspec	Specifies the name of the library and slot number where the target media item resides.
	These two values must be separated using a double colon delimiter ("::"). Use this option only when searching by library slot.

Notes

`nvsetmedia` allows you to perform various operations like read-only, unusable, usable, and read/write.

- The `-readonly` operation marks the media item in read-only mode, and no write operation is permitted. However the media allows you to restore the backup job.

- The `-unusable` operation marks the media item as unusable, in case the media is damaged or not suitable for use. It can be viewed but no operations can be performed (read or write).

- The `-usable` operation marks the media item as usable.This operation does not change the previous state (`readonly` or `readwrite`) of the media.

- The `-readwrite` operation marks the media item as read/write and can perform both the operations.

Examples

The media is marked as `readonly`, with a barcode `CHK2Y005` in "Windows_Library" library attached locally to server "VM-WIN2012-R2".

```
./nvsetmedia –servername "VM-WIN2012-R2" -readonly -barcode "CHK2Y005"
```

The media is marked as `readwrite`, and is labeled with "Media5" in the "TapeLibrary" which is locally attached to the NetVault Server.

```
./nvsetmedia -readwrite -medialabel "Media5"
```

The media is marked as `usable`, in slot 5 of the library 'VTL' that is locally attached to the NetVault Server.

```
nvsetmedia.exe  –usable  -slotspec "VTL::5"
```

nvbulkblankmedia

Description

Blanks one or more media items in the specified library.

Syntax

```
nvbulkblankmedia -libraryname <Library Name> -medialabel <Media Label>
[-allmedia] -password <Password> [-wait]
```

Options

Table 36. nvbulkblankmedia

Option	Description
-libraryname	Specifies the name of the library that contains the target media item.
-barcode	Specifies the barcode of the target media item.
-medialabel	Specifies the label of the target media item.
	This option supports the wildcard character "*" that can be used to represent a string of characters. If a media label contains the character "*", use the backslash character (\) to escape "*". For example, to blank media items with the label "media*star", use the -medialabel option as follows:
	`-medialabel "media\*star`
-allmedia	Blanks all media items in the specified library.
-password	Specifies the password for the NetVault Server.
	If no password is set for the NetVault Server, provide the system's root or administrator password.
-wait	Waits until the task has completed.

Notes

- The blanking operation removes the NetVault header from a tape and deletes the media label and removes any group association. After blanking, a tape becomes available to NetVault for storing future backups.

- The blanking operation deletes or erases the backup data residing on a tape. To purposely destroy the data that is stored on a tape, you must blank it from NetVault and have its data securely removed by tools that are designed for such purposes.

- The blanking operation removes the indexes for backups stored on the selected tapes from the NetVault Database.

- This command does work on servers on which security is disabled.

- The library name and media labels are case-sensitive.

Examples

- Blank all media that reside in the library "ADICLib_1" and use the label "Full Backup Group 7":

  ```
  nvbulkblankmedia -libraryname ADICLib_1 -medialabel "Full Backup Group 7"
  -password ServerPwd
  ```

- Blank all media reside in the library "ADICLib_1" and use labels that begin with "C2-Backups":

```
nvbulkblankmedia -libraryname ADICLib_1 -medialabel "C2-Backups*"
-password ServerPwd
```

nvexportmedia

Description

Exports a piece of media from a tape library to its entry/exit port (EEPort).

Syntax

```
nvexportmedia -servername <Server Name> -barcode <Barcode> |
-medialabel <Media Label> | -slotspec <Library Name::Slot Number> [-wait]
```

Options

Table 37. nvexportmedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-barcode	Specifies the barcode of the target media item.
-medialabel	Specifies the label of the target media item.
	Use this option only when searching by media label. If a media label contains spaces, enclose it within quotation marks ("").
	Example: "Full DB Backups"
-slotspec	Specifies the name of the library and slot number where the target media item resides. These two values must be separated using a double colon delimiter ("::"). Use this option only when searching by library slot.
-wait	Waits until the task has completed.

nvlabelmedia

Description

Use this utility to label new media items or re-label existing media items.

Syntax

```
nvlabelmedia [-servername <Server Name>] -barcode <Barcode> |
-medialabel <Media Label> | -slotspec <Library Name::Slot Number>
-newlabelname <New Media Label> [-newgroupname <New Media Group Name>]
[-newoffsitelocation <New Offsite Location Name>] [-wait]
```

Options

Table 38. nvlabelmedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-barcode	Specifies the barcode of the target media item.
-medialabel	Specifies the label of the target media item.
	Use this option only when searching by media label. If a media label contains spaces, enclose it within quotation marks ("").
	Example: "Full DB Backups"
-slotspec	Specifies the name of the library and slot number where the target media item resides. These two values must be separated using a double colon delimiter ("::"). Use this option only when searching by library slot.
-newlabelname	Specifies the new label for the selected piece of media. If the new media label contains spaces, use underscores ("_") in their place.
	Example: "new_label_1"
-newgroupname	Specifies the new media group for the selected media piece of media. If the media group label contains spaces, use underscores ("_") in their place.
	Example: "new_group_1"
-newoffsitelocation	Specifies the new offsite location for the selected piece of media.
-wait	Waits until the task has completed.

Notes

- To re-label media items that contain existing backups, you first blank it using the **nvblankmedia** or mark it for reuse using the **nvreusemedia** command.

- The offsite location of the media can be changed without blanking the media or marking it for re-use. This property is set or changed using the **-newoffsitelocation** option.

nvlistblankmedia

Description

Displays slots containing blank media items on the specified library.

Syntax

```
nvlistblankmedia -servername <Server Name> -libraryname <Library Name>
```

Options

Table 39. nvlistblankmedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.

nvlistmedia

Description

Lists media items marked with the following tags:

- Reuse
- Read only
- Unusable
- Bad
- Needs import
- Needs recovery
- Any media group tag

Syntax

```
nvlistmedia [-servername <Server Name>] -libraryname <Library Name>
-readonly | -reusable | -unusable | -needsimport | -needsrecovery | -bad -group
```

Options

Table 40. nvlistmedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.
-readonly	Lists read-only media items.
-reusable	Lists media items marked for reuse.
-unusable	Lists media items with the "unusable" tag.
-bad	Lists media items with the "bad" tag.
-needsimport	Lists media items that need to be imported.
-needsrecovery	Lists media items that need recovery.
-group	Lists media items that belong to any media group

nvloadmedia

Description

Use this command to load specific media items to a drive to read the media header or continue using the media from the CLI or from within a script. You can use **nvdeviceeject** command to return the media item to a home slot.

Syntax

```
nvloadmedia [-servername <Server Name>] -barcode <Barcode> |
-medialabel <Media Label> | -slotspec <Library Name::Slot Number> [-wait]
```

Options

Table 41. nvloadmedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-barcode	Specifies the barcode of the target media item.
-medialabel	Specifies the label of the target media item.
	Use this option only when searching by media label. If a media label contains spaces, enclose it within quotation marks ("").
	Example: "Full DB Backups"
-slotspec	Specifies the name of the library and slot number where the target media item resides. These two values must be separated using a double colon delimiter ("::"). Use this option only when searching by library slot.
-wait	Waits until the task has completed.

nvmakemedia

Description

Increases the capacity of a Virtual Tape Library (VTL) by creating additional media files.

A VTL contains the following directories and files:

Table 42. VTL directories and files

Windows	Linux and UNIX	Description
...\<vt>	.../<vtl>	VTL root directory.
...\<vtl>\drives	.../<vtl>/drives	Directory under the VTL root directory where the virtual drives are stored. NetVault creates a subdirectory for each virtual drive in this directory.
...\<vtl>\media	.../<vtl>/media	Directory under the VTL root directory where the virtual media items are stored.
...\<vtl>\slots	.../<vtl>/slots	Directory under the VTL root directory where the virtual slots are stored. NetVault creates a subdirectory for each virtual slot in this directory.

Table 42. VTL directories and files

Windows	Linux and UNIX	Description
...\<vtl>\.serial	.../<vtl>/.serial	File residing in the VTL root directory. It contains a list of media barcodes and drive numbers.
		For example, "4O4HR-2", where "4O4HR" is the barcode and "2" is virtual drive number; 404HR-2", where "404HR" is the barcode and "2" is virtual drive 2.
...\<vtl>\drives\<x>\.serial	.../<vtl>/drives/<x>/.serial	File residing in each drive subdirectory. It contains the individual media barcode and drive number.
...\<vtl>\slots\<x>\.serial	.../<vtl>/slots/<x>/.serial	File residing in each slot subdirectory. It contains barcode for the individual media item.
		For example, "..\..\4O4HR001", where "404HR" is the barcode and "001" is the virtual media item.
...\<vtl>\media\<mediafile>	.../<vtl>/media/<mediafile>	Actual virtual media. For example, ...\vtl1\media\4O4HR001.

To add a media item, use the following steps:

1   Stop the NetVault Service on the machine where the VTL is located.

2   In the **slots** directory, create a subdirectory which is one number larger than the existing largest numbered virtual slot directory.

3   Copy the "**.media**" file from one of the virtual slot directories to the virtual slot directory created in the previous step.

4   Modify the "**.media**" file in the newly created virtual slot directory from **"1Y2NY00*"** to **"1Y2NY00X"**, where X represents the new virtual media number.

5   Use the **nvmakemedia** command to create the media file.

6   Restart the NetVault Service.

Syntax

```
nvmakemedia <file-size> poplib <library>

nvmakemedia <file-size> mediafiles <filename>
```

Options

Table 43. nvmakemedia

Option	Description
<file-size> poplib <library>	This form of the command verifies all media reference files within the specified <library>, and offers to create the file if the corresponding media data file does not exist. Enter "Y" or "y" to confirm media file creation. • **<file-size>:** File size can be an integer value followed by "k" for kilobytes, "m" for megabytes, "g" for gigabytes, or "t" for terabytes. For example, 102400k, 50m, 4g, 2t. The minimum file size allowed is 50m. • **<library>:** Full path to the target VTL name. **Example:** `nvmakemedia 50M poplib c:\tst-vtl`
<file-size> mediafiles <filename>	This form of the command creates a media file of the specified size. • **<file-size>:** File size can be an integer value followed by "k" for KB, "m" for MB, "g" for GB, or "t" for TB (for example, 102400k, 50m, 4g, 2t). The minimum file size allowed is 50m. • **<filename>:** Full path to the new media file. The filename is used as the barcode for the media item. **Example:** `nvmakemedia 50M mediafiles c:\tst-vtl\1Y2NY006`

Notes

- To use this utility on Windows-based systems, you must be logged in with Administrator privileges.

  This utility can only be used on systems that are not added to any domain or on systems that are added to the primary domain or a domain where there is a trust relationship with the primary domain.

nvmediadetails

Description

Displays details pertaining to media items and media groups.

Syntax

```
nvmediadetails [-label <Media Label>] [-group <Group Label>] [-all]
[-listlabels] [-listgroups] [-version]
```

Options

Table 44. nvmediadetails

Option	Description
-label	Specifies the media a label for the target media item. You can specify a few initial characters to search for media items with matching labels.
-group	Specifies the media group label of the target media item.
-all	Displays details for all media items.

Table 44. nvmediadetails

Option	Description
-listlabels	Displays details for all media items that are assigned a media label. The "-group" option can be used with this option to displays media details for a particular media group.
-listgroups	Lists available media groups.
-version	Displays the build date of the NetVault distribution installed on the machine.

Examples

- Display details for a piece of media labeled "MyTape":

  `nvmediadetails -label MyTape`

- Display details of all media items belonging to the Media Group "MyGroup":

  `nvmediadetails -group MyGroup -all`

nvremovemedia

Description

Deletes all information about a piece of media from NetVault Database.

ℹ | **NOTE:** The target media item must be taken offline before issuing this command.

Syntax

`nvremovemedia [-medialabel <Media Label>] [-displaymedialist] [-version]`

Options

Table 45. nvremovemedia

Option	Description
-label	Specifies the media a label for the target media item.
-displaymedialist	Provides a list of media items that have a media label.
-version	Displays the build date of the NetVault distribution installed on the machine.

nvreusemedia

Description

Marks a piece of media for reuse.

Syntax

`nvreusemedia [-servername <Server Name>] -barcode <Barcode> |`
`-medialabel <Media Label> | -slotspec <Library Name::Slot Number>`

Options

Table 46. nvreusemedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-barcode	Specifies the barcode of the target media item.
-medialabel	Specifies the label of the target media item.
	Use this option only when searching by media label. If a media label contains spaces, enclose it within quotation marks (" ").
	Example: `"Full DB Backups"`
-slotspec	Specifies the name of the library and slot number where the target media item resides. These two values must be separated using a double colon delimiter ("::"). Use this option only when searching by library slot.

Notes

• The indexes for backups stored on the target media item are removed from the NetVault Database when you use this command.

• This utility does not support the ACSLS/ ADIC DAS library systems.

• This utility does not support disk-based storage systems such as Quest NetVault SmartDisk, Quest DR Series System, and Data Domain System.

nvscanmedia

Description

Scans media items.

You can use this utility to query all backups stored on a tape and import those backups that are not indexed in the given NetVault Server's database. You can also use the Scan method to import "foreign" tapes into the NetVault Database.

To import backups to the database, the NetVault Server must have the same NetVault Machine Name as the original server that performed the backups. The amount of time it takes to scan the tapes depends on the number of backups that need to be imported and the size of the backup indexes. The scanning process does not read the data on the tape; this process skips between the start and end of backups to read the index for each backup saveset.

A tape is marked "foreign" when NetVault cannot find any information about that item in the NetVault Database. This issue can occur when a tape is swapped between libraries, removed from the NetVault Server, or loaded on a device controlled by a different NetVault Server. NetVault cannot process data stored in a foreign tape until you scan the tape and import the media information into the NetVault Database. The scanning process retrieves the header information from the tape and adds this information to the NetVault Database.

Syntax

```
nvscanmedia [-servername <Server Name>]
-barcode <Barcode> | -medialabel <Media Label> |
-slotspec <Library Name::Slot Number> | -rasdevice <Device name>
-scanall | -force -minlifedays <Minimum Life> [-wait]
```

Options

Table 47. nvscanmedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-scanall	Scans all the labels and drives of the media item. The machine name of Tape Library/VTLs is mandatory for this option. For example,
	`nvscanmedia.exe -servername HIPUNP57176 -scanall "HIPUNP57176: C:\vtl".`
-barcode	Specifies the barcode of the target media item.
-medialabel	Specifies the label of the target media item.
	Use this option only when searching by media label. If a media label contains spaces, enclose it within quotation marks ("").
	Example: `"Full DB Backups"`
-slotspec	Specifies the name of the library and slot number where the target media item resides. These two values must be separated using a double colon delimiter ("::"). Use this option only when searching by library slot.
-rasdevice	Specifies the name of the disk-based device that you want to scan.
-force	Forces NetVault to run the scan operation for unknown media items. This option cannot be used with disk-based storage devices.
-minlifedays	Specifies the minimum life for backups that are imported to the NetVault Database. This option only applies to the backups that are not available in the NetVault Database.
	The minimum life setting is specified in number of days.
	Depending on the value set for this option, the retirement time for imported backups is modified as follows:
	• If a backup is already retired, its retirement time is set to the specified minimum life. If you specify zero, the retirement time for the retired saveset is set to one hour.
	• If a backup is scheduled to retire before the specified period, its retirement time is set to the specified minimum life.
	• If a backup is scheduled to retire after the specified period, its retirement time remains unchanged. For such backups, the backup life setting determines the retirement time.
	NOTE: When a backup stored on a disk-based storage device is retired, that backup is deleted from the device. You cannot import the deleted backup by scanning the device.
-wait	Waits until the task has completed.

nvsyncronizesilomedia

Description

Allocates all the known media in the specified ACSLS library.

Syntax

```
nvsyncronizesilomedia [-servername <Server Name>] -libraryname <Library Name>
```

Options

Table 48. nvsyncronizesilomedia

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job. This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.

nvupdateserialnumber

Description

Updates the serial number of any drive in the specified library back to its original number.

Syntax

```
nvupdateserialnumber [-servername <Server Name>] -libraryname <Library Name>
[-bayname <Bay Name>] [-checkonly]
```

Options

Table 49. nvupdateserialnumber

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job. This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-libraryname	Specifies the name of the target library.
-bayname	Specifies the name of the drive bay in which the target drive is located.
-checkonly	Checks the media serial number.

Job-specific utilities

- nvexpiresaveset
- nvjobabort
- nvjobcreate
- nvjobdelete
- nvjobhold
- nvjoblist

- nvjobmodify
- nvjobresume
- nvjobstart
- nvpolicy
- nvrestore
- nvsetcreate

- nvsetdelete
- nvsetexport
- nvsetimport
- nvsetmodify
- nvtrigger

> **i** | **NOTE:** You cannot use the command-line utilities to create jobs or sets for Virtual Clients.

i | **IMPORTANT:** Several utilities described in this section reference a file named **nvsetmodify.cfg**. This configuration file includes a list of options used to define a backup job and the associated code number that can be used to identify the option in the CLI. You can find **nvsetmodify.cfg** in <NetVault home>\config on Windows and <NetVault Home>/config on Linux. When you use the file, verify that you do not modify the contents in any manner. You can take a printout of this file and use the print for reference purposes. This functionality is intended for highly experienced users. Any attempt to use the values provided in this configuration file must be performed under the guidance of Technical Support.

nvexpiresaveset

Description

Performs the following functions:

- Deletes the specified saveset. Optionally, deletes the duplicates of the specified saveset. The savesets are deleted immediately.

- Marks multiple savesets for deletion. Optionally, includes the duplicates of the specified savesets. The marked savesets are deleted when the Media Manager performs the next "retirement check."

- Changes the expiry of more than one saveset using the expiry date or generation count.

Syntax

```
nvexpiresaveset [-duplicates] [-duplicateonly] -savesetid <Saveset ID>

nvexpiresaveset [-duplicates] [-duplicateonly] [-success] -markforexpiry -infile
<input file>
-outfile <output file>

nvexpiresaveset [-version]

nvexpiresaveset -changeexpiry [-savesetid <saveset id>] [-retiretime <DD/MM/YYYY-
HH:MM:SS>][-generationcycle <no. of full backup count>]

nvexpiresaveset -changeexpiry [-infile <input file>] [-outfile <output file>] [-
retiretime <DD/MM/YYYY-HH:MM:SS>] [-generationcycle <number of full backups>]

nvexpiresaveset -changeexpiry -allsavesets [-retiretime <DD/MM/YYYY-HH:MM:SS>] [-
generationcycle <number of full backups>]
```

Options

To delete a specific saveset and its duplicates, use the following options.

Table 50. nvexpiresaveset — Options for deleting a specific saveset and its duplicates

Option	Description
-savesetid	The NetVault saveset ID number of the instance to expire immediately or to change the expiry date. The immediate expiry option can cause dependent incremental or differential backups to retire prematurely.
-duplicates	Deletes duplicates of the specified saveset. This option can also be used to delete only the saveset of a phase 1 or phase 2 Data Copy backup, since they have different saveset IDs. Accordingly, the required saveset ID can be provided as the input to `nvexpiresaveset`.
-duplicateonly	Specifies whether only the phase 2 saveset is to be deleted. Use this option ONLY for deleting a phase 2 Duplicate copy.

To mark multiple savesets and their duplicates for deletion, use the following options.

Table 51. nvexpiresaveset — Options for marking multiple savesets and their duplicates

Option	Description
-markforexpiry	Marks savesets specified in the input file (infile) for deletion.
	If no dependent Incremental or Differential Backups exist for a saveset, the saveset is removed when the Media Manager performs the next retirement check. By default, these checks are performed at the interval of 60 minutes. To change the interval between two checks, configure the **Retirement Check Granularity in Mins** setting in the **mediamgr.cfg** file. For more information about this setting, see *Quest NetVault Administrator's Guide*.
	If any dependent Incremental or Differential Backups exist for a saveset, the saveset is removed only after all dependent backups have reached their retirement date.
-changeexpiry	The option that sets or changes the expiry of savesets using an expiry date or generation count.
-duplicates	Marks duplicates of the specified savesets for deletion. This option can also be used to delete only the saveset of a phase 1 or phase 2 Data Copy backup, since they have different saveset IDs. Accordingly, the required saveset ID can be provided as the input to `nvexpiresaveset`.
-success	Includes ID numbers of the successful savesets in the output file. Without this option, the utility includes ID numbers of the failed savesets in the output file.
-infile	Specifies the name of the input file.
	The input file contains the ID numbers of the savesets that you want to mark for deletion. You can use any text editor to create this file. Specify one saveset ID per line. Provide the complete path if the input file is not located in the directory from which you run the utility.
-outfile	Specifies the name of the output file.
	By default, the file is created in the directory from which you run the utility. Provide the complete path if you want to save the file in a different location.
-retiretime	The expiry date of saveset you want to change
	Enter the expiry time in the following format: DD/MM/YYYY-HH:MM:SS (GMT/UTC time zone).
-generationcycle	The number of full backups you want to keep.
-allsavesets	When changing the expiry date, this flag includes all savesets.

To view the version of NetVault distribution, use the following option.

- -version: Displays the build date of the NetVault distribution installed on the machine.

Examples

- Delete saveset ID 120:

  ```
  nvexpiresaveset -savesetid 120
  ```

- Delete saveset ID 150 and its duplicates:

  ```
  nvexpiresaveset -duplicates -savesetid 150
  ```

- Mark savesets included in input file "C:\deletelist.txt" for deletion. Send the default output to "C:\failedlist.txt":

  ```
  nvexpiresaveset -markforexpiry -infile "c:\deletelist.txt"
  -outfile "c:\failedlist.txt"
  ```

- Mark savesets included in the input file "deletelist.txt" and their duplicates for deletion. Send the list of successful savesets to the output file "marked.txt":

```
nvexpiresaveset -duplicates -success -markforexpiry -infile deletelist.txt
-outfile marked.txt
```

- Change the retirement time of all savesets to the given time in the command:

```
nvexpiresaveset -changeexpiry -allsavesets -retiretime 12/11/2020-09:45:36 -
generationcycle 10
```

- Change the retirement time of the specified saveset to the given time in the command:

```
nvexpiresaveset -changeexpiry -savesetid 54 -retiretime 12/11/2020-09:45:36
```

- Change the retirement time of all savesets specified in "input.txt" to the time given in the command. Send the list of savesets that failed to change the retirement time:

```
nvexpiresaveset -changeexpiry -infile "C:\input.txt" -outfile "C:\output.txt"
-retiretime 12/11/2020-09:45:36 -generationcycle 10
```

nvjobabort

Description

Aborts an active job.

Syntax

```
nvjobabort [-servername <NetVault Server Name>] -jobid <Job ID>
[-instanceid <Instance ID>]
```

Options

Table 52. nvjobabort

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-jobid	Specifies the ID of the job that you want abort.
-instanceid	Specifies the ID of the instance that you want to abort. The default value for this option is 1.

nvjobcreate

Description

Create and schedules a backup or restore job. You can also use this utility to save a job definition without scheduling it.

The **nvjobcreate** utility does not provide any option to configure the Restore Options. These options must be included in the Restore Selection Set. The **nvsetcreate** utility provides an option that can be used to specify Restore Options in the Restore Selection Set. For more information, see nvsetcreate.

Syntax

```
nvjobcreate [-servername <NetVault Server Name>] -jobtitle <Job Title> [-type <Job
Type>] -selectionsetname <Backup or Restore Selection Set Name>
[-selectionoptionssetname <Backup Options Set Name>]
[-schedulesetname <Schedule Set Name>] [-backupoption <Backup Option>=<value>]
[-targetsetname <Target Set Name>] [-advoptssetname <Advanced Options Set Name>]
[-jobidfile <Output Filename>] -submit -parameters <Parameter Filename> [-version]
```

Options

Table 53. nvjobcreate

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-jobtitle	Specifies the name of the job.
-type	Specifies the job type: backup or restore. The default value for this option is **"backup."**
-selectionsetname	Specifies the name of the Backup or Restore Selection Set. You can use the NetVault WebUI or the **nvsetcreate** utility to create this set.
-selectionoptionsset name	Specifies the name of the Backup Options Set. This option must be specified when creating a backup job.
	If you do not specify this option while creating a backup job, the job is created successfully. However, when you try to run the job from the CLI or WebUI, it reports an error and fails. When you try to view the job definition from the WebUI, the **Manage Job Definitions — View Job** page does not show any details.
-schedulesetname	Specifies the name of the Schedule Set. The job is scheduled to run immediately if you omit this option. You can use the NetVault WebUI or the **nvsetcreate** utility to create this set.
-backupoption	Specifies Backup Options for a job.
	To use this option, you require the "Tag ID" of the option that you want to set. The Tag ID can either be the backup option name as recognized by the CLI or a numeric value assigned to the option by NetVault. Both of these values are grouped under the **[Plugin Options]** section in the **nvsetmodify.cfg** file.
	The format for specifying this option is:
	`-backupoption <Tag ID>=<value>`
	Example:
	`-backupoption <Tag ID>=True/False`
-targetsetname	Specifies the name of the Target Set. You can use the NetVault WebUI or the **nvsetcreate** utility to create this set. If you do not specify a Target Set, the default target options displayed on the NetVault WebUI are used.
-advoptssetname	Specifies the name of the Backup or Restore Advanced Options Set. You can use the NetVault WebUI or the **nvsetcreate** utility to create this set. If you do not specify an Advanced Options Set, the default target options displayed on the NetVault WebUI are used.
-jobidfile	Specifies the name of the output file that stores the Job ID.
	This option is useful if the **nvjobcreate** utility is configured to return the exit status instead of Job ID. For more information about the configuration option, see the *Quest NetVault Administrator's Guide*.
	You can provide an absolute or a relative path for the file. The file stores the Job ID as a string. You can use a script to read this string. This file must be deleted manually after use.

Table 53. nvjobcreate

Option	Description
-submit	Schedules a job and lists it as an active job.
	If you omit this option, the job definition is only saved and not scheduled to run. You can schedule it later using the **nvjobmodify** utility.
-parameters	Reads options from a parameter file.
	You can use any text editor to create the parameter file. Specify one option with its value per line and omit "-" before the option. Use spaces or tabs to separate the option and values. To include comments, begin the line with a "#" character.
	Example:
	`# nvjobcreate example file`
	`jobtitle cli job 1`
	`selectionsetname cliselset`
	This file can be used with the **-parameters** option as follows:
	`./nvjobcreate -parameters example.txt`
-version	Displays the build date of the NetVault distribution installed on the machine.

Note

After using the **nvjobcreate** command to create one or more jobs, if you run the following **nvreport** command, the Scheduler may crash:

```
nvreport -class "Defined Jobs" -format "%SelectionOptions"
```

Workaround: From the NetVault WebUI, open the jobs for editing and save them without any changes.

Examples

- Create an Incremental Backup job using the Backup Selection Set "CLIENT 1 Full Data Backup" and Schedule Set "Repeating 1." The job name is "Incremental Backup of CLIENT1" and the job is administered by a local NetVault Server:

```
nvjobcreate -jobtitle "Incremental Backup of CLIENT1" -type backup
-selectionsetname "CLIENT 1 Full Data Backup"
-backupoption ntfsopt_typeincr=true -schedulesetname "Repeating 1" -submit
```

- Create a restore job using the Restore Selection Set "RestoreFull" and submit the job to run immediately. The job name is "Restore of Full Backup" and the backup job was administered by a remote NetVault Server "SERVER2."

```
nvjobcreate -jobtitle "Restore of Full Backup" -servername SERVER2
-type restore-selectionsetname RestoreFull -submit
```

nvjobdelete

Description

Deletes jobs that match the specified criteria.

Syntax

```
nvjobdelete [-servername <NetVault Server Name>]
[-jobid <Job ID>] [-type <Job Type>]
```

```
[-jobrange <Job ID-Job ID>] [-jobtitle <Job Title>] [-client <Client Name>]
[-plugin <Plug-in Name>] [-selectionsetname <Selection Set Name>]
[-schedulesetname <Schedule Set Name>] [-targetsetname <Target Set Name>]
[-advoptssetname <Advanced Options Set Name>] [-force] [-scheduleonly] [-version]
```

Options

Table 54. nvjobdelete

Option	Description
-servername	Specifies the name of the target NetVault Server.
-jobid	Specifies the ID of the job that you want to delete. Only one Job ID can be specified with this option.
-type	Specifies the type of job that you want to delete: backup or restore.
	Use this option if you want to delete a specific job type. Do not use this option if you want to delete all job types.
-jobrange	Specifies a range of Job ID numbers corresponding to a series of jobs that you want to delete. Use a hyphen to separate the start and end Job ID numbers.
	Example:
	`-jobrange 30-45`
-jobtitle	Specifies the name of the job that you want to delete. You must provide the full name and enclose the name in quotation marks.
	Example:
	`-jobtitle "Full_Backup_1"`
	The **-jobtitle** option deletes a single job.
	You can use the -**jobrange** option with the -**jobtitle** option to delete multiple jobs that use the same job title.
-client	Specifies the name of the NetVault Client that served as target for the jobs. Use this option to delete all jobs for the specified client.
	Example
	`-client "NV_Client_MKTG"`
-plugin	Specifies the name of the plug-in used to perform the jobs. Use this option to delete all jobs that were performed using a particular plug-in. The plug-in name must be enclosed in quotation marks.
	Example:
	`-plugin "File System"`
-selectionsetname	Specifies the name of the Backup or Restore Selection Set that was used to create the jobs.
-schedulesetname	Specifies the name of the Schedule Set that was used to create the jobs.
-targetsetname	Specifies the name of the Target Set that was used to create the jobs.
-advoptssetname	Specifies the name of the Advanced Options Set that was used to create the jobs.
-force	Deletes matching jobs that are scheduled to run.
	If a job that meets the criteria set by other option is in queue (scheduled to run later), any attempt to delete it fails. Use the "-force" option to delete such jobs.
-scheduleonly	Remove jobs from the job queue without deleting them from the NetVault Database. Use this option in lieu of **-force**.
-version	Displays the build date of the NetVault distribution installed on the machine.

Notes

- This note applies to the use of the following options with **nvjobdelete** command:

- -client

- -plugin

- -selectionsetname

- -schedulesetname

- -targetsetname

- -advoptssetname

When any of these options are used alone in the syntax, all instances of a job that meet the set parameters are deleted. For example, the following command deletes all jobs for the Plug-in *for FileSystem*:

```
nvjobdelete -plugin "File System"
```

To delete specific jobs, use a combination of options. For example, if you specify the **-jobrange** option with the **-plugin** option, only jobs that fall into the specified Job ID range specified are deleted.

Examples

- Delete jobs with the following Job ID numbers: 1, 5, range 7-12, range 15-19:

```
nvjobdelete -jobid 1 -jobid 5 -jobrange 7-12 -jobrange 15-19
```

- Delete all backup jobs that have the job name "Backup of Client-A" and job ID numbers between 70 and 100:

```
nvjobdelete -type backup -jobtitle "Backup of Client-A" -jobrange 70-100
```

- Delete all jobs for "Client-A" that use the Schedule Set "FirstTuesday":

```
nvjobdelete -client Client-A -schedulesetname FirstTuesday -force
```

nvjobhold

Description

Places a job on hold. You can use the **nvjobresume** utility to resume the job later.

Syntax

```
nvjobhold [-servername <NetVault Server Name>] -jobid <Job ID>
[-phaseid <Phase ID>] [-version]
```

Options

Table 55. nvjobhold

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-jobid	Specifies the ID of the job that you want to place on hold. Only one Job ID can be specified with this option.

Table 55. nvjobhold

Option	Description
-phaseid	Specifies the phase ID.
	Use this option to place a particular phase on hold. If you omit this option, all scheduled phases of the specified job are placed on hold.
-version	Displays the build date of the NetVault distribution installed on the machine.

nvjoblist

Description

Displays all active jobs. The output is displayed in fixed column format.

Syntax

```
nvjoblist [-servername <NetVault Server Name>] [-delimiter <Delimiter>]
[-title <Job Title>] [-noheader] [-runinfo] [-version]
```

Options

Table 56. nvjoblist

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-delimiter	Specifies the character that you want to use as a delimiter. By default, a white-space character is used as a delimiter.
-title	Specifies the name of the job. Use this option to display all jobs with the specified name. You must provide the full name and enclose the name in quotation marks.
	Example:
	-title "Full_Backup_1
-noheader	Suppresses display of header row.
-runinfo	Includes run status and next run time in the output.
-version	Displays the version number of the CLI tools and the build date of the NetVault distribution installed on the machine.

nvjobmodify

Description

Modifies a job definition.

Syntax

```
nvjobmodify -jobid <Job ID> -jobname <Job Title> -type <Job Type>
[-change <Change Description>] [-submit] [-parameters <Parameter File>]
[-assign <Assignment Character>] [-delimit <Delimiter Character>] [-version]
```

Options

Table 57. nvjobmodify

Option	Description
-jobid	Specifies the ID of the job that you want to modify.
	Example
	`-jobid 56`
	This option is not required if you specify the **-jobname** option.
-jobname	Specifies the name of the job that you want to modify. The job name must be enclosed in quotation marks.
	If two or more jobs on the NetVault Server have the same name, the command fails. In such cases, you must use the **-jobid** option.
-type	Specifies the type of job that you want to modify (backup or restore)
-change	Specifies the changes that you want to make to the job definition. You can specify any number of values with this option. You can omit this option if you want to submit a job without any changes.
	The **<Change description>** variable for the **-change** option is formatted as follows:
	`<item>[:<field>]=<value>`
	<item> can take one of the following values: Title, Set, or Options.
	<field> calls out a specific field in the item that you want to modify.
	<value> is the new setting for the selected field.
	Change items:
	• **Title:** Changes the job name.
	• **Set:** Changes the set used to define a job. <value> specifies the new set name. <field> may take any of the following values:
	BS: Backup Selection Set
	BO: Backup Options Set
	S: Schedule Set
	BT: Backup Target Options Set
	AB: Backup Advanced Options Set
	RS: Restore Selection Set
	AR: Restore Advanced Options Set

Table 57. nvjobmodify

Option	Description

	• **Options:** Modifies the backup options for a job.
	
	To use this option, you require the "Tag ID" of the option that you want to set. The Tag ID can either be the backup option name as recognized by the CLI or a numeric value assigned to the option by NetVault. Both of these values are grouped under the **[Plugin Options]** section in the **nvsetmodify.cfg** file.
	
	The format for specifying this option is:
	
	`Options:<Tag ID>=<value>`
	
	Example:
	
	`Options:<Tag ID>=True/False`
	
	NOTE: If you specify a trigger name that is used by any other job, an error message ("The Trigger Name is Already in Use. Redefine this Job if this was not Intended.") is displayed when you try to save or submit the job. The message is for information only and does not stop you from saving or submitting the job.

-submit	Schedules a job. This option may also be used on its own to schedule jobs that have been created but not scheduled.

-parameter	Reads options from a parameter file.
	
	You can use any text editor to create the parameter file. Specify one option with its value per line and omit "-" before the option. Use spaces or tabs to separate the option and values. To include comments, begin the line with a "#" character.
	
	Example
	
	`# nvjobmodify example file`
	`jobname Backup File System 10-15`
	`type backup`
	`change Set:BS=selectionsetcli`
	
	This file can be used with the **-parameter** option as follows:
	
	`./nvjobmodify -parameter example.txt`

-assign	Specifies the assignment operator that you want to use in change descriptions. The default assignment operator is the "=" character. This option must be specified if the old or new values contain the "=" character.
-delimit	Specifies the character that you want to use as a delimiter in change descriptions. The default delimiter is the ":" character. This option must be specified if old or new values contain the ":" character.
-version	Displays the build date of the NetVault distribution installed on the machine.

Examples

• Modify the job "Backup File System 10-15" to perform Incremental Backup instead of Full Backup using the Plug-in *for FileSystem*:

```
nvjobmodify -jobname "Backup File System 10-15"
-change Options:ntfsopt_typeincr=true
```

nvjobresume

Description

Resumes a job that was previously placed on hold. Only one job can be resume with a single use of this command.

Syntax

```
nvjobresume [-servername <NetVault Server Name>] -jobid <Job ID>
[-phaseid <Phaseid>] [-version]
```

Options

Table 58. nvjobresume

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-jobid	Specifies the ID of the job that you want to resume. Only one Job ID can be specified with this option.
-phaseid	Specifies the phase ID.
	Use this option if you want to resume a particular job phase. If you omit this option, all known phases of the specified job are resumed.
-version	Displays the build date of the NetVault distribution installed on the machine.

nvjobstart

Description

Runs a job using its Job ID, phase number, and instance number.

> **i** | **NOTE:** The nvjobstart command always starts a new job instance. It does not restart a stopped job.

Syntax

```
nvjobstart [-servername <NetVault Server Name>] -jobid <Job ID>
-phase <Phase number> -instance <Instance number> [-wait] [-version]
```

Options

Table 59. nvjobstart

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-jobid	Specifies the ID of the job that you want to run.
-phase	Specifies the phase number to start. The default value for this option is 1.

Table 59. nvjobstart

Option	Description
-instance	
	Specifies the instance number that you want `nvjobstart` to use as a reference to run on the new instance of the job.
	NOTE: The instance number does not restart the specified job instance. The instance number retrieves the instance of the job that you want as the basis for the new job instance on which `nvjobstart` runs.
	If this option is not specified or the specified instance does not exist, the last instance of the job is used as a reference .
-wait	Waits until the task has completed.
-version	Displays the build date of the NetVault distribution installed on the machine.

Notes

- By default, the **nvjobstart** utility returns the following messages depending on the job exit codes.

Table 60. Default job exit codes and status messages

Exit code	Status message
0	Job completed successfully
1	Job failed with error: 'Job Failed'
	This message is returned for the following job completion states:
	• Job failed
	• Job completed with warnings
	• Job aborted
	• Job stopped
	• Job died

If you enable the option **nvjobstart Enhanced Job Completion Status**, the utility returns the following codes and messages:

Table 61. Enhanced job exit codes and status messages

Exit code	Status message
0	Job completed successfully
1	Job Failed
2	Job Completed with Warnings
3	Job Aborted
4	Job Stopped
5	Job Died
-1	Job Failed with Undefined Error

For more information about this option, see the *Quest NetVault Administrator's Guide*.

nvpolicy

Description

Performs the following tasks:

- Creates a policy definition

- Displays policy jobs

- Deletes a policy

- Checks whether a policy job exists or not

- Defines clients for a policy job

- Places a policy in quiesced state

Syntax

```
nvpolicy -list [<Policy Name>] -delete <Policy Name> -ack <Policy Name>
-addclient <Policy Name> <client name> [ <Client Name> ... ] -addgroup <Policy Name>
<Group Name> [ <Group Name> ...] create <Policy Definition File>
-state <Policy Name> -quiesce <Policy Name>
```

Options

Table 62. nvpolicy

Option	Description
-list	Displays existing policies. To view the list of jobs defined for a policy, use this option with the policy name. For example, the following command lists all jobs defined for policy "p1": `nvpolicy -list p1`
-delete	Deletes the specified policy.
-ack	Acknowledges errors.
-addclient	Adds clients to the policy definition. For example, the following command adds clients "Client-A" and "Client-B" to the policy "p1": `nvpolicy -addclient p1 Client-A Client-B`
-addgroup	Adds client groups to the policy definition. For example, the following command adds client groups "Group-A" and "Group-B" to the policy "p1": `nvpolicy -addgroup p1 Group-A Group-B`

-create	Creates a policy using details specified in the policy definition file. The file must be created in the following format:
	Example:
	`[Policy]`
	`Title=policy3`
	`EvtWarn=Event-Warn-1`
	`EvtFail=Event-Fail-1`
	`Clients=client-1,client-2,client-3,client-4`

Table 62. nvpolicy

Option	Description
| | ```
[Job]
Title=MyJob
Selection=MySelection
Options=MyOption
Target=MyTarget
Source=MySource
Schedule=MySchedule
Advanced=MyAdvanced
Active=TRUE
``` |
	NOTE: The Source option is only required when defining a job for the Plug-in *for Consolidation* and or Plug-in *for Data Copy*.
	A policy can contain one or more job definitions. For multiple jobs, include a [Job] section for each job as shown in the following example.
	Example:
| | ```
[Policy]
Title=policy3
EvtWarn=Event-Warn-1
EvtFail=Event-Fail-1
Clients=client1,client2,client3,client4
[Job]
Title=MyJob
Selection=MySelection
Options=MyOption
Target=MyTarget
Source=MySource
Schedule=MySchedule
Advanced=MyAdvanced
Active=TRUE
[Job]
Title=MyJob-2
Selection=MySelection-2
Options=MyOption-2
Target=MyTarget-2
Schedule=MySchedule-2
Advanced=MyAdvanced-2
Active=TRUE
``` |
| -state | Displays the current state of a policy — Dormant, Active, or Quiescing. |
| quiesce | Places an active policy in a quiesced state. |

nvrestore

Description

Performs the following tasks:

- Displays restore jobs. You can filter the list by date, client, plug-in, or Backup Selection Set used for the job.

- Creates restore jobs. You can also use this utility to relocate or rename data during restore.

Syntax

```
nvrestore -list [-targetserver <NetVault Server Name>] [-client <NetVault Client
Name>] [-plugin <Plug-in Name>] [-select <Selection Set Name>] [-startdate
<DD/MM/YY>] [-enddate <DD/MM/YY>]
```

```
nvrestore -create <Saveset> -title <Job Title> -path <Path> [-relocate <New Path>]
[-rename <New Name>] [-targetserver <NetVault Server Name>] [-targetclient <NetVault
Client Name>] [-run [-wait]]
```

```
nvrestore -create <Saveset> -definition <Restore Definition File> [-targetserver
<NetVault Server Name>] [-targetclient <NetVault Client Name>] [-run [-wait]]
```

Options

To list the restore jobs administered by the NetVault Server, use the following options.

Table 63. nvrestore - Options for listing restore jobs

Option	Description
-list	Displays all restore jobs administered by the NetVault Server.
-client	Specifies the name of the target NetVault Client. Use this option filter the list by the specified client.
-plugin	Specifies the plug-in name. Use this option to filter the list by the specified plug-in.
-select	Specifies the name of the Restore Selections Set. Use this option to filter the list by the specified set. **NOTE:** The `-plugin` and `-select` options are mutually exclusive and cannot be used together in the same instance of a `nvrestore -list` command.
-startdate	Specifies the start date. Use this option to display the jobs performed between the start date and end date. If the end date is not specified, all jobs starting from the start date up to the last job are listed. The valid format for the start date is DD/MM/YY.
-enddate	Specifies the end date. Use this option to display the jobs performed between the start date and end date. If the start date is not specified, all jobs starting from the first job up to the specified end data are listed. The valid format for the start date is DD/MM/YY.
-targetserver	Specifies the name of the NetVault Server to access and perform the `nvrestore` task. Use this option to select a NetVault Server that will perform `nvrestore` accessing the Savesets hosted in the NetVault Server. If `-targetserver` is not specified, `nvrestore` attempts to access and run in the local machine. Use the option `-targetserver` to run `nvrestore` in a remote NetVault Server.

To create a restore job, use the following options.

Table 64. nvrestore - Options for creating a restore job

Option	Description
-create	Creates and optionally schedules a restore job.
	Specify the ID of the backup saveset that you want to restore. In addition to the saveset number, you can preface the saveset number with the name of the client from which the backup was taken and the name of the plug-in used to take the backup, each separated with a colon.
	Example:
	`59:NVCLIENT:filesystem`
	This format helps in reducing the time taken to locate the saveset.
-title	Specifies the name of the job.
-path	Specifies the directory or file that you want to restore. Provide the full path to the items.
-relocate	Relocates the selected items to the specified path or directory. Ensure that the specified path is created before you run the restore job.
-rename	Renames the selected items. You can use this option if you do not want to overwrite existing files or directories.
-run	Runs the job. Without this option, the restore job is created and saved, but it is not scheduled to run.
-wait	Waits until the task has completed.
	With this option, the utility return a result of "job succeeded" or "job failed" before releasing the prompt for additional commands.
-targetserver	Specifies the name of the NetVault Server to access and perform the `nvrestore` task. Use this option to select a NetVault Server that will perform `nvrestore` accessing the Savesets hosted in the NetVault Server. If `-targetserver` is not specified, `nvrestore` attempts to access and run in the local machine. Use the option `-targetserver` to run `nvrestore` in a remote NetVault Server.
-targetclient	Specifies the name of the target NetVault Client destination of the restore. Use this option to select a NetVault Client where the data will be restored. The option `-targetclient` applies only to `nvrestore -create` option. If `-targetclient` is not specified, `nvrestore` attempts to restore the data in the local machine. Use the option `-targetclient` to instruct `nvrestore` to restore the data to a remote NetVault Client.

To create a restore job from a job definition file, use the following options.

Table 65. nvrestore - Options for creating a job from a job definition file

Option	Description
-create	Creates and optionally schedules a restore job.
	Specify the ID of the backup saveset that you want to restore. In addition to the saveset number, you can preface the saveset number with the name of the client from which the backup was taken and the name of the plug-in used to take the backup, each separated with a colon.
	Example: `59:NVCLIENT:filesystem`
	This format helps in reducing the time taken to locate the saveset.
-definition	Specifies the name of the job definition file. Provide the full file path.
	The definition file includes a list of files or directories that you want to include or exclude.

	It must use the following format:
	`[Restore]`
	`Title=<Job Title>`
	`Schedule=<Schedule Set name>`
	`Advanced=<Advanced Options Set name>`
	`[Include]`
	`Path=<Full path to restore items>`
	`Relocate=<Relocation path> (Ensure that the path is created before you`
	`run the job.)`
	`Rename=<New name for the item> (You can use this option if you do not`
	`want to overwrite existing files or directories.)`

-run	Runs the job. Without this option, the restore job is created and saved, but not scheduled to run.
-wait	Waits until the task has completed.
	With this option, the utility return a result of "job succeeded" or "job failed" before releasing the prompt for additional commands.
-targetserver	Specifies the name of the NetVault Server to access and perform the `nvrestore` task. Use this option to select a NetVault Server that will perform `nvrestore` accessing the Savesets hosted in the NetVault Server. If `-targetserver` is not specified, `nvrestore` attempts to access and run in the local machine. Use the option `-targetserver` to run `nvrestore` in a remote NetVault Server.
-targetclient	Specifies the name of the target NetVault Client destination of the restore. Use this option to select a NetVault Client where the data will be restored. The option `-targetclient` applies only to `nvrestore -create` option. If `-targetclient` is not specified, `nvrestore` attempts to restore the data in the local machine. Use the option `-targetclient` to instruct `nvrestore` to restore the data to a remote NetVault Client.

Notes

The following rules apply to Restore Definition File:

- The "Schedule" and "Advanced" entries must be included in the [Restore] stanza even if specific Schedule and Restore Advanced Options Sets are not required. You can use the NetVault WebUI or the **nvsetcreate** utility to create these sets.

- Only one item can be specified per line in the [Include] stanza.

  `[Include]`

  `C:\data`

```
C:\new

C:\Program Files
```

- For the **Rename** and **Relocate** options, a separate [Include] stanza must be created for each item. **Correct**

```
[Include]

path=C:\data\files

relocate=C:\data\new

[Include]

path=C:\Program Files

relocate=C:\Old Program Files
```

Incorrect

```
[Include]

path=C:\data\files

path=C:\Program Files

relocate=C:\data\new

relocate=C:\Old Program Files
```

- Both the **Rename** and **Relocate** options can be specified within the same instance of the [Include] stanza to perform both operations for a single file or directory.

`[Include]`

`path=C:\data\new` (data that you want to restore and its original path)

`relocate=C:\saved\data` (the relocation path)

`rename=C:\saved\data\old` (the relocation path along with the new directory name)

- The relocation directory must exist on the target system before you run the restore job. You can create and save the job without using the **"-run"** parameter and establish a new directory for relocation in the command, but when you runt the job, the target relocation directory must exist.

nvsetcreate

Description

Creates a set.

Syntax

```
nvsetcreate [-setname <Set Name>] -type <set type> <Set Type Specific Options>
-assign <Assignment Character> -delimit <Delimiter Character>
-parameters <Parameter Filename>] [-version]
```

> ℹ️ **NOTE:** When used to select nodes for backup and restore, the `nvsetcreate` command does not interpret a single quote and instead changes it to a blank space. To avoid this issue, write the string arguments that use single quote in a parameter file and indicate the file in the `nvsetcreate -parameters` switch.

Options

Table 66. nvsetcreate

Option	Description
-setname	Specifies the name of the set that you want to create.
-type	Specifies the set type and set-specific options.
	The set type can be one of the following:
	• **BS**: Backup Selection Set
	• **BO**: Backup Options Set
	• **S**: Schedule Set
	• **BT:** Backup Target Set
	• **AB**: Backup Advanced Options Set
	• **RS**: Restore Selection Set
	• **AR**: Restore Advanced Options Set
	To obtain a list of available options for any set type, use the following command:
	`nvsetcreate -type <set type> -- help`
	Example:
	`nvsetcreate -type BS -- help`
	For information about set-specific options, see the following sections:
	• Backup Selection Set
	• Restore Selection Set
	• Backup Options Set
	• Schedule Set
	• Backup Target Set
	• Backup Advanced Options Set
	• Restore Advanced Options Set
-assign	Specifies the assignment operator that you want to use in change descriptions. The default assignment operator is the "=" character. This option must be specified if the old or new values contain the "=" character.
-delimit	Specifies the character that you want to use as a delimiter in change descriptions. The default delimiter is the ":" character. This option must be specified if old or new values contain the ":" character.
-parameters	Reads options from a parameter file.
	You can use any text editor to create the parameter file. Specify one option with its value per line and omit "-" before the option. Use spaces or tabs to separate the option and values. To include comments, begin the line with a "#" character.
	Example:

	`# nvsetcreate example file`
	`setname workbackup`
	`type BS`
	`client WinClient`

	This file can be used with the **-parameters** option as follows:
	`./nvsetcreate -parameters example.txt`

Notes

- The Plug-in *for NDMP* allows you to create only Backup Selection Sets using the **nvsetcreate** utility.

- When creating a set for the Plug-in *for NDMP*, if you specify an existing set name, the **nvsetcreate** utility overwrites the set. You can use the **nvsetcreate** utility to modify a set for this plug-in instead of **nvsetmodify**.

Backup Selection Set

Options

Table 67. Backup Selection Set

Option	Description
-client <client>	Specifies the name of the NetVault Client that you want to back up.
-plugin <plug-in name>	Specifies the name of the plug-in that you to use for the backup. The plug-in names must appear exactly as they do on the NetVault WebUI. **Example:** `-plugin "File System"`
-include <path	Specifies the backup path. Include the names of each node under the selected item in the tree as they appear on the NetVault WebUI. Separate the nodes using "/" or "\" depending on the client operating system.
-exclude <path>	Specifies the paths that you want to omit during backup. It must be specified in the same way as the included paths. This option can only be used to exclude items that appear under items that have already been named for inclusion.
-info <path=value[:value[:…]]>	Specifies plug-in information object attached to a node in the selection tree. This information is unavailable to the plug-in at backup time. It can only be specified for nodes where the default values are always added by the plug-in. The type and order of the values is plug-in dependant. For more information, contact Technical Support.
-browsesetting <entry>	Specifies the Tag name and setting for the selected option. Use this option to create Selection Set for filers with limited or no browse capability. To list the tags, type: `nvsetcreate -type BS -helpndmptags` The available tags are: LEVEL – NDMPC_TAG_LEVEL HIST – NDMPC_TAG_GET_FILE_INFO UPDATE – NDMPC_TAG_UPDATE DIRECT –NDMPC_TAG_DIRECT_IF_POSSIBLE

Notes

- When creating a Selection Set for backing up the root directory using NetVault Plug-in *for FileSystem*, do not include the last "\" character. Specify only the drive letter. Thus, use the path C: instead of C:\.

  Example:

  ```
  nvsetcreate -setname testset -type BS -client WINCLIENT1 -plugin "File System"
  -include "Fixed Drives\C:"
  ```

- When using the **-include** option in Backup Selection Sets for Plug-in *for Consolidation*, Plug-in *for Data Copy*, or Plug-in *for Raw Devices*, specify the full file path as displayed on the NetVault WebUI.

  - Use "/" to separate the tree items. Regardless of the OS in use, the forward slash ("/") can be used as a separator.

  - Delimit the path with double quotation marks

  - Include the complete Saveset Title:

    ```
    /JobTitle(Savesetnum) hh:mm DD MM YYYY
    ```

Example:

```
nvsetcreate -setname DataCopy1 -type BS -client ukwk1115 -plugin "Data Copy"
-include "Backups/ukwk1115/File System/spanningTapes (Saveset 106) 11:00 31 jul
2011"
```

Examples

- Create a Backup Selection Set for a Windows-based client "WinClient" to back up all files in the "C:\work" directory using the Plug-in *for FileSystem*, while excluding the file "a.zip":

```
nvsetcreate -setname workbackup -type BS -client WinClient
-plugin "File System" -include "Fixed Drives\C:\work" -exclude "C:\work\a.zip"
```

- Create a Backup Selection Set for Isilon filer (with no browse capability) to perform level 1 backup of the data in the directory "Isilon/ifs/data/testdata/small":

```
nvsetcreate -setname Isilon_Dump1 -type BS -client Interop_r14
-plugin "NDMP Client" -browsesetting NDMPC_TAG_LEVEL=1
-include "Isilon/ifs/data/testdata/small"
```

Restore Selection Set

Options

Table 68. Restore Selection Set

Option	Description
-client <client>	Specifies the name of NetVault Client from which the data was backed up.
-plugin <plug-in name>	Specifies the name of the plug-in that was used to perform the backup. The plug-in names must appear exactly as they do on the NetVault WebUI. **Example:** `-plugin "File System"`
-saveset <ID>	Specifies the ID of the saveset that you want to restore. Use this option when you want to restore a particular saveset. Alternatively, use the **-title** option to restore data from the latest saveset for that backup.
-title <title>	Specifies the name of the backup that you want to restore. If the saveset name contains a tag (backup type identifier), make sure that it is included in the job name (separated by a "-"). **Example:** If the job name is "Test Backup" and the tag or backup type identifier is "VSS Full," then specify: `-title "Test Backup - VSS FULL"` If more than one saveset exists for the job, the latest one is used. To restore data from a particular saveset, use the **-saveset** option.
-timestamp <HH:MM DD MMM YYYY>	Specifies the timestamp of the saveset that you want to restore. This option can be used with the **"-title"** option to create a Restore Selection Set without specifying the saveset ID. The month names are specified in MMM format (for example, "Jan" for "January"). These names are specified in English. **Example:** `-timestamp "19:25 21 Apr 2016"`
-include <path	Specifies the path that you want to restore. It should specify the names of each node under the selected item in the tree as they appear on the NetVault WebUI. The nodes must be separated by "/" or "\" depending on the client operating system. **NOTE:** The **-include** option must be specified before the **-rename** option when both options are used in a Restore Selection Set.

Table 68. Restore Selection Set

Option	Description
-exclude <path>	Specifies the paths that you want to omit during restore. It must be specified in the same way as the included paths. This option can only be used to exclude items that appear under items that have already been named for inclusion.

-rename <path> =<new name or path>	Renames or relocates restore items.
	
	You can combine both options or use each independently. If you want to rename an item without relocating it, provide only the new name. To relocate an item, provide he full path.
	
	When relocating data to a different path, verify that the path exists on the target machine before you run the command.
	
	Examples:
	
	• Rename only:
	`-rename /usr/joe/diary=diary.old`
	
	• Relocate only:
	`-rename /usr/joe/diary=/home/joe/diary`
	
	• Rename and Relocate:
	`-rename /usr/joe/diary=/home/joe/diary.old`
	
	NOTE: When you use the **-rename** option to rename and relocate, NetVault automatically splits the new path into the relocate section and the rename section. If a NetVault plug-in requires you to specify rename and relocate in the same section, use double quotes around the new path to instruct NetVault to keep the selections in the same path and to use the entire literal path for the rename section. For example:
	
	`-rename /usr/joe/diary="/home/joe/diary.old"`
	`-rename /filename/volume="filename_target/volume_target"`

-restoreoption <option=value>	Specifies Restore Options for a job. To use this option, you require the "Tag ID" of the option that you want to set. The Tag ID can either be the backup option name as recognized by the CLI or a numeric value assigned to the option by NetVault. Both of these values are grouped under the **[Plugin Options]** section in the **nvsetmodify.cfg** file. The format for specifying this option is: `-restoreoption <Tag ID=value>`
-restoretarget <client>	Specifies the name of the target client. By default, items are restored to the same client that they were backed up from. When restoring data to an alternate client, ensure that the selected plug-in is installed on the client.
-info <path=value[:value[:…]]>	Specifies plug-in information object attached to a node in the selection tree. The type and order of the values is plug-in dependant. For more information, contact Technical Support.

Examples

• The following example creates a Restore Selection Set "restorebig" that restores data from saveset ID "320" created with the Plug-in *for FileSystem*. The data was backed up from client "isp9039." The set includes the entire volume for restore except directory "/a1"and relocates the file "document" from "/usr/var" to "usr/tmp" directory. Lastly, it enables the restore option "Overwrite Newer Files":

```
nvsetcreate -setname restorebig -type RS -client isp9039 -plugin "File System"
-saveset 320 -include "/" -exclude /a1
-rename /usr/var/document=/usr/tmp/document
-restoreoption NVFS_OPT_OVERNEW=TRUE
```

• The following example creates a Restore Selection Set using the **-timestamp** option:

```
nvsetcreate -setname fs_time -client Client-A -type RS -plugin "File System"
-title fs_full -timestamp "19:25 21 Apr 2016" -include c:\testdata\small\data
```

Backup Options Set

Options

Table 69. Backup Options Set

Option	Description
-client <client>	Specifies the name of the NetVault Client that you want to back up.
-plugin <plug-in name>	Specifies the name of the plug-in that you to use for the backup. The plug-in names must appear exactly as they do on the NetVault WebUI.
	Example: `-plugin "File System"`
-backupoption <option=value>	Specifies backup options for a job.
	To use this option, you require the "Tag ID" of the option that you want to set. The Tag ID can either be the backup option name as recognized by the CLI or a numeric value assigned to the option by NetVault. Both of these values are grouped under the **[Plugin Options]** section in the **nvsetmodify.cfg** file.
	The format for specifying this option is:
	`-backupoption <Tag ID>=<Value>`
	To specify multiple backup options:
	`-backupoption <Tag ID>=<Value> -backupoption <Tag ID>=<Value> ...`
	Example:
	`-backupoption NTFSOPT_SHADOW_COPY=true -backupoption NTFSOPT_TYPEFULL=true  -backupoption NTFSOPT_RESTARTABLE=true`
-backupoptionspath <path>	Specifies the backup options path.
	This option is only applicable if a plug-in can specify different backup option page depending on a selection path within that plug-in. It can be used to specify a particular backup options page from a selection path.

Examples

- Create a Backup Options Set to perform Incremental Backups using Plug-in *for FileSystem*:

```
nvsetcreate -setname FSOptions -type BO -client WinClient
-plugin "File System" -backupoption NTFSOPT_TYPEINCR=true
```

- Create a Backup Options Set to perform Full Backups using Plug-in *for FileSystem*. The backup must be configured as restartable:

```
nvsetcreate -setname FSOptions2 -type BO -client WinClient
-plugin "File System" -backupoption NTFSOPT_TYPEFULL=true -backupoption
NTFSOPT_RESTARTABLE=true
```

Schedule Set

Options

Table 70. Schedule Set

Option	Description
-schedule <value>	Specifies the schedule type. The supported values are: • immediate • once • repeating • triggered
-time <hh:mm>	Specifies the start time for the job.
-date <DD-MMM-YYYY>	Specifies the date on which the schedule takes effect.
-weekdays <ddd[,ddd[,…]]>	Specifies the days of week when the job is run. **Example:** `-weekdays Mon, Tue, Wed, Thu, Fri`
-weeks <n[,n[,…]]>	Specifies the weeks in a month when the job is run. Use "L" to specify the last week in the month. **Example:** `-weeks 1, 3 L`
-monthdays <n[,n[,…]]>	Specifies the dates in the month when the job is run. Use "L" to specify the last day of the month. **Example:** `-monthdays 7, 14, 21, L`
-every <n-period>	Specifies the interval at which the job is run. It is specified as number of hours, days, weeks or months. A hyphen (-) is used to separate the numeric value and period. **Example:** `-every 12-month`
-trigger <trigger>	Specifies the name of the trigger to run a triggered job.
-priority <number>	Specifies the priority level for a job. This option is used to prioritize resource allocation when two or more jobs are scheduled to run at the same time. The priority level can be set to any value between 1 (highest priority) and 100 (lowest priority). A priority level of zero sets a job to run as a background task. The default value for this option is 30.
-retry <boolean>	Enables or disables job retries after an initial attempt to run the job fails. Set it to TRUE to enable job retries. The default value for this option is FALSE.
-retries <number>	Specifies the maximum number of retries for a job. It can be set to any value between 1 and 10. This option is only valid if -retry is set to TRUE. The default value for this option is 1.
-retrydelay <hh:mm>	Specifies the time delay between retries. It can be set to any value between 00:00 and 23:59. This option is only valid if -retry is set to TRUE. By default, the job is scheduled to run immediately if -retry is set to TRUE and no value is set for this option.

Examples

• Create a Schedule Set "EveryLastTuesday" to run a job at 11:30 P.M. on the last Tuesday of every month:

```
nvsetcreate -type S -setname EveryLastTuesday -schedule repeating -time 23:30
-weekdays tue -weeks L
```

Backup Target Set

Options

Table 71. Backup Target Set

Option	Description
-device <device>	Specifies the name of the target device or library. This option can be used more than once in the command. The default value for this option is "Any Device."
-librarydrivenumber <n>	Specifies the target drive. This option must be preceded by the **-device** option. Specify each drive that can be used separately using **-librarydrivenumber** option.
-anymedia	Uses any media regardless of media group associations. If you do not specify this option, only media items that belong to a group are used.
-mid <MID>	Uses media with specified media ID.
-group <media group>	Uses media associated with specified media group.
-autolabel <value>	Labels blank media. The values that can be used are TRUE or FALSE. The default value for this option is TRUE.
-bestfordedupe <value>	Optimizes target selection for best deduplication. The values that can be used are TRUE or FALSE. The default value for this option is TRUE.
-reusemedia <value>	Specifies media reuse media. The values that can be used with this option are: • **never:** Never reuse media • **any:** Reuse any media • **group:** Reuse any media item that belongs to a group
-minimumspace <value>	Specifies minimum space required on a media item for that item to be used for backup. It is specified in MB.
-protectmedia <value>	Write-protects the media. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-firstonmedia <value>	Controls whether backup is first on media. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-localdrivesonly <value>	Allows only locally attached devices. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-mediarequesttime out <value>	Allows you to set media request timeouts. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-mediarequesttime outvalue <hh:mm>	Specifies the timeout interval for media requests. It can be set to any value between 00:05 and 23:59. This option is only valid if the option **-mediarequesttimeout** is set to TRUE. The minimum timeout interval can be 5 minutes. If you specify a value lesser than "00:05" minutes, an error is displayed. The specified value is automatically rounded up to the nearest 5-minute interval. For example, 7 minutes is automatically changed to 10 minutes and 22 minutes is automatically changed to 25 minutes.

Examples

- Create a Backup Target Set that uses either drive 3 or drive 4 of the library "MyDltLib." This set writes to any media, regardless of group, and automatically labels or reuses media as required:

```
nvsetcreate -type BT -setname Drive4 -device MyDltLib -librarydrivenumber 3
-librarydrivenumber 4 -anymedia -autolabel TRUE -reusemedia any
```

Backup Advanced Options Set

Options

Table 72. Backup Advanced Options Set

Option	Description
-backuptype <value>	Specifies the backup type (backup or archive).
-discardtime <interval>	Specifies the length of time you want to retain the backup. The backup is automatically discarded after the period elapses. The period can be specified in number of days, weeks or years. **Example:** `-discardtime 26-weeks`
-backuplife <value>	Specifies the number of full backups that you want to retain for the job. Older backups are automatically discarded.
-encryption <value>	Enables encryption for the backup. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-verify <value>	Performs backup verification. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-deduplicate <value>	Deduplicates the backup data. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-netcompress <value>	Enables network compression for the data transferred between the NetVault Client and Server. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-dontcatalog <value>	Excludes a backup with a selected saveset from cataloging. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-secondarycopy <value>	Creates a secondary copy. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-duplicate <value>	Uses the Duplicate Method to create a secondary copy. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-datacopy <value>	Uses the Data Copy Method to create the secondary copy. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-encryptsecondary copy <value>	Encrypts the secondary copy. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-migrate <value>	Removes the original backup after the secondary copy is created. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.

Table 72. Backup Advanced Options Set

Option	Description
-usereplication <value>	Enables transfer of deduplicated data directly from one device to another device of the same type during a Data Copy or Duplicate operation. The values that can be used are TRUE or FALSE. The default value for this option is TRUE.
	Replication provides an efficient method to create secondary copies and offers the following advantages:
	• Copies data in its deduplicated form, which greatly reduces the amount for data transferred over the network.
	• Copies data directly from the source to the destination without using any resources on the NetVault Server.
	The following storage devices support optimized replication:
	• **Quest NetVault SmartDisk devices:** To perform optimized replication, you require NetVault SmartDisk 2.0 or later.
	If the login credentials configured for the source and destination Quest NetVault SmartDisk Servers do not match, replication fails. To ensure a successful replication, do one of the following:
	– Disable WebDAV authentication on both Quest NetVault SmartDisk Servers.
	– Enable WebDAV authentication only on the source.
	– Configure the same login credentials on both servers.
	NOTE: When copying a backup from a Quest NetVault SmartDisk to a different device type (for example, VTL, Quest DR Series System, or Data Domain System), you must clear this check box. If you do not clear this check box, the Data Copy or Duplicate job fails or stops responding.
	• **Quest DR Series Systems**: To perform optimized replication, both the source and target Quest DR Series systems must be running the same release version of the DR OS. Replication is not supported between systems that run different releases of the OS.
	For example, to replicate data from a source system that is running DR OS 2.1.x, the target system must be running the same OS release version. Replication is unsuccessful if the target system is running DR OS release 2.0.x or 3.0.x.
	NOTE: When optimized replication and backups are performed simultaneously on a Quest DR Series system, the backup throughput is affected.
	• **Quest QoreStor**
	• **DD Boost-Enabled Data Domain Systems**: The secondary copy backups between two DD Boost-Enabled Data Domain Systems use the managed file-level replication feature provided by DD Boost.
	File-level replication requires the DD Boost Replicator license, which must be installed on both the source and the destination Data Domain systems.
	• If the source and target Data Domain systems are running different versions of the Data Domain OS, then for replication to be successful, the target system must be running the higher version of the OS.
-duplicateclient <value>	Specifies the name of the NetVault Client on which you want to run the secondary copy job. It can be Server, Original, or any NetVault Client.
-duplicatescheduleset <set name>	Specifies the name of the Schedule Set for the secondary copy.
-duplicatetargetset <set name>	Specifies the name of the Target Set for the secondary copy.
-duplicatesource <set name>	Specifies the name of the Source Set for the secondary copy.

Table 72. Backup Advanced Options Set

Option	Description
-allowstreamstoshare media <value>	Enables streams to share media. The values that can be used are TRUE or FALSE. The default value for this option is FALSE. This option is only valid if the **-secondarycopy** option is set to TRUE.
-duplicatelife <interval>	Specifies the retention period for secondary copy. If you omit this option, the lifetime of the original (specified using the **-discardtime** option) is used.

-offlineindexafter <interval>	Specifies the retention period for online index. The backup index is automatically deleted from the NetVault Database after the period elapses. This period can be specified in number of days, weeks, or years.
	Examples:
	`-offlineindexafter 2-days`
	`-offlineindexafter 24-weeks`

-prescript <script name>	Specifies the name of the script file that you want to run before the job starts. The file must be stored in the NetVault "scripts" directory.
-prescriptarg <arg>	Specifies the run-time parameters for the script.
-postscript <script name>	Specifies the name of the script file that you want to run before the job completes. The file must be stored in the NetVault "scripts" directory.
-postscriptarg <arg>	Specifies the run-time parameters for the script.
-eventsuccess <arg>	Event to be raised when the job completes successfully.
-eventwarning <arg>	Event to be raised when the job completes with warnings.
-eventfailure <arg>	Event to be raised when the job fails.
-secmediatimeout <mins>	Specifies the timeout interval for media requests. The default value for this option is 10 minutes.
-maxstreams <n>	Maximum number of parallel streams that can be generated. The default value for this option is 1.

Examples

- Create an Advanced Options set "AdvOptBU" with a backup life of 5 full backups. Enable network compression and backup verification, and run a postscript entitled "jobdone":

```
nvsetcreate -type AB -setname AdvOptBU -backuplife 5 -netcompress TRUE
-verify TRUE -postscript jobdone
```

Restore Advanced Options Set

Options

Table 73. Restore Advanced Options Set

Option	Description
-netcompress <value>	Enables network compression for the data transferred between the NetVault Client and Server. The values that can be used are TRUE or FALSE. The default value for this option is FALSE.
-prescript <script name>	Specifies the name of the script file that you want to run before the job starts. The file must be stored in the NetVault "scripts" directory.
-prescriptarg <arg>	Specifies the run-time parameters for the script.
-postscript <script name>	Specifies the name of the script file that you want to run before the job completes. The file must be stored in the NetVault "scripts" directory.
-postscriptarg <arg>	Specifies the run-time parameters for the script.

Table 73. Restore Advanced Options Set

Option	Description
-eventsuccess <arg>	Event to be raised when the job completes successfully.
-eventwarning <arg>	Event to be raised when the job completes with warnings.
-eventfailure <arg>	Event to be raised when the job fails.

nvsetdelete

Description

Deletes a set.

Syntax

```
nvsetdelete -setname <Set Name> [-type <Set Type>] [-version]
```

Options

Table 74. nvsetdelete

Option	Description
-setname	Specifies the name of the set that you want to delete.
-type	Specifies the set type. It can be one of the following: • **BS**: Backup Selection Set • **BO**: Backup Options Set • **S**: Schedule Set • **BT:** Backup Target Set • **AB**: Backup Advanced Options Set • **RS**: Restore Selection Set • **AR**: Restore Advanced Options Set
-version	Displays the build date of the NetVault distribution installed on the machine.

nvsetexport

Description

Exports a set to an output file.

Syntax

```
nvsetexport [-setname <Set Name>] -type <Set Type> -file <Output File> [-version]
```

Options

Table 75. nvsetexport

Option	Description
-setname	Specifies the name of the set that you want to export.
-type	Specifies the set type. It can be one of the following:
	• **BS:** Backup Selection Set
	• **BO**: Backup Options Set
	• **S**: Schedule Set
	• **BT:** Backup Target Set
	• **AB**: Backup Advanced Options Set
	• **RS**: Restore Selection Set
	• **AR**: Restore Advanced Options Set
-file	Specifies the name of the output file.
-version	Displays the build date of the NetVault distribution installed on the machine.

Examples

- Export all Schedule Sets to the file "schedules.nss":

  ```
  nvsetexport -type S -file schedules.nss
  ```

- Export the Backup Selection Sets "Blackbird" and "Robin" to the file "bandr.nss":

  ```
  nvsetexport -type BS -setname Blackbird -setname Robin - file bandr.nss
  ```

nvsetimport

Description

Import the specified sets from an input file to the NetVault Server.

Syntax

```
nvsetimport -file <Input Filename> [-setname <Set Name>[=<new name>]]
[-assign <Assignment Character>] [-version]
```

Options

Table 76. nvsetimport

Option	Description
-file	Specifies the name of the input file.
-setname[=<newname>]	Specifies the names of the sets that you want to import from the input file. To import multiple sets, specify each set name separately using the **-setname** option. You can rename each set while importing them to NetVault.
	If you omit this option, all sets available in the input file are imported, each retaining their original name.
	The existing sets with the same name are overwritten.

Table 76. nvsetimport

Option	Description
-assign	Specifies the assignment operator that you want to use in change descriptions. The default assignment operator is the "=" character. This option must be specified if any value contains the "=" character.
-version	Displays the build date of the NetVault distribution installed on the machine.

Examples

- Import all sets from the file "schedules.nss":

  ```
  nvsetimport -file schedules.nss
  ```

- Import the set "Robin" from the file "bandr.nss", renaming the imported set to "Ptarmigan":

  ```
  nvsetimport -file bandr.nss -setname Robin=Ptarmigan
  ```

- Import the set "Blackbird" from file "bandr.nss", renaming the imported set to "b=k":

  ```
  nvsetimport -file bandr.nss -assign @ -setname Blackbird@b=k
  ```

nvsetmodify

Description

Modifies a set.

Syntax

```
nvsetmodify -setname <set name> -type <set type> -change <change description>
[-parameters <parameter file>] [-assign <assignment character>]
[-delimit <delimiter character>] [-version]
```

Options

Table 77. nvsetmodify

Option	Description
-setname	Specifies the name of the set that you want to modify.
-type	Specifies the set type. It can be one of the following: • **BS:** Backup Selection Set • **BO**: Backup Options Set • **RS**: Restore Selection Set The **nvsetmodify** utility does not support the following set types: • **S**: Schedule Set • **BT:** Backup Target Set • **AB**: Backup Advanced Options Set • **AR**: Restore Advanced Options Set To modify these sets, you can use the following methods: • Use the **nvsetcreate** utility to create a set with the same name. This utility overwrites the existing set. • Use the NetVault WebUI to modify the set.

Table 77. nvsetmodify

Option	Description

-change	Specifies the changes that you want to make. This option can be used more than once. The **<change description>** variable is formatted as follows:
	
	`<item>[:<field>][:<old value>]=<new value>`
	
	<item> can be set to one of the following values
	
	<field> specifies the field in the item that is to be modified.
	
	<old value> specifies the old setting for the selected item.
	
	<new value> specifies the new setting for the selected item.
	
	Change items:
	
	• **tree:** Modifies items in the selection tree. The "tree" item applies only to Backup and Restore Selection Sets. For the "tree" item, the "<field>" variable can be set to the following values:
	   – **path:** For more information, see path.
	   – **rename:** For more information, see rename.
	   – **info:** For more information, see info.
	   – **<node name or ID> for inclusion:** For more information, see <Node Name> or <ID>.
	
	• **Options:** Adds or modifies the restore options if the plug-in provides any.
	
	To use this option, you require the "Tag ID" of the option that you want to set. The Tag ID can either be the backup option name as recognized by the CLI or a numeric value assigned to the option by NetVault. Both of these values are grouped under the **[Plugin Options]** section in the **nvsetmodify.cfg** file.
	
	The format for specifying this option is:
	
	`Options:<Tag ID>=True/False`
	
	• **Target**: Changes items in the target tree (Restore Selection Sets only).
	
	The <field> variable is used to specify the type to be changed. The only permitted value is a valid NetVault Client name. The <new value> specifies the new target Client.
	
	NOTE: If no "<new value>" variable is specified, anything that is selected or omitted in the "<old value>" is considered de-selected when you run the command.
	
	path
	
	Modifies the client name, the plug-in name, or a single node in the selection path. To change the path, set the old and new variables as follows:
	
	NOTE: When using Tree path to replace an intermediate path component, only the intermediate path component is replaced and the rest of the path stays the same.
	
	• **Client:**
	   <old value> = Name of the current NetVault Client
	   <new value> = Name of the new NetVault Client. Ensure that the client is added to the NetVault Server.
	
	• **Plug-in:**
	   <old value> = Name of the current NetVault Plug-in
	   <new value> = Name of the new NetVault Plug-in. Ensure that the new plug-in is installed on the NetVault Server or Client for which the set is defined.
	
	• **Selection path:**
	   <old value> = Full path to the node, from the plug-in root node to the node that you want to change. Depending on the client OS, use the backslash (\) character (Windows) slash (/) character (Linux/UNIX) as the path separator.
	   <new value> = Name of the new node

Table 77. nvsetmodify

Option	Description

Example:

A Backup Selection Set for the Plug-in *for FileSystem* includes the following selection path on Windows:

```
Fixed Drives\C:\work\t1\dump\a
```

To change the directory "t1" to "t2" in this path, the variables are set as follows:

```
<old value> = Fixed Drives\C:\work\t1
```

```
<new value> = t2
```

The resulting selection path is:

```
Fixed Drives\C:\work\t2\dump\a
```

On Linux Clients, the Plug-in *for FileSystem* does not include any predefined level-3 nodes ("Fixed Drives", "Removable Drives", and others). Therefore, a similar selection on Linux/UNIX Client includes the following nodes:

```
/work /t1/dump/a
```

To change the directory "t1" to "t2" in this path, the variables are set as follows:

```
<old value> =/work/t1
```

```
<new value> =t2
```

The resulting selection path is:

```
Fixed Drives\C:\work\t2\dump\a
```

rename

Adds or modifies a rename or relocation command to a Restore Selection Set.

- To add a new rename or relocation command, set the variables as follows:

  <old value> = Current name or path of the rename or relocation target

  <new value> = New name or path for the rename or relocation target

- To modify an existing rename or relocation command, set the variables as follows:

  <old value> = Current rename or relocation syntax

  <new value> = New rename or relocation syntax

info

Modifies the plug-in information object attached to a node in the selection tree. To use this option, set the variables as follows:

<old value>= Full path to the item, from the plug-in root node to the applicable item.

<new value> = New values for the plug-in information object, separated by colons (":"). To leave any field unchanged, specify a double colon ("::") as the new value.

<Node Name> or <ID>

Includes an item in the backup or restore job. The item can either be the "node name" as recognized by the CLI or a numeric "ID" assigned to the node by NetVault. Both of these values are grouped under the **[Tree Nodes]** section in the **nvsetmodify.cfg** file.

To use this option, set the variables as follows:

<old value> = Node Name or Node ID of the current node. If the selection tree for the target NetVault Client contains multiple nodes of the given type, specify the Node Name instead of the Node ID.

<new value> = Node name or ID of the new root node.

Table 77. nvsetmodify

Option	Description
-parameters	Reads options from a parameter file.
	You can use any text editor to create the parameter file. Specify one option with its value per line and omit "-" before the option. Use spaces or tabs to separate the option and values. To include comments, begin the line with a "#" character.
	Example:
	`# nvsetmodify example file`
	`setname BackSet1`
	`type BS`
	This file can be used with the **-parameters** option as follows:
	`./nvsetmodify -parameters example.txt`
-assign	Specifies the assignment operator that you want to use in change descriptions. The default assignment operator is the "=" character. This option must be specified if the old or new values contain the "=" character.
-delimit	Specifies the character that you want to use as a delimiter in change descriptions. The default delimiter is the ":" character. This option must be specified if old or new values contain the ":" character.
-version	Displays the build date of the NetVault distribution installed on the machine.

Examples

ℹ | **NOTE:** When using Tree path to replace an intermediate path component, only the intermediate path component is replaced and the rest of the path stays the same.

- Modify the Backup Selection Set "BS-Set1" to change the NetVault Client from "Client-A" to "Client-B":

`nvsetmodify -setname BS-Set1 -type BS -change Tree:path:Client-A=Client-B`

- Modify the Backup Selection Set "BS-Set1" to change the plug-in from "File System" to "Data Copy":

`nvsetmodify -setname BS-Set1 -type BS -change "Tree:path:File System=Data Copy"`

- Modify the Backup Selection Set "BS-Set1" to change the directory "t1" to "t2" in the selection path "Fixed Drives\C:\work\t1\dump\a":

`nvsetmodify -setname BS-Set1 -type BS`
`-change "Tree@path@Fixed Drives\C:\work\t1=t2" -delimit @`

In this example, the **-delimit** option is used to set the character "@" as the delimiter because the path includes ":" which is the default delimiter.

- Modify the Backup Selection Set "BS-Set1" to change the directory "t1" to "t2" in the selection path "/work/t1/dump/a":

`nvsetmodify -setname BS-Set1 -type BS -change "Tree:path:/work/t1=t2"`

The resulting selection path is: `Fixed Drives\C:\work\t2\dump\a`

- Modify the Backup Selection Set "BS-Set1" to change the drive node from "C:\" to "D:\" in the selection path "Fixed Drives\C:\work\t1\dump\a":

`nvsetmodify -setname BackupSetName -type BS`
`-change "Tree@path@Fixed Drives\C:\=D:\\" -delimit @`

In this example, an extra backslash character is added to the new value D:\ to escape the first backslash character. If you do not include it, then the sequence D:\" would be interpreted as D:"; the first backslash would be used to escape the quotation mark (").

- Modify the Backup Selection Set "BS-Set1" to change the Network Share path from "\\Server1\a" to "\\Server2\b:

```
nvsetmodify -setname BackupSetName -type BS
-change "Tree@path@Network Shares\\\Server1\a\=\\Server2\b\\" -delimit @
```

- Modify the Backup Selection Set "BS-Set1" to change the "Fixed Drives" node to "Removable Drives":

```
nvsetmodify -setname BackupSetName -type BS
-change "Tree:path:Fixed Drives=Removable Drives"
```

> **i** | **NOTE:** The Plug-in *for FileSystem* (Windows only) and a few other plug-ins (Plug-in *for Consolidation*, Plug-in *for Data Copy*, Plug-in *for Databases*, and Plug-in *for Raw Devices*) include pre-defined level-3 nodes. You can obtain the exact names of these nodes from the NetVault WebUI. To prevent any user errors, the **nvsetmodify** utility checks for the correctness of new values specified for level-3 nodes. An error message is displayed if you specify an incorrect value for these nodes. The utility does not perform any checks for the correctness or existence of nodes below level-3.

- Modify the Restore Selection Set "RestoreSet1" (created for the Plug-in *for FileSystem*) to make the following changes:

  - Change the target client from "WinClient1" to "WinClient2"

  - Relocate the directory "C:\Mail" to "C:\MyMail"

  - Set the Restore Option "Overwrite Newer Files"

```
nvsetmodify -setname RestoreSet1 -type RS
-change target:client:WinClient1=WinClient2
-change options:nvfs_opt_overnew=true -change @tree@path@c:\mail=c:\MyMail
```

nvtrigger

Description

Triggers a job that has already been defined and saved using the Triggered scheduling option.

This utility is located in the **bin** directory.

Syntax

```
nvtrigger [-server <server name>] [-wait] [-verbose] [-killonexit] <trigger name>
```

Options

Table 78. nvjobstart

Option	Description
-servername	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-wait	Waits until the task has completed.
-verbose	Displays additional information when the job starts and completes.
	When the job starts, the details such as the Job ID, Instance ID, Job Title, and Start Time are displayed. When the job completes, the end time is displayed.

Table 78. nvjobstart

Option	Description
-killonexit	Aborts a job by terminating the trigger execution. This option must be used with the **-wait** option.
<trigger name>	Specifies the trigger name. This option must be the last option when the tool is invoked as shown in the following example: `nvtrigger -server <server name> -wait -verbose -killonexit <triggername>`

Notes

- The **nvtrigger** utility returns the following exit codes and messages when the job it is associated with completes execution:

    - 0: Backup Completed

    - 1: Backup Failed

    - 2: Backup Completed with Warnings

    - 3: Backup Aborted

- Without the **-wait** option, the **nvtrigger** utility can support multiple jobs. With this option, the utility can only be used to trigger a single job. This limitation also applies to **-wait -killonexit** options. Therefore, you cannot use this option for policy jobs that contains multiple job definitions.

- If you specify the **-wait** option in a script, control is returned to the script only after the triggered job completes. If you do not specify this option, control is returned immediately back to the script even if the triggered job is still running.

Log-specific utilities

- nvlogdump
- nvlogpurge
- nvreadlog

nvlogdump

Description

Dumps NetVault logs to a text or binary file.

Syntax

```
nvlogdump [-jobid <Job ID>] [-filename <Dump File>] [-text]
[-starttime <Start Time>] [-endtime <End Time>]
```

Options

Table 79. nvlogdump

Option	Description
-jobid	Specifies the job ID for which logs are exported.
-filename	Specifies the name of the file to which logs are exported.
	Depending on the dump format selected, the dump files are created in the **binary** or **text** directories under <NetVault home>\logs\dumps (on Windows) or <NetVault home>/logs/dumps (on Linux).
	If you omit the **-filename** option, NetVault creates a file named **CLI_DUMP_<YYYYMMDD>_<HHMMSS>** in the specified format. The binary file has the extension **".nlg"** and the text file has ".**txt**" extension.
-text	Exports logs in text format, and the text file has ".**txt**" extension. If you omit this option, then logs are dumped in binary format.
-starttime	Specifies the time that serves as the starting point for the log dump. The format to specify start time is **YYYYMMDDHHMMSS**.
-endtime	Specifies the time that serves as the stopping point for the log dump. The format to specify end time is **YYYYMMDDHHMMSS**.

Notes

At least the **jobid** option or a combination of the **starttime** and **endtime** options must be specified to properly use this utility. A combination of the options **jobid**, **starttime**, and **endtime** can be specified to dump logs for a particular job that were generated within the given period.

Examples

- Dump logs for Job ID 50, starting from August 1, 2014, 20:33:04, to a binary file named "nvlogdmp.nlg":

```
nvlogdump -filename c:\temp\nvlogdmp -starttime 20140801203304 -jobid 50
```

nvlogpurge

Description

Purges log entries up to the specified time.

Syntax

```
nvlogpurge -purgetime <End Time>
```

Options

Table 80. nvlogpurge

Option	Description
-purgetime	Specifies the time that serves as the end point for the log purge. The format to specify purge time is **YYYYMMDDHHMMSS**.

nvreadlog

Description

Displays log messages.

Syntax

```
nvreadlog [-h] [-b <days>] [-m] [-d <delimiter string>] [-o <messages>]
```

Options

Table 81. nvreadlog

Option	Description
-h	Exits after showing historic log messages.
-b	Specifies the start date; it is specified as the number of days before the current date.
-m	Starts the output from midnight preceding the number of days specified with the **-b** option. You must use this option with the **-b** option.
	For example, at 3 P.M., you specify **-b 1**, logs starting from 3 P.M. the day before are displayed. With the **-m** option, log messages starting from the midnight of previous day are displayed.
	If you specify **-m** without the **-b** option or with **-b 0**, log messages starting from the midnight of current day are displayed. If you issue this command at 3 P.M., 15 hours of logs are displayed.
-d	Specifies one or more characters that you want to use as delimiters. For example, **-d** followed by two spaces would separate each displayed item with two spaces.
-o	Displays specific messages. For example, if you specify -o **failed**, only messages that contain the word **"failed"** are displayed.
	You can specify multiple strings using comma as a separator.

Notes

*   As **"-h"** is a command option, use the full command **"-help"** to view help for this command:

    ```
    nvreadlog -help
    ```

Other utilities

*   bonedate
*   getmachineid
*   installplugin
*   licenseinstall
*   nvlicenseinfo

*   nvmeddbcheck
*   nvpassword
*   nvpluginpreconfig
*   nvpluginaccess
*   nvpgdbpasswd

*   nvreport
*   nvscheddbcheck
*   nvsendmail
*   nvsendopmsg
*   nvtrace

bonedate

Description

Displays the NetVault date and time in use on the current machine. This information is obtained from the machine configured as the NetVault Time Server. For more information about NetVault Time, see the *Quest NetVault Administrator's Guide*.

Syntax

```
bonedate
```

getmachineid

Description

Finds machine ID of the NetVault Server or Client machine on which this utility is run. Machine ID is required to obtain permanent licenses for NetVault products.

Syntax

```
getmachineid
```

installplugin

Description

Installs NetVault plug-ins on the server or client machines. This utility is located in the **bin** directory.

Syntax

```
installplugin <Full path to the .npk installation file>
```

Notes

- Verify that you provide the full file path to the **".npk"** installation file. Enclose the path within quotation marks ("") if it contains any spaces.

licenseinstall

Description

Installs product license. This utility is located in the **bin** directory.

Syntax

```
licenseinstall <license file in .div format>
```

nvlicenseinfo

Description

Provides license information for the NetVault Server.

Syntax

```
nvlicenseinfo
```

nvmeddbcheck

Description

Verifies the structural, entity, and referential integrity of the Media Database. It checks the following:

- Raw file structure
- Database table integrity
- Inter-table references and dependencies

Syntax

```
nvmeddbcheck List
nvmeddbcheck Check [-v <warning level>]
nvmeddbcheck Compact [-v <warning level>] [-f]
```

Options

Table 82. nvmeddbcheck

Option	Description
List	Lists various records stored in the Media Database. The output includes the following items: • New streams • Sessions • Old streams • Media items • Segments • Backup indexes • Retired RAS segments • Retired RAS indexes You can use this option to determine which records should be deleted.
Check	Performs database checks, and displays the status. You can use **-v** with this option to specify the minimum severity level of messages that are displayed.
-v	Specifies the minimum severity level of messages that are displayed. **-v** can take the following values: • **all:** All messages • **back:** Background messages • **inf**: Information messages • **job**: Job messages • **warn:** Warnings • **error**: Errors • **severe:** Severe errors When you set the severity level, only messages at that level and higher are displayed.
Compact	Performs database checks, and removes inconsistent and invalid entries identified during the Check phase. You can use the **-v** and **-f** options with this option. **-v** lets you specify the minimum severity level of messages that are displayed; **-f** lets you purge retired RAS segments and indexes.
-f	Purges retired RAS segments and indexes from the Media Database. This option can only be used with the **Compact** option.

Notes

• You can also use this utility to check and remove the obsolete session records.

nvpassword

Description

Changes NetVault password for server or client on which this utility is run. This utility is available in the **<NetVault home>\bin** directory.

Syntax

```
nvpassword <new password>
```

Notes

- A NetVault password must not contain the following characters:

  `\` and `spaces`

  Escape the special characters such that the desired password is properly received by the CLI. For example, if the password is `<>&#|/"':*.-`()[]{}$@?` then, enter it as the following:

  On Linux shell: `\<\>\&#\|/\"\'\:\*.-\`\(\)[]{}\$@?`

  On Windows command prompt: `"<>&#|/""':*.-`()[]{}$@?"`.

nvpluginpreconfig

Description

The **nvpluginpreconfig** utility allows you to create or modify NetVault Plug-in for *MySQL* and NetVault Plug-in *for SQL Server* configuration from command line interface. This utility can run on NetVault server or client. For more information on configuration details for a specific plug-in, see the relevant plug-in user's guide.

Syntax

NetVault Plug-in *for SQL Server*

```
nvpluginpreconfig --client <Client Name> --plugin <Plugin Name> --mssqlloginmode
<Mode of Login> --mssqlusername <Username> --mssqlpassword <Password> --
mssqlwindomain <Domain>
```

NetVault Plug-in *for MySQL*

```
nvpluginpreconfig --client <Client Name> --plugin <Plugin Name> --mysqlinstancename
<MySQL Instance Name> --mysqledition <MySQL Edition> --mysqlusername <Username> --
mysqlpassword <Password> --mysqlbasedir <MySQL Base Directory> --mysqlbindir <MySQL
Bin Directory>  --mysqldumppath <Mysqldump Path> --mysqlport <TCP Port> --
mysqlcharset <Default Character Set> --mysqlbackupmethod <MyISAM Backup Method> --
mysqlreplication <Enable or Disable replication> --mysqlreplicationslave <True or
False> --mysqlreplicationmaster <True or False> --mysqlbinlogindexpath <Binary Log
Index Path> --mysqlrelaybinlogindexpath <Relay Log Index Path> --mysqlbackuppath
<MySQL Backup Path> --mysqlsocket <Socket>
```

Options

Table 83. nvpluginpreconfig

Option	Description
--plugin	Specifies the plug-in name to be configured. • **mssql**: Specifies the Plug-in *for SQL Server* to be configured. • **mysql**: Specifies the Plug-in *for MySQL* to be configured.
Options for configuring Plug-in *for SQL Server*	
--mssqlloginmode	Specifies the login mode. • **windows**: Windows login mode. • **sqlserver**: SQL server login mode.
Options for configuring Plug-in *for MySQL*	
--mysqledition	Specifies edition. • standard: Standard edition • enterprise: Enterprise edition
--mysqlcharset	Specifies any of the following default character set. latin1, big5, dec8, cp850, koi8r, hp8, latin2, swe7, ascii, ujis, sjis, hebrew, tis620, euckr, koi8u, gb2312, greek, cp1250, gbk, latin5, armscii8, utf8, ucs2, cp866, keybcs2, macce, macromn, cp852, latin7, cp1251, cp1256, cp1257, binary, geostd8, cp932
--backupmethod	Specifies any of the following backup methods: • lock • dump

Table 83. nvpluginpreconfig

Option	Description
--mysqlreplication	Specifies 'enable' or 'disable' replication. The values that can be used are TRUE or FALSE.
--mysqlreplicationslave	The values that can be used are TRUE or FALSE.
--mysqlreplicationmaster	The values that can be used are TRUE or FALSE.

Examples

- **Plug-in *for SQL Server***

```
nvpluginpreconfig --client ClientA --plugin mssql --mssqlloginmode windows --
mssqlusername administrator --mssqlpassword mypassword --mssqlwindomain
prod.com
```

- **Plug-in *for MySQL***

```
nvpluginpreconfig --client ClientA --plugin mysql --mysqlinstancename
INSTANCE1 --mysqledition \ standard --mysqlusername root --mysqlpassword
mypassword \
```

```
--mysqlbasedir "C:\Program Files\MySQL\MySQL Server 4.1" \
```

```
--mysqlbindir "C:\Program Files\MySQL\MySQL Server 4.1\bin" \
```

```
--mysqldumppath "C:\Program Files\MySQL\MySQL Server 4.1\bin\mysqldump.exe" \
```

```
--mysqlport 3306 --mysqlcharset latin1 --mysqlbackupmethod lock --
mysqlreplication false \
```

```
--mysqlreplicationslave true --mysqlreplicationmaster false \
```

```
--mysqlbinlogindexpath "C:\Program Files\MySQL\MySQL Server 4.1\index" \
```

```
--mysqlrelaybinlogindexpath "C:\Program Files\MySQL\MySQL Server 4.1\relay" \
```

```
--mysqlbackuppath "C:\Program Files\MySQL\MySQL Server 4.1\backup"
```

nvpluginaccess

Description

Enables CLI backups and generation of CLI-based reports for plug-ins that require the use of database-related utility (for example, "onbar" for Informix database users and "rman" for Oracle). For more information, see the relevant plug-in user's guide.

Syntax

```
nvpluginaccess [-remove -client <client names>] | [-client <client name>
[-account <account name> -password <account password>]]
```

Options

Table 84. nvpluginaccess

Option	Description
-client	Specifies the name of the NetVault Client.
-account	Specifies the name of the NetVault user account that you want to use with this command. The specified user account must be granted all privileges in NetVault.
-password	Specifies the password for the user account.

nvpgdbpasswd

Description

Use this utility to change the password for the PostgreSQL database superuser.

(The password is initially set when you install or upgrade the NetVault Server software.)

Syntax

```
nvpgdbpasswd store <password>
nvpgdbpasswd change <current password> <new password>
```

Options

Table 85. nvpgdbpasswd

Option	Description
store <password>	Updates the PostgreSQL database superuser password in the **pgdb.cfg** file (NetVault configuration file). It does not change the superuser password in the PostgreSQL Database itself; it just updates the **pgdb.cfg** file. You can use this option to update the password in the configuration file after the password is changed in the database using any PostgreSQL native tool (for example, the **psql** utility).
change <current password> <new password>	Changes the database superuser password both in the PostgreSQL DB and in the **pgdb.cfg** file. You must specify both the current password and the new password with this option.

Notes

- A password for the PostgreSQL database superuser cannot contain the following characters:

  `\` and `spaces`

  Escape the special characters such that the desired password is properly received by the CLI. For example, if the password is `<>&#|/"':*.-`()[]{}$@?` then, enter it as the following:

  On Linux shell: `\<\>\&#\|/\"\'\:\*.-\`\(\)[]{}\$@?`

  On Windows command prompt: `"<>&#|/""':*.-`()[]{}$@?".`

- Before updating the superuser password, you must stop the NetVault Service.

nvreport

Allows you to generate and view canned reports from the command-line interface. For more information about using the reporting functionality, see Using the nvreport utility.

nvscheddbcheck

Description

Verifies the structural, entity, and referential integrity of the Scheduler Database. It checks the following:

- Raw file structure
- Database table integrity
- Inter-table references and dependencies

Syntax

```
nvscheddbcheck List
nvscheddbcheck Check [-v <warning level>
```

Options

Table 86. nvscheddbcheck

Option	Description
List	Lists various records stored in the Scheduler Database. The output includes the following items: • Regular jobs • Policy jobs • Scheduled phases • Job instance data records • Job change records You can use this option to determine which records should be deleted.
Check	Performs database checks, and displays the status.
-v	Specifies the minimum severity level of messages that are displayed. **-v** can take the following values: • **all:** All messages • **back:** Background messages • **inf**: Information messages • **job**: Job messages • **warn:** Warnings • **error**: Errors • **severe:** Severe errors When you set the severity level, only messages at that level and higher are displayed.

nvsendmail

Description

Sends an email to the specified address.

Syntax

```
nvsendmail [-d <dest_address>] [-r <real_name] [-s <subject>] [-f <message_file>]
[-a <attach_file>] [-m] [-n]
```

Options

Table 87. nvsendmail

Option	Description
-d	Specifies the email address of the intended recipient.
-r	Specifies the actual name of the intended recipient.
-s	Specifies the subject line of the email.
-f	Specifies the email message file that you want to send.
-a	Specifies the attachment that you want to send. Provide the full path for the attachment file.
-m	Forces mime format.
-n	Specifies notification mode in which the necessary parameters are obtained from the host environment.

nvsendopmsg

Description

Sends an operator message.

Syntax

```
nvsendopmsg [-n] [-test]
```

Options

Table 88. nvsendopmsg

Option	Description
-n	Sends notification from environment variables.
-test	Sends a test message.

nvtrace

Description

Use this utility to perform the following tasks:

- View whether tracing is enabled or disabled on the specified machine
- Enable tracing on the specified client
- Start and stop tracing at the specified time window
- Generate trace files for all current and new processes
- Generate trace files for the specified processes
- Disable tracing on the specified client

Syntax

```
nvtrace --status [--client <client_name>]

nvtrace --enable [--client <client_name>] [--startat <YYYYMMDDHHMMSS> [--stopat
<YYYYMMDDHHMMSS>]] [--process <procid>[,<procid>,...]]

nvtrace --disable [--client <client_name>]
```

Options

Table 89. nvtrace

Option	Description
--status	Displays whether tracing is enabled or disabled on the specified machine. You can use the following option with **--status**: - **--client:** Specifies the NetVault Client. If the client name is not specified, the status of tracing on the server is displayed.
--enable	Enables tracing on the specified machine. You can use the following options with **--enable**: - **--client:** Specifies the NetVault Client. If the client name is not specified, tracing is enabled on the NetVault Server. - **--startat:** Specifies the date and time when tracing should be started on the machine. The format for specifying this option is `YYYYMMDDHHMMSS`. - **--stopat:** Specifies the date and time when tracing should be stopped on the machine. The format for specifying this option is `YYYYMMDDHHMMSS`. You can omit the **--startat** and **--stopat** options to start tracing immediately. - **--process:** Specifies the process for which trace files are required. You can provide a comma-separated list of process ID numbers to generate trace files for the specified processes. You can omit this option if you want to generate trace files for all current and new processes.
--disable	Disables tracing on the specified machine. You can use the following option with --disable: - **--client:** Specifies the NetVault Client. If the client name is not specified, tracing is disabled on the server.

Using the nvreport utility

About nvreport utility

The **nvreport** utility allows you to generate and view canned reports from the command-line interface. These reports provide information about the backup and restore jobs, storage devices, clients, media utilization, and other aspects of NetVault.

To access help for **nvreport**, type:

```
nvreport -help
```

The **nvreport** utility uses "template" files to output the report data. The template files determine the content, layout, and format of the report. The report templates are located in the **<NetVault home>\reports\ templates** directory.

There are two methods to specify a template file to generate a report:

- **Using the actual filename:** You can use the "-templatefile" option to specify the actual template file that you want to use. With this option, you must provide the full file path for the template file.

- **Using the "nice name":** Each template file has an alternate name value known as its "nice name." This name is used for the template file in the NetVault WebUI. Specify this "Nice Name" with the "-templatename" option.

To access help for the template files, type:

```
nvreport -help templatename
```

Syntax

```
nvreport -server <server name> -class <class name> -templatename <template name>
nvreport -server <server name> -class <class name> -templatefile <full file path>
```

Options

Table 90. nvreport

Option	Description
-server	Specifies the name of the NetVault Server that administers the job.
	This option is required when a remote server administers the job. It can be omitted when a local server administers the job. The server name is case-sensitive.
-class	Specifies the report class. Class names are case-insensitive.
	The main purpose of a class is to organize the individual report components or template files into groups. These template files are used to generate the reports.
	When a class name is specified with the **-class** option, the default template file associated with the class is used to run a report.
	Example:
	`nvreport -class Clients`
	For more information about the available report classes, see Report classes
-templatename	Specifies the "nice name" of the template file.
	Example:
	`nvreport -templatename "Client Machines - cli default template"`
	Note the following:
	• If the "nice name" contains any spaces, enclose the variable in quotation marks (" ").
	• To locate the "nice name" for a template file, open the file in a text editor and note the string in the "%NICENAME" line
	For more information, see Plain text template files.
-templatefile	Specifies the name of the template file. You must specify the full file path with this option.
	Example:
	`nvreport -templatefile` `C:\NetVaulBackup\reports\templates\logsclidefault`
	Note the following:
	• The report templates are located in the **<NetVault home>\reports\ templates** directory.
	• If the file path contains any spaces, enclose the variable in quotation marks
	For more information, see Plain text template files.

Report classes

The following table provides a brief description of the report classes available in NetVault.

Table 91. Report classes

Report class	Output
Advanced Options	Displays all Advanced Options Sets and their details.
Audits	Displays all operations attempted by a specific user account with their result ("Yes", if granted; "No", if denied) and date and time each operation was attempted.
Backup Targets	Displays all Backup Target Sets and their details.

Table 91. Report classes

Report class	Output
Client Groups	Lists all client groups. The report includes: • Group name • Group description • All current clients are member of this group ("Yes" or "No") • Client group members
Clients	Displays the status of the added clients. The report includes: • Client name • NetVault version • Accessibility status ("Yes" or "No") • Client status ("Up" or "Down")
Defined Jobs	Displays all job definitions. The report includes: • Job ID • Job name • NetVault Client name • Policy name (if applicable) • Plug-in name • Job type (Backup, Restore, or Report) • Schedule Set name • Selection Set name • Backup Target Set name • Advanced Options Set name
Drive Events	Lists events related to drives controlled of the server. The report includes: • Time • Date • Drive name • Event type, like start write, stop write
Drive Performance Statistics	Displays the performance statistics for all drives controlled by the server. The report includes: • Time at which the drive was accessed • Date on which the drive was accessed • Drive Name • Job ID • Instance ID • Average data transfer rate (kb/sec)
Drives	Lists all drives accessible to NetVault. The report includes: • Drive Name • Product Name • Vendor Name • Drive status (Online or Offline) • Machine to which the drive or library is locally attached • Data written by this drive • Data read by this drive
Entry/Exit Ports	Lists all entry/exit ports (EEPorts) that exist in any libraries controlled of the server. The report also includes the details of media items residing in the E/E port.

Table 91. Report classes

Report class	Output
Index Media	Provides the summary of Index media of a backup job. The report includes: • Job Title • Job ID • Job Instance • Job Phase ID • Client Name • Backup Time • Backup Date • Media Label • Offsite • Online (Yes or No)
Job History	Provides a summary of jobs performed during the specified period. The report includes: • Start date • Start time • Job ID • Instance ID • Phase ID • Job name • Job type (Backup, Restore, or Report) • Exit status of the job ("Completed", "Completed with errors" or "Failed") • Run length
Libraries	Lists all libraries controlled by the server. The report includes: • Library ID • Library name • Library status (Online or Offline) • Controlling NetVault Server
Library Drives	Lists all drives controlled by the server. The report also includes the details of media items residing in the drive.
Library Slots	Lists all slots that exist in libraries controlled by the server. The report also includes the details of media items residing in the slots.
License Capabilities	Provides a summary of available and used licenses for NetVault.
Media	Lists media items in use by devices controlled by the server. The report includes: • Group label • Media label • Amount of space available • Amount of space used • Media format (MTF=Windows or UTF8=Linux/ UNIX) • Needs import ("Yes" indicates that the media item is marked as Foreign and it needs to be scanned to read the on-tape indices into the NetVault Database) • Needs recovery ("Yes" indicates that the contents on the tape are considered suspect and it needs to be scanned for backups for which indexes are not recorded in NetVault Database) • Media item is marked unusable (Yes, if marked as unusable; No, if not marked as unusable)
Media Capacities	Displays the media capacity details for media items available in the libraries and drives controlled by the server.

Table 91. Report classes

Report class	Output
Media Job Contents	Lists all backup savesets stored on available media. The report includes: • Media label • Group label • Media barcode • Job name • NetVault Client name • Job start date • Job start time • Amount of data transferred to media for the job • Saveset expiry date • Saveset expiry time
Media Requests	Displays media request details. The report includes: • Media request date • Media request time • Job ID • Request status
Media Segment Contents	Provides a summary of media segments. The report includes: • Media label • Media barcode • Job name • NetVault Client name • Backup date • Backup time • Segment length
Media Transfer Requests	Displays all transfer requests. The details include: • Job ID • Instance ID • Type of transfer request ("Read" or "Write") • Request ID • Amount of data transferred
NetVault Event Types	Displays all event types.
NetVault Events	Displays all events raised during the specified period. The report includes: • Date and time • Event name • Event class • Event description • Event message
NetVault Logs	Displays all log messages. Based on the number of log entries that exist in the NetVault Database, it may take several minutes for this command to display the results.
Notifications	Lists all events for which any notification method is set. The report includes: • Event class • Event • User account to which the notification profile belongs (if applicable.) • Notification method

Table 91. Report classes

Report class	Output
Operator Messages	Displays all outstanding operator messages. The report includes: • Message ID • Date and time • Outstanding ("Yes", if outstanding; "No", if acknowledged) If all the operator messages have been acknowledged or deleted, this report returns no information.

Policies	Provides a summary of backup policies. The report includes:
	• Policy name
	• Total number of jobs created within the policy
	• Total number of clients added to the policy.
	• Current status of the policy:
	   - OK: If all jobs in the policy have run successfully
	   - Warnings: If one or more jobs have completed with warnings
	   - Errors: If errors have occurred
	• List of clients added to the policy
	• Events defined for failed jobs
	• Events defined for jobs completed with warnings

Policy Clients	Lists all clients included in a policy. The report includes:
	• Policy name
	• Client name
	• Policy status
	   - OK: If all of the Clients in the policy are accessible
	   - Errors: Iff errors have occurred

Policy Jobs	Lists all jobs included in a policy. The report includes: • Policy name • Job name • Backup Selection Set name • Whether the job is active
Privileges	Lists the privileges currently granted to each user.
Report Templates	Displays all report template files that are saved in the **templates** subdirectory (<NetVault home>\reports\templates on Windows and <NetVault home>/reports/templates on Linux). The report includes: • Template filename • Class name • Output type (Plain text, HTML, or CSV)
Schedule Sets	Displays all Schedule Sets and their details.
Segments	Lists all segments for a backup job. The report includes: • Job ID • Instance ID • Offset, in bytes(starting point on the media where the segment of the job exists) • Overall size of the segment, in bytes • Media label • Media barcode
Selection Options Sets	Displays all Backup Options Sets and their details.

Table 91. Report classes

Report class	Output
Selection Sets	Displays all Selection Sets and their details
Users	Lists all NetVault users. The report includes: • User name • Real name • User Identification Number (the ID numbers for the default users are: "Default = 0" and "Administrator = 1") • Workstation • Last date on which the user accessed NetVault • Last time at which the user accessed NetVault

Plain text template files

The following table provides the "nice name" and filename of the plain text template files.

Table 92. Plain text template files

Class name	Template file "nice name"	Template filename
Advanced Options	Advanced Options - cli default template	advancedoptionsclidefault
Audits	Audits - cli default template	auditclidefault
Backup Targets	Backup Targets - cli default template	backuptargetsclidefault
Client Groups	Client Groups - cli default template	groupsclidefault
Clients	Client Machines - cli default template	clientsclidefault
Defined Jobs	Defined Jobs - cli default template	jobdefinitionsclidefault
Drive Events	Drive Events - cli default template	driveeventsclidefault
Drive Performance Statistics	Drive Performance Statistics - cli default template	driveperformanceclidefault
Drives	Drives - cli default template	drivesclidefault
Entry/Exit Ports	Entry/Exit Ports - cli default template	entryexitportsclidefault
Index Media	Index Media -cli default template	indexmediaclidefault
Job History	Executed Job History - cli default template	jobhistoryclidefault
Libraries	Libraries - cli default template	librariesclidefault
Library Drives	Library Drives - cli default template	librarydrivesclidefault
Library Slots	Library Slots - cli default template	libraryslotsclidefault
License Capabilities	This Server's License Capabilities - cli default template	licensecapsclidefault
Media	Media - cli default template	mediaclidefault
Media Capacities	Media Capacities - cli default template	mediacapacitiesclidefault
Media Job Contents	Media Contents Query - Textual	mediajobcontentsclidefault
Media Requests	Media Requests - cli default template	mediarequestsclidefault
Media Segment Contents	Media Segment Contents Query - Textual	mediasegmentcontentsclidefault
Media Transfer Requests	Media Transfer Requests - cli default template	mediatransfersclidefault
NetVault Event Types	NVBU Event Types - cli default template	eventtypesclidefault
NetVault Events	NVBU Events - cli default template	eventsclidefault
NetVault Logs	NVBU Logs - cli default template	logsclidefault

Table 92. Plain text template files

Class name	Template file "nice name"	Template filename
Notifications	User's Selected Notifications - cli default template	notificationsclidefault
Operator Messages	Operator Messages - cli default template	operatormessagesclidefault
Policies	Policies - cli default template	policiesclidefault
Policy Clients	Policy Clients - cli default template	policyclientsclidefault
Policy Jobs	Policy Jobs - cli default template	policyjobsclidefault
Privileges	Granted Privileges - cli default template	privilegesclidefault
Report Templates	Report Templates Installed on System	reporttemplatesclidefault
Schedule Sets	Schedule Sets - cli default template	schedulesclidefault
Segments	Segments - cli default template	segmentsclidefault
Selection Option Sets	Selection Option Sets - cli default template	seloptionsclidefault
Selection Sets	Selection Sets - cli default template	selectionsclidefault
Users	Users - cli default template	usersclidefault

Formatting the reports

The **nvreport** utility provides several options to format the layout and content of a report. The following sections outline the use of these options.

> **i** | **NOTE:** Unless otherwise noted, the description of the options offered in this section assume that they are being used with report templates that use a "Plain Text" output type. These templates include "clidefault" or "-cli default template" in their filename. You can view these reports from a terminal session window.

Obtaining the real name

When a report is run and viewed from the CLI, the output includes several columns. The column header, referred to as "Field Name", may not be the same as the "real name" of the column set up in the template file that is used to run the report. You must use the real name with the formatting options covered in this section.

You can use one of the following methods to find the real names:

- Using the help option
- Using the template file

Using the help option

To obtain a list of valid field names for a canned report class, type the following command:

```
nvreport -help fields [class name]
```

The output includes four columns: Real name, Field name, Data type, and Description.

This command displays all fields that are available with the specified canned report. It includes even those fields that are not displayed when you run the report. You can include these additional fields using the **format** option. For more information, see Adding or removing columns.

To determine the default fields for a template file, follow these steps:

1 Run the report and note the default Field Name of each column.

2 Run the `nvreport -help fields [Class Name]` command.

3   Locate the appropriate Field Name in the list, and cross-reference its Real Name.

Using the template file

Open the template file in a text editor. In this file, the **%FORMAT** line provides the Real Name for the fields. You can find the template files in <NetVault home>\reports\templates on Windows and <NetVault home>/reports/templates on Linux.

The **%FORMAT** line of a template file only includes Real Names for the fields displayed when a report is run.

Sample template file:

```
%CLASS "Media"
%NICENAME "Media - cli default template"
%FORMAT "%MEDIAGROUP %LABEL %SPACELEFT %SPACEUSED
%MEDIAFORMAT %NEEDSIMPORT %NEEDSRECOVERY %UNUSABLE"
%SORT %MEDIAGROUP+ %LABEL+
%OUTPUTTYPE 0
%HEADERNAME "Default"
%FOOTERNAME "Default"
```

Using the format option

By default, a report is displayed in a pre-defined layout when run in the terminal window. You can use the **-format** option to specify the number of characters that are displayed in a column, insert a line break, or add or remove columns. The formatting options are described in the following sections:

* Specifying maximum characters for a column
* Inserting a line break
* Adding or removing columns

When you use the **-format** option, you must use the real name of the fields. Each name must be prefixed with a "%" symbol. If the real name includes the "%" symbol, use the escape sequence "%%" when specifying the name. Moreover, you must specify all required fields in the syntax. If you omit any field in the syntax, it is not displayed in the output.

Specifying maximum characters for a column

To specify the maximum numbers of characters for a column, append two colons and a number to the Real Name:

```
-format "%<Real Name>::<Max characters>
```

Example:

```
nvreport -class "Media Requests" -format "%Date %JOBID %TRANSITION::3"
```

Inserting a line break

To include a line break between each entry in the report output, append "%\n" to the end of the list of fields named with the **-format** option:

```
-format "%<Real Name> %<Real Name> %\n
```

Example:

```
nvreport -class "Media Requests" -format "%Date %Time %JOBID %TRANSITION %\n"
```

Adding or removing columns

Some template files offer several additional fields that can be included in the output using the **-format** option. To add a column, obtain the full list of the available fields for a template file using the `nvreport -help field <class name>` command. Review the information offered in the Description column for each field, and include the applicable fields. Verify that you use the real name of the field.

The following example uses the "drives" canned report. It includes all the default fields and additionally displays the number of Write Errors for the drive.

Example:

```
nvreport -class drives -format "%DriveName %Product %Vendor %Status %DriveMachine
%DriveDataWritten %DriveDataRead %DriveWriteErrors"
```

Using the sort option

The **-sort** option can be used to sort the entries on a selected field. A sort expression is specified in the following format:

```
-sort "%[field name][+/-]
```

- **[field name]:** Field on which the report is sorted.
- **[+/-]**: Use + to sort the output in ascending order of the specified field, or - to sort the output in descending order.

A report can be sorted by any field a class offers. Even a Real Name for the field that is not displayed in the output can be used for sorting the output.

When you use the **-sort** option, you must use the real name of the fields. Each name must be prefixed with a "%" symbol. If the real name includes the "%" symbol, use the escape sequence "%%" when specifying the name.

Example:

```
nvreport -class "Job History" -sort "%TITLE+"
```

You can specify multiple fields with the "-sort" option. The resulting report prioritizes the sort based on the order of the field names in the syntax. When using multiple sort fields, enclose all fields in quotation marks (" ").

Example:

```
nvreport -class "Job History" -sort "%TITLE+ %EXITSTATUS
```

Using the include option

The **-include** option can be used to filter the data for a report. A filter expression is specified in the following format:

```
-include %[field name][operator][constant]
```

- **[field name]:** Real Name of the field.
- **[operator]**: The operator can be any of the following:
  - > (greater than)
  - >= (greater than or equal to)
  - < (less than)
  - <= (less than or equal to)
  - = (equal to)
  - != (not equal to)

- **[constant]:** The value to which the [field name] value is compared. For example, to include only entries that apply to the job assigned the Job ID of "42", you would include "42" as the [constant].

To join multiple filter expressions, use "AND" and "OR". In addition, use parenthesis to indicate the priority of the arguments.

Examples:

- `nvreport -class "Job History" -include "%JOBDEFINITIONID = 42`

- `nvreport -class "Job History" -include "(%JOBDEFINITIONID > 50 AND %INSTANCEID < 5) OR %TYPE = restore`

Constant types

Table 93. Constant types

Constant type	Description
Timepassed	Use to compare fields that contain time interval values. For example, the amount of time it took to run a backup job. The value can be specified in the following formats: • HH:MM:SS • HHMMSS
Boolean	Use to compare fields that contain boolean values. Examples of boolean values: • Yes or No • True or False
Date	Use to compare fields that contain date values. **Example:** `nvreport -class "job history" -include "%STARTDATE >= [Date]"` The value can be specified in the following formats: • YYYY/MM/DD • YYYYMMDD • now-[number value][time variable (YE = Year, MO = Month, WE = Week, DA = Date, HO = Hour, MI = Minute, SE = Second)] For example, "now-1YE" would be one year ago.
Daysinweek	Use to compare fields that contain a day of the week. The value can be specified in the following format: • Sunday = "SU" • Monday = "MO" • Tuesday = "TU" • Wednesday = "WE" • Thursday = "TH" • Friday = "FR" • Saturday = "SA"
Daysinmonth	Use to compare fields that contain a specific date in the month. For multiple values use a comma separator and enclose all values in quotation marks.

Table 93. Constant types

Constant type	Description
hdwmycount	Use to compare fields that contain the count (total number) of Hours, Days, Weeks, Months and Years.
	The value can be specified in the following format:
	[#H] [#D] [#W] [#M] [#Y]
	For example, "12H 2W 10M 18Y" indicates 12 hours, two weeks, 10 months, and 18 years.
	Each time variable can be added or omitted as required.
Integer (large value)	Use to compare fields that contain large integer values (for example, 764874497498723497)
Number	Use to compare fields that store a numeric value.
	Example:
	`nvreport -class "job history" -include %INSTANCEID = 2`
pluginscreen	N/A
selectiontree	N/A
String	Use to compare fields that contain a string value.
	Example:
	`nvreport -class "job history" -include "%EXITSTATUS !=Failed"`
	Strings of text with spaces must be enclosed in quotation marks.
Systime	Use to compare fields that contain system time.
	The value can be specified in the following format:
	• HH:MM:SS
	• HHMMSS (221011)
	• Past Time: now-[number value][time variable (YE = Year, MO = Month, WE = Week, DA = Date, HO = Hour, MI = Minute, SE = Second)].
	For example, "now-30mi" would be 30 hours ago.
Time	Use to compare fields that contain any time value.
	Example:
	nvreport -class "job history" -include "%STARTTIME >= [Time]"
	Example:
	`nvreport -class "Job History" -format "%Title::25 %starttime::13 %startdate::15 %endtime::13 %enddate::10 %exitstatus::30" -include "%STARTDATE >= 'YYYYMMDD' AND %STARTDATE <= 'YYYYMMDD'"`
	The value can be specified in the following format:
	• HH:MM:SS
	• HHMMSS (221011)
	• Past Time: now-[number value][time variable (YE = Year, MO = Month, WE = Week, DA = Date, HO = Hour, MI = Minute, SE = Second)].
	For example, "now-12ho" would be 12 hours ago.

Table 93. Constant types

Constant type	Description
Unique	N/A
weeksinmonth	Use to compare fields that store a specific week in the month.
	The value can be specified in the following format:
	[Week Number]: Required week numbers
	"L" refers to the last week in the month. For example, **134L** would include the first, third, fourth, and last week in the month.

Using the title option

When a report is run and viewed from the command line, it is given the default title Report "CLI Report" in the output. The **-title** option can be used to change the report title. The **-title** option is specified in the following format:

```
-title <NewReport Title>
```

If a title is to contain any spaces, the entire value must be enclosed in quotation marks. While the "-title" option can be used to label a CLI-output report, it is better suited to label a report that is output to file, and viewed outside of the CLI.

Creating external report files

The report files generated using the **nvreport** utility can be saved to the **output** subdirectory in the **reports** directory (<NetVault home>\reports\output on Windows and <NetVault home>/reports/output on Linux) and used as required. For example, they can be opened for viewing in a browser or sent as email attachments. The procedure for creating an external report file includes the steps outlined in the following sections:

- Selecting the template file
- Specifying the outputdir
- Specifying the appendoutput option
- Using the title option

Selecting the template file

There are two types of report template files.

- **HTML template files:** These templates are used to by the NetVault WebUI. You can use them with the -outputdir option to create HTML-based external files. For more information about these templates, see HTML template files.

- **Plain text template files:** These templates are used by the CLI utilities to display output in the terminal window. You can use them with the -outputdir option to create plain text external files. The plain-text template files contain the text "clidefault" in their filename or "cli default file" or "textual" in their "Nice Name." For more information about these templates, see Plain text template files.

Use the following options to create the report file:

- **-templatename:** Specifies the "nice name" of the template file

- **-templatefile**: Specifies the name of the template file. You must specify the full file path with this option. The report templates are located in the **<NetVault home>\reports\ templates** directory.

i | **NOTE:** While it is possible to use the "-class" option to generate a report file for viewing outside the terminal session window, we recommend that you avoid using it. The "-class" option is designed to be used with a default template file and create a report for viewing in the terminal session window. You may not obtain the desired result in an external report with the "-class" option.

Specifying the outputdir

The output directory is created in <NetVault home>\reports\output on Windows and <NetVault home>/reports/output on Linux.

The syntax for this option is:

```
-outputdir <name for subdirectory>
```

Example:

```
nvreport -templatename "Executed Job History" -outputdir "Test01"
```

Note the following:

- If an existing subdirectory is specified with the "-outputdir" option, it is overwritten.

  The following command creates a subdirectory named "report" and saves the report file "output.html" in this directory:

  ```
  nvreport -templatename "Client Groups" -outputdir report
  ```

  When you generate another report, it overwrites the existing "report" subdirectory and the "output.html" file with the new file:

  ```
  nvreport -templatename "Defined Jobs" -outputdir report
  ```

  If you do not want to overwrite an existing report file, specify a new directory or use the **-appendoutput** option.

- The HTML report templates contain various artwork files in their layout. When you use an HTML template, the artwork files are automatically copied to the new subdirectory.

Specifying the appendoutput option

If an existing subdirectory is specified with the **-outputdir** option, it is overwritten when a new report is generated. To retain the contents of an existing report file, use the -appendoutput option. It allows you to append the new report data to the existing report file.

Example:

```
nvreport -templatename "Restore Summary" -outputdir "Test01" -appendoutput
```

Note the following:

- The **-appendoutput** option must be used with the **-outputdir** option.
- This option allows you to combine two different types of templates.
- This option allows you to combine the HTML and plain text output types.

Using the title option

The **-title** option can be used with the **-outputdir** option to assign a user-defined to the saved report file. This syntax for using this option is:

```
-title <NewReport Title>
```

If a title is to contain any spaces, the entire value must be enclosed in quotation marks.

Example:

```
nvreport -templatename "Historic Jobs - By Date" -outputdir "Test01"
-title "Job History - By Date"
```

Note the following:

- This option can be used with the **-outputdir** option to add a title to any format of template (HTML or plain text.

- When used with the **-appendoutput** option, the **-title** option is used as the title of the report that is appended to the existing "output.html" file. The existing report maintains its existing title.

HTML template files

The following table provides the "nice name" and filename of the HTML template files.

Table 94. HTML template files

Template filename	Nice name	Description
activejobs	Currently Active Jobs	Lists all active jobs. The report includes: • Job ID • Job name • Client name • Policy name • Running status (for example, Writing to Media)
alldrives	All Drives	Lists all drives controlled by the NetVault Server. The report includes: • Name of the machine to which the drive is attached • Drive Name • Drive status (online or offline) • Amount of data read (zero if no jobs are active) • Amount of data written • Number of read errors • Number of write errors • Last write date • Last read date • Last clean date • Amount of data written since it was last cleaned • Number of times the drive has been used since it was last cleaned
allfailedpolicyjobs	Failed Policy Jobs	Provides a summary of failed policy jobs for the specified period. The report includes: • Policy name • Client name • Job name • Plug-in name • Start date • Start time • Run length • Job status

Table 94. HTML template files

Template filename	Nice name	Description
clientgroups	Client Groups	Lists all client groups. The report includes: • Group name • Group description • All current clients are member of this group ("Yes" or "No") • Client group members
clientstatuses	Client Statuses	Displays the status of added clients. The report includes: • Client name • NetVault version • Client accessibility status ("Yes" or "No") • Client status ("Up" or "Down")
errorlogs	Recent Error Logs	Lists error logs generated during the specified period. The report includes: • Date and time • Client name • Job ID • Instance ID • Error message • Warning level
events	NetVault Events	Lists events raised during the specified period. The report includes: • Date and time • Event name • Event class • Event description • Event message
expiredofflinemedia	Expired Offline Media	Lists expired offline media. The report includes: • Media label • Media group label • Barcode • Last read or write date • Offsite location
failedrequests	Failed ULA Requests	Provides a summary of failed user requests for the specified period.

Table 94. HTML template files

Template filename	Nice name	Description
fullonlinemedia	Full Online Media	Lists online storage devices that are full. The report includes: • Media label • Media group label • Barcode • Last read or write date • Media expiry date • Library name • Slot number • Offsite location • Needs import ("Yes" indicates that the media item is marked as Foreign and it needs to be scanned to read the on-tape indices into the NetVault Database)
globalnotifications	Global Notifications	Lists events that are included in the global notification profile. The report includes: • Event class • Configured notification environment • Event • Notification method
historicjobs	Historic Jobs - By Date	Displays date-wise summary of jobs performed during the specified period. The report includes: • Start date and time • Run length
historicjobsbysize	Historic Jobs - By Size	Displays size-wise summary of jobs performed during the specified period. The report includes: • Job ID • Job name • Instance ID • NetVault Client name • Selection Set name • Backup size • Job status • Start date and time • Run length
jobdefinitions	Defined Jobs	Displays all job definitions. The report includes: • Job ID • Job name • NetVault Client name • Policy name (if applicable) • Plug-in name • Job type (Backup, Restore, or Report) • Schedule Set name • Selection Set name • Backup Target Set name • Advanced Options Set name

Table 94. HTML template files

Template filename	Nice name	Description
jobhistory	Executed Job History	Provides a summary of jobs performed during the specified period. The report includes: • Start date and time • End time • Job ID • Instance ID • Phase ID • Job name • Job type (Backup, Restore, or Report) • Exit status of the job ("Completed", "Completed with errors" or "Failed") • Run length
libraryblankcounts	Blank Media Items In Libraries	Displays the number of blank media items residing in the libraries controlled by the NetVault Server. The report includes: • Library name • Blank media count
librarycontents	Libraries' Media Contents	Provides a summary of currently online media items. The report includes: • Library name • Drive name • Slot number • Media label • Barcode • Media group label • Amount of space used and left
logs	NetVault Logs	Displays system logs generated during the specified period. The report includes: • Job ID • Log class • Warning level • Date and time • Client that generated the log • Log message
mediacontentsquery	Media Contents Query	Provides a summary of data stored on individual media items. The report includes: • Media label • Media group label • Barcode • Job name • Client name • Plug-in name • Start date and time • Backup type • Backup size • Media expiry date and time

Table 94. HTML template files

Template filename	Nice name	Description
mediageneral	Media — General	Provides a summary of used media items. The report includes: • Media label • Barcode • Media type (tape or disk file) • Media format (MTF=Windows or UTF8=Linux/UNIX) • Name of the machine to which the drive is attached • Amount of space available • Amount of space used • Media item is marked unusable (Yes, if marked as unusable; No, if not marked as unusable) • Media item is marked read-only (Yes, if marked as read-only; No, if not marked as read-only)
mediasegmentcontents query	Media Segment Contents Query	Provides a summary of data stored on each segment. The report includes: • Media label • Barcode • Job name • Client name • Plug-in name • Backup date • Backup time • Length of the segment (in number of bytes)
mediautilization	Media Utilization	Displays the storage utilization statistics for devices controlled by the NetVault Server. The report includes: • Media label • Barcode • Media group label • Amount of space available • Amount of space used
notifications	Users' Selected Notifications	Lists all events that have been included in any user notification profile. The report includes: • Event name • Event description
offlinedevices	Offline Devices	Lists devices that are currently offline.
outstandingopmsgs	Outstanding Operator Messages	Lists operator messages that have not been acknowledged. The report includes: • Date and time • Operator message text If all messages have been acknowledged or deleted, this report returns no information

Table 94. HTML template files

Template filename	Nice name	Description
overnight_jobs_failed	Failed Overnight Backup Jobs	Provides a summary of overnight backup jobs that failed. The report includes: • Job ID • Job name • Client name • Policy name • Job status
overnight_jobs_failed_count	Count Of Failed Overnight Backup Jobs	Displays the total number of the overnight backup jobs that failed (for example, "0 backup jobs failed").
overnight_jobs_successful_count	Count Of Successful Overnight Backup Jobs	Displays the total number of the overnight backup jobs that completed successfully (for example, "12 backup jobs finished successfully").
overnight_jobs_total_data_stored	Count of Data Stored In Overnight Jobs	Displays the total amount of the data stored in overnight jobs (for example, "Approx. 348GB of data was stored").
overnight_jobs_warnings_count	Count Of Overnight Backup Jobs Finished With Warnings	Displays the total number of the overnight backup jobs that completed with warnings (for example, "1 backup job finished with warnings").

policiessummary	Policy Basics	Provides a summary of backup policies. The report includes:
		• Policy name
		• Total number of jobs created within the policy
		• Total number of clients added to the policy
		• Policy status:
		  - OK: All policy jobs have completed successfully
		  - Warnings: One or more policy jobs have completed with warnings
		  - Errors: One or more policy jobs have failed
		• List of clients added to the policy
		• Events defined for failed jobs
		• Events defined for jobs completed with warnings

restoresummary	Restore Summary	Provides a summary of all restore jobs. The report includes: • Start date and time • Client name • Job name • Job ID • Instance ID • Run length • Job status
serverlicensecapabilities	Server License Capabilities And Usage	Displays available and used licenses for NetVault. The report includes: • License description (for example, number of clients allowed, number of library units, and others) • Available licenses • Used licenses
serverlicenseflags	Server License Flags	Lists the functionality offered by current Server License type.

Table 94. HTML template files

Template filename	Nice name	Description
single_job_drives_events	Single Job's Drive Events	Displays the transfer rates for the drives used in a specific job.
single_job_logs	Single Job's Logs	Displays the log entries for a particular job. The report includes: • Date and time of log entry • Log class • Warning level • Client that generated the log • Log message
single_job_media	Media Used by Single Backup	Displays the media usage details for a particular job. The report includes: • Barcode • Media label • Media type (tape or disk file) • Offsite location
single_job_media_transfers	Single Job's Media Transfers	Displays the data transfer details for a particular job. The report includes: • Date and time the media transfer request was received • Date and time the requested media transfer began • Date and time the requested media transfer completed • Type of media transfer (read or write0 • Amount of data transferred
single_job_summary	Single Job Main Summary	Provides a summary of a particular job. The report includes: • Job ID • Job name • Job type (backup, restore, or report) • Plug-in name • Instance ID • Start date and time • End date and time • Job status • Size of data transferred • Transfer rate (applies only to backup jobs)
single_job_xfer_rates	Single Job's Data Transfer Rate	Displays the data transfer rate for a particular job. The report includes: • Date and time of event • Drive name • Drive events
singlepolicybytecounts	Policy Totals	Displays the backup size and transfer rate for a backup policy. The report includes: • Total backup size • Average backup size • Total transfer rate • Average transfer rate

Table 94. HTML template files

Template filename	Nice name	Description
singlepolicyclients	Policy Clients	Lists all clients included in a policy. The report includes: • Policy name • Client name • Policy status: - OK: All policy jobs have completed successfully - Warnings: One or more policy jobs have completed with warnings - Errors: One or more policy jobs have failed
singlepolicyfailedjobs	Failed Jobs Within Single Policy	Lists all failed jobs for a backup policy. The report includes: • Policy name • Client name • Job name • Plug-in name • Start date • Start time • Run length • Job status
singlepolicyjobs	Defined Policy Jobs	Provides a summary of jobs added to a policy. The report includes: • Job name • Policy name • Whether the job is currently active • Backup Selection Set name • Backup Options Set name • Schedule Set name • Target Set name • Advanced Options Set name
singlepolicystatus	Policy Status Information	Displays the status of a particular policy. The report includes: • Policy name • Number of clients added to the policy • Number of jobs added to the policy • Failed jobs • Jobs completed with warnings • Policy status
singleusersaudittrail	Single User's Audit Trail	Displays auditor logs for the specified user account.
userdefinedeventtypes	User-Defined Event Types	Lists all user-defined events. The report includes: • Event class • Event • Notification method • Configured notification environment (if applicable)

Table 94. HTML template files

Template filename	Nice name	Description
userdetails	User Details	Displays the details of NetVault users. The report includes: • Account name • Real name • Description • Location • Contact information • Last logon date and time
userprivileges	User Privileges	Lists privileges granted to individual users.
usersmediausage	Quotas And Media Usage	Provides a summary of used and assigned media quota for each user account. The report includes: • Account name • Media quota • Media used

About us

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