Dell FluidFS 5.0 FS8600 Appliance
CLI Reference Guide

Notes, Cautions, and Warnings

NOTE: A NOTE indicates important information that helps you make better use of your computer.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

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

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About This Guide

This guide provide information about using the FS8600 command-line interface (CLI) and how it can be used to manage FluidFS clusters.

Revision History

Document number: 680-114-001

Revision	Date	Description
A	January 2016	Initial release of FluidFS v5
B	March 2016	Removed a command that is no longer valid
C	July 2016	Removed a command that is no longer valid

Audience

The intended audience for this document are storage or network administrators.

Related Documentation

The following documents comprise the core Dell FluidFS for FS8600 appliance documentation set.

Documents Intended for Dell Customers

- *Dell FluidFS Version 5.0 FS8600 Appliance Administrator's Guide* – Provides information about using the Dell Storage Manager software to manage FS8600 appliances, and provides information about FS8600 appliance monitoring and troubleshooting.
- *Dell FluidFS Version 5.0 FS8600 Appliance Firmware Update Guide* – Provides information about upgrading the FluidFS software from version 4.0 to 5.0.
- *Dell FluidFS Version 5.0 Release Notes* – Provide information about FluidFS releases, including new features and enhancements, open issues, and resolved issues.
- *Dell Storage Manager Installation Guide* – Provides information about installing and configuring the Dell Storage Manager Data Collector and Dell Storage Manager Client.
- *Dell Storage Manager Administrator's Guide* – Describes how to use the Dell Storage Manager software to manage Storage Center and FS8600 appliances.
- *Dell Storage Manager Release Notes* – Provides information about Dell Storage Manager releases, including new features and enhancements, open issues, and resolved issues.

Documents Intended for Dell Installers and Certified Business Partners

- *Dell FluidFS Version 5.0 FS8600 Appliance Pre-Deployment Requirements* – Provides a checklist that assists in preparing to deploy an FS8600 appliance prior to a Dell installer or certified business partner arriving onsite to perform an FS8600 appliance installation.

- *Dell FluidFS Version 5.0 FS8600 Appliance Deployment Guide* – Provides information about the deploying an FS8600, including cabling the appliance to the Storage Center and network, and deploying the appliance using the Dell Storage Manager software.
- *Dell FS8600 Appliance Service Guide* – Provides information about FS8600 appliance hardware, system component replacement, and system troubleshooting.
- *Dell NAS Appliance SFP+ Replacement Procedure* – Provides information about replacing SFP+ transceivers on an inactive system.
- *Dell FluidFS FS8600 Appliance 1Gb to 10Gb Upgrade Procedure* – Provides information about upgrading a Fibre Channel FS8600 appliance from 1Gb Ethernet client connectivity to 10Gb Ethernet client connectivity.

1

About the CLI

The command line interface (CLI) provides a comprehensive set of commands for managing the FluidFS cluster. The CLI allows you to perform the same management operations as the FluidFS NAS Manager WebUI, as well as operations that can be performed only from the CLI.

CLI Menus

CLI commands are organized using menus and submenus. Menus group related CLI commands. The following table lists the CLI menus that are available.

Menu	Submenus	Description
access-control	• active-directory • local-users – without-password-complexity-checks • local-groups • users-database • mapping • available-backups	Use this menu to manage local users and user groups, external user repositories, and user mapping policies.
events	• system • auditing	Use this menu to monitor FluidFS cluster events and SACL auditing events.

hardware	• NAS appliances
	  – discovery
	• fabrics
	  – iscsi-portals
	  – iscsi
	  – fc
	• storage-subsystem
	• storage-identifiers
	• restore-configuration-from-storage
	• destroy-cluster
		Use this menu to manage fabrics, NAS appliances, the NAS pool, and the storage subsystem; create and destroy a FluidFS cluster; and restore a configuration from storage.

networking	• subnets • client-network-interface • default-gateway • static-routes	Use this menu to manage client subnets, the default gateway, static routes, DNS, and client load balancing; view SMB and

Menu	Submenus	Description
	• DNS, NFS • client-load-balancing • active sessions • active-ndmp-sessions • open files • monitor – external-servers-states – performance-per-node – performance-summary * read * write * IOPS	NDMP sessions; and monitor performance and external servers.
system	• time • data-protection – antivirus-scanners – NDMP-configuration – cluster-partnerships • mail-configuration • file-system-resiliency • administrators • SNMP • licenses • software-updates • internal – file-system * service-mode * domains * background-processes • configuration – data-reduction – health-scan * internal-storage-reservation • security – support-access – management-access * management-subnet – FTP * configuration – ui-configuration • internal-network	Use this menu to manage the system time, data protection, administrators, SNMP, licensing, software updates, the file system, the support account, secured management, FTP, and the FluidFS cluster name; run diagnostics; and monitor background operations.

Menu	Submenus	Description
	• cluster-name • language • diagnostics • system-configuration-state • background-operations • EM – recipients	
NAS-volumes	• list – capacity-over-time – edit – clone • NAS-pool – configuration – capacity-overtime • NFS-exports – add-acl – delete-acl – general-settings • SMB-shares – home-share – general-settings • quota – rules * users • default * users-in-groups * groups • default – usage * users * groups • snapshots – schedules • replication – schedules • namespace aggregation • configuration-backups	Use this menu to manage NAS volumes, clone volumes, NFS exports,SMB shares, quota rules, snapshots, replication, and configuration backups; and monitor quota usage.

CLI Command Syntax

CLI commands have the following structure:

CLI> *<main_menu> <submenu(s)> <command> <argument(s)> -<option(s)>*

where:

- **CLI>** – Command prompt where you type the command
- ***<main_menu>*** – Name of the main menu
- ***<submenu(s)>*** – Names of one or more submenus (separated with spaces). Certain menus have multiple levels of submenus.
- ***<command>*** – Name of the command that you want to execute
- ***<argument(s)>*** – Arguments (separated with spaces) that you must enter with the command to execute the command successfully. You might have none or multiple arguments depending on the command that you want to execute. You must enter the arguments for a command in the correct order.
- ***<option(s)>*** – Options (separated with a space) that are available for a command. You might have none or multiple options depending on the command that you want to execute and you might need to enter at least one of the available options for the command to execute successfully. Each option for a command must start with a hyphen (-).

Navigating the CLI

When navigating the CLI, the following commands are available throughout the system:

- **back** — Moves back one level in the menu hierarchy
- **main** — Returns to the main menu
- **help** — Lists information about currently available menus, commands, arguments, and options
- **history** — Lists previously executed commands
- **exit** or **quit** — Exits the CLI
- **find** — Lists menus and commands containing the text you supply

Entering Commands in the CLI

There are two ways to enter commands in the CLI:

- Enter a command by navigating one menu at a time
- Enter a single line command

Tab completion is available in the CLI. You can press the **Tab** key to automatically complete a menu, submenu, command, or option name after entering a unique portion of the name. This can be useful in completing long commands. For example, entering `net` and then pressing **Tab** is the same as entering `networking`. If there are several items that begin with those characters, the CLI displays the possibilities. For example, entering `NAS-volumes n` and then pressing **Tab** displays `NAS-pool` and `NFS-exports`.

Press **Tab** again to see the available submenus, commands, and options under the given string. For example, entering `events` and then pressing **Tab** twice displays the available events commands: `list` and `view`.

The CLI also lets you abbreviate a command if the abbreviation uniquely identifies the command. For example, the following commands are identical: `events list` and `events li`.

Enter a Command by Navigating One Menu at a Time

Enter a command by navigating through the CLI one menu at a time.

1. Type the *<menu name>* and press the **Enter** key.
   The available submenus and commands under the menu are displayed.
2. If needed, type the *<submenu name>* and press the **Enter** key.
   The available submenus and commands under the submenu are displayed.
3. Repeat Step 2 until you reach the submenu level containing the command that you want to execute.
4. Type *<command> <argument(s)> –<option(s)>* and press the **Enter** key.
   The command is executed.

Example:

1. Type `access-control` and press the **Enter** key.
2. Type `mapping` and press the **Enter** key.
3. Type `manual` and press the **Enter** key.
4. Type `add NAS jsmith johns –EnableWindowsToUNIXMapping Yes` and press the **Enter** key.

Enter a Single Line Command

To enter a single line CLI command:

Type: *<menu name> <submenu name(s)> <command> <argument(s)> -<option(s)>* and press the **Enter** key.

The command is executed.
Example:

Type: **access-control mapping manual add NAS jsmith johns EnableWindowsToUNIXMapping Yes** and press the **Enter** key.

CLI Output

Depending on the command, all available output might be displayed, or just the beginning of the output might be displayed along with the following message describing the options available for navigating the output.

<command> <number>`% Press Enter for next line Space for next page or ESC to stop paging.`

For some commands with lengthy output, the following options are available:

- `%` — Displays the percentage of output displayed
- `Enter` — Pressing **Enter** displays the next line of output
- `Space` — Pressing **Space** displays the next page of output

- `ESC` — Pressing **Esc** returns you to a command prompt

Getting Help on the CLI

The CLI provides online help for menus, commands, arguments, and options. At any time while using the CLI, you can type **help** to see more information about the available menus, commands, arguments, and options.

Example 1

```
CLI/access-control/mapping/manual> help
Available commands:
            list
            view
            add
            delete
            restore
```

Example 2

```
CLI/access-control/mapping/manual> help view
view - Modify the mapping rule between a Windows and UNIX user
```

Accessing the CLI

Log on to the CLI using either a VGA console or a secure shell (SSH) session.

Connect to the FluidFS Cluster CLI Using a VGA Console

Log on to the CLI using a VGA console to manage the FluidFS cluster.

NOTE: Connect a monitor to the NAS controller's VGA port and connect a keyboard to one of the NAS controller's USB ports.

1. From the command line, type the following command at the **login as** prompt:

   cli
2. Type the FluidFS cluster administrator user name at the **login as** prompt.

   The default user name is **Administrator**.
3. Type the FluidFS cluster administrator password at the ***<user_name>***'s password prompt.

   The default password is **Stor@ge!**. You are logged on to the CLI and a Welcome window is displayed, listing the installed FluidFS version and the available commands in the main menu.

Connect to the FluidFS Cluster CLI Through SSH Using a Password

Log on to the CLI through SSH to manage the FluidFS cluster.

1. Use either of the following options:
   - Using an SSH client, connect to a client VIP. From the command line, type the following command at the **login as** prompt:

     `cli`

- Using a UNIX/Linux workstation, type the following command from a prompt:

  ```
  ssh cli@<client_VIP_or_name>
  ```

2. Type the FluidFS cluster administrator user name at the **login as** prompt. The default user name is **Administrator**.
3. Type the FluidFS cluster administrator password at the ***<user_name>***'s password prompt. The default password is **Stor@ge!**. You are logged on to the CLI and a Welcome window is displayed, listing the installed FluidFS version and the available commands in the main menu.

Connect to the FluidFS Cluster CLI Through SSH Without Using a Password

You can use SSH keys to bypass the SSH login prompt to manage the FluidFS cluster.

1. Log on to a UNIX/Linux workstation for which you want to bypass the SSH login prompt.
2. From the command line, type the following command:

   ```
   ssh-keygen -t rsa
   ```

3. Press **Enter** at the **Enter file in which to save the key (/home/***<user_name>*/.ssh/id_rsa) prompt.
4. Press **Enter** at the **Enter passphrase (empty for no passphrase)** prompt and again at the **Enter same passphrase again** prompt. An SSH key is generated at **/home/***<user_name>*/.ssh/id_rsa.pub.
5. Copy the SSH key.
6. Log on to the CLI using a password.
7. Type the following command:

   ```
   system administrators passwordless-access add-ssh-keys Administrator
   <MachineName> "<SSH_key>"
   ```

   Now you can use the following command to log on to the FluidFS cluster from the workstation without needing a password:

   ```
   ssh <FluidFS_administrator_user_name>@<client_VIP_or_name>
   ```

   You can also use the following format to run commands from the workstation without needing a password:

   ```
   ssh <FluidFS_administrator_user_name>@<client_VIP_or_name> <CLI_command>
   ```

2

CLI Commands

This section describes the available FluidFS cluster CLI commands.

access-control active-directory join

Join the FluidFS cluster to Active Directory.

Format

```
access-control active-directory join <Domain> {options}
```

Arguments

Argument	Description	Format
<Domain>	Active Directory domain	Existing Active Directory domain name

Options

Option	Description	Format
-Username <Username>	Active Directory administrator name	Existing Active Directory administrator user name. The user should preferably be a domain administrator, or at least have the ability to add a computer object to the domain.
-Password <Password>	Active Directory administrator password	Existing Active Directory administrator password. If this option is not given, it will be prompted for, and the text will not appear on the screen.

Example

Join the FluidFS cluster to the Active Directory domain nas.test using the Active Directory administrator username Administrator and password password:

```
CLI> access-control active-directory join nas.test -Username Administrator
-Password password
```

access-control active-directory leave

Description

Disconnect the FluidFS cluster from the Active Directory domain.

Format

```
access-control active-directory leave
```

Example

Disconnect the FluidFS cluster from the Active Directory domain:

```
CLI> access-control active-directory leave
```

access-control active-directory modify-settings

The system selects which controllers to use automatically, based on the sites defined in Active Directory. You can override this automatic selection and specify a list of preferred domain controllers.

Format

```
access-control active-directory modify-settings <PreferredDcList>
```

Example

To specify a list of preferred domain controllers:

```
CLI> access-control active-directory modify-settings 10.56.1.3,10.56.1,4
```

access-control active-directory status

Display the Active Directory status.

Format

```
access-control active-directory status
```

Example

Display the current Active Directory status:

```
CLI> access-control active-directory status
```

Output

```
Configured        = Yes
Status            = Optimal (all domain info is received successfully)
Domain            = QA.DELL-IDC.COM
DomainControllers =
.-----------------.----------------------.------------.--------.--------.
```

```
| Domain           | DC Name                 |  DC IP     |  Trust | Online |
|------------------|-------------------------|------------|--------|--------|
| Dell-IDC.com     | DC3.Dell-IDC.com        |172.22.144.2| Two-way|  Yes   |
|------------------|-------------------------|------------|--------|--------|
| QA.Dell-IDC.com  | CHID2.QA.DEll-IDC.com   | 10.48.28.34| Primary|  Yes   |
|------------------|-------------------------|------------|--------|--------|
| QA2.Dell-IDC.com|                         |            | Two-way|  Yes   |
'------------------'-------------------------'------------'--------.--------.
Preferred Domain Controllers = .-----------.-------------.
                               | DC Name   | DC IP       |
                               |-----------|-------------|
                               |           |             |
                               .-----------.-------------.
```

access-control available-backups list

Display a list of available backups for global configuration.

Format

```
access-control available-backups list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the current list of available backups for global configuration:

```
CLI> access-control available-backups list
```

Output

```
.--------------.--------------------.
| Cluster Name | Backup Time        |
|--------------|--------------------|
| idffs2       | 05-Aug-14 09:19:02 |
'--------------'--------------------'
```

access-control computers-list

Display a list of machine accounts (computers) in Active Directory.

Format

```
access-control computers-list <Domain> <AccountName prefix>
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-Domain<Domain>	Account domain, the available domains are displayed by "domains-list" command	
-AccountNamePrefix<AccountNamePrefix>	Prefix of computer name to be displayed by the command	

Example

Display a list of machine accounts (computers) in Active Directory.

```
CLI> access-control computers-list
```

Output

```
.-----------------.-----------------.-----------------------
| Domain          | Type            | Computer Name         |
|-----------------|-----------------|-----------------------|
| <UNIX accounts> | UNIX            |win2k12d-m380.lab.town |
|-----------------|-----------------|-----------------------|
| BUILTIN         | Local           |win2k12d-m380.lab.town |
|-----------------|-----------------|-----------------------|
| idffs1          | Local           |win2k12d-m380.lab.town |
|-----------------|-----------------|-----------------------|
| NAS             | ActiveDirectory |win2k12d-m380.lab.town |
'-----------------'-----------------'-----------------------|
```

access-control domains-list

Display a list of user and group domains.

Format

```
access-control domains-list
```

Example

Display a list of the current user and group domains:

```
CLI> access-control domains-list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-Remarks Remarks>	Group description	Text description of the group

Output

```
.-----------------.-----------------.
| Domain          | Type            |
|-----------------|-----------------|
| <UNIX accounts> | UNIX            |
|-----------------|-----------------|
| BUILTIN         | Local           |
|-----------------|-----------------|
| idffs1          | Local           |
|-----------------|-----------------|
| NAS             | Active Directory|
'-----------------'-----------------'
```

access-control groups-list

Display a list of groups.

Format

```
access-control groups-list <Domain> <GroupNameStartWith>
```

Arguments

Argument	Description	Format
-Domain <Domain>	Group domain	Existing group domain
-GroupNameStartWith <GroupNameStartWith>	Prefix of group name	Prefix of an existing group name

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-Remarks <Remarks>	Group description	

Example

Display a list of groups in the NAS domain whose group name starts with d:

```
CLI> access-control groups-list NAS d
```

Output

```
.--------.----------------------.----------------------.---------.----------.
| Domain | Name                 | Id                   | Type    | Source   |
|--------|----------------------|----------------------|---------|----------|
| NAS    | DHCP Administrators  | S-1-5-21-1100376456-3| Windows | EXTERNAL |
|        |                      | 253980028-2903806399-|         |          |
|        |                      | 1104                 |         |          |
|--------|----------------------|----------------------|---------|----------|
| NAS    | DnsAdmins            | S-1-5-21-1100376456-3| Windows | EXTERNAL |
|        |                      | 253980028-2903806399-|         |          |
|        |                      | 1101                 |         |          |
|--------|----------------------|----------------------|---------|----------|
| NAS    | Domain Admins        | S-1-5-21-1100376456-3| Windows | EXTERNAL |
|        |                      | 253980028-2903806399-|         |          |
|        |                      | 512                  |         |          |
|--------|----------------------|----------------------|---------|----------|
| NAS    | Domain Computers     | S-1-5-21-1100376456-3| Windows | EXTERNAL |
|        |                      | 253980028-2903806399-|         |          |
|        |                      | 515                  |         |          |
|--------|----------------------|----------------------|---------|----------|
| NAS    | Domain Controllers   | S-1-5-21-1100376456-3| Windows | EXTERNAL |
|        |                      | 253980028-2903806399-|         |          |
|        |                      | 516                  |         |          |
|--------|----------------------|----------------------|---------|----------|
| NAS    | Domain Guests        | S-1-5-21-1100376456-3| Windows | EXTERNAL |
|        |                      | 253980028-2903806399-|         |          |
|        |                      | 514                  |         |          |
|--------|----------------------|----------------------|---------|----------|
| NAS    | Domain Users         | S-1-5-21-1100376456-3| Windows | EXTERNAL |
|        |                      | 253980028-2903806399-|         |          |
|        |                      | 513                  |         |          |
'--------'----------------------'----------------------'---------'----------'
```

access-control local-groups add

Add a local group.

Format

```
access-control local-groups add <GroupName>
```

Arguments

Argument	Description	Format
<GroupName>	Local group name	Contains only the following characters: letters, numbers, underscores, hyphens, spaces, and periods. A period cannot be

Argument	Description	Format
		used as the last character of the account name.

Options

Options	Description	Format
-Remarks <Remarks>	Group description	Text description of the group

Example

Add a local group named groupA:

```
CLI> access-control local-groups add groupA
```

access-control local-groups add-external-computer

Add an external computer to a local group.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
access-control local-groups add-external-computer <ComputerDomain>
<ComputerName> <LocalGroupName>
```

Arguments

Argument	Description	Format
<ComputerDomain>	External computer domain	Existing external computer domain name
<ComputerName>	External computer name	Existing external computer name
<LocalGroupName>	Local group name	Existing local group name

Example

Add an external computer named MyComputer in the NAS domain to a local group named groupA:

```
CLI> access-control local-groups add-external-computer NAS MyComputer groupA
```

access-control local-groups add-external-group

Add an external group to a local group.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
access-control local-groups add-external-group <UserDomain> <GroupName>
<LocalGroupName>
```

Arguments

Argument	Description	Format
<UserDomain>	External user domain	Existing external user domain name
<GroupName>	External group name	Existing external group name
<LocalGroupName>	Local group name	Existing local group name

Example

Add an external group named groupABC in the NAS domain to a local group named groupA:

```
CLI> access-control local-groups add-external-group NAS groupABC groupA
```

access-control local-groups add-external-user

Add an external user to a local group.

NOTE: To view a list of existing domains, use the command `access-control domains-list`.

Format

```
access-control local-groups add-external-user <UserDomain> <UserName>
<GroupName>
```

Arguments

Argument	Description	Format
<UserDomain>	External user domain	Existing external user domain name
<UserName>	External user name	Existing external user name
<GroupName>	Local group name	Existing local group name

Example

Add an external user named jsmith in the NAS domain to a local group named groupA:

```
CLI> access-control local-groups add-external-user NAS jsmith groupA
```

access-control local-groups add-local-user

Add a local user to a local group.

Format

```
access-control local-groups add-local-user <UserName>
<GroupName>
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Existing local user name
<GroupName>	Local group name	Existing local group name

Example

Add a local user named user1 to a local group named groupA:

```
CLI> access-control local-groups add-local-user user1 groupA
```

access-control local-groups delete

Delete a local group.

NOTE: A group must be empty before it can be deleted.

Format

```
access-control local-groups delete <GroupName>
```

Arguments

Argument	Description	Format
<GroupName>	Local group name	Existing local group name

Example

Delete a local group named groupB:

```
CLI> access-control local-groups delete groupB
```

access-control local-groups delete-external-computer

Delete an external computer from a local group.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
access-control local-groups delete-external-computer <ComputerDomain>
<ComputerName> <LocalGroupName>
```

Arguments

Argument	Description	Format
<ComputerDomain>	External computer domain	Existing external computer domain name
<ComputerName>	External computer name	Existing externalcomputer name
<LocalGroupName>	Local group name	Existing local group name

Example

Delete an external computer named MyComputer from the NAS domain to a local group named groupA:

```
CLI> access-control local-groups delete-external-computer NAS MyComputer NAS
jsmith groupA
```

access-control local-groups delete-external-group

Delete an external group from a local group.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
access-control local-groups delete-external-group <GroupDomain> <GroupName>
<LocalGroupName>
```

Arguments

Argument	Description	Format
<GroupDomain>	External group domain	Existing external group domain name
<GroupName>	External group name	Existing external group name
<LocalGroupName>	Local group name	Existing local group name

Example

Delete an external group named groupABC in the NAS domain from a local group named groupA:

```
CLI> access-control local-groups delete-external-group NAS groupABC groupA
```

access-control local-groups delete-external-user

Delete an external user from a local group.

NOTE: To view a list of existing domains, use the command `access-control domains-list`.

Format

```
access-control local-groups delete-external-user <UserDomain> <UserName>
<GroupName>
```

Arguments

Argument	Description	Format
<UserDomain>	External user domain	Existing external user domain name
<UserName>	External user name	Existing external user name
<GroupName>	Local group name	Existing local group name

Example

Delete an external user named jsmith in the NAS domain from a local group named groupA:

```
CLI> access-control local-groups delete-external-user NAS jsmith groupA
```

access-control local-groups delete-local-user

Delete a local user from a local group.

Format

```
access-control local-groups delete-local-user <UserName> <GroupName>
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Existing local user name
<GroupName>	Local group name	Existing local group name

Example

Delete a local user named user1 from a local group named groupA:

```
CLI> access-control local-groups delete-local-user user1 groupA
```

access-control local-groups list

Display a list of the local groups.

Format

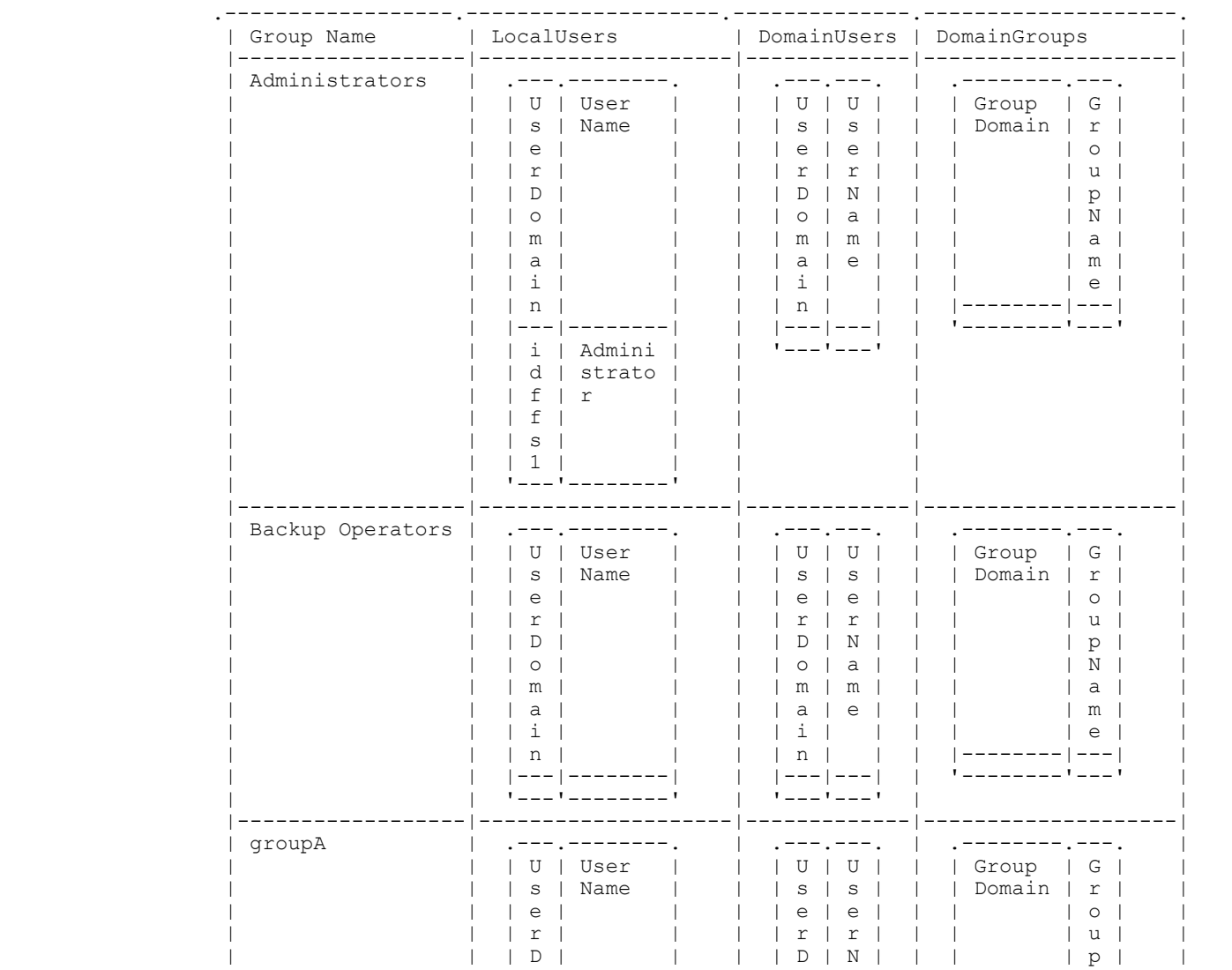
```
access-control local-groups list
```

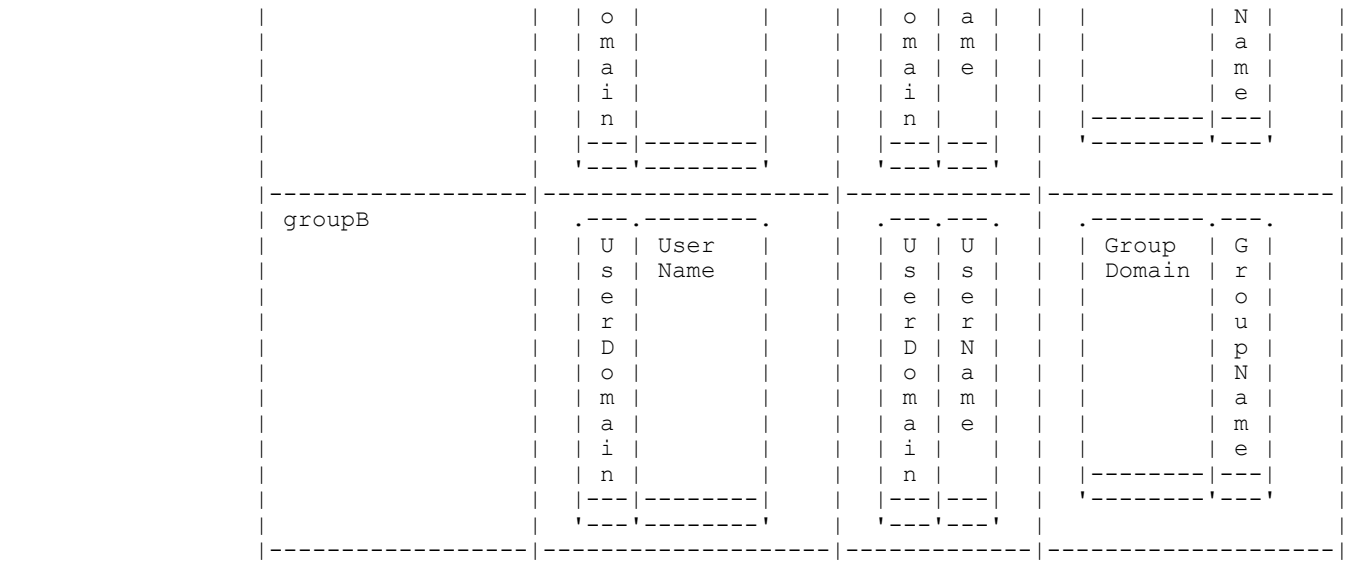
Example

Display the current list of local groups:

```
CLI> access-control local-groups list
```

Output





```
|                  |   | o |        |     |   | o | a |   |   |        | N |     |
|                  |   | m |        |     |   | m | m |   |   |        | a |     |
|                  |   | a |        |     |   | a | e |   |   |        | m |     |
|                  |   | i |        |     |   | i |   |   |   |        | e |     |
|                  |   | n |        |     |   | n |   |   |   |--------|---|     |
|                  |   |---|--------|     |   |---|---|   |   '--------'---'     |
|                  |   '---'--------'     |   '---'---'   |                      |
|------------------|--------------------|-------------|--------------------|
| groupB           |   .---.--------.     |   .---.---.   |   .--------.---.     |
|                  |   | U | User   |     |   | U | U |   |   | Group  | G |     |
|                  |   | s | Name   |     |   | s | s |   |   | Domain | r |     |
|                  |   | e |        |     |   | e | e |   |   |        | o |     |
|                  |   | r |        |     |   | r | r |   |   |        | u |     |
|                  |   | D |        |     |   | D | N |   |   |        | p |     |
|                  |   | o |        |     |   | o | a |   |   |        | N |     |
|                  |   | m |        |     |   | m | m |   |   |        | a |     |
|                  |   | a |        |     |   | a | e |   |   |        | m |     |
|                  |   | i |        |     |   | i |   |   |   |        | e |     |
|                  |   | n |        |     |   | n |   |   |   |--------|---|     |
|                  |   |---|--------|     |   |---|---|   |   '--------'---'     |
|                  |   '---'--------'     |   '---'---'   |                      |
|------------------|--------------------|-------------|--------------------|
...[snip]...
```

access-control local-groups restore

Restore local groups from another FluidFS cluster.

Format

```
access-control local-groups restore <ConfigurationSourceClusterName>
```

Arguments

Argument	Description	Format
<ConfigurationSourceClusterName>	FluidFS cluster name from where the local groups should be restored	Existing FluidFS cluster name

Example

Restore local groups from a FluidFS cluster named idffs1:

```
CLI> access-control local-groups restore idffs1
```

access-control local-groups view

Display the settings for a local group.

Format

```
access-control local-groups view <GroupName>
```

Arguments

Argument	Description	Format
<GroupName>	Local group name	Existing local group name

Options

Option	Description	Format
-Remarks <Remarks>	Group description	Text description of the group

Example

Display the settings for a local group named groupA:

```
CLI> access-control local-groups view groupA
```

Output

```
Group Name   = groupA
LocalUsers   =  .-------------.-----------.
                | User Domain | User Name |
                |-------------|-----------|
                | idffs1      | user1     |
                '-------------'-----------'

DomainUsers  =  .-------------.-----------.
                | User Domain | User Name |
                |-------------|-----------|
                '-------------'-----------'

DomainGroups =  .--------------.------------.
                | Group Domain | Group Name |
                |--------------|------------|
                '--------------'------------'
```

access-control local-users add

Add a local user to users and groups so that you can grant that user access to SMB shares and NFS exports.

Format

```
access-control local-users add <UserName> <PrimaryGroupName> {options}
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Contains only the following characters: letters, numbers, underscores, hyphens, spaces, and periods. A period cannot be

Argument	Description	Format
		used as the last character of the account name.
<PrimaryGroupName>	Primary group of the local user (must be a local group)	Existing local group name

Options

Option	Description	Format
-Password <Password>	Local user password	Includes at least seven characters and should contain at least three of the following character types: lowercase character, uppercase character, digit, special characters (for example, +, ?, and *)
-RealName <RealName>	Full user name	Existing user's full name
-Remarks <Remarks>	User description	Description of the user

Example

Add a local user named user1 with the password Pass123 to the group groupA:

```
CLI> access-control local-users add user1 groupA -Password Pass123
```

access-control local-users change-password

Change a local user password.

Format

```
access-control local-users change-password <UserName> {options}
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Existing local user name

Options

Option	Description	Format
-Password <Password>	Local user password	Includes at least seven characters and should contain at least three of the following character types: lowercase character, uppercase character, digit, special

Option	Description	Format
		characters (for example, +, ?, and *)

Example

Change the password for a local user named user1 to Password123:

```
CLI> access-control local-users change-password user1 -Password Password123
```

access-control local-users delete

Delete a local user.

Format

```
access-control local-users delete <UserName>
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Existing local user name

Example

Delete a local user named user1:

```
CLI> access-control local-users delete user1
```

access-control local-users edit

Modify local user settings.

Format

```
access-control local-users edit <UserName> {options}
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Existing local user name

Options

Option	Description	Format
-PrimaryGroupName <PrimaryGroupName>	Primary group of the local user (must be a local group)	Existing local group name
-Enabled <Enabled>	Indicate whether the local user is enabled	Possible values are Yes, No
-PasswordNeverExpires <PasswordNeverExpires>	Indicate whether the local user password will never expire	Possible values are Yes, No
-RealName <RealName>	Full user name	Full name of existing user
-Remarks <Remarks>	User description	Text description of user

Example

Move a local user named user1 to the group groupB:

```
CLI> access-control local-users edit user1 -PrimaryGroupName groupB
```

access-control local-users list

Display a list of the local users.

Format

```
access-control local-users list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the current local users:

```
CLI> access-control local-users list
```

Output

```
.---------------.---------------.---------.-----------------------------.
| User Name     | Primary Group | Enabled | Password Is About To Expire |
|---------------|---------------|---------|-----------------------------|
| Administrator | Local Users   | Yes     | No                          |
|---------------|---------------|---------|-----------------------------|
| nobody        | nobody_group  | No      | No                          |
|---------------|---------------|---------|-----------------------------|
```

```
| user1          | groupA         | Yes      | No                           |
'----------------'----------------'----------'------------------------------'
```

access-control local-users restore

Restore local users from another FluidFS cluster.

Format

```
access-control local-users restore <ConfigurationSourceClusterName>
```

Arguments

Argument	Description	Format
<ConfigurationSourceClusterName>	FluidFS cluster name from where the local users should be restored	Existing FluidFS cluster name

Example

Restore local users from a FluidFS cluster named idffs1:

```
CLI> access-control local-users restore idffs1
```

access-control local-users view

Display the settings for a local user.

Format

```
access-control local-users view <UserName>
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Existing local user name

Options

Option	Description	Format
-RealName <RealName>	Full user name	Full name of user
-Remarks <Remarks>	User description	Text description of user

Example

Display the settings for a local user named user1:

```
CLI> access-control local-users view user1
```

Output

```
User Name                    = user1
Primary Group                = groupA
Enabled                      = Yes
Password Is About To Expire = No
Password Never Expires       = Yes
```

access-control local-users view-groups

Display the groups to which a local user belongs.

Format

```
access-control local-users view-groups <UserName>
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Existing local user name

Example

Display the groups to which a local user named user1 belongs:

```
CLI> access-control local-users view-groups user1
```

Output

```
User Nam = user1
MemberOf = groupA
```

access-control local-users without-password-complexity-checks add-user

Add a local user without password-complexity checks.

NOTE: Before adding a local user without password-complexity checks, password-complexity enforcement must be disabled using the command `system internal protocols-settings SMB-settings edit`.

Format

```
access-control local-users without-password-complexity-checks add-user
<UserName> <PrimaryGroupName> {options}
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Contains only the following characters: letters, numbers,

Argument	Description	Format
		underscores, hyphens, spaces, and periods. A period can not be used as the last character of the account name.
<PrimaryGroupName>	Primary group of the local user (must be a local group)	Existing local group name

Options

Option	Description	Format
-Password <Password>	Local user password	Any string

Example

Add a local user named user1 without password-complexity checks to the group groupA:

```
CLI> access-control local-users without-password-complexity-checks add-user
user1 groupA -Password Pass
```

access-control local-users without-password-complexity-checks change-password

Change a local user password without password-complexity checks.

Format

```
access-control local-users without-password-complexity-checks change-password
<UserName> {options}
```

Arguments

Argument	Description	Format
<UserName>	Local user name	Existing local user name

Options

Option	Description	Format
-Password <Password>	Local user password	Any string

Example

Change the password for a local user (without password-complexity checks) named `user1` to `Pswd`:

```
CLI> access-control local-users without-password-complexity-checks change-
password user1 -Password Pswd
```

access-control mapping manual add

Add a user mapping rule between a Windows and UNIX user.

NOTE: To view a list of existing domains, use the command `access-control domains-list`.

Format

```
access-control mapping manual add <WindowsUserDomain> <WindowsUserName>
<UNIXUserName> {options}
```

Arguments

Argument	Description	Format
<WindowsUserDomain>	Domain of the Windows user	Existing Windows domain
<WindowsUserName>	Name of the Windows user	Existing Windows user
<UNIXUserName>	Name of the UNIX user	Existing UNIX user

Options

Option	Description	Format
-EnableWindowsToUNIXMapping <EnableWindowsToUNIXMapping>	Indicate whether the Windows to UNIX mapping is enabled	Possible values are Yes, No. Default is Yes.
-EnableUNIXToWindowsMapping <EnableUNIXToWindowsMapping>	Indicate whether the UNIX to Windows mapping is enabled	Possible values are Yes, No. Default is Yes.

Example

Add a Windows to UNIX user mapping rule between a Windows user named jsmith in the NAS domain and a UNIX user named johns:

```
CLI> access-control mapping manual add NAS jsmith johns-
EnableWindowsToUNIXMapping Yes
```

access-control mapping manual delete

Delete a user mapping rule between a Windows and UNIX user.

NOTE: To view a list of existing domains, use the command `access-control domains-list`.

Format

```
access-control mapping manual delete <WindowsUserDomain> <WindowsUserName>
<UNIXUserName>
```

Arguments

Argument	Description	Format
<WindowsUserDomain>	Domain of the Windows user	Existing Windows domain
<WindowsUserName>	Name of the Windows user	Existing Windows user
<UNIXUserName>	Name of the UNIX user	Existing UNIX user

Example

Delete the user mapping rule between a Windows user named jsmith in the NAS domain and a UNIX user named johnf:

```
CLI> access-control mapping manual delete NAS jsmith johnf
```

access-control mapping manual edit

Modify a user mapping rule between a Windows and UNIX user.

NOTE: To view a list of existing domains, use the command `access-control domains-list`.

Format

```
access-control mapping manual edit <WindowsUserDomain> <WindowsUserName>
<UNIXUserName> {options}
```

Arguments

Argument	Description	Format
<WindowsUserDomain>	Domain of the Windows user	Existing Windows domain
<WindowsUserName>	Name of the Windows user	Existing Windows user
<UNIXUserName>	Name of the UNIX user	Existing UNIX user

Options

Option	Description	Format
-EnableWindowsToUNIXMapping <EnableWindowsToUNIXMapping>	Indicate whether the Windows to UNIX mapping is enabled	Possible values are Yes, No
-EnableUNIXToWindowsMapping <EnableUNIXToWindowsMapping>	Indicate whether the UNIX to Windows mapping is enabled	Possible values are Yes, No

Example

Modify the user mapping rule between a Windows user named jsmith in the NAS domain and a UNIX user named johns to use UNIX to Windows mapping:

```
CLI> access-control mapping manual edit NAS john jsmith -
EnableUNIXToWindowsMapping Yes
```

access-control mapping manual list

Display a list of the user mapping rules between Windows and UNIX users.

Format

```
access-control mapping manual list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of the user mapping rules between Windows and UNIX users:

```
CLI> access-control mapping manual list
```

Output

```
.--------------.--------------.--------------.---------------.---------------.
| Windows User | Windows User | Unix User    | Enable        | Enable Unix   |
| Domain       | Name         | Name         | Windows To    | To Windows    |
|              |              |              | Unix Mapping  | Mapping       |
|--------------|--------------|--------------|---------------|---------------|
| NAS          | jsmith       | johns        | Yes           | Yes           |
'--------------'--------------'--------------'---------------'---------------'
```

access-control mapping manual restore

Restore manual user mappings from another FluidFS cluster.

Format

```
access-control mapping manual restore <ConfigurationSourceClusterName>
```

Arguments

Argument	Description	Format
<ConfigurationSourceClusterName>	FluidFS cluster name from where the manual mappings should be restored	Existing FluidFS cluster name

Example

Restore manual user mappings from a FluidFS cluster named idffs1:

```
CLI> access-control mapping manual restore idffs1
```

access-control mapping manual view

Display a user mapping rule between a Windows and UNIX user.

NOTE: To view a list of existing domains, use the `command access-control domains-list`.

Format

```
access-control mapping manual view <WindowsUserDomain> <WindowsUserName>
<UNIXUserName>
```

Arguments

Argument	Description	Format
<WindowsUserDomain>	Domain of the Windows user	Existing Windows domain
<WindowsUserName>	Name of the Windows user	Existing Windows user
<UNIXUserName>	Name of the UNIX user	Existing UNIX user

Example

Display the user mapping rule between a Windows user named jsmith in the NAS domain and a UNIX user named johnk:

```
CLI> access-control mapping manual view NAS jsmith johnk
```

Output

```
Windows User Domain            = NAS
Windows User Name              = jsmith
Unix User Name                 = johns
Enable Windows To Unix Mapping = Yes
Enable Unix To Windows Mapping = Yes
```

access-control mapping policy edit

Modify user mapping policy settings.

Format

```
access-control mapping policy edit {options}
```

Options

Option	Description	Format
-AutomaticMapping <AutomaticMapping>	Indicate whether the automatic mapping between Windows and UNIX users is enabled	Possible values are Yes, No

Example

Enable automatic user mapping between Windows and UNIX users:

```
CLI> access-control mapping policy edit –AutomaticMapping Yes
```

access-control mapping policy view

Display user mapping policy settings.

Format

```
access-control mapping policy view
```

Example

Display the current user mapping policy settings:

```
CLI> access-control mapping policy view
```

Output

```
Automatic Mapping = No
```

access-control users-database edit

Modify the NIS/LDAP settings.

NOTE: You cannot switch between NIS and LDAP without first setting the DatabaseType to **None**.

Format

```
access-control users-database edit {options}
```

Options

Option	Description	Format
-DatabaseType <DatabaseType>	Indicate which repository the FluidFS cluster is using	Possible values are LDAP, NIS, None
-NISDomain <NISDomain>	NIS domain	Existing NIS domain
-NISServers <NISServers>	List of NIS servers	Comma-separated list of existing NIS servers
-LDAPBaseDN <LDAPBaseDN>	LDAP Base DN	Existing LDAP Base DN
-LDAPServers <LDAPServers>	List of LDAP servers	Comma-separated list of existing LDAP servers
-LDAPFilters	List of LDAP filters	Comma-separated list of existing LDAP filters
-LDAPFiltersEnabled <LDAPFiltersEnable>	Indicates whether the filters are enabled	Possible values are Yes, No
-LDAPExtendedSchema <LDAPExtendedSchema>	Indicate whether LDAP uses an extended schema	Possible values are Yes, No
-LDAPUseTLS <LDAPUseTLS>	Indicate whether LDAP uses TLS	Possible values are Yes, No
-LDAPUseNotAnonymous <LDAPUseNotAnonymous>	Indicate whether LDAP uses an anonymous connection	Possible values are Yes, No
-LDAPBindDN <LDAPBindDN>	LDAP bind DN	Existing LDAP bind DN
-LDAPBindPassword <LDAPBindPassword>	LDAP bind password	Existing LDAP bind password
-LdapUseCertificate <LdapUseCertificate>	Indicate whether LDAP uses a certificate	Possible values are Yes, No
-LdapCertificate <LdapCertificate>	LDAP certificate	Existing LDAP certificate in Base64 format

Example

Add an LDAP server 172.22.144.4 using the Base DN dc=nas,dc=test:

```
CLI> access-control users-database edit -LDAPServers 172.22.144.4-DatabaseType
LDAP -LDAPBaseDN "dc=nas,dc=test"
```

access-control users-database view

Display NIS/LDAP settings.

Format

```
access-control users-database view
```

Example

Display the current NIS/LDAP settings:

```
CLI> access-control users-database view
```

Output

```
Database Type          = LDAP
NisServers             =
LDAP Base DN           = dc=nas,dc=test
LdapServers            = 172.22.144.4
LDAP Extended Schema   = No
LDAP Use Filters       = No
LDAP Filters           =
LDAP Use TLS           = No
LDAP Use Not Anonymous = No
LDAP Bind DN           = cn=proxyuser,dc=example,dc=com
LdapUseCertificate     = No
LdapCertificate        =
```

access-control users-list

Display a list of users.

Format

```
access-control users-list <Domain> <UserNameStartWith>
```

Arguments

Argument	Description	Format
-Domain <Domain>	User domain	Existing user domain
-UserNameStartWith <UserNameStartWith>	Prefix of user name	Prefix of an existing user name

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of users in the NAS domain whose user name starts with ca:

```
CLI> access-control users-list NAS ca
```

Output

```
.--------.--------.---------------------.---------------.---------.----------.
| Domain | Name   | Id                  | Primary group | Type    | Source   |
|--------|--------|---------------------|---------------|---------|----------|
| NAS    | carl   | S-1-5-21-1100376456 | Domain Users  | Windows | EXTERNAL |
|        |        | -3253980028-2903806 |               |         |          |
|        |        | 399-1165            |               |         |          |
|--------|--------|---------------------|---------------|---------|----------|
| NAS    | carla  | S-1-5-21-1100376456 | Domain Users  | Windows | EXTERNAL |
|        |        | -3253980028-2903806 |               |         |          |
|        |        | 399-1114            |               |         |          |
'--------'--------'---------------------'---------------'---------'----------'|
```

events auditing view

Display the details of a single event.

Format

```
events auditing view <UniqueID>
```

Arguments

Argument	Description	Format
<UniqueID>	Unique ID of the event	Existing event ID

Example

Display the details of event 1975784:

```
CLI> events audit view 5188
```

Output

```
Event ID      = 17000001
Event Time    = 08-Dec-14 12:35:41
Severity      = Info
Workspace     = System Audit
Headline      = Successful Write by CPLSUP3\Administrator on jvol1/secret.txt
Text          = Description: The User CPLSUP3\Administrator performed a
successful write operation
                on file jvol1/secret.txt. The Desired access mask:  WRITE_DATA/
ADD_FILE (0x2)
Action Items  =
Internal Info =
```

events auditing list

Display a list of the security events.

Format

```
events auditing list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
--Severity <Severity>	Filter according to the severity of the events	
--Period <Period>	Filter according to the period of the events	
--ConsolidatedEventID <ConsolidatedEventID>	Enter this option to get occurrences of consolidated events	
--HeadlineSubText <HeadlineSubText>	Filter according to headline sub text.	

Example

Display a current list of the security events:

```
CLI> events auditing list
```

Output

```
.-------------.----------.------------.-----------.--------.-------------------.
| Consolidated| Event ID | Event First| Event Last|Severity| Headline          |
| Event ID    |          | Occurrence | Occurrence|        |                   |
|-------------|----------|------------|-----------|--------|-------------------|
| 5188        | 117000001| 08-Dec-14  | 08-Dec-14 | Info   | Successful Write  |
|             |          | 12:05:06   | 12:05:06  |        | by CPLSUP3\       |
|             |          |            |           |        | Administrator on  |
|             |          |            |           |        | jvoli/secret.txt  |
|-------------|----------|------------|-----------|--------|-------------------|
| 5189        | 117000004| 08-Dec-14  | 08-Dec-14 | Info   | Successful Read   |
|             |          | 12:35:41   | 12:35:41  |        | Attributes by     |
|             |          |            |           |        | CPLSUP3\          |
|             |          |            |           |        | Administrator on  |
|             |          |            |           |        | jvoli/secret.txt  |
|-------------|----------|------------|-----------|--------|-------------------|
| 5184        | 117000004| 08-Dec-14  | 08-Dec-14 | Info   | Successful Read   |
|             |          | 12:35:41   | 12:35:41  |        | by CPLSUP3\       |
|             |          |            |           |        | Administrator on  |
|             |          |            |           |        | jvoli/secret.txt  |
.-------------|----------|------------|-----------|--------|-------------------|
...[snip]...
```

events auditing summary-list

Display a list of system-consolidated events.

Format

```
events auditing summary-list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-Severity <Severity>	Filter according to severity of events	
-Period <Period>	Filter according to period of the events	
-HeadlineSubText <HeadlineSubText>	Filter according to headline sub text	

Example

Display a current list of the system-consolidated events:

```
CLI> events auditing summary-list
```

events system list

Display a list of the system (non-security) events.

Format

```
events list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
--Severity <Severity>	Filter according to the severity of the events	
--Period <Period>	Filter according to the period of the events	

Option	Description	Format
--ConsolidatedEventID <ConsolidatedEventID>	Enter this option to get occurrences of consolidated events	
--HeadlineSubText <HeadlineSubText>	Filter according to headline sub text.	

Example

Display a current list of the events:

```
CLI> events system list
```

Output

```
.-----------.-----------.------------.----------.-------------.-------------.
| Unique ID | Event ID  | Event Time | Severity | Workspace   | Headline    |
|-----------|-----------|------------|----------|-------------|-------------|
| 1975780   | 114000003 | 30-Jul-14  | Info     | System      | Fluid FS    |
|           |           | 12:05:06   |          |             | Health Scan |
|           |           |            |          |             | finished a  |
|           |           |            |          |             | scanning    |
|           |           |            |          |             | cycle.      |
|-----------|-----------|------------|----------|-------------|-------------|
| 1975784   | 115000112 | 30-Jul-14  | Info     | System      | The user    |
|           |           | 12:35:41   |          |             | Administrat |
|           |           |            |          |             | or has      |
|           |           |            |          |             | successfull |
|           |           |            |          |             | y added new |
|           |           |            |          |             | Local User  |
|           |           |            |          |             | 'user1' to  |
|           |           |            |          |             | cluster     |
|           |           |            |          |             | repository  |
|-----------|-----------|------------|----------|-------------|-------------|
...[snip]...
```

events system summary-list

Display a list of system-consolidated events.

Format

```
events system summary-list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-Severity <Severity>	Filter according to severity of events	

Option	Description	Format
-Period <Period>	Filter according to period of the events	
-HeadlineSubText <HeadlineSubText>	Filter according to headline sub text	

Example

Display a current list of the system— consolidated events:

```
CLI> events system summary-list
```

Output

```
.----------.----------.----------.---------.-----------.-------------------.
| Unique ID| Event ID | Event Time| Severity| Workspace | Headline          |
|----------|----------|----------|---------|-----------|-------------------|
| 5188     | 117000001| 08-Dec-14 | Info    | SACL Audit| Successful Write  |
|          |          | 12:05:06  |         |           | by CPLSUP3\       |
|          |          |           |         |           | Administrator on  |
|          |          |           |         |           | jvoli/secret.txt  |
|----------|----------|----------|---------|-----------|-------------------|
| 5189     | 117000004| 08-Dec-14 | Info    | SACL Audit| Successful Read   |
|          |          | 12:35:41  |         |           | Attributes by     |
|          |          |           |         |           | CPLSUP3\          |
|          |          |           |         |           | Administrator on  |
|          |          |           |         |           | jvoli/secret.txt  |
|----------|----------|----------|---------|-----------|-------------------|
| 5184     | 117000004| 08-Dec-14 | Info    | SACL Audit| Successful Read   |
|          |          | 12:35:41  |         |           | by CPLSUP3\       |
|          |          |           |         |           | Administrator on  |
|          |          |           |         |           | jvoli/secret.txt  |
.----------|----------|----------|---------|-----------|-------------------|
...[snip]...
```

events system view

Display the details of a single event.

Format

```
events system view <UniqueID>
```

Arguments

Argument	Description	Format
<UniqueID>	Unique ID of the event	Existing event ID

Example

Display the details of event 1975784:

```
CLI> events system view 1975784
```

Output

```
Event ID   = 115000112
Event Time = 30-Jul-14 12:35:41
Severity   = Info
Workspace  = System
Headline   = The user Administrator has successfully added new Local User
'user1' to cluster repository
Text       =
             Description:
                     The user Administrator has successfully added new Local
User  'user1' to cluster repository
```

hardware destroy-cluster destroy-and-change-model

Destroy the FluidFS cluster and change the model code.

CAUTION: This command should be used only by Dell Technical Support. Misuse of this command can damage the FluidFS cluster and/or its data.

NOTE: Before destroying the cluster, change the FluidFS cluster operation mode to No Service using the command `system internal file-system service-mode set`.

Format

```
hardware destroy-cluster destroy-and-change-model <Model>
```

Arguments

Arguments	Description	Format
Model	The model to be changed to	

Example

Destroy the FluidFS cluster and change model to fs8610:

```
CLI> hardware destroy-cluster destroy-and-change-model FS8610
```

hardware fabrics add

Add a fabric to the cluster.

Format

```
hardware fabrics add <Name> <Netmask> {options}
```

Arguments

Argument	Description	Format
<Name>	Name of the new fabric	
<Netmask>	Netmask of the new fabric	IP address in IPv6 or IPv4 format

Options

Option	Description	Format
-SanVIP <SanVIP>	San VIP which will be used to communicate with the cluster	

Example

Add a fabric named FAB1 on the eth30 interface where the netmask is 255.255.255.0:

```
CLI> hardware fabrics add FAB1 eth30 255.255.0.0
```

hardware fabrics fc list

Display a list of the Fibre Channel fabrics.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics fc list
```

Example

Display a current list of the Fibre Channel fabrics:

```
CLI> hardware fabrics fc list
```

Output

```
.------.-----------.
| Name | Interface |
|------|-----------|
| SANa | hba0      |
|------|-----------|
| SANb | hba1      |
'------'-----------'
```

hardware fabrics fc view

Display details of a Fibre Channel fabric.

NOTE: This command is available only on Fibre Channel with 1GbE or 10GbE FS8600 appliances.

Format

```
hardware fabrics fc view <Name>
```

Arguments

Argument	Description	Format
<Name>	Name of the Fibre Channel fabric	Existing Fibre Channel fabric name

Example

Display details of a Fibre Channel fabric named SANa:

```
CLI> hardware fabrics fc view SANa
```

Output

```
Name      = SANa
Interface = hba0
```

hardware fabrics iSCSI add

Add an iSCSI fabric.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI add <Interface> <Netmask>
<ControllersIPs> {options}
```

Arguments

Argument	Description	Format
<Interface>	Interface of the new iSCSI fabric	Ethernet interface in the following format: ethXX (for example, eth30)
<Netmask>	Netmask of the new iSCSI fabric	IP address in x.x.x.x format
<ControllersIPs>	NAS controller IP addresses	Comma-separated list of IP addresses in x.x.x.x format

Options

Option	Description	Format
-VLANTag <VLANTag>	VLAN ID of the fabric	Whole positive number (1 to 4094)

Example

Add an iSCSI fabric on the eth30 interface where the netmask is 255.255.255.0 and the NAS controller IP addresses are 192.11.18.10 and 192.11.18.11:

```
CLI> hardware fabrics iSCSI add eth30 255.255.0.0 192.11.18.10,192.11.18.11
```

hardware fabrics iSCSI delete

Delete the iSCSI fabric.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI delete <Name>
```

Arguments

Argument	Description	Format
<Name>	Name of the iSCSI fabric	Existing iSCSI fabric name

Example

Delete an iSCSI fabric named SANb:

```
CLI> hardware fabrics iSCSI delete SANb
```

hardware fabrics iSCSI edit

Modify settings of an iSCSI fabric.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI edit <Name> {options}
```

Arguments

Argument	Description	Format
<Name>	Name of the iSCSI fabric	Existing iSCSI fabric name

Options

Option	Description	Format
-VLANTag <VLANTag>	VLAN ID of the fabric	Whole positive number (1 to 4094)
-Netmask <Netmask>	Netmask of the iSCSI fabric	IP address in x.x.x.x format
-ControllersIPs <ControllersIPs>	NAS controller IP addresses	Comma-separated list of IP addresses in x.x.x.x format

Example

For an iSCSI fabric named SANb, change the NAS controller IP addresses to 192.11.18.14 and 192.11.18.15:

```
CLI> hardware fabrics iscsi edit SANb -ControllersIPs 192.11.18.14,192.11.18.15
```

hardware fabrics iSCSI list

Display a list of iSCSI fabrics.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI list
```

Example

Display a current list of iSCSI fabrics:

```
CLI> hardware fabrics iSCSI list
```

Output

```
.------.-----------.----------.-----------------.----------------------------.
| Name | Interface | VLAN Tag | Netmask         | ControllersIps             |
|------|-----------|----------|-----------------|----------------------------|
| SAN  | eth30     | 3436     | 255.255.255.192 | 172.22.153.160,            |
|      |           |          |                 | 172.22.153.161             |
|------|-----------|----------|-----------------|----------------------------|
| SANb | eth31     | 3536     | 255.255.255.192 | 172.22.153.210,            |
|      |           |          |                 | 172.22.153.211             |
'------'-----------'----------'-----------------'----------------------------'
```

hardware fabrics iSCSI-portals add-IPv4

Add an IPv4 address to storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI-portals add-IPv4 <IP> <Description>
```

Arguments

Argument	Description	Format
<IP>	IPv4 address of the iSCSI storage	IP address in IPv4 format
<Description>	Description for the IPv4 address of the iSCSI storage	Any string

Example

Add the IPv4 address 172.22.158.167 to storage iSCSI portals with PortIP_172.22.158.167 and a description:

```
CLI> hardware fabrics iSCSI-portals add-IPv4 172.22.158.167 port_172.22.158.167
```

hardware fabrics iSCSI-portals delete-IPv4

Delete an IPv4 address from the storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI-portals delete-IPv4 <IP>
```

Arguments

Argument	Description	Format
<IP>	IPv4 address of the iSCSI storage	Existing IPv4 address of the iSCSI storage

Example

Delete the IPv4 address 172.22.158.167 from the storage iSCSI portals:

```
CLI> hardware fabrics iSCSI-portals delete-IPv4 172.22.158.167
```

hardware fabrics iSCSI-portals disable-authentication

Disable authentication to storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI-portals disable-authentication
```

hardware fabrics iSCSI-portals enable-authentication

Enable authentication to storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI-portals enable-authentication <Username> {options}
```

Arguments

Argument	Description	Format
<Username>	User name that will be used for the authentication with storage iSCSI portals	Existing iSCSI user name

Options

Option	Description	Format
-Password <Password>	Password of the user name that will be used for the authentication with storage iSCSI portals	Existing iSCSI password

Example

Enable authentication to storage iSCSI portals using an account with the username user and the password Password123:

```
CLI> hardware fabrics iSCSI-portals enable-authentication user -Password
Password123
```

hardware fabrics iSCSI-portals rediscover-all

Rediscover storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI-portals rediscover-all
```

hardware fabrics iSCSI-portals view

Display the settings of iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI-portals view
```

Example

Display the current settings of iSCSI portals:

```
CLI> hardware fabrics iSCSI-portals view
```

Output

```
Use Authentication = No
Username           =
IscsiPortals       =  .----------------.---------------------.
                      | IP             | Description         |
                      |----------------|---------------------|
                      | 172.22.158.167 | port_172.22.158.167 |
                      |----------------|---------------------|
                      | 172.22.158.166 | port_172.22.158.166 |
                      |----------------|---------------------|
                      | 172.22.158.178 | port_172.22.158.178 |
                      '----------------'---------------------'
```

hardware fabrics iSCSI view

Display settings of an iSCSI fabric.

NOTE: This command is available only on 10GbE iSCSI FS8600 appliances.

Format

```
hardware fabrics iSCSI view <Name>
```

Arguments

Argument	Description	Format
<Name>	Name of the iSCSI fabric	Existing iSCSI fabric name

Example

Display the settings of an iSCSI fabric named SANb:

```
CLI> hardware fabrics iSCSI view SANb
```

Output

```
Name           = SANb
Interface      = eth31
VLAN Tag       = 3536
Netmask        = 255.255.255.192
ControllersIps = 172.22.153.210,172.22.153.211
```

hardware fabrics status-list

Display a list of fabrics and their connectivity status to the storage.

NOTE: This command is available only on 10GbE iSCSI FS8600i appliances.

Format

```
hardware fabrics status-list
```

Example

Display a current list of fabrics and their connectivity status to the storage:

```
CLI> hardware fabrics status-list
```

Output

```
+--[SAN]
|   |- Overall Connectivity Status = Accessible
|   '- DetailedConnectivityStatus =
    .-----------.----------.-----------.---------.
|   | Controller| IP       | Descripti | Status  |
|   |    ID     |          | on        |         |
|   |-----------|----------|-----------|---------|
|   | 0         | 172.22.15| 69125.576 | Accessib|
|   |           | 3.179    | 483958872 | le      |
|   |           |          | 4868401.4 |         |
|   |           |          | 6         |         |
|   |-----------|----------|-----------|---------|
|   | 1         | 172.22.15| 69125.576 | Accessib|
|   |           | 3.179    | 483958872 | le      |
|   |           |          | 4868401.4 |         |
|   |           |          | 6         |         |
|   '-----------'----------'-----------'---------'
'--[SANb]
    |- Overall Connectivity Status = Accessible
    '- DetailedConnectivityStatus  =
    .-----------.----------.-----------.---------.
    | Controller| IP       | Descripti | Status  |
    |    ID     |          | on        |         |
    |-----------|----------|-----------|---------|
    | 0         | 172.22.15| 69125.576 | Accessib|
    |           | 3.229    | 483958872 | le      |
    |           |          | 4868414.6 |         |
    |           |          | 0         |         |
    |-----------|----------|-----------|---------|
    | 1         | 172.22.15| 69125.576 | Accessib|
    |           | 3.229    | 483958872 | le      |
    |           |          | 4868414.6 |         |
    |           |          | 0         |         |
    '-----------'----------'-----------'---------'
```

hardware NAS-appliances add-appliance

Add a NAS appliance.

NOTE: The NAS controllers in the new NAS appliance must be in standby mode and powered on. A NAS controller is on and in standby mode if the power LED is flashing green at around 2 flashes per second.

Format

```
hardware NAS-appliances add-appliance <ApplianceServiceTag>
```

Arguments

Argument	Description	Format
<ApplianceServiceTag>	Service tag of the NAS appliance	Existing service tag of additional NAS appliance

Example

Add a NAS appliance with the service tag 17XZQQ2 to an existing FluidFS cluster:

```
CLI> hardware NAS-appliances add-appliance 17XZQQ2
```

hardware NAS-appliances attach-controller

Attach a NAS controller.

NOTE: The NAS controller must have a controller detached. NAS appliance IDs are numbered starting from 1, whereas NAS controller IDs are numbered starting from 0.

Format

```
hardware NAS-appliances attach-controller <ApplianceID>
<ControllerID>
```

Arguments

Argument	Description	Format
<ApplianceID>	NAS appliance ID	Existing NAS appliance ID
<ControllerID>	NAS controller ID	NAS controller ID to attach

Example

Attach a NAS controller where the NAS appliance ID is 1 and the NAS controller ID is 0:

```
CLI> hardware NAS-appliances attach-controller 1 0
```

hardware NAS-appliances blink-appliance

Update the blinking status of a NAS appliance.

Format

```
hardware NAS-appliances blink-appliance <NASApplianceID> <BlinkFirstController>
<BlinkSecondController>
```

Arguments

Argument	Description	Format
<NASApplianceID>	ID of the NAS appliance	Existing NAS appliance ID
<BlinkFirstController>	Indicate whether the first NAS controller of the NAS appliance should blink	Possible values are Yes, No
<BlinkSecondController>	Indicate whether the second NAS controller of the NAS appliance should blink	Possible values are Yes, No

Example

Make the first NAS controller blink in a NAS appliance with the ID 1:

```
CLI> hardware NAS-appliances blink-appliance 1 Yes No
```

hardware NAS-appliances create-cluster

Create a FluidFS cluster.

NOTE: The NAS controllers must be in standby mode and powered on. A NAS controller is on and in standby mode if the power LED is flashing green at around 2 flashes per second.

Format

```
hardware NAS-appliances create-cluster {options}
```

Options

Option	Description	Format
-AdditionalNASAppliances <AdditionalNASAppliances>	Service tags of additional NAS appliances	Comma-separated list of existing service tags for additional NAS appliances
-CurrentApplianceServiceTag <CurrentApplianceServiceTag>	Service tag of current NAS appliance	Existing service tag of NAS appliance
-SingleController <SingleController>	Create FluidFS cluster with a single controller	

Example

Create a FluidFS cluster:

```
CLI> hardware NAS-appliances create-cluster SingleController
```

hardware NAS-appliances delete

Delete an unjoined NAS appliance.

Format

```
hardware NAS-appliances delete <ApplianceID>
```

Arguments

Argument	Description	Format
<ApplianceID>	NAS appliance ID	Existing NAS appliance ID

Example

Delete an unjoined NAS appliance with the ID 2:

```
CLI> hardware NAS-appliances delete 2
```

hardware NAS-appliances detach-controller

Detach a NAS controller.

NOTE: NAS appliance IDs are numbered starting from 1, whereas NAS controller IDs are numbered starting from 0.

Format

```
hardware NAS-appliances detach-controller <ApplianceID> <ControllerID>
```

Arguments

Argument	Description	Format
<ApplianceID>	NAS appliance ID	Existing NAS appliance ID
<ControllerID>	NAS controller ID	NAS controller ID

Example

Detach a NAS controller where the NAS appliance ID is 1 and the NAS controller ID is 0:

```
CLI> hardware NAS-appliances detach-controller 1 0
```

hardware NAS-appliances discovery list

Display a list of discovered NAS appliances.

Format

```
hardware NAS-appliances discovery list
```

Example

Display a current list of discovered, undeployed NAS appliances:

```
CLI> hardware NAS-appliances discovery list
```

Output

```
.-----------------------.-----------------------------------------------------.
| Appliance Service Tag | Controllers                                         |
|-----------------------|-----------------------------------------------------|
| 7DSS3V1               |  .--------.----------.--------------------------.  |
|                       |  | Model  | Version  | Address                  |  |
|                       |  |--------|----------|--------------------------|  |
|                       |  | FS8610i| 3.0.7440 | fe80::a236:9fff:fe03:134 |  |
|                       |  |        |          | e                        |  |
|                       |  |--------|----------|--------------------------|  |
|                       |  | FS8610i| 3.0.7440 | fe80::a236:9fff:fe03:149 |  |
|                       |  |        |          | 2                        |  |
|                       |  '--------'----------'--------------------------'  |
'-----------------------'-----------------------------------------------------'
```

hardware NAS-appliances discovery view

Display details of a discovered NAS appliance.

Format

```
hardware NAS-appliances discovery view <ApplianceServiceTag>
```

Arguments

Argument	Description	Format
<ApplianceServiceTag>	NAS appliance service tag	Existing NAS appliance service Ttag

Example

Display details of a discovered, undeployed NAS appliance with the service tag 7DSS3V1:

```
CLI> hardware NAS-appliances discovery view 7DSS3V1
```

Output

```
Appliance S = 7DSS3V1
Controllers = +--+- Address          = fe80::a236:9fff:fe03:134e
              |  |- Slot             = 1
              |  |- ServiceTag       = 8DSS3V1
              |  |- Version          = 4.0.002838
              |  |- Model            = FS8610i
              |  |- Controller ID    = 7DSS3V1-1
              |  |- Is Clean         = Yes
              |  '- AllIPv6Addresses = fe80::a236:9fff:fe03:134e,
              |                        fe80::a236:9fff:fe03:134c
              '--+- Address          = fe80::a236:9fff:fe03:1492
                 |- Slot             = 2
                 |- ServiceTag       = 9DSS3V1
                 |- Version          = 4.0.002838
                 |- Model            = FS8610i
                 |- Controller ID    = 7DSS3V1-2
                 |- Is Clean         = Yes
                 '- AllIPv6Addresses = fe80::a236:9fff:fe03:1492,
                                       fe80::a236:9fff:fe03:1490
```

hardware NAS-appliances join-appliance

Join a NAS appliance.

Format

```
hardware NAS-appliances join-appliance <ApplianceID>
```

Arguments

Argument	Description	Format
<ApplianceID>	NAS appliance ID	Existing NAS appliance ID

Example

Join a NAS appliance with the ID 2:

```
CLI> hardware NAS-appliances join-appliance 2
```

hardware NAS-appliances list

Display a list of NAS appliances.

Format

```
hardware NAS-appliances list
```

Example

Display a current list of NAS appliances:

```
CLI> hardware NAS-appliances list
```

Output

```
.--------------.--------------------.--------------------.--------------------.
| Appliance ID | Appliance Service  | Is File System     | Controllers        |
|              | Tag                | Member             |                    |
|--------------|--------------------|--------------------|--------------------|
| 1            | 17XZSW1            | Yes                |  .------.-------.  |
|              |                    |                    |  | Cont | Clust |  |
|              |                    |                    |  | roll | er    |  |
|              |                    |                    |  | ers  | Membe |  |
|              |                    |                    |  | ID   | r     |  |
|              |                    |                    |  |------|-------|  |
|              |                    |                    |  | 0    | Yes   |  |
|              |                    |                    |  |------|-------|  |
|              |                    |                    |  | 1    | Yes   |  |
|              |                    |                    |  '------'-------'  |
 '--------------'--------------------'--------------------'--------------------'
```

hardware NAS-appliances reboot-controller

Reboot a single NAS controller.

Format

```
hardware NAS-appliances reboot-controller <ControllerID>
```

Arguments

Argument	Description	Format
<ControllerID>	NAS controller ID	Existing NAS controller ID

Example

Reboot a NAS controller with the ID 0:

```
CLI> hardware NAS-appliances reboot-controller 0
```

hardware restore-configuration-from-storage list-lost-volumes

Display a list of lost NAS volumes.

When restoring the configuration from storage, a gap between the state of the file system and the configuration information could exist. This command can help find this situation.

CAUTION: This command should be used only by Dell Technical Support. This command is used as part of a disaster recovery scenario.

Format

hardware restore-configuration-from-storage list-lost-volumes

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of lost NAS volumes:

```
CLI> hardware restore-configuration-from-storage list-lost-volumes
```

Output

```
.------.----------.
| Name | Size     |
|------|----------|
| vol1 | 80.00MB  |
'------'----------'
```

hardware restore-configuration-from-storage restore-configuration

Restore the configuration from the storage.

CAUTION: This command should be used only by Dell Technical Support. This command is used as part of a disaster recovery scenario.

Format

```
hardware restore-configuration-from-storage restore
```

hardware restore-configuration-from-storage restore-lost-volumes

Restore lost NAS volumes.

When restoring the configuration from storage, a gap between the state of the file system and the configuration information could exist. This command can help find and correct this situation.

CAUTION: This command should be used only by Dell Technical Support. This command is used as part of a disaster recovery scenario.

Format

```
hardware restore-configuration-from-storage restore-lost-volumes
```

Example

Restore lost NAS volumes:

```
CLI> hardware restore-configuration-from-storage restore-lost-volumes
```

hardware restore-configuration-from-storage restore-NAS-volumes

Restore NAS volumes from the storage.

CAUTION: This command should be used only by Dell Technical Support. This command is used as part of a disaster recovery scenario.

Format

```
hardware restore-configuration-from-storage restore-NAS-volumes
```

hardware restore-configuration-from-storage restore-NAS-volumes

Restore NAS volumes from the storage.

CAUTION: This command should be used only by Dell Technical Support. This command is used as part of a disaster recovery scenario.

Format

```
hardware restore-configuration-from-storage restore-NAS-volumes
```

Example

Restore NAS volumes from the storage:

```
CLI> hardware restore-configuration-from-storage restore-NAS-volumes
```

hardware storage-identifiers list

Display a list of the storage identifiers.

Format

```
hardware storage-identifiers list
```

Options

Option	Description	Format
--CSV	Display the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the current storage identifiers:

```
CLI> hardware storage-identifiers list
```

Output

```
.------------------.----------------------.
| Identifier       | Description          |
|------------------|----------------------|
| 21000024ff4f92e8 | Controller0 hba0 WWN |
|------------------|----------------------|
| 21000024ff4f92e9 | Controller0 hba1 WWN |
|------------------|----------------------|
| 21000024ff4f9318 | Controller1 hba0 WWN |
|------------------|----------------------|
| 21000024ff4f9319 | Controller1 hba1 WWN |
'------------------'----------------------'
```

hardware storage-identifiers view

Display information about a storage identifier.

Format

```
hardware storage-identifiers view <Identifier>
```

Arguments

Argument	Description	Format
<Identifier>	Storage identifier	Existing storage identifier

Example

Display information about the storage identifier 21000024ff4f92e8:

```
CLI> hardware storage-identifiers view 21000024ff4f92e8
```

Output

```
Identifier  = 21000024ff4f92e8
Description = Controller0 hba0 WWN
```

hardware storage-subsystem create-NAS-pool

Create the NAS pool.

Format

```
hardware storage-subsystem create-NAS-pool
```

hardware storage-subsystem expand-NAS-pool

Expand the NAS pool.

Format

```
hardware storage-subsystem expand-NAS-pool
```

hardware storage-subsystem file-system-configuration edit

Modify the file system storage configuration.

Format

```
hardware storage-subsystem file-system-configuration edit
```

Arguments

Argument	Description	Format
-UnmapEnabled <UnmapEnabled>	When releasing space in NAS volumes and NAS pool, make that space available for block volumes, using the SCSI TRIM command.	Values are Yes or No

hardware storage-subsystem file-system-configuration view

Display the file system storage configuration.

Format

```
hardware storage-subsystem file-system-configuration view
```

Example

Display the file system storage configuration.:

```
CLI> hardware storage-subsystem file-system-configuration view
```

Output

```
Unmap Enabled = No
```

hardware storage-subsystem rescan

Trigger LUN discovery.

Format

```
hardware storage-subsystem rescan
```

hardware storage-subsystem view

Display the storage subsystem status.

Format

```
hardware storage-subsystem view
```

Example

Display the current storage subsystem status:

```
CLI> hardware storage-subsystem view
```

Output

```
'--+- Name               = Storage
   |- Luns Accessibility = Optimal
   '- Luns               = +--+- ID            = 36000d31000fad80000000017
                            |  |- LUN Number    = 0
                            |  |- Reserved Size = 524288
                            |  |- Real Size     = 524288
                            |  |- Status        = Formatted
                            |  |- Accessibility = Optimal
                            |  |- Array Type    = MD36XXI
                            |  '- Controllers   =  .----.------------------.
                            |                      | ID| LUN Accessibility |
                            |                      |----|------------------|
                            |                      | 0  | Optimal          |
                            |                      |----|------------------|
                            |                      | 1  | Optimal          |
                            |                      '----'------------------'
...[snip]...
```

NAS-volumes add

Add a NAS volume.

Format

```
NAS-volumes add <Name> <Size> {options}
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Must have a maximum length of 230 characters, and may contain letters, numbers, spaces, and underscores. Control characters and commas are not allowed.
<Size>	NAS volume size	Floating point number with suffix of units (MB, GB, or TB) (for example, 100MB)

Options

Option	Description	Format
-Administrator <Administrator>	Administrator of the NAS volume	Existing administrator user name
-ReservedSpace <ReservedSpace>	Reserved space from the NAS volume	Floating point number
-EnableUsedSpaceThreshold <EnableUsedSpaceThreshold>	Indicate whether the used space threshold is enabled	Possible values are Yes, No
-UsedSpaceThreshold <UsedSpaceThreshold>	Used space threshold (percent from the NAS volume size)	Zero-based, whole positive number (0 to 100)
-EnableAvailableSpaceThreshold <EnableAvailableSpaceThreshold>	Indicate whether the unused space threshold is enabled	Possible values are Yes, No
-AvailableSpaceThreshold <AvailableSpaceThreshold>	Unused space threshold	Floating point number with suffix of units (for example, 100MB)
-EnableDataReduction <EnableDataReduction>	Indicate whether data reduction is enabled	Possible values are Yes, No
-DataReductionType <DataReductionType>	Data reduction type	Possible values are De-duplication, De-duplicationWithCompression
-RehydrateOnRead <RehydrateOnRead>	Indicate whether the system should save the rehydrate files during the read when data reduction is disabled	Possible values are Yes, No
-DataReductionFilesFilterAccessTime <DataReductionFilesFilterAccessTime>	Threshold of access time	Whole positive number (in days) greater than or equal to 30
-DataReductionFilesFilterModificat	Threshold of modify time	Whole positive number (in days) greater than or equal to 30

Option	Description	Format
ionTime <DataReductionFilesFilterModificationTime>		
-DataReductionFilesFilterType <DataReductionFilesFilterType>	Indicate whether the files should pass to deduplication immediately or according to defined filters	Possible values are AllFiles, AgeBased
-AccessTimeGranularity <AccessTimeGranularity>	Granularity of access time updates	Possible values are Always, Daily, Never, Every5Minutes, EveryHour
-EnableSnapshotSpaceConsumptionThreshold <EnableSnapshotSpaceConsumptionThreshold>	Indicate whether the snapshot space consumption threshold is enabled	Possible values are Yes, No
-SnapshotSpaceConsumptionThreshold <SnapshotSpaceConsumptionThreshold>	Snapshot space consumption threshold (percent from the NAS volume size)	Zero-based, whole positive number (0 to 100)
-SecurityStyle <SecurityStyle>	Interoperability policy	Possible values are Mixed, NTFS, UNIX
-DefaultUNIXFilePermissions <DefaultUNIXFilePermissions>	Default UNIX file permissions for files that will be created from Windows on a NAS volume with a UNIX interoperability policy	UNIX permission (rwxrwxrwx) in octal format
-DefaultUNIXFolderPermissions <DefaultUNIXFolderPermissions>	Default UNIX file permissions for folders that will be created from Windows on a NAS volume with a UNIX interoperability policy	UNIX permission (rwxrwxrwx) in octal format
-ReportZeroDiskUsage <ReportZeroDiskUsage>	Indicate whether the disk usage for files that do not have a valid disk usage count will be reported as zero	Possible values are Yes, No
—SACLAuditPolicy <SACLAuditPolicy>	SACL auditing policy	

Example

Add an NTFS NAS volume named vol3 with a size of 20 MB and enable an alert that is triggered when 95% of the NAS volume space is used:

```
CLI> NAS-volumes add vol3 20MB -SecurityStyle NTFS -EnableUsedSpaceThreshold
Yes -UsedSpaceThreshold 95
```

NAS-volumes view

Display NAS volume settings.

Format

```
NAS-volumes view <Name>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Example

Display the current settings for a NAS volume named vol3:

```
CLI> NAS-volumes view vol3
```

Output

```
Name                                          = vol3
Administrator                                 =
Size                                          = 20.00 MB
Used Space                                    = 0.01 MB
Is Used Space Threshold Enabled               = Yes
Used Space Threshold                          = 95%
Unused Space                                  = 19.99 MB
Is Unused Space Threshold Enabled             = No
Unused Space Threshold                        = 20.00 MB
Over Committed Space                          = 0.00 MB
Space Provisioning                            = Thin
Unused Reserved Space                         = 0.00 MB
Reserved Space                                = 0.00 MB
Clone                                         = No
Data Reduction Enabled                        = No
Data Reduction Type                           = De-duplication
Data Reduction Rehydrate On Read              = No
Data Reduction Savings                        = 0.00 MB
Data Reduction Savings Percent                = 0%
Data Reduction Files Filter Access Time       = 30
Data Reduction Files Filter Modification Time = 30
Data Reduction Files Filter Type              = AgeBased
Number Of Snapshots                           = 0
Snapshot Used Space                           = 0.00 MB
Access Time Granularity                       = Daily
Enable Snapshot Space Consumption Threshold   = No
Snapshot Space Consumption Threshold          = 100
Security Style                                = NTFS
Default UNIX File Permissions                 = 0744
Default UNIX Folder Permissions               = 0755
Number Of Nfs Exports                         = 0
Number Of SMB Shares                          = 0
Report Zero Disk Usage                        = No
SACL Audit Policy                             = None
Limit access to specified subnets             = No
Access allowed only from subnets              =  .------------.
```

```
                                                    | Network ID |
                                                    |------------|
                                                    '------------'
Inode Distribution                                = No
Keep redundant copy of metadata for improved resiliency = Yes
```

NAS-volumes auditing-policy add

Add an auditing policy for a volume.

Format

```
NAS-volumes auditing-policy add <VolumeName> <PolicyName> <SubscriberID>
<AuditOperations> -Enable
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<PolicyName>	Name of the auditing policy	Existing policy name
<SubscriberID>	ID for the auditing cluster	Existing cluster ID
<AuditOperations>	List of one or more file-access operations	Possible values are CREATE_NEW, WRITE, READ, RENAME, SET_OWNER, SET_ATTRIBUTES, DELETE, OPEN_FOLDER, CHANGE_SECURITY, LINK

Options

Option	Description	Format
-Enable	Indicate whether the auditing policy is enabled or disabled for the volume	Possible values are Yes, No.

Example

Add an auditing policy for a NAS volume:

```
CLI> NAS-volumes auditing-policy add vol1 policy1 NASCluster1
WRITE,READ,SET_ATTRIBUTES,DELETE -Enable Yes
```

NAS-volumes auditing-policy delete

Delete an auditing policy for a volume.

Format

```
NAS-volumes auditing-policy delete <VolumeName> <PolicyName> <SubscriberID>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<PolicyName>	Name of the auditing policy	Existing policy name
<SubscriberID>	Cluster ID for the auditing server	Existing cluster ID

Example

Delete an auditing policy from a NAS volume:

```
CLI> NAS-volumes auditing-policy delete vol1 policy1 NASCluster1
```

NAS-volumes auditing-policy edit

Modify an auditing policy for a volume.

You can change subscriber ID and the file-access operations listed in the policy.

Format

```
NAS-volumes auditing-policy edit <VolumeName> <PolicyName> <SubscriberID>
<AuditOperations> -Enable
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<PolicyName>	Name of the auditing policy	Existing policy name
<SubscriberID>	Cluster ID for the auditing server	New cluster ID
<AuditOperations>	List of one or more file-access operations to modify	Possible values are CREATE_NEW, WRITE, READ, RENAME, SET_OWNER, SET_ATTRIBUTES, DELETE, OPEN_FOLDER, CHANGE_SECURITY, LINK

Options

Option	Description	Format
-Enable	Indicate whether the auditing policy is enabled or disabled for the volume	Possible values are Yes, No. [Default is Yes?]

Example

Modify an auditing policy for a NAS volume:

```
CLI> NAS-volumes auditing-policy edit vol1 policy1 NASCluster1
WRITE,READ,SET_ATTRIBUTES,RENAME -Enable Yes
```

NAS-volumes auditing-policy list

Display a list of existing auditing policies.

Format

```
NAS-volumes auditing-policy list
```

Example

Display a list of existing auditing policies:

```
CLI> NAS-volumes auditing-policy list
```

Output

```
SubscriberID   = Cluster ID of the auditing server
Enable         = Whether policy is enabled or disabled
OperationsList = List of one or more file-access operations for the policy
```

NAS-volumes configuration-backups list-available

Display a list of available NAS volume configuration backups.

Backups will be available only if they are from another NAS volume, which happens as a result of replication (Tthe .clusterConfig directory is copied as part of replication data), an NDMP restore of another NAS volume (the .clusterConfig directory is backed up from one NAS volume and restored to another), or a manual copy of the .clusterConfig directory from another NAS volume.

Format

```
NAS-volumes configuration-backups list-available
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of NAS volume configuration backups:

```
CLI> NAS-volumes configuration-backups list-available
```

Output

```
.-------------------.------------------.------------------.-----------------.
| Volume Name       | Source Cluster   | Source Volume    | Backup Time     |
|                   | Name             | Name             |                 |
|-------------------|------------------|------------------|-----------------|
| Vol1              | idffs2           | VolA             | 02-Aug-13       |
|                   |                  |                  | 14:30:28        |
|-------------------|------------------|------------------|-----------------|
| Vol2              | idffs2           | VolB             | 31-Jul-13       |
|                   |                  |                  | 16:21:38        |
'-------------------'------------------'------------------'-----------------'
```

NAS-volumes configuration-backups view-available

Description

Display available configuration backups for a NAS volume. Backups will be available only if they are from another NAS volume, which happens as a result of replication (.clusterConfig directory is copied as part of replication data), an NDMP restore of another NAS volume (.clusterConfig directory is backed up from one NAS volume and restored to another), or a manual copy of the .clusterConfig directory from another NAS volume.

Format

```
NAS-volumes configuration-backups view-available <VolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name

Example

Display the available configuration backups for a NAS volume named vol1:

```
CLI> NAS-volumes configuration-backups view-available
vol1
```

Output

```
Volume Name         = vol1
Source Cluster Name = idffs2
Source Volume Name  = VolA
Backup Time         = 31-Jul-13 16:21:38
```

NAS-volumes configuration-backups restore-configuration

Restore NAS volume settings from another FluidFS cluster.

Format

```
NAS-volumes configuration-backups restore-configuration <VolumeName>
<ConfigurationTypes>
```

Arguments

Argument	Description	Format
<VolumeName>	Volume name	Existing NAS volume name
<ConfigurationTypes>	Configuration types that should be restored	Comma-separated list of configuration types. Possible values are SMBshare, NfsExport, QuotaRule, and SnapshotSchedule.

Example

Restore snapshot schedule settings for a NAS volume named vol1:

```
CLI> NAS-volumes configuration-backups restore-configuration vol1
SnapshotSchedule
```

NAS-volumes clone file

Description

Create a clone of a file.

NOTE: The file must be at least 7 MB to be cloned.

Format

```
NAS-volumes clone file <VolumeName> <SourceFilePath> <DestinationDirectoryPath>
<DesinationFileName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<SourceFilePath>	Source file path	Existing source file path
<DestinationDirectoryPath>	Destination directory path	Existing directory path

Argument	Description	Format
<DesinationFileName>	Destination file name	Length must be less than 230 characters

Example

Clone a file on a NAS volume named vol1 from /folder/file.pdf to /folder/filecopy.pdf:

```
CLI> NAS-volumes clone file vol1 /folder/file.pdf /folder filecopy.pdf
```

NAS-volumes clone volume

Description

Clone a NAS volume.

Format

```
NAS-volumes clone volume <Name> <BaseVolumeName> <BaseSnapshotName>
```

Arguments

Argument	Description	Format
<Name>	Cloned NAS volume name	Must have a maximum length of 230 characters, and may contain letters, numbers, spaces, and underscores. Control characters and commas are not allowed.
<BaseVolumeName>	Base NAS volume	Existing NAS volume name
<BaseSnapshotName>	Base snapshot	Existing snapshot name

Example

Create a clone NAS volume named clonevol3 from a NAS volume named vol3 and a snapshot named vol3snap:

```
CLI> NAS-volumes clone volume clonevol3 vol3 vol3snap
```

NAS-volumes delete

Description

Delete a NAS volume.

Format

```
NAS-volumes delete <Name>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Example

Delete a NAS volume named vol3:

```
CLI> NAS-volumes delete vol3
```

Output

```
Confirmation: You are about to delete <NAS _volume _name>. All data stored on
the NAS volume will be lost.
Are you sure that you want to complete the operation? ( Yes / No ):
```

NAS-volumes edit advanced-settings

Modify the advanced settings of a NAS volume.

Format

```
NAS-volumes edit advanced-settings <Name> {options}
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
<SACLAuditPolicy>	SACL auditing policy	
<EagerInodeDistribution>	Enable EagerInodeDistribution will balance system for few writers	
-AccessTimeGranularity <AccessTimeGranularity>	Granularity of access time updates	Possible values are Always, Daily, Never, Every5Minutes, EveryHour
-ReportZeroDiskUsage <ReportZeroDiskUsage>	Indicate whether the disk usage for files that do not have a valid disk usage count will be reported as zero	Possible values are Yes, No
-RestrictSnapshotsAccess <RestrictSnapshotsAccess>	Enable/disable user's access to snapshots of a specific volume	Possible values are Yes, No

Example

Update access timestamps every hour for a NAS volume named vol1:

```
CLI> NAS-volumes edit advanced-settings vol1 -AccessTimeGranularity Everyhour
```

NAS-volumes edit data-reduction

Modify the data reduction settings of a NAS volume.

Format

```
NAS-volumes edit data-reduction <Name> {options}
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
-EnableDataReduction <EnableDataReduction>	Indicate whether data reduction is enabled	Possible values are Yes, No
-DataReductionType <DataReductionType>	Data reduction type	Possible values are De-duplication, De-duplicationWithCompression
-DataReductionFilesFilterAccessTime <DataReductionFilesFilterAccessTime>	Threshold of access time. If a file was read in the last <x> days, it will not be a candidate for data reduction.	Whole positive number (in days) greater than or equal to 5
-DataReductionFilesFilterModificationTime <DataReductionFilesFilterModificationTime>	Threshold of modify time. If a file was modified or written in the last <x> days, it will not be a candidate for data reduction.	Whole positive number (in days) greater than or equal to 5
-DataReductionFilesFilterType <DataReductionFilesFilterType>	Indicate whether the files should pass to deduplication immediately or according to defined filters	Possible values are AllFiles, AgeBased
-DataReductionRehydrateOnRead <DataReductionRehydrateOnRead>	Indicate whether the system should save the rehydrate files during the read when data reduction is disabled	Possible values are Yes, No

Example

Enable data reduction on a NAS volume named vol1:

```
CLI> NAS-volumes edit data-reduction vol1 -EnableDataReduction Yes
```

NAS-volumes edit interoperability-policy

Modify the interoperability policy of a NAS volume.

If the interoperability policy is changed, it affects any new files or directories in the volume.

Format

```
NAS-volumes edit interoperability-policy <Name> {options}
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
-SecurityStyle <SecurityStyle>	Interoperability policy	Possible values are Mixed, NTFS, UNIX
-DefaultUNIXFilePermissions <DefaultUNIXFilePermissions>	Default UNIX file permissions for files that will be created from Windows on a NAS volume with a UNIX interoperability policy	UNIX permission (rwxrwxrwx) in octal format
-DefaultUNIXFolderPermissions <DefaultUNIXFolderPermissions>	Default UNIX file permissions for folders that will be created from Windows on a NAS volume with a UNIX interoperability policy	UNIX permission (rwxrwxrwx) in octal format

Example

Change the security style of a NAS volume named vol1 to UNIX:

```
CLI> NAS-volumes edit interoperability-policy vol1 -SecurityStyle UNIX
```

NAS-volumes edit name

Description

Rename a NAS volume.

Format

```
NAS-volumes edit name <Name> <NewName>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name
<NewName>	New NAS volume name	Must have a maximum length of 230 characters, and may contain letters, numbers, spaces, and underscores. Control characters and commas are not allowed.

Example

Rename a NAS volume from vol1 to vol2:

```
CLI> NAS-volumes edit name vol1 vol2
```

NAS-volumes edit owner

Modify the NAS volume owner.

Format

```
NAS-volumes edit owner <Name> <Administrator>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name
<Administrator>	Administrator of the NAS volume	Selected existing administrator user name

Example

Change the owner of a NAS volume named vol1 to Administrator2:

```
CLI> NAS-volumes edit owner vol1 Administrator2
```

NAS-volumes edit space

Description

Modify the NAS volume space settings.

Format

```
NAS-volumes edit space <Name> {options}
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
-Size <Size>	NAS volume size	Floating point number with suffix of units (MB, GB, or TB) (for example, 100MB)
-SpaceProvisioning <SpaceProvisioning>	Space provisioning type of the NAS volume	Possible values are Thick, Thin
-ReservedSpace <ReservedSpace>	Reserved space from the NAS volume	Floating point number
-EnableUsedSpaceThreshold <EnableUsedSpaceThreshold>	Indicate whether the used space threshold is enabled	Possible values are Yes, No
-UsedSpaceThreshold <UsedSpaceThreshold>	Used space threshold (percent from the NAS volume size)	Zero-based, whole positive number (0 to 100)
-EnableAvailableSpaceThreshold <EnableAvailableSpaceThreshold>	Indicate whether the unused space threshold is enabled	Possible values are Yes, No
-AvailableSpaceThreshold <AvailableSpaceThreshold>	Unused space threshold	Floating point number with suffix of units (for example, 100MB)
-EnableSnapshotSpaceConsumptionThreshold <EnableSnapshotSpaceConsumptionThreshold>	Indicate whether the snapshot space consumption threshold is enabled	Possible values are Yes, No
-SnapshotSpaceConsumptionThreshold <SnapshotSpaceConsumptionThreshold>	Snapshot space consumption threshold (percent from the NAS volume size)	Zero-based, whole positive number (0 to 100)

Example

Change the size of a NAS volume named vol1 to 50 MB:

```
CLI> NAS-volumes edit space vol1 -Size 50MB
```

NAS-volumes edit subnet-restrictions add-allowed-subnets

Add allowed subnet to the NAS volume.

Format

```
NAS-volumes edit subnet-restrictions add-allowed-subnets <Name> <NetworkID>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name
<NetworkID>	Subnet network ID	

Example

Add allowed subnet to NAS volume Vol2:

```
CLI> NAS-volumes edit subnet-restrictions add-allowed-subnets Vol2 192.168.0.0
```

NAS-volumes edit subnet-restrictions delete-allowed-subnets

Delete allowed subnet from the NAS volume.

Format

```
NAS-volumes edit subnet-restrictions delete-allowed-subnets <Name> <NetworkID>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name
<NetworkID>	Subnet network ID	

Example

Delete allowed subnet from NAS volume Vol2:

```
CLI> NAS-volumes edit subnet-restrictions delete-allowed-subnets Vol2
192.168.0.0
```

NAS-volumes edit subnet-restrictions limit-to-subnets

Enable or disable NAS volume access restriction for specified subnets.

NOTE: If home shares reside on the volume to be restricted, all users might lose access to their home shares if they are not accessing it through this subnet.

Format

```
NAS-volumes edit edit subnet-restrictions limit-to-subnets <Name>
<EnableLimitToSubnets>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name
<EnableLimitToSubnets>	Indicate if the limit to subnets feature is enabled on the volume	Values are Yes and No

Example

Enable NAS volume access restriction for specified subnet:

```
CLI> NAS-volumes edit edit subnet-restrictions limit-to-subnets MyVolume Yes
```

NAS-volumes list capacity-over-time last-day

Display the last day's NAS volumes statistics.

Format

```
NAS-volumes list capacity-over-time last-day <VolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last day's NAS volumes statistics for a NAS volume named vol3:

```
CLI> NAS-volumes list capacity-over-time last-day vol3
```

Output

```
 .-------.----------.---------.--------.---------------.-----------------.------
---------.
 | Volume| Time     | Size    | Used   | Unused        | Unused Uneserved| Over
Committed|
 | Name  |          |         | Space  | Reserved Space| Space           |
Space         |

|-------|----------|---------|--------|---------------|-----------------|-------
--------|
 | vol3  | 09-Aug-14| 20.00 MB| 0.00 MB| 0.00 MB       | 19.00 MB        | 0.00
MB        |
 |       | 13:23:02 |         |        |               |
|               |

|-------|----------|---------|--------|---------------|-----------------|-------
--------|
 | vol3  | 09-Aug-14| 20.00 MB| 0.00 MB| 0.00 MB       | 19.00 MB        | 0.00
MB        |
 |       | 12:00:00 |         |        |               |
|               |

|-------|----------|---------|--------|---------------|-----------------|-------
--------|
 | vol3  | 09-Aug-14| 0.00 MB | 0.00 MB| 0.00 MB       | 0.00 MB         | 0.00
MB        |
 |       |11:00:00  |         |        |               |
|               |

|-------|----------|---------|--------|---------------|-----------------|-------
--------|
...[snip]...
```

NAS-volumes list capacity-over-time last-month

Display the last month's NAS volumes statistics.

Format

```
NAS-volumes list capacity-over-time last-month <VolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last month's NAS volumes statistics for a NAS volume named vol3:

```
CLI> NAS-volumes list capacity-over-time last-month vol3
```

Output

```
 .-------.-----------.---------.----------.----------.-----------.--------------
-.
 | Volume| Time      | Size    |Used Space| Unused   | Unused    | Over
Committed|
 | Name  |           |         |          | Reserved | Unreserved|
Space         |
 |       |           |         |          |  Space   |  Space
|               |

|-------|-----------|---------|----------|----------|-----------|---------------
|
 | vol3  | 02-Aug-13 | 0.00 MB | 0.00 MB  | 0.00 MB  | 0.00 MB   | 0.00
Mb       |
 |       | 00:00:00  |         |          |          |
|               |

|-------|-----------|---------|----------|----------|-----------|---------------
|
 | vol3  | 01-Aug-13 | 0.00 MB | 0.00 MB  | 0.00 MB  | 0.00 MB   | 0.00
MB       |
 |       | 00:00:00  |         |          |          |
|               |

|-------|-----------|---------|----------|----------|-----------|---------------
|
 | vol3  | 31-Jul-13 | 0.00 MB | 0.00 MB  | 0.00 MB  | 0.00 MB   | 0.00
MB       |
 |       | 00:00:00  |         |          |          |
|               |

|-------|-----------|---------|----------|----------|-----------|---------------
|
...[snip]...
```

NAS-volumes list capacity-over-time last-week

Display the last week's NAS volumes statistics.

Format

```
NAS-volumes list capacity-over-time last-week <VolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last week's NAS volumes statistics for a NAS volume named vol3:

```
CLI> NAS-volumes list capacity-over-time last-week vol3
```

Output

```
.------------.----------.--------.----------.---------.-----------.----------.
| Volume Name| Time     | Size   |Used Space| Unused  | Unused    | Over     |
|            |          |        |          | Reserved| Unreserved| Committed|
|            |          |        |          | Space   | Space     | Space    |
|------------|----------|--------|----------|---------|-----------|----------|
| vol3       | 09-Aug-13| 0.00 MB| 0.00 MB  | 0.00 MB | 0.00 MB   | 0.00 MB  |
|            | 00:00:00 |        |          |         |           |          |
|------------|----------|--------|----------|---------|-----------|----------|
| vol3       | 08-Aug-13| 0.00 MB| 0.00 MB  | 0.00 MB | 0.00 MB   | 0.00 MB  |
|            | 18:00:00 |        |          |         |           |          |
|------------|----------|--------|----------|---------|-----------|----------|
| vol3       | 08-Aug-13| 0.00 MB| 0.00 MB  | 0.00 MB | 0.00 MB   | 0.00 MB  |
|            | 12:00:00 |        |          |         |           |          |
|------------|----------|--------|----------|---------|-----------|----------|
 ...[snip]...
```

NAS-volumes list capacity-over-time last-year

Display the last year's NAS volumes statistics.

Format

```
NAS-volumes list capacity-over-time last-year <VolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last year's NAS volumes statistics for a NAS volume named vol3:

```
CLI> NAS-volumes list capacity-over-time last-year vol3
```

Output

```
.-----------.----------.---------.-----------.---------.----------.----------.
|Volume Name| Time     | Size    | Used Space| Unused  | Unused   | Over     |
|           |          |         |           | Reserved| Uneserved| Committed|
|           |          |         |           | Space   | Space    | Space    |
|-----------|----------|---------|-----------|---------|----------|----------|
| vol3      | 09-Aug-14| 20.00 MB| 0.00 MB   | 0.00 MB | 19.00 MB | 0.00 MB  |
|           | 13:31:27 |         |           |         |          |          |
|-----------|----------|---------|-----------|---------|----------|----------|
| vol3      | 26-Jul-14| 0.00 MB | 0.00 MB   | 0.00 MB | 0.00 MB  | 0.00 MB  |
|           | 00:00:00 |         |           |         |          |          |
|-----------|----------|---------|-----------|---------|----------|----------|
| vol3      | 12-Jul-14| 0.00 MB | 0.00 MB   | 0.00 MB | 0.00 MB  | 0.00 MB  |
|           | 00:00:00 |         |           |         |          |          |
|-----------|----------|---------|-----------|---------|----------|----------|
 ...[snip]...
```

NAS-volumes list capacity-over-time now

Display the current NAS volumes statistics.

Format

```
NAS-volumes list capacity-over-time now <VolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the current NAS volumes statistics for a NAS volume named vol3:

```
CLI> NAS-volumes list capacity-over-time now vol3
```

Output

```
.------------.----------.---------.---------.----------.----------.-------------
-.
| Volume Name| Time     | Size    |Used Space| Unused  | Unused   |Over
Committed|
|            |          |         |          | Reserved| Uneserved|
Space         |
|            |          |         |          |  Space  | Space
|              |
|------------|----------|---------|----------|---------|----------|-------------
-|
| vol3       | 09-Aug-13| 20.00 MB| 0.00 MB  | 0.00 MB | 19.00 MB | 0.00
MB      |
|            | 13:23:02 |         |          |         |
|              |
|------------|----------|---------|----------|---------|----------|-------------
-|
| vol3       | 09-Aug-13| 20.00 MB| 0.00 MB  | 0.00 MB | 19.00 MB | 0.00
MB      |
|            | 12:00:00 |         |          |         |
|              |
|------------|----------|---------|----------|---------|----------|-------------
-|
| vol3       | 09-Aug-13| 0.00 MB | 0.00 MB  | 0.00 MB | 0.00 MB  | 0.00
MB      |
|            | 11:00:00 |         |          |         |
|              | |
|------------|----------|---------|----------|---------|----------|-------------
-|
...[snip]...
```

NAS-volumes list clones

Description

List cloned NAS volumes.

Format

```
NAS-volumes list clones
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of cloned NAS volumes:

```
CLI> NAS-volumes list clones
```

Output

```
 .--------------.-------------.--------------.-------------.
 | Cloned Volume| Base Volume | Base Snapshot| Base Volume |
 |  Name        |  Name       |  Name        | Space Status|
 |--------------|-------------|--------------|-------------|
 | clonevol3    | vol3        | vol3snap     | Warning     |
 '--------------'-------------'--------------'-------------'
```

NAS-volumes list data-reduction

List of NAS volumes with their data reduction information.

Format

```
NAS-volumes list data-reduction
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the NAS volumes with their current data reduction information:

```
CLI> NAS-volumes list data-reduction
```

Output

```
.-------.---------------.-----------------.------------------.---------------.--
--------------.
| Name  | Data Reduction| Data Reduction  | Data Reduction   | Data Reduction|
Data Reduction |
|       | Enabled       | Type            | Rehydrate On Read|  Savings      |
Savings Percent|
|-------|---------------|-----------------|------------------|---------------|--
--------------|
| smbvol| No            | De-duplication  | No               | 0.00 MB       |
0%             |
|-------|---------------|-----------------|------------------|---------------|--
--------------|
| nfsvol| Yes           | De-duplication  | No               | 0.00 MB       |
0%             |
|       |               | with compression|                  |
|                |
|-------|---------------|-----------------|------------------|---------------|--
```

```
--------------|
| svol3 | Yes           | De-duplication  | No               | 0.00 MB       |
0%             |
|-------|---------------|-----------------|------------------|---------------|--
--------------|
```

NAS-volumes list snapshots

Description

List NAS volumes with their snapshot space consumption.

Format

```
NAS-volumes list snapshots
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the NAS volumes with their current snapshot space consumption:

```
CLI> NAS-volumes list snapshots
```

Output

```
.------.---------------------.---------------------.
 | Name | Number Of Snapshots | Snapshot Used Space |
 |------|---------------------|---------------------|
 | vol1 | 1                   | 0.00 MB             |
 |------|---------------------|---------------------|
 | vol2 | 0                   | 0.00 MB             |
 '------'---------------------'---------------------'
```

NAS-volumes list space

List NAS volumes with their space information.

Format

```
NAS-volumes list space
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the NAS volumes with their current space information:

```
CLI> NAS-volumes list space
```

Output

```
.-------.---------.----------.---------.--------------.-------------.-----------
------.------.
| Name  | Size    |Used Space|Unused   | OverCommitted| Space       | Unused
Reserved| Clone|
|       |         |          | Space   | Space        | Provisioning|
Space          |      |
|-------|---------|----------|---------|--------------|-------------|-----------
------|------|
| smbvol| 20.00 MB| 0.39 MB  | 19.61 MB| 0.00 MB      | Thin        | 0.00
MB        | No   |
|-------|---------|----------|---------|--------------|-------------|-----------
------|------|
| nfsvol| 20.00 MB| 0.36 MB  | 19.64 MB| 0.00 MB      | Thin        | 0.00
MB        | No   |
|-------|---------|----------|---------|--------------|-------------|-----------
------|------|
| vol3  | 20.00 M | 0.27 MB  | 19.73 MB| 0.00 MB      | Thin        | 0.00
MB        | No   |
'-------'---------'----------'---------'--------------'-------------'-----------
------'------'
```

NAS-volumes Namespace-Aggregation add

Convert a regular folder to a redirection folder to be used for namespace aggregation.

Format

```
NAS-volumes Namespace-Aggregation add <VolumeName> <Path> [options]
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	Existing path to a directory	Redirection can be set on empty directories only.

Options

Option	Description	Format
-EnableSmb		Yes or No
-RemoteSmbShare	Name of the share for the remote SMB	Must not be empty when corresponding flag is enabled
-EnableNFS		Yes or No
-RemoteNfsExport		Must not be empty when corresponding flag is enabled

Example

Enable Namespace Aggregation on a a NAS volume named vol1:

```
CLI> NAS-volumes Namespace-Aggregation add vol1
```

NAS-volumes Namespace-Aggregation create-folder

Create a redirection folder on a volume.

A redirection folder points clients to other shares residing internally or externally to a FluidFS system.

Format

```
NAS-volumes Namespace-Aggregation create-folder <VolumeName> <ParentFolder>
<Name>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ParentFolder>	Parent folder under the NAS volume	Existing parent folder
<Name>	Name of the new folder	Less than 255 characters and cannot contain the following characters: < > " \ | ? *. Also, the path cannot include ., .., and so on.

Example

Create /folder1 on a NAS volume named vol2:

```
CLI> NAS-volumes Namespace-Aggregation create-folder vol2 / folder1
```

NAS-volumes Namespace-Aggregation delete

Delete a redirection folder from a volume.

Format

```
NAS-volumes Namespace-Aggregation delete <VolumeName> <Path>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	Path to an existing volume	

Example

Delete /folder1 on a NAS volume named vol2:

```
CLI> NAS-volumes Namespace-Aggregation delete vol2 /folder1
```

NAS-volumes Namespace-Aggregation edit

Edit namespace aggregation settings on a NAS volume.

Format

```
NAS-volumes Namespace-Aggregation edit <VolumeName> <Path> [options]
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	Existing path to a directory	

Options

Option	Description	Format
-EnableSmb		Yes or No
-RemoteSmbShare	Name of the share for the remote SMB	Must not be empty when corresponding flag is enabled
-EnableNFS		Yes or No
-RemoteNfsExport		Must not be empty when corresponding flag is enabled

Example

Edit Namespace Aggregation settings on a a NAS volume named vol2:

```
CLI> NAS-volumes Namespace-Aggregation edit vol2
```

NAS-volumes Namespace-Aggregation edit-by-dsid

Edit namespace aggregation settings on a NAS volume by dataset identifier (DSID).

Format

```
NAS-volumes Namespace-Aggregation edit-by-dsid <VolumeName> <DSID>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	An existing path to a directory	

Options

Option	Description	Format
-RemoteHost		
-EnableSmb		Yes or No
-RemoteSmbShare	Name of the share for the remote SMB	Must not be empty when corresponding flag is enabled.
-EnableNFS		Yes or No
-RemoteNfsExport		Must not be empty when corresponding flag is enabled.

Example

Edit namespace aggregation settings on a a NAS volume named vol2 by DSID:

```
CLI> NAS-volumes Namespace-Aggregation edit-by-dsid vol1 <dsid>
```

NAS-volumes Namespace-Aggregation list

List the redirection folders that exist on a volume.

Format

```
NAS-volumes Namespace-Aggregation list <VolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name

Example

List the redirection folders on a NAS volume named vol2:

```
CLI> NAS-volumes Namespace-Aggregation list vol2
```

NAS-volumes Namespace-Aggregation view

View the redirection folders that exist on a volume.

Format

```
NAS-volumes Namespace-Aggregation view <VolumeName> <Path>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	Path to an existing volume	

Example

View namespace aggregation settings on a NAS volume named vol2:

```
CLI> NAS-volumes Namespace-Aggregation view vol2
```

NAS-volumes Namespace-Aggregation view-by-dsid

View the redirection folders that exist on a volume by dataset ID.

Format

```
NAS-volumes Namespace-Aggregation view-by-dsid  <VolumeName> <DSID>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<DSID>	Dataset identification	Allows working with entries that cannot be resolved to valid directories (for example, due to cache loss)

Example

View namespace aggregation settings on a NAS volume named vol1 by DSID:

```
CLI> NAS-volumes Namespace-Aggregation view-by-dsid vol1
```

NAS-volumes NAS-pool capacity-overtime last-day

Display the last day's NAS pool statistics.

Format

```
NAS-volumes NAS-pool capacity-overtime last-day
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last day's NAS pool statistics:

```
CLI> NAS-volumes NAS-pool capacity-overtime last-day
```

Output

```
 .------------------.---------.--------.---------------.------------------.
 | Time             | Capacity| Used   |Unused Reserved| Unused Unreserved|
 |------------------|---------|--------|---------------|------------------|
 | 16-May-13 13:52:20| 1.70 TB | 1.00 MB| 41.00 MB      | 1.70 TB          |
 |------------------|---------|--------|---------------|------------------|
 | 16-May-13 12:00:00| 1.70 TB | 1.00 MB| 19.00 MB      | 1.70 TB          |
 |------------------|---------|--------|---------------|------------------|
 | 16-May-13 11:00:00| 1.70 TB | 0.00 MB| 19.00 MB      | 1.70 TB          |
 |------------------|---------|--------|---------------|------------------|
...[snip]...
```

NAS-volumes Namespace-Aggregation view-by-dsid

View the redirection folders that exist on a volume by dataset ID.

Format

```
NAS-volumes Namespace-Aggregation view-by-dsid  <VolumeName> <DSID>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<DSID>	Dataset identification	Allows working with entries that cannot be resolved to valid directories (for example, due to cache loss)

Example

View namespace aggregation settings on a NAS volume named vol1 by DSID:

```
CLI> NAS-volumes Namespace-Aggregation view-by-dsid vol1
```

NAS-volumes NAS-pool capacity-overtime last-month

Display the last month's NAS pool statistics.

Format

```
NAS-volumes NAS-pool capacity-overtime last-month
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last month's NAS pool statistics:

```
CLI> NAS-volumes NAS-pool capacity-overtime last-month
```

Output

```
 .------------------.---------.--------.----------------.------------------.
 | Time             | Capacity| Used   | Unused Reserved| Unused Unreserved|
 |------------------|---------|--------|----------------|------------------|
 | 16-May-13 13:53:28| 1.70 TB | 1.00 MB| 41.00 MB       | 1.70 TB          |
 |------------------|---------|--------|----------------|------------------|
 | 15-May-13 00:00:00| 1.70 TB | 0.00 MB| 19.00 MB       | 1.70 TB          |
 |------------------|---------|--------|----------------|------------------|
 | 14-May-13 00:00:00| 1.70 TB | 0.00 MB| 19.00 MB       | 1.70 TB          |
 |------------------|---------|--------|----------------|------------------|
...[snip]...
```

NAS-volumes NAS-pool capacity-overtime last-week

Display the last week's NAS pool statistics.

Format

```
NAS-volumes NAS-pool capacity-overtime last-week
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last week's NAS pool statistics:

```
CLI> NAS-volumes NAS-pool capacity-overtime last-week
```

Output

```
.------------------.--------.---------.----------------.-----------------.
| Time             |Capacity| Used    |Unused Reserved |Unused Unreserved|
|------------------|--------|---------|----------------|-----------------|
| 16-May-13 13:52:48| 1.70 TB| 1.00 MB | 41.00 MB       | 1.70 TB         |
|------------------|--------|---------|----------------|-----------------|
| 16-May-13 06:00:00| 1.70 TB| 0.00 MB | 19.00 MB       | 1.70 TB         |
|------------------|--------|---------|----------------|-----------------|
| 16-May-13 00:00:00| 1.70 TB| 0.00 MB | 19.00 MB       | 1.70 TB         |
|------------------|--------|---------|----------------|-----------------|
...[snip]...
```

NAS-volumes NAS-pool capacity-overtime last-year

Display the last year's NAS pool statistics.

Format

```
NAS-volumes NAS-pool capacity-overtime last-year
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last year's NAS pool statistics:

```
CLI> NAS-volumes NAS-pool capacity-overtime last-year
```

Output

```
.-------------------.---------.--------.----------------.------------------.
| Time              | Capacity| Used   | Unused Reserved| Unused Unreserved|
|-------------------|---------|--------|----------------|------------------|
| 16-May-13 13:54:02| 1.70 TB | 1.00 MB| 41.00 MB       | 1.70 TB          |
|-------------------|---------|--------|----------------|------------------|
| 02-May-13 00:00:00| 0.00 MB | 0.00 MB| 0.00 MB        | 0.00 MB          |
|-------------------|---------|--------|----------------|------------------|
| 18-Apr-13 00:00:00| 0.00 MB | 0.00 MB| 0.00 MB        | 0.00 MB          |
|-------------------|---------|--------|----------------|------------------|
...[snip]...
```

NAS-volumes NAS-pool configuration edit

Modify the NAS pool settings.

Format

```
NAS-volumes NAS-pool configuration edit {options}
```

Options

Option	Description	Format
-EnableUsedSpaceAlertThresholdPercent <EnableUsedSpaceAlertThresholdPercent>	Indicate whether the NAS pool used space threshold is enabled	Possible values are Yes, No
-UsedSpaceAlertThresholdPercent <UsedSpaceAlertThresholdPercent>	NAS pool used space threshold (percent of the NAS pool)	Zero-based, whole positive number (0 to 100)
-EnableAvailableSpaceAlertThreshold <EnableAvailableSpaceAlertThreshold>	Indicate whether the NAS pool unused space threshold is enabled	Possible values are Yes, No
-AvailableSpaceAlertThreshold <AvailableSpaceAlertThreshold>	NAS pool unused space threshold	Floating point number (for example, 50MB)

Example

Change the NAS pool used space alert threshold percent to 90%:

```
CLI> NAS-volumes NAS-pool configuration edit -UsedSpaceAlertThresholdPercent 90
```

NAS-volumes NAS-pool configuration view

Description

Display NAS pool settings.

Format

```
NAS-volumes NAS-pool configuration view
```

Example

Display the current NAS pool settings:

```
CLI> NAS-volumes NAS-pool configuration view
```

Output

```
Enable Used Space Alert Threshold Percent = Yes
Used Space Alert Threshold Percent        = 90%
Enable Available Space Alert Threshold    = Yes
Available Space Alert Threshold           = 10.00 GB
```

NAS-volumes NAS-pool view

Description

Display current NAS pool information.

Format

```
NAS-volumes NAS-pool view
```

Example

Display current NAS pool information:

```
CLI> NAS-volumes NAS-pool view
```

Output

```
Total Capacity                          = 1.70 TB
Total Reserved                          = 42.00 MB
Total Used                              = 1.69 MB
Total Unused                            = 1.70 TB
Total Unused Reserved                   = 41.22 MB
Total Unused Unreserved                 = 1.70 TB
```

```
Total Over Committed                       = 0.00 MB
Total Optimization Saved Space             = 0.00 MB
Total Optimization Saved Space Percent     = 0
Number Of NAS Volumes                      = 5
Number Of NAS Volumes With Snapshots       = 2
Number Of NAS Volumes With Replication     = 0
Number Of NAS Volumes With Data Reduction = 0
Number Of Cloned Volumes                   = 1
```

NAS-volumes nfs-export select access create

Create the user access to the NFS export.

Formats

`nfs-export select` *`nfs_export_name`* `access create netgroup` *`netgroup_name`* `trusted-user`

`nfs-export select` *`nfs_export_name`* `access create client-ip` *`ip_netmask`* `trusted-user`

Arguments

Variable	Description	Format
<ContainerName>	NAS container name	Existing NAS container name
<nfs-export-name>	NFS export name	Existing NFS export name
<netgroup-name>	Client's netgroup to which this NFS export should be available	Existing netgroup name
<ip-netmask>	IP and netmask addresses for the client to provide NFS export access to. This address ensures that only the client's root user can access the export.	Client IP

Options

Parameter	Description	Format
trusted-user	Trusted users to which this NFS export is available	Possible values are Nobody, All, and All except root

NAS-volumes NFS-exports add

Add an NFS (Network File System) export to a NAS volume.

Format

`NAS-volumes NFS-exports add <ExportName> <VolumeName> <Path> {options}`

Arguments

Argument	Description	Format
<ExportName>	NFS export name	Maximum length of 255 characters, and can contain letters, numbers, and underscores. The name must start with a letter.
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	NFS export path in the NAS volume	Existing NFS export path

Options

Option	Description	Format
-EnableLimitReportedSize <EnableLimitReportedSize>	Indicate whether it is required to limit the reported size	Possible values are Yes, No
-LimitReportedSize <LimitReportedSize>	Limited reported size	Floating point number with suffix of units (for example, 100MB)
-RequireSecurePort <RequireSecurePort>	Indicate whether it is required to use a secure port	Possible values are Yes, No
-Comment <Comment>	Comment for the NFS export	Any string
-UnixStyle <UnixStyle>	Indicate whether the NFS export uses system default authentication	Possible values are Yes, No
-Krb5 <Krb5>	Indicate whether the NFS export can use Kerberos for authentication	Possible values are Yes, No
-Krb5i <Krb5i>	Indicate whether the NFS export can use Kerberos for authentication, and includes a hash with each transaction to ensure integrity. Traffic can still be intercepted and examined, but modifications to the traffic will be apparent.	Possible values are Yes, No
-Krb5p <Krb5p>	Indicate whether the NFS export can use Kerberos for authentication, and encrypts all traffic between the client and server. This method is the most secure, but also incurs the most overhead.	Possible values are Yes, No

Option	Description	Format
-Report32bitInode <Report32bitInode>	Indicate whether the NFS export reports 32-bit inode to the clients	Possible values are Yes, No

Example

Add an NFS export named export1 to a NAS volume named vol2 at the path /folder:

```
CLI> NAS-volumes NFS-exports add export1 vol2 /folder
```

NAS-Volumes nfs-export select access show

Display a list of all the ACLs on a particular NFS export.

Format

```
nfs-export select <nfs_export_name> access show
```

Arguments

Argument	Description	Format
<nfs-export-name>	NFS export name	Existing NFS export name

NAS-volumes NFS-exports add-acl for-all-clients

Add an ACL (access control list) for all clients accessing an NFS export.

Format

```
NAS-volumes NFS-exports add-acl for-all-clients <VolumeName> <ExportName>
<TrustUsers> <ReadWrite>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name
<TrustUsers>	Type of users to which this NFS export should be available	Possible values are Nobody, EveryoneExceptRoot. Note that "Everyone" is not permitted with no restriction to a netgroup, a subnet, or a client machine.
<ReadWrite>	Indicate whether the NFS export is read-write	Possible values are Yes, No

Example

Add an ACL for all clients accessing a read-write NFS export named export1 on a NAS volume named vol2 with a trust type of EveryoneExceptRoot:

```
CLI> NAS-volumes NFS-exports add-acl for-all-clients vol2 export1
EveryoneExceptRoot Yes
```

NAS-volumes NFS-exports add-acl for-clients-in-netgroup

Add an ACL (access control list) for all clients in a netgroup accessing an NFS export.

Format

```
NAS-volumes NFS-exports add-acl for-clients-in-netgroup <VolumeName>
<ExportName> <Netgroup> <TrustUsers> <ReadWrite>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name
<Netgroup>	Client's netgroup to which this NFS export should be available	Netgroup name
<TrustUsers>	Type of users to which this NFS export should be available	Possible values are Nobody, Everyone, EveryoneExceptRoot
<ReadWrite>	Indicate whether the NFS export is read-write	Possible values are Yes, No

Example

Add an ACL for all clients in a netgroup 172.22.69.0 /24 accessing a read-write NFS export named export1 on a NAS volume named vol2 with a trust type of Everyone:

```
CLI> NAS-volumes NFS-exports add-acl for-clients-in-netgroup vol2 export1
172.22.69.0 /24 Everyone Yes
```

NAS-volumes NFS-exports add-acl for-clients-in-subnet

Add an ACL (access control list) for all clients in a subnet accessing an NFS export.

Format

```
NAS-volumes NFS-exports add-acl for-clients-in-subnet <VolumeName> <ExportName>
<ClientsNetworkID> <ClientNetworkPrefixLen> <TrustUsers> <ReadWrite>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name
<ClientsNetworkID>	Network ID of the clients to which this NFS export should be available	IP address in IPv6 or IPv4 format
<ClientsNetworkPrefixLen>	Network prefix length of the clients to which this NFS export should be available	An integer (up to 30 for IPv4, up to 126 for IPv6).
<TrustUsers>	Type of users to which this NFS export should be available	Possible values are Nobody, Everyone, EveryoneExceptRoot
<ReadWrite>	Indicate whether the NFS export is read-write	Possible values are Yes, No

Example

Add an ACL for all clients in a subnet 172.22.69.0 /24 accessing a read-write NFS export named export1 on a NAS volume named vol2 with a trust type of Everyone:

```
CLI> NAS-volumes NFS-exports add-acl for-clients-in-subnet vol2 export1
172.22.69.0 /24 Everyone Yes
```

NAS-volumes NFS-exports add-acl for-single-client

Add an ACL (access control list) for a single client accessing an NFS export.

Format

```
NAS-volumes NFS-exports add-acl for-single-client <VolumeName> <ExportName>
<Client> <TrustUsers> <ReadWrite>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name
<Client>	Client to which this NFS export should be available	Existing host name or IP address in IPv6 or IPv4 format
<TrustUsers>	Type of users to which this NFS export should be available	Possible values are Nobody, Everyone, EveryoneExceptRoot
<ReadWrite>	Indicate whether the NFS export is read-write	Possible values are Yes, No

Example

Add an ACL for a single client with the IP address 172.22.69.18 accessing a read-write NFS export named export1 on a NAS volume named vol2 with a trust type of Everyone:

```
CLI> NAS-volumes NFS-exports add-acl for-single-client vol2 export1
172.22.69.18 Everyone Yes
```

NAS-volumes NFS-exports create-folder

Description

Create a new folder for an NFS export.

Format

```
NAS-volumes NFS-exports create-folder <VolumeName> <ParentFolder>
<Name>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ParentFolder>	Parent folder under the NAS volume	Existing parent folder
<Name>	Name of the new folder	Less than 255 characters and may not contain the following characters: < > " \ | ? *. Also, the path may not include ., .., and so on.

Example

Create an NFS export folder named folder1 with a parent folder / on a NAS volume named vol2:

```
CLI> NAS-volumes NFS-exports create-folder vol2 / folder1
```

NAS-volumes NFS-exports delete

Description

Delete an NFS export.

Format

```
NAS-volumes NFS-exports delete <VolumeName> <ExportName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name

Example

Delete an NFS export named export1 from a NAS volume named vol2:

```
CLI> NAS-volumes NFS-exports delete vol2 export1
```

NAS-volumes NFS-exports delete-acl for-all-clients

Delete an ACL for all clients accessing an NFS export.

Format

```
NAS-volumes NFS-exports delete-acl for-all-clients <VolumeName> <ExportName>
<TrustUsers>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name
<TrustUsers>	Type of users for which this NFS export was defined	Possible values are Nobody, EveryoneExceptRoot

Example

Delete an ACL for all clients accessing an NFS export named export1 on a NAS volume named vol2 with a trust type of EveryoneExceptRoot:

```
CLI> NAS-volumes NFS-exports delete-acl for-all-clients vol2 export1
EveryoneExceptRoot
```

NAS-volumes NFS-exports delete-acl for-clients-in-netgroup

Delete an ACL for all clients in a netgroup accessing an NFS export.

Format

```
NAS-volumes NFS-exports delete-acl for-clients-in-netgroup <VolumeName>
<ExportName> <Netgroup> <TrustUsers>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name
<Netgroup>	Clients netgroup to which this NFS export should be available	Existing netgroup name
<TrustUsers>	Type of users to which this NFS export should be available	Possible values are Nobody, Everyone, EveryoneExceptRoot

Example

Delete an ACL for all clients in a netgroup named group1 accessing an NFS export named export1 on a NAS volume named vol2 with a trust type of Everyone:

```
CLI> NAS-volumes NFS-exports delete-acl for-clients-in-netgroup vol2 export1
group1 Everyone
```

NAS-volumes NFS-exports delete-acl for-clients-in-subnet

Delete an ACL for all clients in a subnet accessing an NFS export.

Format

```
NAS-volumes NFS-exports delete-acl for-clients-in-subnet <VolumeName>
<ExportName> <ClientsNetworkID> <ClientsPrefixLen> <TrustUsers>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name
<ClientsNetworkID>	Clients network ID to which this NFS export should be available	IP address in IPv6 or IPv4 format
<ClientsPrefixLen>	Length of the prefix of the clients to which this NFS export should be available	Integer (up to 30 for IPv4, up to 126 for IPv6)
<TrustUsers>	Type of users to which this NFS export should be available	Possible values are Nobody, Everyone, EveryoneExceptRoot

Example

Delete an ACL for all clients in the subnet 172.22.69.0 /24 accessing an NFS export named export1 on a NAS volume named vol2 with a trust type of Everyone:

```
CLI> NAS-volumes NFS-exports delete-acl for-clients-in-subnet vol2 export1
172.22.69.0 24 Everyone
```

NAS-volumes NFS-exports delete-acl for-single-client

Delete an ACL for a single client accessing an NFS export.

Format

```
NAS-volumes NFS-exports delete-acl for-single-client <VolumeName> <ExportName>
<Client> <TrustUsers>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name
<Client>	Client to which this NFS export should be available	Existing host name or IP address in the format: 'x.x.x.x'
<TrustUsers>	Type of users to which this NFS export should be available	Possible values are Nobody, Everyone, EveryoneExceptRoot

Example

Delete an ACL for a single client 172.22.69.18 accessing an NFS export named export1 on a NAS volume named vol2 with a trust type of Everyone:

```
CLI> NAS-volumes NFS-exports delete-acl for-single-client vol2 export1
172.22.69.18 Everyone
```

NAS-volumes NFS-exports edit

Modify the NFS export settings.

Format

```
NAS-volumes NFS-exports edit <VolumeName> <ExportName> {options}
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name

Options

Option	Description	Format
-EnableLimitReportedSize <EnableLimitReportedSize>	Indicate whether it is required to limit the reported size	Possible values are Yes, No
-LimitReportedSize <LimitReportedSize>	Limited reported size	Floating point number with suffix of units (for example, 100MB)
-RequireSecurePort <RequireSecurePort>	Indicate whether it is required to use a secure port	Possible values are Yes, No
-Comment <Comment>	Comment for the NFS export	Any string
-UnixStyle <UnixStyle>	Indicate whether the NFS export uses system default authentication	Possible values are Yes, No
-Krb5 <Krb5>	Indicate whether the NFS export uses only Kerberos for authentication	Possible values are Yes, No
-Krb5i <Krb5i>	Indicate whether the NFS export uses Kerberos for authentication, and includes a hash with each transaction to ensure integrity. Traffic can still be intercepted and examined, but modifications to the traffic will be apparent.	Possible values are Yes, No
-Krb5p <Krb5p>	Indicate whether the NFS export uses Kerberos for authentication, and encrypts all traffic between the client and server. This method is the most secure, but also incurs the most overhead.	Possible values are Yes, No
-Report32bitInode <Report32bitInode>	Indicate whether the NFS export reports 32-bit inode to the clients	Possible values are Yes, No

Example

Modify an NFS export named export1 on a NAS volume named vol2 to limit the reported size to 50 MB:

```
CLI> NAS-volumes NFS-exports edit vol2 export1 -EnableLimitReportedSize Yes -
LimitReportedSizeMB 50MB
```

NAS-volumes NFS-exports list

Display a list of NFS exports.

Format

```
NAS-volumes NFS-exports list {options}
```

Options

Option	Description	Format
-VolumeName <VolumeName>	NAS volume name	Existing NAS volume name
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of NFS exports:

```
CLI> NAS-volumes NFS-exports list
```

Output

```
.---------------------------.-------------.--------------------.---------.
 | Export Name               | Volume Name | Path               | Comment |
 |---------------------------|-------------|--------------------|---------|
 | export1                   | vol2        | /folder            |         |
 '---------------------------'-------------'--------------------'---------'
```

NAS-volumes NFS-exports view

Display NFS export settings.

Format

```
NAS-volumes NFS-exports view <VolumeName> <ExportName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ExportName>	NFS export name	Existing NFS export name

Example

Display the current NFS export settings for an NFS export named export1 on a NAS volume named vol2:

```
CLI> NAS-volumes NFS-exports view vol2 export1
```

Output

```
Export Name                = export1
Volume Name                = vol2
Path                       = /folder
Enable Limit Reported Size = No
Limit Reported Size        = 0.00 MB
Require Secure Port        = Yes
Comment                    =
Sys                        = Yes
Krb5                       = Yes
Krb5i                      = Yes
Krb5p                      = Yes
Report32bitInode           = Yes
AccessDetails              =
.--------------------.------------------.------------------.----------.-------------.
| Export To          | Export To Clients| Export To Netmask| ReadWrite| TrustUsers          |
|--------------------|------------------|------------------|----------|-------------|
| All Client Machines|                  | 0.0.0.0          | Yes      | Everyone except root|
'--------------------'------------------'------------------'----------'-------------'
```

NAS-volumes quota directory add

Add a quota rule for a directory.

Format

```
NAS-volumes quota directory add <VolumeName> <Path> [options]
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	Existing path to an empty directory	

Options

Option	Description	Format
-IsRequiredAlert	Indicate whether alert event to the administrator is enabled	Yes or No
-SoftLimit	Soft quota limit	Example: 50MB
-IsQuotaLimited	Indicate whether the hard quota is enabled	Yes or No
-HardLimit	Hard quota limit	Example: 50MB

Example

Change a directory into a quota directory on a NAS volume named vol1 and limit the quota to 2 GB:

```
CLI> NAS-volumes quota directory add vol1 /volume2 -isquotalimited yes -
hardlimit 2GB
```

NAS-volumes quota directory create-folder

Create a new folder on a NAS volume.

NOTE: Run the `NAS-volumes quota directory add` command on this folder before adding any subdirectories or files in the newly created folder.

Format

```
NAS-volumes quota directory create-folder <VolumeName> <ParentFolder> <Name>
```

Options

Option	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ParentFolder>	Parent folder under the NAS volume	
<Name>	Name of the new folder	

Example

Create a new folder called /Name/NewFolder on a NAS volume named vol1:

```
CLI> NAS-volumes quota directory create-folder VolumeName vol1/Name/NewFolder
```

NAS-volumes quota directory delete

Change a quota directory back into a plain directory on a NAS volume.

Format

```
NAS-volumes quota directory delete <VolumeName> <Path>
```

Options

Option	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	Path to the quota directory	

NAS-volumes quota directory edit

Modify a quota directory on a NAS volume.

Format

```
NAS-volumes quota directory edit <VolumeName> <Path> [options]
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	Path to the quota directory	

Options

Option	Description	Format
-IsRequiredAlert	Indicate whether the soft quota is enabled	Yes or No
-SoftLimit	Soft quota limit	Example: 50MB
-IsQuotaLimited	Indicate whether the hard quota is enabled	Yes or No
-HardLimit	Hard quota limit	Example: 50MB

Example

Modify the soft limit of a directory quota on a NAS volume named vol1:

```
CLI> NAS-volumes quota directory edit vol1 -SoftLimit 100MB
```

NAS-volumes quota directory list

Display a list of quota directories on a NAS volume.

Format

```
NAS-volumes quota directory list <VolumeName> {options}
```

Options

Option	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of quota directories on a NAS volume named jvol1:

```
CLI> NAS-volumes quota directory list jvol1
```

Output

```
CLI/NAS-volumes/quota/directory> list jvol1
.--------.-------.------------.-----------.---------.-----------.---------.
| Volume | Path  | Is Required| Soft Limit| Is Quota| Hard Limit| Usage   |
|  Name  |       |  Alert     |           | Limited |           |         |
|--------|-------|------------|-----------|---------|-----------|---------|
| jvol1  | /Qdir2| No         | 0.00 MB   | Yes     | 1.00 GB   | 0.00 MB |
'--------'-------'------------'-----------'---------'-----------'---------'
```

NAS-volumes quota directory view

View details of a quota directory on a NAS volume.

Format

```
NAS-volumes quota directory view <VolumeName> <Path>
```

Options

Option	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	Path to the quota directory	

Example

View details of a quota directory named /Qdir2 on a NAS volume named jvol1:

```
CLI> NAS-volumes quota directory view jvol1/Qdir2
```

Output

```
CLI/NAS-volumes/quota/directory> list jvol1
.------------.-------.-----------------.-----------.-----------------.---------
---.--------.
| Volume Name| Path  | Is Required Alert| Soft Limit| Is Quota Limited| Hard
Limit| Usage  |
|------------|-------|-----------------|-----------|-----------------|---------
--|--------|
| jvol1      | /Qdir | No               | 0.00 MB   | Yes             | 1.00
GB   | 0.00 MB|
'------------'-------'-----------------'-----------'-----------------'---------
--'--------'

CLI/NAS-volumes/quota/directory> view jvol1 /Qdir2
Volume Name     = jvol1
Path            = /Qdir2
IsRequiredAlert = No
Soft Limit      = 0.00 MB
```

```
IsQuotaLimited  = Yes
Hard Limit      = 1.00 GB
Usage           = 0.00 MB
```

NAS-volumes quota rules groups add

Add a group quota rule on a NAS volume.

NOTE: To view a list of existing domains, use the command `access-control domains-list`.

Format

```
NAS-volumes quota rules groups add <VolumeName> <GroupDomain> <GroupName>
{options}
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Options

Option	Description	Format
-IsRequiredAlert <IsRequiredAlert>	Indicate whether the soft quota is enabled	Possible values are Yes, No
-SoftLimit <SoftLimit>	Soft quota limit	Floating point number with suffix of units (for example, 100MB)
-IsQuotaLimited <IsQuotaLimited>	Indicate whether the hard quota is enabled	Possible values are Yes, No
-HardLimit <HardLimit>	Hard quota limit	Floating point number with suffix of units (for example, 100MB)

Example

Add a hard quota of 50 MB for a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules groups add vol1 idffs2 groupA -IsQuotaLimited Yes -
HardLimit 50MB
```

NAS-volumes quota rules groups default edit

Modify the default rule for the group quota for a NAS volume.

Format

```
NAS-volumes quota rules groups default edit <Name> {options}
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Options

Option	Description	Format
-DefaultGroupQuotaIsRequiredAlert <DefaultGroupQuotaIsRequiredAlert>	Indicate whether the soft quota is enabled	Possible values are Yes, No
-DefaultGroupQuotaSoftLimit <DefaultGroupQuotaSoftLimit>	Soft quota limit	Floating point number with suffix of units (for example, 100MB)
-DefaultGroupQuotaIsQuotaLimited <DefaultGroupQuotaIsQuotaLimited>	Indicate whether the hard quota is enabled	Possible values are Yes, No
-DefaultGroupQuotaHardLimit <DefaultGroupQuotaHardLimit>	Hard quota limit	Floating point number with suffix of units (for example, 100MB)

Example

Add a hard quota of 50 MB for groups on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules groups default edit vol1 -
DefaultGroupQuotaIsQuotaLimited Yes -DefaultGroupQuotaHardLimit 50MB
```

NAS-volumes quota rules groups default view

Description

Display default group quota settings for a NAS volume.

Format

```
NAS-volumes quota rules groups default view <Name>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Example

Display the current default group quota settings for a NAS volume named vol1:

```
CLI> NAS-volumes quota rules groups default view vol1
```

Output

```
Name                                = vol1
Default Group Quota Is Required Alert = No
Default Group Quota Soft Limit        = 0
Default Group Quota Is Quota Limited  = Yes
Default Group Quota Hard Limit        = 50
```

NAS-volumes quota rules groups delete

Description

Delete a group quota rule from a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules groups delete <VolumeName> <GroupDomain> <GroupName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Example

Delete a group quota rule for a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules groups delete vol1 idffs2 groupA
```

NAS-volumes quota rules groups delete-by-group-ID

Description

Delete a group quota rule from a NAS volume using the group ID.

Format

```
NAS-volumes quota rules groups delete-by-group-ID <VolumeName> <GroupID>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupID>	Group ID (GID or GSID)	Existing GID or GSID

Example

Delete a group quota rule for a group with the GSID S-1-5-21-3013153020-774773256-2344179283-3003 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules groups delete-by-group-ID vol1
S-1-5-21-3013153020-774773256-2344179283-3003
```

NAS-volumes quota rules groups edit

Description

Modify a group quota rule on a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules groups edit <VolumeName> <GroupDomain> <GroupName>
{options}
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Options

Option	Description	
-IsRequiredAlert <IsRequiredAlert>	Indicate whether the soft quota is enabled	Possible values are Yes, No
-SoftLimit <SoftLimit>	Soft quota limit	Floating point number with suffix of units (for example, 100MB)
-IsQuotaLimited <IsQuotaLimited>	Indicate whether the hard quota is enabled	Possible values are Yes, No
-HardLimit <HardLimit>	Hard quota limit	Floating point number with suffix of units (for example, 100MB)

Example

Change the hard quota to 60 MB for a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules groups edit vol1 idffs2 groupA -IsQuotaLimited Yes
-HardLimit 60MB
```

NAS-volumes quota rules groups list

Description

Display a list of group quota rules on a NAS volume.

Format

```
NAS-volumes quota rules groups list <VolumeName> {options}
```

Options

Option	Description	Format
-<VolumeName> <VolumeName>	NAS volume name	Existing NAS volume name
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of group quota rules on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules groups list -VolumeName
vol1
```

Output

```
.----------.----------.----------.----------.----------.----------.----------.
| Volume   | Group    | Group    | Is       | Soft     | Is Quota | Hard     |
| Name     | Domain   | Name     | Required | Limit    | Limited  | Limit    |
|          |          |          | Alert    |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|
| vol1     | idffs2   | groupA   | No       | 0.00 MB  | Yes      | 50.00 MB |
'----------'----------'----------'----------'----------'----------'----------'
```

NAS-volumes quota rules groups view

Description

Display the settings for a group quota rule on a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules groups view <VolumeName> <GroupDomain> <GroupName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Example

Display the current settings for a group quota rule for a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules groups view vol1 idffs2 groupA
```

Output

```
Volume Name       = vol1
Group Domain      = idffs2
Group Name        = groupA
Is Required Alert = No
Soft Limit        = 0.00 MB
Is Quota Limited  = Yes
Hard Limit        = 50.00 MB
```

NAS-volumes quota usage groups list

Description

Display a list of groups usage on a NAS volume.

Format

```
NAS-volumes quota usage groups list {options}
```

Options

Option	Description	Format
-VolumeName <VolumeName>	NAS volume name	Existing NAS volume name
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of groups usage on a NAS volume named vol1:

```
CLI> NAS-volumes quota usage groups list -VolumeName vol1
```

Output

```
.-------------.--------------.-------------.---------.
| Volume Name | Group Domain | Group Name  | Usage   |
|-------------|--------------|-------------|---------|
| vol1        | idffs2       | Local Users |50.00 MB |
'-------------'--------------'-------------'---------'
```

NAS-volumes quota usage group view

Description

Display the usage of a group on a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota usage group view <VolumeName> <GroupDomain> <GroupName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Example

Display the usage of a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota usage group view vol1 idffs2 groupA
```

Output

```
Volume Name  = vol1
Group Domain = idffs2
Group Name   = groupA
Usage        = 50.00 MB
```

NAS-volumes quota usage group view-by-id

Display the usage of a group on a NAS volume using the group ID.

NOTE: To view a list of existing domains, use the command `access-control domains-list`.

Format

```
NAS-volumes quota usage group view-by-id <VolumeName> <GroupID>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupID>	Group ID (GID or SID)	Existing group ID

Example

Display the usage of a group ID on a NAS volume named vol21:

```
CLI> NAS-volumes quota usage group view-by-id
S-1-5-21-3013153020-774773256-2344179283-3003 vol2
```

Output

```
Volume Name  = vol1
Group ID =  S-1-5-21-3013153020-774773256-2344179283-3003
Usage        = 50.00 MB
```

NAS-volumes quota usage group view-effective-rules

Description

Display the effective quota rules for a group on a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota usage group view-effective-rules <VolumeName> <GroupDomain>
<GroupName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Example

Display the effective quota rules for a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota usage group view-effective-rules vol1 idffs2 groupA
```

Output

```
Volume Name                 = vol1
Group Domain                = idffs2
Group Name                  = groupA
Is Group Soft Quota Enabled = No
Group Soft Quota            = 0.00 MB
Is Group Hard Quota Enabled = Yes
Group Hard Quota            = 50.00 MB
```

NAS-volumes quota usage users list

Description

Display a list of users usage.

Format

```
NAS-volumes quota usage users list {options}
```

Options

Option	Description	Format
-VolumeName <VolumeName>	NAS volume name	Existing NAS volume name
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of users usage for a NAS volume named vol1:

```
CLI> NAS-volumes quota usage users list -VolumeName vol1
```

Output

```
.-------------.-------------.---------------.---------.
| Volume Name | User Domain | User Name     | Usage   |
|-------------|-------------|---------------|---------|
| vol1        | idffs2      | user1         | 5.00 MB |
'-------------'-------------'---------------'---------'
| vol1        | idffs2      | user2         |10.00 MB |
'-------------'-------------'---------------'---------'
```

NAS-volumes quota usage users view

Description

Display the usage of a user on a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota usage users view <VolumeName> <UserDomain>
<UserName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<UserDomain>	User domain	Existing user domain
<UserName>	User name	Existing user name

Example

Display the usage of a user named user1 in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota usage users view vol1 idffs2 user1
```

Output

```
Volume Name = vol1
User Domain = idffs2
User Name   = user1
Usage       = 5.00 MB
```

NAS-volumes quota usage users view-by-id

Display the usage of a user on a NAS volume by user ID.

NOTE: To view a list of existing domains, use the command `access-control domains-list`.

Format

```
NAS-volumes quota usage users view-by-id <VolumeName> <UserID>
<UserName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<UserID>	User ID (UID or SID)	Existing user ID

Example

Display the usage of a user ID user1 in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota usage users view-by-id vol1 idffs2 user1
```

Output

```
Volume Name = vol1
User Domain = idffs2
User Name   = user1
Usage       = 5.00 MB
```

NAS-volumes quota usage users view-effective-rules

Display the effective quota rules for a user on a NAS volume.

NOTE: To view a list of existing domains, use the command `access-control domains-list`.

Format

```
NAS-volumes quota usage users view-effective-rules <VolumeName> <UserDomain>
<UserName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<UserDomain>	User domain	Existing user domain
<UserName>	User name	Existing user name

Example

Display the effective quota rules for a user named user1 in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota usage users view-effective-rules vol1 idffs2 user1
```

Output

```
Volume Name                 = vol1
User Domain                 = idffs2
User Name                   = user1
Is User Soft Quota Enabled  = No
User Soft Quota             = 0.00 MB
Is User Hard Quota Enabled  = Yes
User Hard Quota             = 50.00 MB
Group Domain                = idffs2
Group Name                  = groupA
Is Group Soft Quota Enabled = No
Group Soft Quota            = 0.00 MB
Is Group Hard Quota Enabled = Yes
Group Hard Quota            = 40.00 MB
```

NAS-volumes quota rules users add

Description

Add a user quota rule on a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules users add <VolumeName> <UserDomain> <UserName> {options}
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<UserDomain>	User domain	Existing user domain
<UserName>	User name	Existing user name

Options

Option	Description	Format
-IsRequiredAlert <IsRequiredAlert>	Indicate whether the soft quota is enabled	Possible values are Yes, No
-SoftLimit <SoftLimit>	Soft quota limit	Floating point number with suffix of units (for example, 100MB)
-IsQuotaLimited <IsQuotaLimited>	Indicate whether the hard quota is enabled	Possible values are Yes, No
-HardLimit <HardLimit>	Hard quota limit	Floating point number with suffix of units (for example, 100MB)

Example

Add a 50 MB hard quota user quota rule for a user named user1 in the idffs2 domain on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users add vol1 idffs2 user1 -IsQuotaLimited Yes -
HardLimit 50MB
```

NAS-volumes quota rules users default edit

Modify the default rule for the user quota for a NAS volume.

Format

```
NAS-volumes quota rules users default edit <Name> {options}
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Options

Option	Description	
-DefaultUserQuotaIsRequiredAlert <DefaultUserQuotaIsRequiredAlert>	Indicate whether the soft quota is enabled	Possible values are Yes, No
-DefaultUserQuotaSoftLimit <DefaultUserQuotaSoftLimit>	Soft quota limit	Floating point number with suffix of units (for example, 100MB)
-DefaultUserQuotaIsQuotaLimited <DefaultUserQuotaIsQuotaLimited>	Indicate whether the hard quota is enabled	Possible values are Yes, No

Option	Description	
-DefaultUserQuotaHardLimit <DefaultUserQuotaHardLimit>	Hard quota limit	Floating point number with suffix of units (for example, 100MB)

Example

Add a hard quota of 10 MB for a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users default edit vol1 -
DefaultUserQuotaIsQuotaLimited Yes -DefaultUserQuotaHardLimit 10MB
```

NAS-volumes quota rules users default view

Description

Display default user quota settings for a NAS volume.

Format

```
NAS-volumes quota rules users default view <Name>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name

Example

Display the current default user quota settings for a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users default view vol1
```

Output

```
Name                                = vol1
Default User Quota Is Required Alert = No
Default User Quota Soft Limit        = 0
Default User Quota Is Quota Limited  = Yes
Default User Quota Hard Limit        = 100
```

NAS-volumes quota rules users delete

Description

Delete a user quota rule from a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules users delete <VolumeName> <UserDomain> <UserName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<UserDomain>	User domain	Existing user domain
<UserName>	User name	Existing user name

Example

Delete a user quota rule for a user named user1 in the idffs2 domain on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users delete vol1 idffs2 user1
```

NAS-volumes quota rules users delete-by-user-ID

Description

Delete a user quota rule from a NAS volume using the user ID.

Format

```
NAS-volumes quota rules users delete-by-user-ID <VolumeName> <UserID>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<UserID>	User ID (UID or SID)	Existing UID or SID

Example

Delete a user quota rule for a user with the SID S-1-5-21-3013153020-774773256-2344179283-3014 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users delete-by-user-ID vol1
S-1-5-21-3013153020-774773256-2344179283-3014
```

NAS-volumes quota rules users edit

Description

Modify a user quota rule on a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules users edit <VolumeName> <UserDomain> <UserName>
{options}
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<UserDomain>	User domain	Existing user domain
<UserName>	User name	Existing user name

Options

Option	Description	Format
-IsRequiredAlert <IsRequiredAlert>	Indicate whether the soft quota is enabled	Possible values are Yes, No
-SoftLimit <SoftLimit>	Soft quota limit	Floating point number with suffix of units (for example, 100MB)
-IsQuotaLimited <IsQuotaLimited>	Indicate whether the hard quota is enabled	Possible values are Yes, No
-HardLimit <HardLimit>	Hard quota limit	Floating point number with suffix of units (for example, 100MB)

Example

Modify a user quota rule for a user named user1 in the idffs2 domain on a NAS volume named vol1 to have a hard quota of 40 MB:

```
CLI> NAS-volumes quota rules users edit vol1 idffs2 user1 -IsQuotaLimited Yes -
HardLimit 40MB
```

NAS-volumes quota rules users-in-groups add

Description

Add a quota rule for users in a group on a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules users-in-groups add <VolumeName> <GroupDomain>
<GroupName> {options}
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Options

Option	Description	Format
-IsRequiredAlert <IsRequiredAlert>	Indicate whether the soft quota is enabled	Possible values are Yes, No
-SoftLimit <SoftLimit>	Soft quota limit	Floating point number with suffix of units (for example, 100MB)
-IsQuotaLimited <IsQuotaLimited>	Indicate whether the hard quota is enabled	Possible values are Yes, No
-HardLimit <HardLimit>	Hard quota limit	Floating point number with suffix of units (for example, 100MB)

Example

Add a hard quota of 50 MB for any users in a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users-in-groups add vol1 idffs2 groupA -
IsQuotaLimited Yes -HardLimit 50MB
```

NAS-volumes quota rules users-in-groups delete

Description

Delete a quota rule for users in a group from a NAS volume.

Format

```
NAS-volumes quota rules users-in-groups delete <VolumeName> <GroupDomain>
<GroupName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Example

Delete a hard quota rule for any users in a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users-in-groups delete vol1 idffs2 groupA
```

NAS-volumes quota rules users-in-groups delete-by-group-ID

Description

Delete a quota rule for users in a group from a NAS volume using the group ID.

Format

```
NAS-volumes quota rules users-in-groups delete-by-group-ID <VolumeName>
<GroupID>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupID>	Group ID (GID or GSID)	Existing GID or GSID

Example

Delete a hard quota rule for any users in a group with the GSID S-1-5-21-3013153020-774773256-2344179283-3003 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users-in-groups delete-by-group-ID vol1
S-1-5-21-3013153020-774773256-2344179283-3003
```

NAS-volumes quota rules users-in-groups edit

Description

Modify a quota rule for users in a group on a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules users-in-groups edit <VolumeName> <GroupDomain>
<GroupName> {options}
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Options

Option	Description	Format
-IsRequiredAlert <IsRequiredAlert>	Indicate whether the soft quota is enabled	Possible values are Yes, No
-SoftLimit <SoftLimit>	Soft quota limit	Floating point number with suffix of units (for example, 100MB)
-IsQuotaLimited <IsQuotaLimited>	Indicate whether the hard quota is enabled	Possible values are Yes, No
-HardLimit <HardLimit>	Hard quota limit	Floating point number with suffix of units (for example, 100MB)

Example

Change the hard quota to 60 MB for any users in a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users-in-groups edit vol1 idffs2 groupA -
IsQuotaLimited Yes -HardLimit 60MB
```

NAS-volumes quota rules users-in-groups list

Description

Display a list of quota rules for any users in groups for a NAS volume.

Format

```
NAS-volumes quota rules users-in-groups list {options}
```

Options

Option	Description	Format
-VolumeName <VolumeName>	NAS volume name	Existing NAS volume name
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of quota rules for any users in groups for a NAS volume:

```
CLI> NAS-volumes quota rules users-in-groups list
```

Output

```
.----------.----------.----------.----------.----------.----------.----------.
| Volume   | Group    | Group    | Is       | Soft     | Is Quota | Hard     |
| Name     | Domain   | Name     | Required | Limit    | Limited  | Limit    |
|          |          |          | Alert    |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|
| vol1     | idffs2   | groupA   | No       | 0.00 MB  | Yes      | 65.00 MB |
'----------'----------'----------'----------'----------'----------'----------'
```

NAS-volumes quota rules users-in-groups view

Description

Display the settings of a quota rule for any users in a group for a NAS volume.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules users-in-groups view <VolumeName> <GroupDomain>
<GroupName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<GroupDomain>	Group domain	Existing group domain
<GroupName>	Group name	Existing group name

Example

Display the current settings for a quota rule for any users in a group named groupA in a domain named idffs2 on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users-in-groups view vol1 idffs2 groupA
```

Output

```
Volume Name       = vol1
Group Domain      = idffs2
Group Name        = groupA
Is Required Alert = No
Soft Limit        = 0.00 MB
Is Quota Limited  = Yes
Hard Limit        = 60.00 MB
```

NAS-volumes quota rules users list

Description

Display a list of user quota rules.

Format

```
NAS-volumes quota rules users list {options}
```

Options

Option	Description	Format
-VolumeName <VolumeName>	NAS volume name	Existing NAS volume name
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of the user quota rules:

```
CLI> NAS-volumes quota rules users list
```

Output

```
.----------.----------.----------.----------.----------.----------.----------.
| Volume   | User     | User     | Is       | SoftLimi | Is Quota | Hard     |
| Name     | Domain   | Name     | Required | t        | Limited  | Limit    |
|          |          |          | Alert    |          |          |          |
|----------|----------|----------|----------|----------|----------|----------|
| vol1     | idffs2   | user1    | No       | 0.00 MB  | Yes      | 5.00 MB  |
'----------'----------'----------'----------'----------'----------'----------'
```

NAS-volumes quota rules users view

Description

Display the user quota rule settings.

NOTE: To view a list of existing domains, use the command access-control domains-list.

Format

```
NAS-volumes quota rules users view <VolumeName> <UserDomain> <UserName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<UserDomain>	User domain	Existing user domain
<UserName>	User name	Existing user name

Example

Display the current settings for a user quota rule for a user named user1 in the idffs2 domain on a NAS volume named vol1:

```
CLI> NAS-volumes quota rules users view vol1 idffs2 user1
```

Output

```
Volume Name       = vol1
User Domain       = idffs2
User Name         = user1
Is Required Alert = No
SoftLimit         = 0.00 MB
Is Quota Limited  = Yes
Hard Limit        = 5.00 MB
```

NAS-volumes replication connect

Connect the source NAS volume to the destination NAS volume.

Format

```
NAS-volumes replication connect <VolumeName> <RemoteClusterName>
<RemoteVolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name

Options

Option	Description	Format
-SnapshotRetentionPolicy <SnapshotRetentionPolicy>	Snapshot retention policy	Valid values are Archive, Minimum and IdenticalToSource. If Archive is chosen, then the

Option	Description	Format
		retention period in days (integer) is used.
-SnapshotRetentionPeriodInDays <SnapshotRetentionPeriodInDays>	Snapshot retention period on days	
-Use QOS <Use QOS>	Select whether or not to use QoS	Boolean: To use or not QOS
-QOS <QOS>	Select existing QoS	QOS entity name (existing)

Example

Connect a source NAS volume named volsource to a destination NAS volume named voldest where the remote FluidFS cluster name is idffs2:

```
CLI> NAS-volumes replication connect volsource idffs2 voldest
```

NAS-volumes replication create-volume-on-destination

Create a NAS volume on remote FluidFS system.

Format

```
NAS-volumes replication create-volume-on-destination <Name> <Size> <RemoteName>
```

Arguments

Argument	Description	Format
<Name>	NAS volume name	Existing NAS volume name
<Size>	NAS volume size (for example: 100GB)	Valid units are MB, GB, or TB
<RemoteName>	Remote cluster	

Example

```
NAS-volumes replication create-volume-on-destination vol1-replica 100GB DR-NAS
```

NAS-volumes replication demote

Demote the destination NAS volume.

Format

```
NAS-volumes replication demote <VolumeName> <RemoteClusterName>
<RemoteVolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name

Example

Demote a destination NAS volume named voldest where the source NAS volume is named volsource and the destination FluidFS cluster name is idffs2:

```
CLI> NAS-volumes replication demote volsource idffs2 voldest
```

Output

```
Confirmation: Changes on destination NAS volume since 13-Aug-13 14:52:06 will
be lost.
Are you sure that you want to complete the operation? ( Yes / No ):
```

NAS-volumes replication disable

Description

Disable the replication between source and destination NAS volumes.

Format

```
NAS-volumes replication disable <VolumeName> <RemoteClusterName>
<RemoteVolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name

Example

Disable the replication between a source NAS volume named volsource and a destination NAS volume named voldest where the remote FluidFS cluster name is idffs2:

```
CLI> NAS-volumes replication disable volsource idffs2 voldest
```

NAS-volumes replication disconnect

Description

Disconnect the source NAS volume from the destination NAS volume.

NOTE: Before you can disconnect a source NAS volume, the destination NAS volume must be promoted using the command NAS-volumes replication promote.

Format

```
NAS-volumes replication disconnect <VolumeName> <RemoteClusterName>
<RemoteVolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name

Example

Disconnect a source NAS volume named volsource from a destination NAS volume named voldest where the remote FluidFS cluster name is idffs2:

```
CLI> NAS-volumes replication disconnect volsource idffs2 voldest
```

NAS-volumes replication enable

Description

Enable the replication between source and destination NAS volumes.

Format

```
NAS-volumes replication enable <VolumeName> <RemoteClusterName>
<RemoteVolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name

Example

Enable the replication between a source NAS volume named volsource and a destination NAS volume named voldest where the remote FluidFS cluster name is idffs2:

```
CLI> NAS-volumes replication enable volsource idffs2 voldest
```

NAS-volumes replication list-destination

Display a list of replications for destination NAS volumes.

Format

```
NAS-volumes replication list-destination
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of replications for NAS volumes that are replication destinations on this cluster:

```
CLI> NAS-volumes replication list-destination
```

Output

```
.-------.-------.-------.--------.------.------.-------.--------.------.--------
-.---------.
| Volume| Source| Source| Achiev | Statu| Error| Next  | Seconds| Trans|
Snapshot |Snapshot |
| Name  | Cluste| Volume| ed     | s    |      | Recove| To Com | ferre|
Retention|Retention|
|       | r Name| Name  | Recove |      |      | ry    | plete  | d MB |
Policy   |in Days  |
|       |       |       | ry     |      |      | Point |        |
|         |         |
|       |       |       | Point  |      |      |       |        |
|         |         |
|-------|-------|-------|--------|------|------|-------|--------|------|--------
-|---------|
| volde | idffs1| volsou| 13-Aug | Idle | None |       |        |      |
Minimum  | 42      |
| st    |       | rce   | -13    |      |      |       |        |
|         |         |
|       |       |       | 14:52: |      |      |       |        |
|         |         |
|       |       |       | 06     |      |      |       |        |
|         |         |
'-------'-------'-------'--------'------'------'-------'--------'------'--------
-|---------|
```

NAS-volumes replication list-source

Display a list of replications for source NAS volumes.

Format

```
NAS-volumes replication list-source
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of replications for source NAS volumes:

```
CLI> NAS-volumes replication list-source
```

Output

```
.---------.-------------.------------.---------.------.------.---------.---------
---.---------.-------.---------.-------------.
| Volume  | Destination | Destination| Achieved|Status| Error| Next    |
Seconds To| Transfer|Cluster|Snapshot |Snapshot     |
| Name    | Cluster Name| VolumeName | Recovery|      |      | Recovery|
Complete  | red MB  | Name  |Retention|Retention Per|
|         | Name        |            | Point   |      |      | Point
|           |         |       |Policy   |iod in days) |
|---------|-------------|------------|---------|------|------|---------|---------
---|---------|-------|---------|-------------|
|volsource| idffs2      | voldest    |13-Aug-13| Idle | None |
|           |         |       |         |             |
|         |             |            | 14:52:06|      |      |
|           |         |       |         |             |
'---------'-------------'------------'---------'------'------'---------'---------
---'---------'-------.---------.-------------.
```

NAS-volumes replication modify-snapshot-retention

Modify the snapshot retention policy.

Format

```
NAS-volumes replication modify-snapshot-retention <VolumeName>
<RemoteClusterName> <RemoteVolumeName> <SnapshotRetentionPolicy> {options}
```

Arguments

Arguments	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name
<SnapshotRetentionPolicy>	Snapshot retention policy	

Options

Option	Description	Format
<SnapshotRetentionPeriodInDays>	Snapshot retention period in days (default 30 days)	Number of days

NAS-volumes replication promote

Description

Promote the destination NAS volume.

Format

```
NAS-volumes replication promote <VolumeName> <RemoteClusterName>
<RemoteVolumeName>
```

Arguments

Arguments	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name

Example

Promote a destination NAS volume named voldest where the source NAS volume is named volsource and the destination FluidFS cluster name is idffs2:

```
CLI> NAS-volumes replication promote volsource idffs2 voldest
```

NAS-volumes replication schedules add

Description

Add a schedule for replication.

Format

```
NAS-volumes replication schedules add <VolumeName> <RemoteClusterName>
<RemoteVolumeName> <Name> <ScheduleType> {options}
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name
<Name>	Replication schedule name	Maximum of 230 characters, and may contain letters, numbers, and underscores
<ScheduleType>	Replication schedule type	Possible values are Periodic, SpecificTime

Options

Option	Description	Format
-Period <Period>	Interval between replications in periodic policy. This option is relevant only for ScheduleType Periodic.	Whole positive number
-Days <Days>	List of days in which the replication will start. This option is relevant only for ScheduleType SpecificTime.	Possible values are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, or Saturday
-Hours <Hours>	List of hours in which the replication will start. This option is relevant only for ScheduleType SpecificTime.	Zero-based, whole positive number (0 to 23)
-Minute <Minute>	Minute in which the replication will start. This option is relevant only for ScheduleType SpecificTime.	Zero-based, whole positive number (0 to 59)

Example

Add a replication schedule named repsched to run on Sundays at 20:00 where the source NAS volume is named volsource, the destination FluidFS cluster name is idffs2, and the destination NAS volume is named voldest:

```
CLI> NAS-volumes replication schedules add volsource idffs2 voldest repsched
SpecificTime -Days Sunday -Hours 20
```

NAS-volumes replication schedules delete

Description

Delete a replication schedule.

Format

```
NAS-volumes replication schedules delete <VolumeName> <RemoteClusterName>
<RemoteVolumeName> <Name>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name
<Name>	Replication schedule name	Existing replication schedule name

Example

Delete a replication schedule named resched where the source NAS volume is named volsource, the destination FluidFS cluster name is idffs2, and the destination NAS volume is named voldest:

```
CLI> NAS-volumes replication schedules delete volsource idffs2 voldest repsched
```

NAS-volumes replication schedules edit

Description

Modify the settings for a replication schedule.

Format

```
NAS-volumes replication schedules edit <VolumeName> <RemoteClusterName>
<RemoteVolumeName> <Name> {options}
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name
<Name>	Replication schedule name	Existing replication schedule name

Options

Option	Description	Format
-ScheduleType <ScheduleType>	Replication schedule type	Possible values are Periodic, SpecificTime
-Period <Period>	Interval between replications in periodic policy. This option is relevant only for ScheduleType Periodic.	Whole positive number
-Days <Days>	List of days in which the replication will start. This option is relevant only for ScheduleType SpecificTime.	Possible values are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, or Saturday
-Hours <Hours>	List of hours in which the replication will start. This option is relevant only for ScheduleType SpecificTime.	Zero-based, whole positive number (0 to 23)
-Minute <Minute>	Minute in which the replication will start. This option is relevant only for ScheduleType SpecificTime.	Zero-based, whole positive number (0 to 59)

Example

Modify a replication schedule named repsched to run on Sundays at 18:00 where the source NAS volume is named volsource, the destination FluidFS cluster name is idffs2, and the destination NAS volume is named voldest:

```
CLI> NAS-volumes replication schedules edit volsource idffs2 voldest repsched -
Days Sunday -Hours 18
```

NAS-volumes replication schedules list

Description

Display a list of replication schedules.

Format

```
NAS-volumes replication schedules list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of replication schedules:

```
CLI> NAS-volumes replication schedules list
```

Output

```
.--------------.-------------.---------------.---------------.---------------.
| Schedule     | Volume Name | Remote        | Remote Volume | Frequency     |
| Name         |             | Cluster Name  | Name          |               |
|--------------|-------------|---------------|---------------|---------------|
| repsched1    | volsource   | idffs2        | voldest       | Sunday at     |
|              |             |               |               | 20:00         |
|--------------|-------------|---------------|---------------|---------------|
| repsched2    | volsource   | idffs2        | voldest       | Every 1440    |
|              |             |               |               | minutes       |
'--------------'-------------'---------------'---------------'---------------'
```

NAS-volumes replication schedules view

Description

Display the settings of a replication schedule.

Format

```
NAS-volumes replication schedules view <VolumeName> <RemoteClusterName>
<RemoteVolumeName> <Name>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name
<Name>	Replication schedule name	Existing replication schedule name

Example

Display the settings for a replication schedule named resched1 where the source NAS volume is named volsource, the destination FluidFS cluster name is idffs2, and the destination NAS volume is named voldest:

```
CLI> NAS-volumes replication schedules view volsource
idffs2 voldest repsched1
```

Output

```
Schedule Name       = repsched1
Volume Name         = volsource
Remote Cluster Name = idffs2
Remote Volume Name  = voldest
Frequency           = Sunday at 20:00
```

NAS-volumes replication set-QOS

Set QoS (quality of service) replication for a volume.

Format

```
NAS-volumes replication set-QOS <VolumeName> <RemoteClusterName>
<RemoteVolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name

Options

Option	Description	Format
-SnapshotRetentionPolicy <SnapshotRetentionPolicy>	Snapshot retention policy	Valid values are Archive, Minimum and IdenticalToSource. If Archive is chosen, then the retention period in days (integer) is used.
-SnapshotRetentionPeriodInDays <SnapshotRetentionPeriodInDays>	Snapshot retention period on days	
-Use QoS <Use QoS>	Select whether or not to use QoS	Boolean: To use or not QoS
-QoS name <QoS name>	Select existing QoS	QoS entity name (existing)

Example

Set QoS replication on a NAS volume named volsource:

```
CLI> NAS-volumes replication set-QOS volsource
```

NAS-volumes replication start

Start the replication from source to destination NAS volumes.

Format

```
NAS-volumes replication start <VolumeName> <RemoteClusterName>
<RemoteVolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name

Example

Start the replication from a source NAS volume named volsource to a destination NAS volume named voldest on a remote FluidFS cluster named idffs2:

```
CLI> NAS-volumes replication start volsource idffs2 voldest
```

NAS-volumes replication view

Display the status of replication.

Format

```
NAS-volumes replication view <VolumeName> <RemoteClusterName>
<RemoteVolumeName> <QOS name>
```

Arguments

Argument	Description	Format
<VolumeName>	Source NAS volume name	Existing NAS volume name
<RemoteClusterName>	Destination FluidFS cluster name	Existing FluidFS cluster name
<RemoteVolumeName>	Destination NAS volume name	Existing NAS volume name
<QOSname>	Name of existing QOS to be used by replication	Use QOS name or leave field empty if unlimited

Example

Display the current replication status where the source NAS volume is named volsource, the destination FluidFS cluster name is idffs2, and the destination NAS volume is named voldest:

```
CLI/NAS-volumes/replication> view jvol1 cplsup3 jvol1-replica
```

Output

```
Role                     = Source
Volume Name              = jvol1
Remote Cluster Name      = cplsup3
Remote Volume Name       = jvol1-replica
Achieved Recovery Point = 10-Dec-14 14:52:06
Target Recovery Point    = 10-Dec-14 14:52:06
Status                   = Idle
Error                    = None
Next Recovery Point      =
Seconds To Complete      =
Transferred MB           =
Snapshot Retention Policy= Archive
Snapshot Retention period in Days = 10
The amount of resources on source and destination = Same
CLI/NAS-volumes/replication>
```

NAS-volumes SMB-shares add

Add an SMB share to a NAS volume.

Format

```
NAS-volumes SMB-shares add <ShareName> <VolumeName> <Path> {options}
```

Arguments

Argument	Description	Format
<ShareName>	SMB share name	Maximum length of 80 characters, and can contain letters, numbers, and underscores
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	SMB share path in the NAS volume	Existing path in the NAS volume

Options

Option	Description	Format
-Comment <Comment>	Comment for the SMB share	Any string
-AntiVirus <AntiVirus>	Indicate whether the files that are opened from this SMB share must pass an antivirus check	Possible values are Yes, No
-EnableAvExtensionsFilters <EnableAvExtensionsFilters>	Indicate whether to exclude specified file extensions from antivirus scanning	Possible values are Yes, No
-AvExtensions <AvExtensions>	File extensions to exclude from antivirus scanning	Any string

Option	Description	Format
-EnableAvExcludeDirsFilters <EnableAvExcludeDirsFilters>	Indicate whether to exclude specified directories from antivirus scanning	Possible values are Yes, No
-AvExcludeDirs <AvExcludeDirs>	Directories to exclude from antivirus scanning	Any string
-AvMaxFileSizeForScanning <AvMaxFileSizeForScanning>	Maximum size of files that will be sent for antivirus scanning	Floating point number with suffix of units (for example, 100MB)
-AvDenyAccessLargeUnscannedFiles <AvDenyAccessLargeUnscannedFiles>	Indicate whether access to files larger than the defined size will be denied	Possible values are Yes, No
-AccessBasedEnumeration <AccessBasedEnumeration>	Defines whether access-based share enumeration is active	Possible values are Yes, No
-RequireMessageEncryption <RequireMessageEncryption>	Defines whether traffic while connected to this share is required to be encrypted	
-EnableExtensionsFilter <EnableExtensionsFilter>	Enable file extension filtering	
-ExtensionsFilter <ExtensionsFilter>	List of file extensions that are prohibited for creation or renaming on share	
-EnableExtensionsFilterExcludeGroups <EnableExtensionsFilterExcluedGruops>	Enable file extension filter exclude groups list	
-EnableContinuousAvailability <EnableContinuousAvailability>	Indicate if the continuous availability feature is enabled on the share. Continuous availability features track file operations on a highly available file share so that clients can fail over to another node of the cluster without interruption.	

Example

Add an SMB share named share to a NAS volume named vol1 at the path /folder1:

```
CLI> NAS-volumes SMB-shares add share vol1 /folder1
```

NAS-volumes SMB-shares add-exclude-group

Add an exclude group for extensions filter of an SMB share.

Members of this group are not restricted in the types of files they can save on the SMB share.

Format

```
NAS volumes SMB-shares add-exclude-group <ShareName> <GroupDomain> <GroupName>
```

Arguments

Argument	Description	Format
<ShareName>	SMB share name	
<GroupDomain>	Group domain. The available domains are displayed by the `domains-list` command.	
<GroupName>	Local group name	Contains only the following characters: letters, numbers, underscores, hyphens, spaces, and periods. A period cannot be used as the last character of the account name.

NAS volumes SMB-shares add-share-level-permission

Add share-level permission to an SMB share.

Format

```
NAS volumes SMB-shares add-share-level-permission <ShareName> <AccountDomain>
<AccountName> <AllowDeny> <PermissionType>
```

Arguments

Argument	Description	Format
<ShareName>	SMB share name	
<AccountDomain>	Account domain. The available domains are displayed by the `domains-list` command.	
<AccountName>	Account name	
<AllowDeny>	Indicate whether this share-level permission allows or denies operation.	Possible values are Allow, Deny
<PermissionType>	Permission type	Possible values are Change, FullControl, Read

NAS-volumes SMB-shares create-folder

Create a folder in a volume.

This folder can then be used for an SMB share.

Format

```
NAS-volumes SMB-shares create-folder <VolumeName> <ParentFolder>
<Name>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<ParentFolder>	Parent folder under the NAS volume	Existing parent folder
<Name>	Name of the new folder	Less than 255 characters and cannot contain the following characters: < > " \ | ? *. Also, the path cannot include ., .., and so on.

Example

Create /folder1 on a NAS volume named vol1:

```
CLI> NAS-volumes SMB-shares create-folder vol1 / folder1
```

NAS-volumes SMB-shares delete

Delete an SMB share.

Format

```
NAS-volumes SMB-shares delete <ShareName>
```

Arguments

Argument	Description	Format
<ShareName>	SMB share name	Existing SMB share name

Example

Delete an SMB share named share1:

```
CLI> NAS-volumes SMB-shares delete share1
```

NAS-volumes SMB-shares delete-exclude-group

Delete exclude group for extensions filter of SMB share.

After executing this command, members of this group will have to conform to the restrictions on which types of files can be written to the volume. Only new writes or renames by group members are affected.

Format

```
NAS volumes SMB-shares delete-exclude-group <ShareName> <GroupDomain>
<GroupName>
```

Arguments

Argument	Description	Format
<ShareName>	SMB share name	
<GroupDomain>	Group domain. The available domains are displayed by `domains-list` command.	
<GroupName>	Local group name	Contains only the following characters: letters, numbers, underscores, hyphens, spaces, and periods. A period cannot be used as the last character of the account name.

NAS-volumes SMB-shares delete-share-level-permission

Delete share-level permission from an SMB share.

Format

```
NAS volumes SMB-shares delete-share-level-permissions <ShareName>
<AccountDomain> <AccountName>
```

Arguments

Argument	Description	Format
<ShareName>	SMB share name	
<AccountDomain>	Account domain. The available domains are displayed by the `domains-list` command	
<AccountName>	Account name	

NAS-volumes SMB-shares delete-share-level-permission-by-sid

Delete share-level permission from SMB share by SID.

Format

```
NAS volumes SMB-shares delete-share-level-permission-by-sid <ShareName> <SID>
```

Arguments

Argument	Description	Format
<ShareName>	SMB share name	
<SID>	Share ID	

NAS-volumes SMB-shares edit

Modify SMB share settings.

Format

```
NAS-volumes SMB-shares edit <ShareName> {options}
```

Arguments

Argument	Description	Format
<ShareName>	SMB share name	Existing SMB share name

Options

Option	Description	Format
-Comment <Comment>	Comment for the SMB share	Any string
-AntiVirus <AntiVirus>	Indicate whether the files that are opened from this SMB share must pass an anti-virus check	Possible values are Yes, No
-EnableAvExtensionsFilters <EnableAvExtensionsFilters>	Indicate whether to exclude specified file extensions from antivirus scanning	Possible values are Yes, No
-AvExtensions <AvExtensions>	File extensions to exclude from antivirus scanning	Any string
-EnableAvExcludeDirsFilters <EnableAvExcludeDirsFilters>	Indicate whether to exclude specified directories from antivirus scanning	Possible values are Yes, No

Option	Description	Format
-AvExcludeDirs <AvExcludeDirs>	Directories to exclude from antivirus scanning	Any string
-AvMaxFileSizeForScanning <AvMaxFileSizeForScanning>	Maximum size of files that will be sent for antivirus scanning	Floating point number with suffix of units (for example, 100MB)
-AvDenyAccessLargeUnscannedFiles <AvDenyAccessLargeUnscannedFiles>	Indicate whether access to files larger than the defined size will be denied	Possible values are Yes, No
-AccessBasedEnumeration <AccessBasedEnumeration>	Defines whether access-based share enumeration is active	Possible values are Yes, No
-RequireMessageEncryption <RequireMessageEncryption>	Defines whether traffic is required to be encrypted while connected to this share	
-EnableExtensionsFilter <EnableExtensionsFilter>	Enable file extension filtering	
-ExtensionsFilter <ExtensionsFilter>	List of file extensions that are prohibited from creation or renaming on a share	
-EnableExtensionsFilterExcludeGroups <EnableExtensionsFilterExcludeGroups>	Enable file extensions filter exclude group list	
-EnableContinuousAvailability	Indicate if the continuous availability feature is enabled on the share. Continuous availability features track file operations on a highly available file share so that clients can fail over to another node of the cluster without interruption.	
-EnableBranchCache	Enables branch cache on a share	
-BranchCacheExtensionsFilter	List of file name extensions	
-BranchCacheExtensionsFilterType	Filter type	Possible values are Exclude, None

Example

Enable antivirus scanning on an SMB share named share and exclude .docx files from antivirus scanning:

```
CLI> NAS-volumes SMB-shares edit share -AntiVirus Yes -
EnableAvExtensionsFilters Yes -AvExtensions docx
```

NAS-volumes SMB-shares general-settings view

Display the general settings for the SMB protocol.

Format

```
NAS-volumes SMB-shares general-settings view
```

Example

Display the current general settings for the SMB protocol:

```
CLI> NAS-volumes SMB-shares general-settings view
```

Output

```
Local Accounts Password Never Expires             = No
Local Accounts Max Password Age                   = 6 Weeks
Check Password Complexity                         = Yes
Is Required Message Signed                        = No
Is Required Message Encryption                    = No
Maximum SMB version Restriction                   = SMB-v3
Force leases restriction (Yes = leases disabled)  = No
Force oplocks restricion (Yes = oplocks disabled) = No
```

NAS-volumes SMB-shares home-share disable

Disable SMB home shares on a NAS volume.

Format

```
NAS-volumes SMB-shares home-share disable
```

NAS-volumes SMB-shares home-share edit

Modify the SMB home shares settings.

Format

```
NAS-volumes SMB-shares home-share edit {options}
```

Options

Option	Description	Format
-AntiVirusCheck <AntiVirusCheck>	Indicate whether the files that are opened from this SMB share must pass an antivirus check	Possible values are Yes, No
-EnableAvExtensionsFilters <EnableAvExtensionsFilters>	Indicate whether to exclude specified file extensions from antivirus scanning	Possible values are Yes, No

Option	Description	Format
-AvExtensions <AvExtensions>	File extensions to exclude from antivirus scanning	Any string
-EnableAvExcludeDirsFilters <EnableAvExcludeDirsFilters>	Indicate whether to exclude specified directories from antivirus scanning	Possible values are Yes, No
-AvExcludeDirs <AvExcludeDirs>	Directories to exclude from antivirus scanning	Any string
-AvMaxFileSizeForScanning <AvMaxFileSizeForScanning>	Maximum size of files that will be sent for antivirus scanning	Floating point number with suffix of units (for example, 100MB)
-AvDenyAccessLargeUnscannedFiles <AvDenyAccessLargeUnscannedFiles>	Indicate whether access to files larger than the defined size will be denied	Possible values are Yes, No
-AccessBasedEnumeration <AccessBasedEnumeration>	Defines whether access-based share enumeration is active	Possible values are Yes, No
-RequireMessageEncryption <RequireMessageEncryption>	Defines whether SMB3 traffic is required to be encrypted while connected to home shares	
-EnableExtensionsFilter <EnableExtensionsFilter>	Enable the extension filter	
-ExtensionsFilter <ExtensionsFilter>	List of file extensions that are prohibited for creation or renaming of a file on the share	
-EnableExtensionsFilterExcludeGroups <EnableExtensionsFilterExcludeGroups>	Enable file extension filter exclude group list	
-EnableHomeShareAutoCreation <EnableHomeShareAutoCreation>	Home folder can be created automatically, if it does not exist already, during the first login of the user	
-EnableContinuousAvailability <EnableContinuousAvailability>	Indicate if the continuous availability feature is enabled on the share. Continuous availability features track the operations on a highly available file share so that clients can fail over to another node of the cluster without disconnection.	

Example

Disable antivirus scanning on SMB home shares:

```
CLI> NAS-volumes SMB-shares home-share edit -AntiVirusCheck No
```

NAS-volumes SMB-shares home-share enable

Enable SMB home shares on a NAS volume.

Format

```
NAS-volumes SMB-shares home-share enable <VolumeName> <PathPrefix>
<PathTemplate>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
-PathPrefix <PathPrefix>	Prefix of the SMB home shares	Existing path
-PathTemplate <PathTemplate>	Template of the SMB home shares	Possible values are path-prefix/domain/user-name, path-prefix/user-name

Example

Enable SMB home shares on a NAS volume named vol1 at the path /users/<username>:

```
CLI> NAS-volumes SMB-shares home-share enable vol1 /users path-prefix/user-name
```

NAS-volumes SMB-shares home-share view

Display SMB home shares settings.

Format

```
NAS-volumes SMB-shares home-share view
```

Example

Display SMB home shares settings:

```
CLI> NAS-volumes/SMB-shares/home-share> view
```

Output

```
Volume Name                          =homes
Path Prefix                          = /
Path Template                        = path-prefix/user-name
Enabled                              = Yes
Antivirus Check                      = No
Enable Antivirus Extensions Filters  = No
Antivirus Extensions Filters         =
Enable Antivirus Exclude Dirs Filters = No
Antivirus Exclude Dirs Filters       =
Antivirus Max File Size for Scanning  = 1.46GB
Antivirus Deny Access Large Unscanned Files = Yes
Access Based Enumeration             = No
```

```
Is Required Message Encryption        = No
Enable file extension filter          = No
Deny creation of files with these extensions =
Enable excluding groups from file extension filter = No
Allow creation of any file to         = .--------------.-------------.
                                        |Group Domain  | Group Name  |
                                        .--------------.-------------.
                                        |              |             |
                                        .--------------.-------------.
Enable automatic home folder creation = Yes
Contionuous availability for file handles = No
```

NAS-volumes SMB-shares list

Display a list of SMB shares.

Format

```
NAS-volumes SMB-shares list {options}
```

Options

Option	Description	Format
-VolumeName <VolumeName>	NAS volume name	Existing NAS volume name
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of the SMB shares on a NAS volume named vol1:

```
CLI> NAS-volumes SMB-shares list -VolumeName vol1
```

Output

```
 .------------.-------------.----------.-----------.
 | Share Name | Volume Name | Path     | Antivirus |
 |------------|-------------|----------|-----------|
 | share      | vol2        | /folder1 | No        |
 '------------'-------------'----------'-----------'
```

NAS-volumes SMB-shares view

Display SMB share settings.

Format

```
NAS-volumes SMB-shares view <ShareName>
```

Arguments

Argument	Description	Format
<ShareName>	SMB share name	Existing SMB share name

Example

Display the current settings for an SMB share named share:

```
CLI> NAS-volumes SMB-shares view share
```

Output

```
Volume Name                                  = vol2
Share Name                                   = jshare1
Path                                         = /folder1
Comment                                      =
Antivirus                                    = No
Enable Antivirus Extensions Filters          = No
AvExtensions                                 =
Enable Antivirus Exclude Dirs Filters        = No
AvExcludeDirs                                =
Antivirus Max File Size For Scanning         = 1.46 GB
Antivirus Deny Access Large Unscanned Files = Yes
Access Based Enumeration                     = No
Require Message Encryption                   = No
Share Level Permissions
Deny creation of files with these extensions =
Enable excluding groups from file extension filter = No
Allow creation of any file to          = .--------------.-------------.
                                         |Group Domain  | Group Name  |
                                         .--------------.-------------.
                                         |              |             |
                                         .--------------.-------------.
Enable automatic home folder creation = Yes
Contionuous availability for file handles = No
```

NAS-volumes snapshots add

Add a snapshot for a NAS volume.

Format

```
NAS-volumes snapshots add <VolumeName> <Name>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Name>	Snapshot name	Maximum length of 230 characters, and can contain letters, numbers, spaces, and underscores. Control characters,

Argument	Description	Format
		commas, and so on are not allowed.

Example

Add a snapshot named snap1 for a NAS volume named vol1:

```
CLI> NAS-volumes snapshots add vol1 snap1
```

NAS-volumes snapshots delete

Delete a snapshot from a NAS volume.

Format

```
NAS-volumes snapshots delete <VolumeName> <SnapshotName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<SnapshotName>	Snapshot name	Existing snapshot name

Example

Delete a snapshot named snap1 from a NAS volume named vol1:

```
CLI> NAS-volumes snapshots delete vol1 snap1
```

NAS-volumes snapshots disable-expiry

Disable a snapshot expiration date.

Format

```
NAS-volumes snapshots disable-expiry <VolumeName> <SnapshotName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<SnapshotName>	Snapshot name	Existing snapshot name

Example

Disable a snapshot expiration date for a snapshot named snap1on a NAS volume named vol1:

```
CLI> NAS-volumes snapshots disable-expiry vol1 snap1
```

NAS-volumes snapshots list

Display a list of snapshots.

Format

```
NAS-volumes snapshots list <VolumeName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the current snapshots on a NAS volume named vol1:

```
CLI> NAS-volumes snapshots list vol1
```

Output

```
.-------------.---------------.--------------------.
| Volume Name | Snapshot Name | Created At         |
|-------------|---------------|--------------------|
| vol1        | snap1         | 13-Aug-13 10:03:18 |
|-------------|---------------|--------------------|
| vol1        | snap2         | 13-Aug-13 10:03:30 |
'-------------'---------------'--------------------'
```

NAS-volumes snapshots rename

Rename a snapshot on a NAS volume.

Format

```
NAS-volumes snapshots rename <VolumeName> <SnapshotName> <NewSnapshotName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<SnapshotName>	Existing snapshot name	Existing snapshot name
<NewSnapshotName>	New snapshot name	Maximum length of 230 characters, and can contain letters, numbers, spaces, and underscores. Control characters,

Argument	Description	Format
		commas, and so on are not allowed.

Example

Rename a snapshot named snap1 to snapa on a NAS volume named vol1:

```
CLI> NAS-volumes snapshots rename vol1 snap1 snapa
```

NAS-volumes snapshots restore

Restore a NAS volume to a snapshot.

NOTE: All data written to the volume after the snapshot was taken will be deleted from the volume.

Format

```
NAS-volumes snapshots restore <VolumeName> <SnapshotName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<SnapshotName>	Snapshot name	Existing snapshot name

Example

Restore a NAS volume named vol1 to a snapshot named snap1:

```
CLI> NAS-volumes snapshots restore vol1 snap1
```

NAS-volumes snapshots schedules add

Add a snapshot schedule to a NAS volume.

Format

```
NAS-volumes snapshots schedules add <VolumeName> <Name> <ScheduleType> {options}
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Name>	Snapshot schedule name	Length must be less than 230 characters
<ScheduleType>	Snapshot schedule type	Possible values are Periodic, SpecificTime

Options

Option	Description	Format
-EnableRetention <EnableRetention>	Indicate whether the retention policy is enabled	Possible values are Yes, No
-RetentionPeriod <RetentionPeriod>	Retention period of snapshots created by this policy	An integer number with suffix of units H/D/W (hours, days, or weeks) (for example, 10H)
-Period <Period>	Interval between snapshots in periodic policy. This option is relevant only for ScheduleType Periodic.	Whole positive number (in minutes)
-Days <Days>	List of days on which the snapshots should be taken. This option is relevant only for ScheduleType SpecificTime.	Comma-separated list of days. Possible values are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, or Saturday
-Hours <Hours>	List of hours at which the snapshots should be taken. This option is relevant only for ScheduleType SpecificTime.	Comma-separated list of hours. Zero-based, whole positive number (0 to 23).
-Minute <Minute>	Minute at which the snapshots should be taken. This option is relevant only for ScheduleType SpecificTime.	Zero-based, whole positive number (0 to 59)

Example

Add a snapshot schedule named snapsched1 on a NAS volume named vol1 to take snapshots once a day and retain them for 7 days:

```
CLI> NAS-volumes snapshots schedules add vol1 snapsched1 Periodic -Period 1440 -
EnableRetention Yes -RetentionPeriod 7D
```

NAS-volumes snapshots schedules delete

Delete a snapshot schedule from a NAS volume.

Format

```
NAS-volumes snapshots schedules delete <VolumeName> <Name>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Name>	Snapshot schedule name	Existing snapshot schedule name

Example

Delete a snapshot schedule named snapsched1 from a NAS volume named vol1:

```
CLI> NAS-volumes snapshots schedules delete vol1 snapsched1
```

NAS-volumes snapshots schedules edit

Modify a snapshot schedule.

Format

```
NAS-volumes snapshots schedules edit <VolumeName> <Name> {options}
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Name>	Snapshot schedule name	Existing snapshot schedule name

Options

Option	Description	Format
-EnableRetention <EnableRetention>	Indicate whether the retention policy is enabled	Possible values are Yes, No
-RetentionPeriod <RetentionPeriod>	Retention period of snapshots created by this policy	An integer number with suffix of units H/D/W (hours, days, or weeks) (for example, 10H)
-Period <Period>	Interval between snapshots in periodic policy. This option is relevant only for ScheduleType Periodic.	Whole positive number (in minutes)
-ScheduleType <ScheduleType>	List of days on which the snapshots should be taken. This option is relevant only for ScheduleType SpecificTime.	Possible values are Periodic, SpecificTime
-Days <Days>	List of hours at which the snapshots should be taken. This option is relevant only for ScheduleType SpecificTime.	Comma-separated list of days. Possible values are Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, or Saturday
-Hours <Hours>	Minute at which the snapshots should be taken. This option is relevant only for ScheduleType SpecificTime.	Comma-separated list of hours. Zero-based, whole positive number (0 to 23).

Option	Description	Format
-Minute <Minute>	Interval between snapshots in periodic policy. This option is relevant only for ScheduleType Periodic.	Zero-based, whole positive number (0 to 59)

Example

Modify a snapshot schedule named snapsched1 on a NAS volume named vol1 to retain snapshots for 12 hours:

```
CLI> NAS-volumes snapshots schedules edit vol1 snapsched1 -EnableRetention Yes -
RetentionPeriod 12H
```

NAS-volumes snapshots schedules list

Display a list of snapshot schedules.

Format

```
NAS-volumes snapshots schedules list [options]
```

Options

Option	Description	Format
-CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-VolumeName <VolumeName>	NAS volume name	

Example

Display a current list of snapshot schedules on a NAS volume named vol1:

```
CLI> NAS-volumes snapshots schedules list -VolumeName vol1
```

Output

```
.--------------.-------------.---------------.---------------.---------------.
| Schedule     | Volume Name | Enable        | Retention     | Frequency     |
| Name         |             | Retention     | Period        |               |
|--------------|-------------|---------------|---------------|---------------|
| snapsched1   | vol1        | Yes           | 1 Weeks       | Every 1440    |
|              |             |               |               | minutes       |
|--------------|-------------|---------------|---------------|---------------|
| snapsched2   | vol1        | Yes           | 1 Weeks       | Sunday at     |
|              |             |               |               | 20:00         |
'--------------'-------------'---------------'---------------'---------------'
```

NAS-volumes snapshots schedules view

Display snapshot schedule settings.

Format

```
NAS-volumes snapshots schedules view <VolumeName> <Name>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<Name>	Snapshot schedule name	Existing snapshot schedule name

Example

Display the current settings for a snapshot schedule named snapsched1 on a NAS volume named vol1:

```
CLI> NAS-volumes snapshots schedules view vol1 snapsched1
```

Output

```
Schedule Name    = snapsched1
Volume Name      = vol1
Enable Retention = Yes
Retention Period = 1 Weeks
Frequency        = Every 1440 minutes
```

NAS-volumes snapshots set-expiry

Set a snapshot expiration date.

Format

```
NAS-volumes snapshots set-expiry <VolumeName> <SnapshotName> <ExpirationDate>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<SnapshotName>	Snapshot name	Existing snapshot name
<ExpirationDate>	Snapshot expiration date	"DD-MMM-YY HH:MI:SS" (double quotation marks are required)

Example

Set a snapshot expiration date of 25-Aug-13 23:09:34 for a snapshot named snap1 on a NAS volume named vol1:

```
CLI> NAS-volumes snapshots set-expiry vol1 snap1 "25-Aug-13 23:09:34"
```

NAS-volumes snapshots view

Display snapshot information.

Format

```
NAS-volumes snapshots view <VolumeName> <SnapshotName>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
<SnapshotName>	Snapshot name	Existing snapshot name

Example

Display current information for a snapshot named snap1 on a NAS volume named vol1:

```
CLI> NAS-volumes snapshots view vol1 snap1
```

Output

```
Volume Name   = vol1
Snapshot Name = snap1
Created At    = 13-Aug-13 10:03:18
Has Expiry    = No
Expiry        =
```

networking client-load-balancing list-sessions-of-connection

Display sessions of connection.

Format

```
networking client-load-balancing list-sessions-of-connection <ClientIP>
<AccessIP>
```

Arguments

Argument	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
<ClientIP>	Client or router IP address	Existing client or router IP address in IPv6 or IPv4 format
<AccessIP>	Client VIP to which the client or router was accessed	Existing client VIP IP address in IPv6 or IPv4 format

Example

Display sessions of connection with the IP address 172.22.69.18 using client VIP 172.22.69.32:

```
CLI> networking client-load-balancing list-sessions-of-connection 172.22.69.18
172.22.69.32 1
```

Output

```
.-------.-------.------------.--------.-------.------.-------.-------.------.
| Protoc| Contro| NFS Session|User    | Comput| #    |Connec | Idle  | Guest|
| ol    | ller  | Id         |        | er    | Open |ted    | Time  |      |
|       | Id    |            |        |       | Files|Time   |       |      |
|-------|-------|------------|--------|-------|------|-------|-------|------|
|SMB 3.0| 0     |  N/A       |IDC\jona| 10.48 |    2 |21:14: | 19:00:| No   |
|       |       |            |thans   |  29.76|      |  16   |12     |      |
|-------|-------|------------|--------|-------|------|-------|--- ---|------|
```

networking active-ndmp-sessions list

Display a list of active NDMP sessions (jobs).

Format

```
networking active-ndmp-sessions list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the current list of active NDMP sessions (jobs):

```
CLI> networking active-ndmp-sessions list
```

Output

```
.-----------.---------.----------.--------------.----------.--------------------.
| Controller| Session | Session  | DMA IP       | Session  | Session Start Time|
| Id        | Id      | Type     |              | Path     |                    |
|-----------|---------|----------|--------------|----------|--------------------|
| 1         | 151691  | Restore  | 172.41.200.70| /volume2 | 03-Jun-13 11:25:14|
'-----------'---------'----------'--------------'----------'--------------------'
```

networking active-ndmp-sessions logoff

Abort an active NDMP session.

Format

```
networking active-ndmp-sessions logoff <ControllerID> <SessionID>
```

Arguments

Argument	Description	Format
<ControllerID>	ID of the NAS controller to which the DMA session is connected	Existing NAS controller ID
<SessionID>	NDMP session (job) ID	Existing NDMP session (job) ID

Example

Abort an active NDMP session (job) with the job ID 151691 running on NAS controller 1:

```
CLI> networking active-ndmp-sessions logoff 1 151691
```

networking active-ndmp-sessions view

Display information about an active NDMP session (job).

Format

```
networking active-ndmp-sessions view <ControllerID> <SessionID>
```

Arguments

Argument	Description	Format
<ControllerID>	ID of the NAS controller to which the DMA session is connected	Existing NAS controller ID
<SessionID>	NDMP session (job) ID	Existing NDMP session (job) ID

Example

Display information about an active NDMP session (job) on NAS controller 1 with the job ID 150471:

```
CLI> networking active-ndmp-sessions view 1 150471
```

Output

```
Controller ID      = 1
Session ID         = 150471
Session Type       = Backup
DMA IP             = 172.41.200.70
Session Path       = /volume2
Session Start Time = 03-Jun-13 11:17:25
```

networking active-view-NFS-sessions

Display information about an active NFS session.

Format

```
networking active-sessions view-NFS-session <NFSSessionID>
```

Arguments

Argument	Description	Format
<NFSSessionID>	ID of the NFS session	

Example

Display information about an active NFS session for the user idffs2\user1 on the computer win2k8d-m380.lab.town using NAS controller 1:

```
CLI> networking active-sessions view-NFS-session
1-5-27907-2049-4-172.1234-172.41.2.225
```

Output

```
Protocol          = NFS 4
Controller ID     = 1
NFS Session ID    = 1-5-27907-2049-4-172.1234-172.41.2.225
Computer          = 172.41.200.123
Number Open Files = 0
Connected Time    = 32:42:58
Idle Time         = 00:00:00
Guest             = No
```

networking active-sessions list-idle-sessions

Display a list of active SMB and NFS sessions.

Format

```
networking active-sessions list-idle-sessions {options}
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-FilterByIdleTimeMin <FilterByIdleTimeMin>	Displays only the sessions idle for longer than the specified number of minutes	Integer, in minutes (2880 or larger)

Example

Display a list of the current active sessions:

```
CLI> networking active-sessions list-idle-session 2880
```

Output

```
.--------.--------.--------------.--------.--------.--------.--------.-------.
| Protoc | Contro | User         | Comput | Number |Connec  | Idle   | Guest |
| ol     | ller   |              | er     | Open   |ted     | Time   |       |
|        | Id     |              |        | Files  |Time    |        |       |
|--------|--------|--------------|--------|--------|--------|--------|-------|
|SMB     | 0      | idffs1\user1 | ::ffff | 1      |00:14:  | 00:14: | No    |
|        |        |              | :172.2 |        |16      | 16     |       |
|        |        |              | 2.69.1 |        |        |        |       |
|        |        |              | 8      |        |        |        |       |
'--------'--------'--------------'--------'--------'--------'--------'-------'
```

networking active-sessions list-sessions-with-many-open-files

Display a list of SMB and NFS sessions with many open files.

Format

```
networking active-sessions list-sessions-with-many-open-files
<FilterByOpenFiles>
```

Arguments

Argument	Description	Format
-FilterByOpenFIles <FilterByOpenFiles>	Displays sessions with a number of open files larger than specified value	Integer (50 or larger)

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of sessions with many open files:

```
CLI> networking active-sessions list-sessions-with-many-open-files
```

Output

```
.----------.--------.--------------.--------.--------.-------.--------.-------.
| Protoc   | Contro | User         | Comput | Number |Connec | Idle   | Guest |
| ol       | ller   |              | er     | Open   |ted    | Time   |       |
|          | Id     |              |        | Files  |Time   |        |       |
|----------|--------|--------------|--------|--------|-------|--------|-------|
|SMB       | 0      | idffs1\user1 | ::ffff | 52     |00:14: | 00:00: | No    |
|          |        |              | :172.2 |        |16     | 00     |       |
|          |        |              | 2.69.18|        |       |        |       |
'----------'--------'--------------'--------'--------'-------'--------'-------'
```

networking active-sessions logoff-NFS-sessions

Disconnect an active NFS session.

Format

```
networking active-sessions logoff-NFS-session {options}
```

Options

Option	Description	Format
-ControllerID <ControllerID>	ID of the NAS controller to which the session is connected	Existing NAS controller ID
-ClientComputerName <ClientComputerName>	Computer name from where the session was established	Existing computer name or IP address in IPv6 or IPv4 format

Example

Disconnect an active NFS session for session 150471 on the computer win2k8d-m380.lab.town using NAS controller 1:

```
CLI> networking active-sessions logoff-NFS-sessions logoff -ClientComputerName
1 win2k8d-m380.lab.town
```

networking active-sessions logoff-NFS-session-by-ID

Disconnect an active NFS session by session ID.

Format

```
networking active-sessions logoff-NFS-session <SessionID>
```

Arguments

Argument	Description	Format
<SessionID>	ID of the connected NFS session	Existing session ID

Example

Disconnect an active NFS session with an ID of 150471:

```
CLI> networking active-sessions logoff-NFS-session 150471
```

networking active-sessions logoff-SMB-sessions

Disconnect an active SMB session.

Format

```
networking active-sessions logoff-SMB-sessions {options}
```

Options

Option	Description	Format
-ControllerID <ControllerID>	ID of the NAS controller to which the session is connected	Existing NAS controller ID
-ClientComputerName <ClientComputerName>	Computer name from where the session was established	Existing computer name or IP address in IPv4 or IPv6 format
-UserName <UserName>	User name that established the session	Existing user name

Example

Disconnect an active SMB session for the user idffs2\user1 on the computer win2k8d-m380.lab.town using NAS controller 1:

```
CLI> networking active-sessions logoff-SMB-sessions -ClientComputerName 1
win2k8d-m380.lab.town -UserName idffs2\user1
```

networking active-sessions logoff-SMB-session-by-ID

Disconnect an active SMB session by session ID.

Format

```
networking active-sessions logoff-SMB-session <SessionID>
```

Arguments

Argument	Description	Format
<SessionID>	ID of the connected SMB session	Existing session ID

Example

Disconnect an active SMB session with an ID of 150471:

```
CLI> networking active-sessions logoff-SMB-session 150471
```

networking active-sessions list

Display a list of active sessions.

Format

```
networking active-sessions list {options}
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-list	Displays a list of active SMB and NFS sessions	
-FilterByUserName <FilterByUserName>	Displays only the sessions matching specified user name	

Example

Display a list of the current active sessions:

```
CLI> networking active-sessions list
```

Output

```
.--------.-------.-------------.----------.------.-----.-------.--------.-----.
|Protoc  | Contro| NFS Session |User      | Comput| #    |Connec| Idle   |Guest|
|ol      | ller  | Id          |          | er    | Open |ted   | Time   |     |
|        | Id    |             |          |       | Files|Time  |        |     |
|--------|-------|-------------|----------|-------|------|------|--- ----|-----|
|SMB 3.0| 0      |  N/A        | IDC\jona | 10.48.|    1 |21:14:| 19:00: | No  |
|        |       |             | thans    |  29.76|      |  16  |12      |     |
|--------|-------|-------------|----------|-------|------|------|--- ----|-----|
|NFS 4   | 1     | 1-5-27907-20|cplsup3\AB|172.41.|    0 |95.23.|00.00.05| No  |
|--------|-------|-------------|----------|-------|------|------|--- ----|-----|
```

networking active-sessions view-SMB-session

Display information about an active SMB session.

Format

```
networking active-sessions view-SMB-session <ControllerID> <User> <Computer>
```

Arguments

Argument	Description	Format
<ControllerID>	ID of the NAS controller to which the session is connected	Existing NAS controller ID
<User>	User name that established the session	Existing user name
<Computer>	Computer name from where the session was established	Existing computer name or IP address in IPv6 or IPv4 format

Example

Display information about an active SMB session for the user idffs2\user1 on the computer win2k8d-m380.lab.town using NAS controller 1:

```
CLI> networking active-SMB-sessions view 1 idffs2\user1 win2k8d-m380.lab.town
```

Output

```
Protocol          = SMB
Controller ID     = 1
User              = idffs2\user1
Computer          = ::ffff:172.22.69.18
# Open Files = 0
Connected Time    = 32:42:58
```

```
Idle Time          = 00:00:00
Guest              = No
```

networking client-load-balancing list

Display a list of clients on the same subnet as the FluidFS cluster (in other words, clients in a flat network) and routers.

Clients that access the FluidFS cluster through a router cannot be listed. From the perspective of the FluidFS cluster, it appears that the communication is directly with the router.

Format

```
networking client-load-balancing list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the current clients and routers:

```
CLI> networking client-load-balancing list
```

Output

```
.-------.-------.--------.--------.--------.--------.-------.-------.--------.
| Clien | Acces | Curren | Curren | Assign | Pinned| Pinne | Proto | Manual |
| t IP  | s IP  | t      | t      | ed     | Contro| d     | col   | Failba |
|       |       | Contro | Interf | Contro | ller  | Inter |       | ck Is  |
|       |       | ller   | ace    | ller   | ID    | face  |       | Requir |
|       |       | ID     |        | ID     |       |       |       | ed     |
|-------|-------|--------|--------|--------|-------|-------|-------|--------|
| 172.2 | 172.2 | 0      | eth1   | 0      |       |       | Other | No     |
| 2.69. | 2.69. |        |        |        |       |       |       |        |
| 1     | 40    |        |        |        |       |       |       |        |
|-------|-------|--------|--------|--------|-------|-------|-------|--------|
| 172.2 | 172.2 | 0      | eth0   | 0      |       |       | SMB   | No     |
| 2.69. | 2.69. |        |        |        |       |       |       |        |
| 18    | 40    |        |        |        |       |       |       |        |
'-------'-------'--------'--------'--------'-------'-------'-------'--------'
```

networking client-load-balancing list-sessions-of-connection

Display sessions of connection.

Format

```
networking client-load-balancing list-sessions-of-connection <ClientIP>
<AccessIP>
```

Arguments

Argument	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
<ClientIP>	Client or router IP address	Existing client or router IP address in IPv6 or IPv4 format
<AccessIP>	Client VIP to which the client or router was accessed	Existing client VIP IP address in IPv6 or IPv4 format

Example

Display sessions of connection with the IP address 172.22.69.18 using client VIP 172.22.69.32:

```
CLI> networking client-load-balancing list-sessions-of-connection 172.22.69.18
172.22.69.32 1
```

Output

```
.-------.-------.------------.--------.-------.------.-------.-------.------.
| Protoc| Contro| NFS Session|User    | Comput| #    |Connec | Idle  | Guest|
| ol    | ller  | Id         |        | er    | Open |ted    | Time  |      |
|       | Id    |            |        |       | Files|Time   |       |      |
|-------|-------|------------|--------|-------|------|-------|-------|------|
|SMB 3.0| 0     |  N/A       |IDC\jona| 10.48 |    2 |21:14: | 19:00:| No   |
|       |       |            |thans   |  29.76|      |  16   |12     |      |
|-------|-------|------------|--------|-------|------|-------|--- ---|------|
```

networking client-load-balancing mass-failback

Move all clients back to their preferred NAS controller.

NOTE: Clients that are moved between controllers will experience a brief disconnection.

Format

```
networking client-load-balancing mass-failback
```

networking client-load-balancing mass-rebalance

Rebalance all the clients between the NAS controllers.

NOTE: Clients that are moved between controllers will experience a brief disconnection.

Format

```
networking client-load-balancing mass-rebalance
```

networking client-load-balancing move

Move a client or router to a required NAS controller.

Format

```
networking client-load-balancing move <ClientIP> <AccessIP> <ControllerID>
```

Arguments

Argument	Description	Format
<ClientIP>	Client or router IP address	Existing client or router IP address in IPv6 or IPv4 format
<AccessIP>	Client VIP to which the client or router was accessed	Existing client VIP IP address in IPv6 or IPv4 format
<ControllerID>	ID of the NAS controller to which to move the client	Existing NAS controller ID

Example

Move a client with the IP address 172.22.69.18 using client VIP 172.22.69.32 to controller 1:

```
CLI> networking client-load-balancing move 172.22.69.18 172.22.69.32 1
```

networking client-load-balancing pin

Pin a client or router to an assigned NAS controller.

Format

```
networking client-load-balancing pin <ClientIP> <AccessIP> <ControllerID>
{options}
```

Arguments

Argument	Description	Format
<ClientIP>	Client or router IP address	Existing client or router IP address in the format: x.x.x.x
<AccessIP>	Client VIP to which the client or router was accessed	Existing client VIP IP address in the format: x.x.x.x
<ControllerID>	ID of the NAS controller to which to pin the client	Existing NAS controller ID

Options

Option	Description	Format
-NetworkInterface <NetworkInterface>	Network interface to which to pin the client	Existing Ethernet interface in the format: ethXX (for example, eth30) or bond1

Example

Pin a client with the IP address 172.22.69.18 using client VIP 172.22.69.32 to NAS controller 1:

```
CLI> networking client-load-balancing pin 172.22.69.18 172.22.69.32 1
```

networking client-load-balancing unpin

Unpin a client or router from the assigned NAS controller.

Format

```
networking client-load-balancing unpin <ClientIP> <AccessIP>
```

Arguments

Argument	Description	Format
<ClientIP>	Client or router IP address	Existing client or router IPv6 or IPv4 address
<AccessIP>	Client VIP to which the client or router was accessed	Existing client VIP IPv6 or IPv4 address

Example

Unpin a client with the IP address 172.22.69.18 using client VIP 172.22.69.32 from the assigned NAS controller:

```
CLI> networking client-load-balancing unpin 172.22.69.18 172.22.69.32
```

networking client-load-balancing view

Display information about a client on the same subnet as the FluidFS cluster (in other words, a client in a flat network) or a router.

Clients that access the FluidFS cluster through a router cannot be viewed. From the perspective of the FluidFS cluster, it appears that the communication is directly with the router.

Format

```
networking client-load-balancing view <ClientIP> <AccessIP>
```

Arguments

Argument	Description	Format
<ClientIP>	Client or router IP address	Existing client or router IP address in IPv6 or IPv4 format
<AccessIP>	Client VIP to which the client or router was accessed	Existing client VIP IP address in IPv6 or IPv4 format

Example

Display information for a client with the IP address 172.22.69.18 using the client VIP 172.22.69.40:

```
CLI> networking client-load-balancing view 172.22.69.18 172.22.69.40
```

Output

```
Client IP                   = 172.22.69.18
Access IP                   = 172.22.69.40
Current Controller ID       = 0
Current Interface           = eth0
Assigned Controller ID      = 0
Pinned Controller ID        =
Pinned Interface            =
Protocol                    = SMB
Is Required Manual Failback = No
```

networking client-network-interface edit

Modify the settings of the client network interface.

Format

```
networking client-network-interface edit {options}
```

Options

Option	Description	Format
-Mode <Mode>	Bonding module type of the client network interface	Possible values are ALB, LACP
-MTU <MTU>	MTU of the client network interface	Whole positive number (1 to 9000)

Example

Change the mode of the client network interface to LACP:

```
CLI> networking client-network-interface edit -Mode LACP
```

networking client-network-interface view

Display the settings of the client network interface.

Format

```
networking client-network-interface view
```

Example

View the current settings of the client network interface:

```
CLI> networking client-network-interface view
```

Output

```
Mode = ALB
MTU  = 1500
```

networking default-gateway add

Add a default gateway. Only one default gateway can be defined.

Format

```
networking default-gateway add <GatewayIP>
```

Arguments

Argument	Description	Format
<GatewayIP>	Default gateway IP address	IP address in IPv6 or IPv4 format

Example

Add a default gateway with the IP address 172.22.69.1:

```
CLI> networking default-gateway add 172.22.69.1
```

networking default-gateway delete

Delete the default gateway.

Format

```
networking default-gateway delete
```

Example

Delete the current default gateway:

```
CLI> networking default-gateway delete
```

networking default-gateway edit

Modify the default gateway.

Format

```
networking default-gateway edit <GatewayIP>
```

Arguments

Argument	Description	Format
<GatewayIP>	Default gateway IP address	IP address in IPv6 or IPv4 format

Example

Change the default gateway to IP address 172.22.69.2:

```
CLI> networking default-gateway edit 172.22.69.2
```

networking default-gateway view

Display default gateway settings.

Format

```
networking default-gateway view
```

Example

View the current default gateway:

```
CLI> networking default-gateway view
```

Output

```
Gateway IP = 172.22.69.1
```

networking DNS edit

Modify DNS settings.

Format

```
networking DNS edit {options}
```

Options

Option	Description	Format
-DNSServers <DNSServers>	Comma-separated list of DNS servers	IP addresses in IPv6 or IPv4 format
-DNSSuffixes <DNSSuffixes>	Comma-separated list of DNS suffixes	A DNS suffix must be a fully qualified domain name (FQDN).

Example

Change the DNS server to 172.20.65.20 and the suffix to nas.test:

```
CLI> networking DNS edit -DNSServers 172.20.65.20 -DNSSuffixes nas.test
```

networking DNS view

Display DNS settings.

Format

```
networking DNS view
```

Example

Display the current DNS settings:

```
CLI> networking DNS view
```

Output

```
DnsServers    = 10.48.28.33,10.48.28.34
DNSSuffixes   = dell.com
```

networking monitor external-servers-states list

Display a list of external servers and their accessibility status.

Format

```
networking monitor external-servers-states list
```

Options

Option	Description	Format
--CSV	Display the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of external servers and their accessibility status:

```
CLI> networking monitor external-servers-states list
```

Output

```
.--------------------.---------.-------------.
 | Host               | Type    | State       |
 |--------------------|---------|-------------|
 | 172.20.65.20       | DNS     | AVAILABLE   |
 |--------------------|---------|-------------|
 | 172.22.69.1        | GATEWAY | UNAVAILABLE |
 |--------------------|---------|-------------|
 | time.lab.town      | NTP     | AVAILABLE   |
 '--------------------'---------'-------------'
```

networking monitor external-servers-states view

Display the accessibility status of a single external server.

Format

```
networking monitor external-servers-states view <Host> <Type>
```

Arguments

Argument	Description	Format
<Host>	External server host	Existing server host name or IP address in IPv6 or IPv4 format. A host name must contain one or more sub names, each separated by a dot. Each sub name can contain letters, numbers, or

Argument	Description	Format
		hyphens, but cannot start or end in a hyphen.
<Type>	Type of external server	Possible values are GATEWAY, STATIC_ROUTE, DNS, ANTIVIRUS, MAIL_RELAY, NIS, LDAP, DMA_SERVER, TRAP_RECIPIENTS, NTP, ISCSI_PORTAL

Example

Display the accessibility status of an NTP server named time.lab.town:

```
CLI> networking monitor external-servers-states view time.lab.town NTP
```

Output

```
Host  = time.lab.town
Type  = NTP
State = AVAILABLE
```

networking monitor performance-per-node last-day

Display the last day's traffic statistics per NAS controller.

Format

```
networking monitor performance-per-node last-day
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last day's traffic statistics per NAS controller:

```
CLI> networking monitor performance-per-node last-day
```

Output

```
.----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.
 | Co | Tim | NFS | NFS | NDM | NDM | SMB |SMB  |Rep |Rep  | Net | Net | Tot |
 | nt | e   | Rea | Wri | P   | P   |     |     | lic| lic | wor | wor | al  |
 | ro |     | d   | te  | Rea | Wri | Rea | Wri | ati| ati | k   | kOv | Tra |
 | ll |     | (pe | (pe | d   | te  | d   | te  | on | on  | Ove | erh | ffi |
 | er |     | r   | r   | (pe | (pe | (pe | (pe | Rea| Wri | rhe | ead | c   |
 | ID |     | sec | sec | r   | r   | r   | r   | d  | te  | ad  | Wri | (pe |
```

```
 |     |      | )    | )    | sec | sec | sec | sec | (pe| (pe | Rea | teM | r   |
 |     |      |      |      | )   | )   | )   | )   | r  | r   | d   | BsP | sec |
 |     |      |      |      |     |     |     |     | sec| sec | (pe | erS | )   |
 |     |      |      |      |     |     |     |     | )  |     | r   | ec  |     |
 |     |      |      |      |     |     |     |     |    |     | sec |     |     |
 |     |      |      |      |     |     |     |     |    |     | )   |     |     |
 |-----|------|------|------|-----|-----|-----|-----|----|-----|-----|-----|-----|
 | 0   | 05-  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0| 0.0 | 0.0 | 0.0 | 0.0 |
 |     | Aug  | 0    | 0    | 0   | 0   | 0   | 0   | 0  | 0   | 0   | 0   | 0   |
 |     | -14| MB   | MB   | MB  | MB  | MB  | MB  | MB | MB  | MB  | MB  | MB  |
 |     | 11:  |      |      |     |     |     |     |    |     |     |     |     |
 |     | 28:  |      |      |     |     |     |     |    |     |     |     |     |
 |     | 33   |      |      |     |     |     |     |    |     |     |     |     |
 |-----|------|------|------|-----|-----|-----|-----|----|-----|-----|-----|-----|
 | 1   | 05-  | 0.0  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0| 0.0 | 0.0 | 0.0 | 0.0 |
 |     | Aug  | 0    | 0    | 0   | 0   | 0   | 0   | 0  | 0   | 0   | 0   | 0   |
 |     | -14|  MB  | MB   | MB  | MB  | MB  | MB  | MB | MB  | MB  | MB  | MB  |
 |     | 11:  |      |      |     |     |     |     |    |     |     |     |     |
 |     | 28:  |      |      |     |     |     |     |    |     |     |     |     |
 |     | 33   |      |      |     |     |     |     |    |     |     |     |     |
 |-----|------|------|------|-----|-----|-----|-----|----|-----|-----|-----|-----|
...[snip]...
```

networking monitor performance-per-node last-month

Display the last month's traffic statistics per NAS controller.

Format

```
networking monitor performance-per-node last-month
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last month's traffic statistics per NAS controller:

```
CLI> networking monitor performance-per-node last-month
```

Output

```
.----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.
 | Co | Tim | NFS | NFS | NDM | NDM | SMB | SMB | Rep| Rep | Net | Net | Tot |
 | nt | e   | Rea | Wri | P   | P   |     |     | lic| lic | wor | wor | al  |
 | ro |     | d   | te  | Rea | Wri | Rea | Wri | ati| ati | k   | kOv | Tra |
 | ll |     | (pe | (pe | d   | te  | d   | te  | on | on  | Ove | erh | ffi |
 | er |     | r   | r   | (pe | (pe | (pe | (pe | Rea| Wri | rhe | ead | c   |
 | ID |     | sec | sec | r   | r   | r   | r   | d  | te  | ad  | Wri | (pe |
 |    |     | )   | )   | sec | sec | sec | sec | (pe| (pe | Rea | teM | r   |
 |    |     |     |     | )   | )   | )   | )   | r  | r   | d   | BsP | sec |
 |    |     |     |     |     |     |     |     | sec| sec | (pe | erS | )   |
 |    |     |     |     |     |     |     |     | )  | )   | r   | ec  |     |
```

```
|     |      |      |      |      |      |      |      |      |      | sec  |      |      |
|     |      |      |      |      |      |      |      |      |      | )    |      |      |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 0   | 05-  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
|     | Aug  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
|     | -14  | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   |
|     | 11:  |      |      |      |      |      |      |      |      |      |      |      |
|     | 33:  |      |      |      |      |      |      |      |      |      |      |      |
|     | 05   |      |      |      |      |      |      |      |      |      |      |      |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
| 1   | 05-  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
|     | Aug  | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
|     | -14  | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   |
|     | 11:  |      |      |      |      |      |      |      |      |      |      |      |
|     | 33:  |      |      |      |      |      |      |      |      |      |      |      |
|     | 05   |      |      |      |      |      |      |      |      |      |      |      |
|-----|------|------|------|------|------|------|------|------|------|------|------|------|
...[snip]...
```

networking monitor performance-per-node last-week

Display the last week's traffic statistics per NAS controller.

Format

```
networking monitor performance-per-node last-week
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last week's traffic statistics per NAS controller:

```
CLI> networking monitor performance-per-node last-week
```

Output

```
.----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.
| Co | Tim | NFS | NFS | NDM | NDM | SMB | SMB | Rep| Rep | Net | Net | Tot |
| nt | e   | Rea | Wri | P   | P   |     |     | lic| lic | wor | wor | al  |
| ro |     | d   | te  | Rea | Wri | Rea | Wri | ati| ati | k   | kOv | Tra |
| ll |     | (pe | (pe | d   | te  | d   | te  | on | on  | Ove | erh | ffi |
| er |     | r   | r   | (pe | (pe | (pe | (pe | Rea| Wri | rhe | ead | c   |
| ID |     | sec | sec | r   | r   | r   | r   | d  | te  | ad  | Wri | (pe |
|    |     | )   | )   | sec | sec | sec | sec | (pe| (pe | Rea | teM | r   |
|    |     |     |     | )   | )   | )   | )   | r  | r   | d   | BsP | sec |
|    |     |     |     |     |     |     |     | sec| sec | (pe | erS | )   |
|    |     |     |     |     |     |     |     | )  | )   | r   | ec  |     |
|    |     |     |     |     |     |     |     |    |     | sec |     |     |
|    |     |     |     |     |     |     |     |    |     | )   |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
| 0  | 05- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0| 0.0 | 0.0 | 0.0 | 0.0 |
```

```
|     | Aug | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
|     | -14 | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   |
|     | 11: |      |      |      |      |      |      |      |      |      |      |      |
|     | 30: |      |      |      |      |      |      |      |      |      |      |      |
|     | 23  |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
| 1   | 05- | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  |
|     | Aug | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
|     | -14 | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   | MB   |
|     | 11: |      |      |      |      |      |      |      |      |      |      |      |
|     | 30: |      |      |      |      |      |      |      |      |      |      |      |
|     | 23  |      |      |      |      |      |      |      |      |      |      |      |
|-----|-----|------|------|------|------|------|------|------|------|------|------|------|
...[snip]...
```

networking monitor performance-per-node last-year

Display the last year's traffic statistics per NAS controller.

Format

```
networking monitor performance-per-node last-year
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last year's traffic statistics per NAS controller:

```
CLI> networking monitor performance-per-node last-year
```

Output

```
.----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.
 | Co | Tim | NFS | NFS | NDM | NDM | SMB | SMB | Rep| Rep | Net | Net | Tot |
 | nt | e   | Rea | Wri | P   | P   |     |     | lic| lic | wor | wor | al  |
 | ro |     | d   | te  | Rea | Wri | Rea | Wri | ati| ati | k   | kOv | Tra |
 | ll |     | (pe | (pe | d   | te  | d   | te  | on | on  | Ove | erh | ffi |
 | er |     | r   | r   | (pe | (pe | (pe | (pe | Rea| Wri | rhe | ead | c   |
 | ID |     | sec | sec | r   | r   | r   | r   | d  | te  | ad  | Wri | (pe |
 |    |     | )   | )   | sec | sec | sec | sec | (pe| (pe | Rea | teM | r   |
 |    |     |     |     | )   | )   | )   | )   | r  | r   | d   | BsP | sec |
 |    |     |     |     |     |     |     |     | sec| sec | (pe | erS | )   |
 |    |     |     |     |     |     |     |     | )  | )   | r   | ec  |     |
 |    |     |     |     |     |     |     |     |    |     | sec |     |     |
 |    |     |     |     |     |     |     |     |    |     | )   |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0  | 10- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0| 0.0 | 0.0 | 0.0 | 0.0 |
|    | Dec | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0   | 0   | 0   | 0   |
|    | -14 | MB  | MB  | MB  | MB  | MB  | MB  | MB | MB  | MB  | MB  | MB  |
|    | 11: |     |     |     |     |     |     |    |     |     |     |     |
|    | 33: |     |     |     |     |     |     |    |     |     |     |     |
```

```
|     | 50  |      |      |      |      |      |      |     |      |      |      |      |
|-----|-----|------|------|------|------|------|------|-----|------|------|------|------|
|  1  | 10- | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0  | 0.0 | 0.0  | 0.0  | 0.0  | 0.0  |
|     | Dec | 0    | 0    | 0    | 0    | 0    | 0    | 0   | 0    | 0    | 0    | 0    |
|     | -14 | MB   | MB   | MB   | MB   | MB   | MB   | MB  | MB   | MB   | MB   | MB   |
|     | 11: |      |      |      |      |      |      |     |      |      |      |      |
|     | 33: |      |      |      |      |      |      |     |      |      |      |      |
|     | 50  |      |      |      |      |      |      |     |      |      |      |      |
|-----|-----|------|------|------|------|------|------|-----|------|------|------|------|
...[snip]...
```

networking monitor performance-per-node now

Display the current traffic statistics per NAS controller.

Format

```
networking monitor performance-per-node now
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the current traffic statistics per NAS controller:

```
CLI> networking monitor performance-per-node now
```

Output

```
.----.-----.-----.-----.-----.-----.-----.-----.----.-----.-----.-----.-----.
| Co | Tim | NFS | NFS | NDM | NDM | SMB | SMB | Rep| Rep | Net | Net | Tot |
| nt | e   | Rea | Wri | P   | P   |     |     | lic| lic | wor | wor | al  |
| ro |     | d   | te  | Rea | Wri | Rea | Wri | ati| ati | k   | kOv | Tra |
| ll |     | (pe | (pe | d   | te  | d   | te  | on | on  | Ove | erh | ffi |
| er |     | r   | r   | (pe | (pe | (pe | (pe | Rea| Wri | rhe | ead | c   |
| ID |     | sec | sec | r   | r   | r   | r   | d  | te  | ad  | Wri | (pe |
|    |     | )   | )   | sec | sec | sec | sec | (pe| (pe | Rea | teM | r   |
|    |     |     |     | )   | )   | )   | )   | r  | r   | d   | BsP | sec |
|    |     |     |     |     |     |     |     | sec| sec | (pe | erS | )   |
|    |     |     |     |     |     |     |     | )  | )   | r   | ec  |     |
|    |     |     |     |     |     |     |     |    |     | sec |     |     |
|    |     |     |     |     |     |     |     |    |     | )   |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
| 0  | 05- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0| 0.0 | 0.0 | 0.0 | 0.0 |
|    | Aug | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0   | 0   | 0   | 0   |
|    | -14 | MB  | MB  | MB  | MB  | MB  | MB  | MB | MB  | MB  | MB  | MB  |
|    | 11: |     |     |     |     |     |     |    |     |     |     |     |
|    | 28: |     |     |     |     |     |     |    |     |     |     |     |
|    | 33  |     |     |     |     |     |     |    |     |     |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
| 1  | 05- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0| 0.0 | 0.0 | 0.0 | 0.0 |
|    | Aug | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0   | 0   | 0   | 0   |
```

```
 |     | -14 | MB   | MB   | MB   | MB   | MB   | MB   | MB | MB   | MB   | MB   | MB   |
 |     | 11: |      |      |      |      |      |      |    |      |      |      |      |
 |     | 28: |      |      |      |      |      |      |    |      |      |      |      |
 |     | 33  |      |      |      |      |      |      |    |      |      |      |      |
 |-----|-----|------|------|------|------|------|------|----|------|------|------|------|
...[snip]...
```

networking monitor performance-summary IOPS last-day

Display the last day's IOPS traffic statistics.

Format

```
networking monitor performance-summary IOPS last-day
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last day's IOPS traffic statistics:

```
CLI> networking monitor performance-summary IOPS last-day
```

Output

```
.--------------.--------.--------.--------.--------.-------.--------------.
 | Time         | NFS    | NFS    | NFS    | SMB    |SMB    | SMB IOPS     |
 |              | IOPS   | IOPS   | IOPS   | IOPS   |IOPS   | Other        |
 |              | Read   | Write  | Other  | Read   |Write  |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-14    | 0      | 0      | 0      | 0      |0      | 0            |
 | 14:42:19     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-14    | 0      | 0      | 9      | 0      |0      | 0            |
 | 13:00:00     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
...[snip]...
```

networking monitor performance-summary IOPS last-month

Display the last month’s IOPS traffic statistics.

Format

```
networking monitor performance-summary IOPS last-month
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last month's IOPS traffic statistics:

```
CLI> networking monitor performance-summary IOPS last-month
```

Output

```
 .--------------.--------.--------.--------.--------.--------.-------------.
 | Time         | NFS    | NFS    | NFS    | SMB    |SMB     | SMB IOPS    |
 |              | IOPS   | IOPS   | IOPS   | IOPS   |IOPS    | Other       |
 |              | Read   | Write  | Other  | Read   |Write   |             |
 |--------------|--------|--------|--------|--------|--------|-------------|
 | 10-May-14    | 0      | 0      | 0      | 0      |0       | 0           |
 | 14:42:44     |        |        |        |        |        |             |
 |--------------|--------|--------|--------|--------|--------|-------------|
 | 10-May-14    | 0      | 0      | 8      | 0      |0       | 0           |
 | 06:00:00     |        |        |        |        |        |             |
 |--------------|--------|--------|--------|--------|--------|-------------|
...[snip]...
```

networking monitor performance-summary IOPS last-week

Display the last week's IOPS traffic statistics.

Format

```
networking monitor performance-summary IOPS last-week
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last week's IOPS traffic statistics:

```
CLI> networking monitor performance-summary IOPS last-week
```

Output

```
.--------------.--------.--------.--------.--------.--------.--------------.
 | Time         | NFS    | NFS    | NFS    | SMB    |SMB     | SMB  IOPS    |
 |              | IOPS   | IOPS   | IOPS   | IOPS   |IOPS    | Other        |
 |              | Read   | Write  | Other  | Read   |Write   |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-14    | 0      | 0      | 0      | 0      |0      | 0            |
 | 14:43:33     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-14    | 0      | 0      | 8      | 0      |0      | 0            |
 | 06:00:00     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
...[snip]...
```

networking monitor performance-summary IOPS last-year

Display the last year's IOPS traffic statistics.

Format

```
networking monitor performance-summary IOPS last-year
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last year's IOPS traffic statistics:

```
CLI> networking monitor performance-summary IOPS last-year
```

Output

```
.--------------.--------.--------.--------.--------.--------.--------------.
 | Time         | NFS    | NFS    | NFS    | SMB    |SMB     | SMB IOPS     |
 |              | IOPS   | IOPS   | IOPS   | IOPS   |IOPS    | Other        |
 |              | Read   | Write  | Other  | Read   |Write   |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-14    | 0      | 0      | 0      | 0      |0      | 0            |
 | 14:43:02     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 26-Apr-14    | 0      | 0      | 8      | 0      |0      | 0            |
 | 00:00:00     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
...[snip]...
```

networking monitor performance-summary IOPS now

Display the current IOPS traffic statistics.

Format

```
networking monitor performance-summary IOPS now
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the current IOPS traffic statistics:

```
CLI> networking monitor performance-summary IOPS now
```

Output

```
.--------------.--------.--------.--------.--------.-------.--------------.
 | Time         | NFS    | NFS    | NFS    | SMB    |SMB    | SMB IOPS     |
 |              | IOPS   | IOPS   | IOPS   | IOPS   |IOPS   | Other        |
 |              | Read   | Write  | Other  | Read   |Write  |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-13    | 0      | 0      | 0      | 0      |0      | 0            |
 | 14:42:19     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-13    | 0      | 0      | 9      | 0      |0      | 0            |
 | 13:00:00     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
...[snip]...
```

networking monitor performance-summary read last-day

Display the last day's read traffic statistics.

Format

```
networking monitor performance-summary read last-day
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last day's read traffic statistics:

```
CLI> networking monitor performance-summary read last-day
```

Output

```
 .--------.--------.--------.--------------.-------------.--------------.
 | Time   | NFS    | NDMP   | SMB Read     | Replication | Network      |
 |        | Read   | Read   | (per sec)    | Read (per   | Overhead     |
 |        | (per   | (per   |              | sec)        | Read (per    |
 |        | sec)   | sec)   |              |             | sec)         |
 |--------|--------|--------|--------------|-------------|--------------|
 | 10-May | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 14:19: |        |        |              |             |              |
 | 20     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
 | 10-May | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 13:00: |        |        |              |             |              |
 | 00     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
...[snip]...
```

networking monitor performance-summary read last-month

Display the last month’s read traffic statistics.

Format

```
networking monitor performance-summary read last-month
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header'	Append --CSV to the command

Example

Display the last month’s read traffic statistics:

```
CLI> networking monitor performance-summary read last-month
```

Output

```
 .--------.--------.--------.--------------.-------------.--------------.
 | Time   | NFS    | NDMP   | SMB Read     | Replication | Network      |
 |        | Read   | Read   | (per sec)    | Read (per   | Overhead     |
 |        | (per   | (per   |              | sec)        | Read (per    |
```

```
|         | sec)    | sec)    |               |              | sec)          |
|---------|---------|---------|---------------|--------------|---------------|
| 10-May  | 0.00    | 0.00    | 0.00 MB       | 0.00 MB      | 0.00 MB       |
| -13     | MB      | MB      |               |              |               |
| 14:20:  |         |         |               |              |               |
| 47      |         |         |               |              |               |
|---------|---------|---------|---------------|--------------|---------------|
| 09-May  | 0.00    | 0.00    | 0.00 MB       | 0.00 MB      | 0.00 MB       |
| -13     | MB      | MB      |               |              |               |
| 00:00:  |         |         |               |              |               |
| 00      |         |         |               |              |               |
|---------|---------|---------|---------------|--------------|---------------|
...[snip]...
```

networking monitor performance-per-node last-week

Display the last week's traffic statistics per NAS controller.

Format

```
networking monitor performance-per-node last-week
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last week's traffic statistics per NAS controller:

```
CLI> networking monitor performance-per-node last-week
```

Output

```
.----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.
 | Co | Tim | NFS | NFS | NDM | NDM | SMB | SMB | Rep| Rep | Net | Net | Tot |
 | nt | e   | Rea | Wri | P   | P   |     |     | lic| lic | wor | wor | al  |
 | ro |     | d   | te  | Rea | Wri | Rea | Wri | ati| ati | k   | kOv | Tra |
 | ll |     | (pe | (pe | d   | te  | d   | te  | on | on  | Ove | erh | ffi |
 | er |     | r   | r   | (pe | (pe | (pe | (pe | Rea| Wri | rhe | ead | c   |
 | ID |     | sec | sec | r   | r   | r   | r   | d  | te  | ad  | Wri | (pe |
 |    |     | )   | )   | sec | sec | sec | sec | (pe| (pe | Rea | teM | r   |
 |    |     |     |     | )   | )   | )   | )   | r  | r   | d   | BsP | sec |
 |    |     |     |     |     |     |     |     | sec| sec | (pe | erS | )   |
 |    |     |     |     |     |     |     |     | )  | )   | r   | ec  |     |
 |    |     |     |     |     |     |     |     |    |     | sec |     |     |
 |    |     |     |     |     |     |     |     |    |     | )   |     |     |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
 | 0  | 05- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0| 0.0 | 0.0 | 0.0 | 0.0 |
 |    | Aug | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0   | 0   | 0   | 0   |
 |    | -13 | MB  | MB  | MB  | MB  | MB  | MB  | MB | MB  | MB  | MB  | MB  |
 |    | 11: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 30: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 23  |     |     |     |     |     |     |    |     |     |     |     |
```

```
 |----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
 | 1  | 05- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
 |    | Aug | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
 |    | -13 | MB  | MB  | MB  | MB  | MB  | MB  | MB  | MB  | MB  | MB  | MB  |
 |    | 11: |     |     |     |     |     |     |     |     |     |     |     |
 |    | 30: |     |     |     |     |     |     |     |     |     |     |     |
 |    | 23  |     |     |     |     |     |     |     |     |     |     |     |
 |----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
...[snip]...
```

networking monitor performance-summary read last-year

Display the last year's read traffic statistics.

Format

```
networking monitor performance-summary read last-year
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last year's read traffic statistics:

```
CLI> networking monitor performance-summary read last-year
```

Output

```
 .--------.--------.--------.--------------.-------------.--------------.
 | Time   | NFS    | NDMP   | SMB Read     | Replication | Network      |
 |        | Read   | Read   | (per sec)    | Read (per   | Overhead     |
 |        | (per   | (per   |              | sec)        | Read (per    |
 |        | sec)   | sec)   |              |             | sec)         |
 |--------|--------|--------|--------------|-------------|--------------|
 | 10-May | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 14:21: |        |        |              |             |              |
 | 14     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
 | 26-Apr | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 00:00: |        |        |              |             |              |
 | 00     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
...[snip]...
```

networking monitor performance-per-node last-day

Display the last day's traffic statistics per NAS controller.

Format

```
networking monitor performance-per-node last-day
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last day's traffic statistics per NAS controller:

```
CLI> networking monitor performance-per-node last-day
```

Output

```
.----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.-----.
 | Co | Tim | NFS | NFS | NDM | NDM | CIF | CIF | Rep| Rep | Net | Net | Tot |
 | nt | e   | Rea | Wri | P   | P   | S   | S   | lic| lic | wor | kOv | al  |
 | ro |     | d   | te  | Rea | Wri | Rea | Wri | ati| ati | k   | erh | Tra |
 | ll |     | (pe | (pe | d   | te  | d   | te  | on | on  | Ove | ead | ffi |
 | er |     | r   | r   | (pe | (pe | (pe | (pe | Rea| Wri | rhe | Wri | c   |
 | ID |     | sec | sec | r   | r   | r   | r   | d  | te  | ad  | teM | (pe |
 |    |     | )   | )   | sec | sec | sec | sec | (pe| (pe | Rea | BsP | r   |
 |    |     |     |     | )   | )   | )   | )   | r  | r   | d   | erS | sec |
 |    |     |     |     |     |     |     |     | sec| sec | (pe | ec  | )   |
 |    |     |     |     |     |     |     |     | )  | )   | r   |     |     |
 |    |     |     |     |     |     |     |     |    |     | sec |     |     |
 |    |     |     |     |     |     |     |     |    |     | )   |     |     |
 |----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
 | 0  | 05- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0| 0.0 | 0.0 | 0.0 | 0.0 |
 |    | Aug | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0   | 0   | 0   | 0   |
 |    | -13 | MB  | MB  | MB  | MB  | MB  | MB  | MB | MB  | MB  | MB  | MB  |
 |    | 11: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 28: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 33  |     |     |     |     |     |     |    |     |     |     |     |
 |----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
 | 1  | 05- | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0| 0.0 | 0.0 | 0.0 | 0.0 |
 |    | Aug | 0   | 0   | 0   | 0   | 0   | 0   | 0  | 0   | 0   | 0   | 0   |
 |    | -13 | MB  | MB  | MB  | MB  | MB  | MB  | MB | MB  | MB  | MB  | MB  |
 |    | 11: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 28: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 33  |     |     |     |     |     |     |    |     |     |     |     |
 |----|-----|-----|-----|-----|-----|-----|-----|----|-----|-----|-----|-----|
...[snip]...
```

networking monitor performance-summary write last-day

Display the last day's write traffic statistics.

Format

```
networking monitor performance-summary write last-day
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last day's write traffic statistics:

```
CLI> networking monitor performance-summary write last-day
```

Output

```
 .--------.--------.--------.--------------.--------------.--------------.
 | Time   | NFS    | NDMP   | SMB Write    | Replication  | Network      |
 |        | Write  | Write  | (per sec)    | Write (per   | Overhead     |
 |        | (per   | (per   |              | sec)         | Write (per   |
 |        | sec)   | sec)   |              |              | sec)         |
 |--------|--------|--------|--------------|--------------|--------------|
 | 10-May | 0.00   | 0.00   | 0.00 MB      | 0.00 MB      | 0.00 MB      |
 | -13    | MB     | MB     |              |              |              |
 | 14:21: |        |        |              |              |              |
 | 55     |        |        |              |              |              |
 |--------|--------|--------|--------------|--------------|--------------|
 | 10-May | 0.00   | 0.00   | 0.00 MB      | 0.00 MB      | 0.00 MB      |
 | -13    | MB     | MB     |              |              |              |
 | 13:00: |        |        |              |              |              |
 | 00     |        |        |              |              |              |
 |--------|--------|--------|--------------|--------------|--------------|
...[snip]...
```

networking monitor performance-summary write last-month

Display the last month's write traffic statistics.

Format

```
networking monitor performance-summary write last-month
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last month's write traffic statistics:

```
CLI> networking monitor performance-summary write last-month
```

Output

```
.--------.--------.--------.--------------.--------------.--------------.
 | Time   | NFS    | NDMP   | SMB Write    | Replication | Network      |
 |        | Write  | Write  | (per sec)    | Write (per  | Overhead     |
 |        | (per   | (per   |              | sec)        | Write (per   |
 |        | sec)   | sec)   |              |             | sec)         |
 |--------|--------|--------|--------------|-------------|--------------|
 | 10-May | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 14:23: |        |        |              |             |              |
 | 07     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
 | 26-Apr | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 00:00: |        |        |              |             |              |
 | 00     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
...[snip]...
```

networking monitor performance-summary write last-week

Display the last week's write traffic statistics.

Format

```
networking monitor performance-summary write last-week
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last week's write traffic statistics:

```
CLI> networking monitor performance-summary write last-week
```

Output

```
 .--------.--------.--------.--------------.-------------.--------------.
 | Time   | NFS    | NDMP   | SMB Write    | Replication | Network      |
 |        | Write  | Write  | (per sec)    | Write (per  | Overhead     |
 |        | (per   | (per   |              | sec)        | Write (per   |
 |        | sec)   | sec)   |              |             | sec)         |
 |--------|--------|--------|--------------|-------------|--------------|
 | 10-May | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 14:23: |        |        |              |             |              |
 | 07     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
 | 26-Apr | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 00:00: |        |        |              |             |              |
 | 00     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
...[snip]...
```

networking monitor performance-summary write last-year

Display the last year's write traffic statistics.

Format

```
networking monitor performance-summary write last-year
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the last year's write traffic statistics:

```
CLI> networking monitor performance-summary write last-year
```

Output

```
 .--------.--------.--------.--------------.-------------.--------------.
 | Time   | NFS    | NDMP   | SMB Write    | Replication | Network      |
 |        | Write  | Write  | (per sec)    | Write (per  | Overhead     |
 |        | (per   | (per   |              | sec)        | Write (per   |
```

```
 |        | sec)    | sec)    |              |              | sec)         |
 |--------|---------|---------|--------------|--------------|--------------|
 | 10-May | 0.00    | 0.00    | 0.00 MB      | 0.00 MB      | 0.00 MB      |
 | -13    | MB      | MB      |              |              |              |
 | 14:23: |         |         |              |              |              |
 | 07     |         |         |              |              |              |
 |--------|---------|---------|--------------|--------------|--------------|
 | 26-Apr | 0.00    | 0.00    | 0.00 MB      | 0.00 MB      | 0.00 MB      |
 | -13    | MB      | MB      |              |              |              |
 | 00:00: |         |         |              |              |              |
 | 00     |         |         |              |              |              |
 |--------|---------|---------|--------------|--------------|--------------|
...[snip]...
```

networking monitor performance-summary write now

Display the current write traffic statistics.

Format

```
networking monitor performance-summary write now
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the current write traffic statistics:

```
CLI> networking monitor performance-summary write write
```

Output

```
 .--------.--------.--------.--------------.-------------.--------------.
 | Time   | NFS    | NDMP   | SMB Write    | Replication | Network      |
 |        | Write  | Write  | (per sec)    | Write (per  | Overhead     |
 |        | (per   | (per   |              | sec)        | Write (per   |
 |        | sec)   | sec)   |              |             | sec)         |
 |--------|--------|--------|--------------|-------------|--------------|
 | 10-May | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 14:21: |        |        |              |             |              |
 | 55     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
 | 10-May | 0.00   | 0.00   | 0.00 MB      | 0.00 MB     | 0.00 MB      |
 | -13    | MB     | MB     |              |             |              |
 | 13:00: |        |        |              |             |              |
 | 00     |        |        |              |             |              |
 |--------|--------|--------|--------------|-------------|--------------|
...[snip]...
```

networking open-files close

Close open files by file handle, protocol, or controllerID.

Format

```
networking open-files close
```

Options

Option	Description	Format
FileHandle <FileHandle>	File handle	
Protocol <Protocol>	Protocol through which the file was opened	Possible values are ((enums.ClientProtocol))
ControllerID <ControllerID>	ID of the controller through which the file was opened	

Example

Close an open file:

```
CLI> networking open-files close 35625 SMB 0
```

Output

```
.--------.--------.--------------.--------.--------.--------.--------.-------.
| Protoc | Contro | User         | Comput | Number |Connec | Idle   | Guest |
| ol     | ller   |              | er     | Open   |ted    | Time   |       |
|        | Id     |              |        | Files  |Time   |        |       |
|--------|--------|--------------|--------|--------|--------|--------|-------|
|SMB     | 0      | idffs1\user1 | ::ffff | 1      |00:14: | 00:00: | No    |
|        |        |              | :172.2 |        |16     | 00     |       |
|        |        |              | 2.69.1 |        |       |        |       |
|        |        |              | 8      |        |       |        |       |
'--------'--------'--------------'--------'--------'-------'--------'-------'
```

networking open-files close-file-by-path

Close all files with the specified path.

Format

```
networking open-files close-file-by-path /vol1/dir1/file1
```

Options

Option	Description	Format
FilePath <Path>	File path	

Example

Close an open file by path:

```
CLI> networking open-files close <FilePath>
```

Output

```
.----------.--------.--------------.--------.--------.-------.--------.-------.
| Protoc   | Contro | User         | Comput | Number |Connec | Idle   | Guest |
| ol       | ller   |              | er     | Open   |ted    | Time   |       |
|          | Id     |              |        | Files  |Time   |        |       |
|----------|--------|--------------|--------|-------|--------|--------|-------|
|SMB       | 0      | idffs1\user1 | ::ffff | 1      |00:14: | 00:00: | No    |
|          |        |              | :172.2 |        |16     | 00     |       |
|          |        |              | 2.69.1 |        |       |        |       |
|          |        |              | 8      |        |       |        |       |
'----------'--------'--------------'--------'--------'-------'--------'-------'
```

networking open-files close close-file-by-user

Close open files by user.

Format

```
networking open-files close close-file-by-user <AccessedBy>
```

Options

Option	Description	Format
AccessedBy <AccessedBy>	User who opened the file	

Example

Close an open file by user:

```
CLI> networking open-files close close-file-by-user idffs1\Jonathans2
```

Output

```
Confirmation: You are about to close opened file(s). Are you sure? All unsaved
changes done by client(s) will be lost. Filter details:
clientUserName='idffs1\Jonathans2'
Are you sure that you want to complete the operation? ( Yes / No ):Yes
```

networking open-files list

Display a list of SMB and NFS open files.

Format

```
networking open-files list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
—FilterByName <FilterByName>	Displays only the files matching the specified name	

Example

Display a list of open files:

```
CLI> networking open-files list
```

Output

```
.-------.---------------.--------------.---------.-----.----------.-----------.
| File  | User          | Controller ID| Protocol|Locks| Open Mode|File handle|
|-------|---------------|--------------|---------|-----|----------|-----------|
| \jvol1| DELL\jonathans| 0            | SMB     | 0   | Read Only| 35625     |
|-------|---------------|--------------|---------|-----|----------|-----------|
| \jvol2| cplsup3\Admin | 1            | SMB     | 0   | Special  | 108       |
|-------|---------------|--------------|---------|-----|----------|-----------|
| \jvol2| cplsup3\Admin | 1            | SMB     | 0   | Read Only| 117       |
'-------'---------------'--------------'---------'-----'----------'-----------'
```

networking open-files view

Display information about SMB and NFS open files.

Format

```
networking open-files view <FileHandle> <Protocol> <Controller>
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
FileHandle <FileHandle>	File handle	
Protocol <Protocol>	Protocol through which the file was opened. Possible values are ((enums.ClientProtocol))	
ControllerID <ControllerID>	ID of the controller through which the file was opened	

Example

Display information about open files:

```
CLI> networking open-files list 35625 SMB0
```

Output

```
Path            = jvol1
Accessed By     = Dell\Jonathans
Protocol        = SMB
Number Of Locks = 0
Mode            = Read ONly
File handle     = 35625
```

networking static-routes add

Add a static route for a destination subnet.

Format

```
networking static-routes add <DestinationNetworkID> <DestinationPrefix>
<GatewayIP>
```

Arguments

Argument	Description	Format
<DestinationNetworkID>	Network ID of the destination subnet	IP address in IPv4 or IPv6 format
<DestinationPrefix>	Prefix of the destination subnet	Integer (up to 126)
<GatewayIP>	Gateway for the destination subnet	IP address in IPv4 or IPv6 format

Example

Add a static route to a subnet with the address 172.51.0.0 16 172.41.0.50:

```
CLI> networking/static-routes> add 172.51.0.0 16 172.41.0.50
```

networking static-routes delete

Delete the static route for a destination subnet.

Format

```
networking static-routes delete <DestinationNetworkID> <DestinationPrefix>
```

Arguments

Argument	Description	Format
<DestinationNetworkID>	Network ID of the destination subnet	Existing network ID
<DestinationNetMask or DestinationPrefix>	Prefix of the destination subnet	Existing network prefix

Example

Delete the static route to a subnet with the address 10.1.100.0 and prefix 24:

```
CLI> networking static-routes delete 10.1.100.0 24
```

networking static-routes edit

Modify the gateway for a destination subnet.

Format

```
networking static-routes edit <DestinationNetworkID> <DestinationPrefix>
<GatewayIP>
```

Arguments

Argument	Description	Format
<DestinationNetworkID>	Network ID of the destination subnet	Existing network ID
<DestinationPrefix>	Prefix of the destination subnet	Existing network prefix
<GatewayIP>	Gateway for the destination subnet	IP address in IPv6 format

Example

Modify a static route to a subnet with the ID 172.51.0.0 and prefix 16 to use the gateway172.41.0.55:

```
CLI> networking/static-routes> edit 172.51.0.0 16 172.41.0.55
```

networking static-routes list

Display a list of the static routes.

Format

```
networking static-routes list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the current static routes:

```
CLI> networking static-routes list
```

Output

```
.------------------------.---------------------------.------------.
| Destination Network ID | Destination Prefix Length | Gateway IP |
|------------------------|---------------------------|------------|
| 172.51.00              | 16                        |172.41.2.65 |
.------------------------.---------------------------.------------.
```

networking static-routes view

Display static route settings for a destination subnet.

Format

```
networking static-routes view <DestinationNetworkID> <DestinationPrefix>
```

Arguments

Argument	Description	Format
<DestinationNetworkID>	Network ID of the destination subnet	Existing network ID
<DestinationPrefix>	Prefix of the destination subnet	Existing network prefix (integer)

Example

Display static route settings for a subnet with ID 172.51.0.0 and prefix 16:

```
CLI> networking static-routes view 172.51.0.0 16
```

Output

```
Destination Network ID = 172.51.0.0
Destination Prefix     = 16
Gateway IP             = 172.41.2.65
CLI/networking/static-routes>
```

networking subnets add

Add a subnet on the client network.

Format

```
networking subnets add <prefix length> [options]
```

Arguments

Argument	Description	Format
< Prefix length>	Prefix length of the subnet	Routing prefix size in CIDR notation, equivalent to the number of leading 1 bits in the routing subnet mask

Options

Option	Description	Format
-VLANTag <VLANTag>	VLAN ID of the subnet	Whole positive number (1 to 4094)
-PrivateIPs <PrivateIPs>	NAS controller IP addresses	Comma-separated list of private IP addresses in IPv6 or IPv4 format according to the number of controllers
-PublicIPs <PublicIPs>	Client VIPs	Comma-separated list of VIPs; must specify at least one

Example

Add a client subnet with prefix length 16 and the client VIPs 192.168.0.14 and 192.168.0.15 with NAS controller IP addresses 192.168.0.16 and 192.168.0.17:

```
CLI> networking subnets add 16 255.255.128.0 –PublicIPs
192.168.0.14,192.168.0.15 -PrivateIPs 192.168.0.16,192.168.0.17
```

networking subnets delete

Delete a subnet from the client network.

Format

```
networking subnets delete <NetworkID> <Prefix length>
```

Arguments

Argument	Description	Format
<NetworkID>	Network ID of the subnet	Existing network ID
< PrefixLength>	Prefix length of the subnet	Existing prefix length (integer)

Example

Delete a client subnet with the ID 192.168.0.0 and prefix 16:

```
CLI> networking subnets delete 192.168.0.0 16
```

networking subnets edit

Modify client network subnet settings.

Format

```
networking subnets edit <NetworkID> <Prefix length> {options}
```

Arguments

Argument	Description	Format
<NetworkID>	Current network ID of the subnet	Existing network ID
< PrefixLength>	Current prefix length of the subnet	Routing prefix size in CIDR notation, equivalent to the number of leading 1 bits in the routing subnet mask

Options

Option	Description	Format
-NewPrefixLength <NewPrefixLength>	New prefix length of the subnet	Integer
-VLANTag <VLANTag>	VLAN ID of the subnet	Whole positive number (1 to 4094)
-PrivateIPs <PrivateIPs>	NAS controller IP addresses	Comma-separated list of private IP addresses in IPv6 or IPv4 format
-PublicIPs <PublicIPs>	Client VIPs	Comma-separated list of VIPs

Example

Edit a client subnet with the ID 192.168.0.0 to change the prefix from 18 to 19:

```
CLI> networking subnets edit 192.168.0.0 18 –NewPrefix 19
```

networking subnets list

Display a list of the client network subnets.

Format

```
networking subnets list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the current client network subnets:

```
CLI> networking subnets list
```

Output

```
.-------------.----------------.----------.----------------.-----------------.
| Network Id  | Prefix length  | VLAN Tag | PrivateIPs     | PublicIPs       |
|-------------|----------------|----------|----------------|-----------------|
| 172.22.69.0 | 24             | 0        | 172.22.69.42,  | 172.22.69.40,   |
|             |                |          | 172.22.69.43   | 172.22.69.41    |
'-------------'----------------'----------'----------------'-----------------'
```

networking subnets view

Display client network subnet settings.

Format

```
networking subnets view <NetworkID> <Prefix>
```

Arguments

Argument	Description	Format
<NetworkID>	Network ID of the subnet	Existing network ID
<Netmask or Prefix>	Prefix length of the subnet	Routing prefix size in CIDR notation, equivalent to the number of leading 1 bits in the routing subnet mask

Example

Display the settings for a client network with the ID 172.22.69.0 and the prefix length 24:

```
CLI> networking subnets view 172.22.69.0 24
```

Output

```
Network Id = 172.22.69.0
Prefix     = 24
VLAN Tag   = 0
PrivateIPs = 172.22.69.42,172.22.69.43
PublicIPs  = 172.22.69.40,172.22.69.41
```

system administrators add

Add administrator privileges to a user.

Format

```
system administrators add <UserName> {options}
```

Arguments

Argument	Description	Format
<UserName>	Name of the user that will become administrator	Length must be less than 97 characters

Options

Option	Description	Format
-Email <Email>	Email address of the administrator	Email address in the following format: 'xxx@xxx.xxx'
-Scope <Scope>	Administrator scope	Possible values are NASClusterAdministrator, NASVolumeAdministrator
-EnableNASVolumesSeverity <EnableNASVolumesSeverity>	Indicate whether events from the NAS volumes workspace should be sent by email to the administrator	Possible values are Yes, No
-NASVolumesSeverity <NASVolumesSeverity>	Severity of the events from the NAS volumes workspace that will be sent by email to the administrator	Possible values are All, Major
-EnableAccessControlSeverity <EnableAccessControlSeverity>	Indicate whether events from the access control workspace should be sent by email to the administrator	Possible values are Yes, No

Option	Description	Format
-AccessControlSeverity <AccessControlSeverity>	Severity of the events from the access control workspace that will be sent by email to the administrator	Possible values are All, Major
-EnableNetworkingSeverity <EnableNetworkingSeverity>	Indicate whether events from the performance and connectivity workspace should be sent by email to the administrator	Possible values are Yes, No
-NetworkingSeverity <NetworkingSeverity>	Severity of the events from the performance and connectivity workspace that will be sent by email to the administrator	Possible values are All, Major
-EnableHardwareSeverity <EnableHardwareSeverity>	Indicate whether events from the hardware workspace should be sent by email to the administrator	Possible values are Yes, No
-HardwareSeverity <HardwareSeverity>	Severity of the events from the hardware workspace that will be sent by email to the administrator	Possible values are All, Major
-EnableSystemSeverity <EnableSystemSeverity>	Indicate whether events from the system workspace should be sent by email to the administrator	Possible values are Yes, No
-SystemSeverity <SystemSeverity>	Severity of the events from the system workspace that will be sent by email to the administrator	Possible values are All, Major

Example

Add a cluster administrator named Administrator2 with the email address admin@domain.com and enable email for all hardware events:

```
CLI> system administrators add Administrator2 -Email admin@domain.com -Scope
NASClusterAdministrator -EnableHardwareSeverity Yes -HardwareSeverity All
```

system administrators delete

Delete the administrator privileges from the user.

Format

```
system administrators delete <UserName>
```

Arguments

Argument	Description	Format
<UserName>	Name of the administrator	Existing administrator user name

Example

Delete the administrator privileges from an administrator named Administrator2:

```
CLI> system administrators delete Administrator2
```

system administrators edit

Modify administrator settings.

Format

```
system administrators edit <UserName> {options}
```

Arguments

Argument	Description	Format
<UserName>	Name of the administrator	Existing administrator user name

Options

Option	Description	Format
-Email <Email>	Email address of the administrator	Email address in the following format: 'xxx@xxx.xxx'
-Scope <Scope>	Administrator scope	Possible values are NASClusterAdministrator, NASVolumeAdministrator
-EnableNASVolumesSeverity <EnableNASVolumesSeverity>	Indicate whether events from the NAS volumes workspace should be sent by email to the administrator	Possible values are Yes, No
-NASVolumesSeverity <NASVolumesSeverity>	Severity of the events from the NAS volumes workspace that will be sent by email to the administrator	Possible values are All, Major
-EnableAccessControlSeverity <EnableAccessControlSeverity>	Indicate whether events from the access control workspace should be sent by email to the administrator	Possible values are Yes, No
-AccessControlSeverity <AccessControlSeverity>	Severity of the events from the access control workspace that will be sent by email to the administrator	Possible values are All, Major
-EnableNetworkingSeverity <EnableNetworkingSeverity>	Indicate whether events from the performance and connectivity	Possible values are Yes, No

Option	Description	Format
	workspace should be sent by email to the administrator	
-NetworkingSeverity <NetworkingSeverity>	Severity of the events from the performance and connectivity workspace that will be sent by email to the administrator	Possible values are All, Major
-EnableHardwareSeverity <EnableHardwareSeverity>	Indicate whether events from the hardware workspace should be sent by email to the administrator	Possible values are Yes, No
-HardwareSeverity <HardwareSeverity>	Severity of the events from the hardware workspace that will be sent by email to the administrator	Possible values are All, Major
-EnableSystemSeverity <EnableSystemSeverity>	Indicate whether events from the system workspace should be sent by email to the administrator	Possible values are Yes, No
-SystemSeverity <SystemSeverity>	Severity of the events from the system workspace that will be sent by email to the administrator	Possible values are All, Major

Example

Change the email address of an administrator named Administrator2 to storage@domain.com and enable email for all hardware events:

```
CLI> system administrators edit Administrator2 -Email storage@domain.com -
EnableHardwareSeverity Yes -HardwareSeverity All
```

system administrators list

Display a list of the administrators.

Format

```
system administrators list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the current administrators:

```
CLI> system administrators list
```

Output

```
.----------------.---------------------.--------.---------------------------.
| User Name      | Email               | SSHKey | Scope                     |
|----------------|---------------------|--------|---------------------------|
| Administrator  | user@jonathan-linux2|ssh-rsa | NAS cluster administrator |
|----------------|---------------------|--------|---------------------------|
| Administrator2 | storage@domain.com  |        | NAS cluster administrator |
'----------------'---------------------'--------'---------------------------'
```

system administrators view

Display administrator settings.

Format

```
system administrators view <UserName>
```

Arguments

Argument	Description	Format
<UserName>	Name of the administrator	Existing administrator user name

Example

Display the current settings for an administrator named Administrator2:

```
CLI> system administrators view Administrator2
```

Output

```
User Name                      = Administrator2
Email                          = storage@domain.com
MachineName                    = 172.41.200.145
SSHKey                         = ssh-rsa
Scope                          = NAS cluster administrator
Enable NAS Volumes Severity    = Yes
NAS Volumes Severity           = Major
Enable Access Control Severity = Yes
Access Control Severity        = Major
Enable Networking Severity     = Yes
Networking Severity            = Major
Enable Hardware Severity       = Yes
Hardware Severity              = All
Enable System Severity         = Yes
System Severity                = Major
```

system administrators passwordless-access add-ssh-keys

Add a secure shell handling (SSH) key.

This command allows the Administrator to use a private self-generated SSH key for authenticating against FluidFS CLI.

Format

```
system administrators passwordless-access add-ssh-keys <UserName> <MachineName>
<SSHKey>
```

Arguments

Argument	Description	Format
<UserName>	Name of the user that will become administrator	Length must be less than 97 characters
<MachineName>	Name of machine	
<SSHKey>	Public SSH key for a specified machine that will allow the administrator to enter the CLI without a user name and password	Existing SSH key

system administrators passwordless-access del-ssh-key

Delete a secure shell handling (SSH) key.

Format

```
system administrators passwordless-access del-ssh-key <UserName> <MachineName>
<SSHKey>
```

Arguments

Argument	Description	Format
<UserName>	Name of the user that will become administrator	Length must be less than 97 characters
<MachineName>	Name of machine	
<SSHKey>	Public SSH key for a specified machine that will allow the administrator to enter the CLI without a user name and password	Existing SSH key

system administrators passwordless-access modify-ssh-key

Modify a secure shell handling (SSH) key.

Format

```
system administrators passwordless-access modify-ssh-key <UserName>
<MachineName> <SSHKey>
```

Arguments

Argument	Description	Format
<UserName>	Name of the user that will become administrator	Length must be less than 97 characters
<MachineName>	Name of machine	
<SSHKey>	Public SSH key for a specified machine that will allow the administrator to enter the CLI without a user name and password	Existing SSH key

system background-operations recent

Display a list of recent background operations.

Format

```
system background-operations recent
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of recent background operations:

```
CLI> system background-operations recent
```

Output

```
.------------.------------------.---------.----------.----------.---------------
---------.------------.-----------.---------.---------.
| Background | SessionId        |RequestId|RequestTag| Operation|
ObjectTyp              | StartTime  | EndTime   | Rollback| Status  |
| OperationID|                  |         |          |
|                         |            |           |         |         |
|------------|------------------|---------|----------|----------|---------------
---------|------------|-----------|---------|---------|
| 5          | 51FFC00B63B05F297| 196     | Default  | Action   |
RunSMBFileAccessibility| 05-Aug-14  | 05-Aug-13 | No      | Finished|
|            | E89465B0AC6FE3D  |         |          |          |
Diagnostic             | 14:03:48   | 14:44:04  |         |         |
|------------|------------------|---------|----------|----------|---------------
---------|------------|-----------|---------|---------|
| 4          | 51FFC00B63B05F29 | 190     | Default  | Action   |
RunClientConnectivity  | 05-Aug-14  | 05-Aug-13 | No      | Finished|
```

```
|            | 7E9465B0AC6FE3D  |          |          |          |
Diagn                  | 13:33:59   | 14:14:20  |         |         |
|------------|------------------|---------|----------|----------|---------------
---------|------------|-----------|---------|---------|
| 3          | 51DFC15C08EA1A7E9| 56275   | Default  | Action   |
ServicePac             | 12-Jul-14  | 12-Jul-13 | No      | Finished|
|            | BAF0B871DB85E6A  |          |          |
|                         | 14:15:51   | 14:20:52  |         |         |
'------------'------------------'---------'----------'----------'---------------
---------'------------'-----------'---------'---------'
```

system background-operations running

Display a list of running background operations.

Format

```
system background-operations running
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the current running background operations:

Output

```
CLI> system background-operations running
```

Background OperationID	Session ID	Request ID	Request Tag	Operation	ObjectType	StartTime	Rollback	Progress
12	52010B0C63B0505A55A9545CB374A0FB9	4	Default	Action	RunSMBFileAccessibilityDiagnostic	06-Aug-13 9:43:27	No	7

system background-operations view-running-operations-status

Display the status of running background operations according to a specific ID.

Format

```
system background-operations view-running-operations-status
<BackgroundOperationID>
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
<BackgroundOperationID>	ID of the background operation	

Example

Display a list of running background operations:

```
CLI> system background-operations view-running-operations-status
BackgroundOperationID 14
```

Output

```
.------------.------------------.----------.-----------.----------.-----------.-
----------.----------.---------.---------.
| Backgroun  | SessionId        | RequestId| RequestTag| Operation| ObjectType|
StartTime | EndTime  | Rollback| Status  |
| OperationI |                  |          |           |          |
|            |          |         |          |
|------------|------------------|----------|-----------|----------|-----------|-
----------|----------|---------|---------|
| 14         | 51FFC00B63B05F297|122366    | Default   | Action   | Service   |
10-Dec-14 | 05-Aug-13| No      | Finished|
|            | E89465B0AC6FE3D  |          |           |          | PackRun   |
14:03:48  | 14:44:04 |         |         |
|------------'------------------'----------'-----------'----------'-----------'-
----------'----------'---------'---------'
```

system background-operations wait-to-finish

Block the command prompt until the current background process completes or the specified timeout is reached, whichever occurs first.

Format

```
system background-operations wait-to-finish <TimeoutInSec>
```

Arguments

Argument	Description	Format
<TimeoutInSec>	Amount of time to block the command prompt waiting for the background operation to finish	Whole positive number (in seconds)

Example

Block the command prompt for 20 seconds or until the current background process completes, whichever occurs first:

```
CLI> system background-operations wait-to-finish 20
```

system data-protection antivirus-scanners add

Add an antivirus server.

Format

```
system data-protection antivirus-scanners add <Name> <Port>
```

Arguments

Argument	Description	Format
<Name>	Antivirus server	Existing antivirus server host name or IP address. An IP address must be in IPv6 or IPv4 format. A host name must contain one or more sub names, each separated by a dot. Each sub name can contain letters, numbers, or hyphens, but cannot start or end in a hyphen.
<Port>	Antivirus server port	Whole positive number

Example

Add an antivirus server with the host name av1.domain.com that the FluidFS cluster should connect to on port 80:

```
CLI> system data-protection antivirus-scanners add av1.domain.com 80
```

system data-protection antivirus-scanners delete

Delete an antivirus server.

Format

```
system data-protection antivirus-scanners delete <Name> <Port>
```

Arguments

Argument	Description	Format
<Name>	Antivirus server	Existing antivirus server host name or IP address
<Port>	Antivirus server port	Existing antivirus server port

Example

Delete an antivirus server with the host name av1.domain.com that the FluidFS cluster connects to on port 80:

```
CLI> system data-protection antivirus-scanners delete av1.domain.com 80
```

system data-protection antivirus-scanners view

Display a list of antivirus servers.

Format

```
system data-protection antivirus-scanners view
```

Example

Display a current list of antivirus servers added to the FluidFS cluster:

```
CLI> system data-protection antivirus-scanners view
```

Output

```
Hosts =  .-----------------.------.
         | Name            | Port |
         |-----------------|------|
         | 74.125.225.113 | 80   |
         '-----------------'------'
```

system data-protection cluster-partnerships add

Create a partnership between two FluidFS clusters.

NOTE: If two FluidFS clusters have a firewall between two them, TCP ports 10550, 10551, and 10561 –10576 should be open for the client VIPs and all NAS controller IP addresses.

Format

```
system data-protection cluster-partnerships add <RemoteIP> {options}
```

Arguments

Argument	Description	Format
<RemoteIP>	IP address of the remote system	IP address in IPv6 or IPv4 format

Options

Option	Description	Format
-UserName <UserName>	Administrator of the remote system	Administrator user name of the remote system
-Password <Password>	Password of the remote system administrator	Password of the remote system

Example

Create a partnership with a FluidFS cluster that has the IP address 172.22.69.40 and has an administrator named Administrator with the password Stor@ge!:

```
CLI> system data-protection cluster-partnerships add 172.22.69.40 -UserName
Administrator -Password Stor@ge!
```

system data-protection cluster-partnerships delete

Delete a partnership between two FluidFS clusters.

Format

```
system data-protection cluster-partnerships delete <RemoteSystemName>
```

Arguments

Argument	Description	Format
<RemoteSystemName>	Name of the remote system	Existing remote system name

Example

Delete a partnership with a FluidFS cluster named idffs2:

```
CLI> system data-protection cluster-partnerships delete idffs2
```

system data-protection cluster-partnerships delete-local-partnership-by-ID

Delete a cluster partnership by ID.

This command only deletes the partnerhip locally.

Format

```
system data-protection cluster-partnerships delete-local-partnership-by-ID
<ClusterID>
```

Arguments

Argument	Description	Format
<ClusterID>	Cluster ID	Existing cluster ID

Example

Delete a partnership with a FluidFS cluster ID of 12345:

```
CLI> system data-protection cluster-partnerships delete-local-partnership-by-ID
12345
```

system data-protection cluster-partnerships edit

Modify the partnership settings.

Format

```
system data-protection cluster-partnerships edit <RemoteSystemName> {options}
```

Arguments

Argument	Description	Format
<RemoteSystemName>	Name of the remote system	Existing remote system name

Options

Option	Description	Format
-ClusterIP <ClusterIP>	IP address of the remote system	IP address in IPv6 or IPv4 format

Example

Modify the partnership with a FluidFS cluster named idffs1 to change the cluster IP address to 172.22.69.33:

```
CLI> system data-protection cluster-partnerships edit idffs1 -ClusterIP
172.22.69.33
```

system data-protection cluster-partnerships list

Display a list of the FluidFS cluster's partnerships.

Format

```
system data-protection cluster-partnerships list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of the FluidFS cluster's partnerships:

```
CLI> system data-protection cluster-partnerships list
```

Output

```
.-------------------------.-------------------.-----------------.----------.
| Partner Id              | Remote System Name| Remote System Ip| Status   |
|-------------------------|-------------------|-----------------|----------|
| 497fd4e8-3855-46dc-af9a-|                   |                 |          |
|           1f9d8c723f13  | Sup2-6CC5J5J      | 172.41.2.95     | Available|
'-------------------------'-------------------'-----------------'----------'
```

system data-protection cluster-partnerships update-protocol-version

Upgrade the communication type for a remote FluidFS cluster.

Format

```
system data-protection cluster-partnerships update-protocol-version
<RemoteSystemName> {options}
```

Arguments

Argument	Description	Format
<RemoteSystemName>	Name of the remote system	Existing remote system name

Options

Option	Description	Format
-UserName <UserName>	Administrator of the remote system	Administrator user name of the remote system
-Password <Password>	Password of the remote system administrator	Password of the remote system

Example

Update the communication type for a remote FluidFS cluster named idffs2 that has an administrator named Administrator with the password Stor@ge!:

```
CLI> system data-protection cluster-partnerships update-protocol-version idffs2
-UserName Administrator -Password Stor@ge!
```

system data-protection file-system resiliency disable

Disable file system metadata resiliency on new volumes.

This attribute applies to when the volume is created and the value is set to No.

NOTE: When a new volume is created, its resilience attributes for its lifetime are decided according to the current value of this parameter.

Format

```
system data-protection file-system resiliency disable
```

system data-protection file-system resiliency enable

Enable file system metadata resiliency on volumes created when the value is set to Yes.

The attribute is applied to a volume when it is created, and is never changed for that volume.

Format

```
system data-protection file-system resiliency enable
```

system data-protection file-system resiliency view

Display file system resiliency configuration.

The configuration applies to volumes when they are created.

Format

```
system data-protection file-system resiliency view
```

system data-protection NDMP-configuration edit

Modify NDMP settings.

NOTE: To delete DMA servers, you must provide an empty list in the form of " ".

Format

```
system data-protection NDMP-configuration edit {options}
```

Options

Option	Description	Format
-DMAServers <DMAServers>	DMA servers	Comma-separated list of IP addresses in IPv4 or IPv6 format
-ClientPort <ClientPort>	Client port number	Whole positive number

Example

Add an NDMP server with the IP address 74.125.225.113 that uses the client port number 10000:

```
CLI> system data-protection NDMP-configuration edit -DMAServers 74.125.225.113 -
ClientPort 10000
```

system data-protection NDMP-configuration update-user

Modify NDMP user settings (name and password).

Format

```
system data-protection NDMP-configuration update-user <Username> {options}
```

Arguments

Argument	Description	Format
<Username>	NDMP user name	Maximum length of 64 characters, and can contain letters, numbers, and underscores

Options

Option	Description	Format
-Password <Password>	NDMP user password	Must include at least seven characters and should contain at least three of the following

Option	Description	Format
		character types: lowercase character, uppercase character, digit, special characters (for example, +, ?, and *)

Example

Change the NDMP username to backupuser and password to Password123:

```
CLI> system data-protection NDMP-configuration update-user backupuser -Password
Password123
```

system data-protection NDMP-configuration view

Display NDMP settings.

Format

```
system data-protection NDMP-configuration view
```

Example

Display the current NDMP settings:

```
CLI> system data-protection NDMP-configuration view
```

Output

```
DMAServers  = 74.125.225.113
User Name   = backup_user
Client Port = 10000
```

system data-protection QOS add

Create a new QoS entity with name and bandwidth allocations.

Format

```
system data-protection QOS add <name> {speed}
```

Arguments

Argument	Description	Format
<name>	QOS entity name	

Options

Option	Description	Format
-Limitation_speed <speed>	Bandwidth allocation as KBps	

Example

Create a new QoS entity with name Entity1 and bandwidth speed 100 KBps:

```
CLI> system data-protection QOS add Entity1 -Name -100KBps speed
```

system data-protection QOS delete

Delete a QoS entity.

Format

```
system data-protection QOS delete <name> {speed}
```

Arguments

Argument	Description	Format
<name>	QOS entity name	

Example

Delete a QoS entity with name Entity1:

```
CLI> system data-protection QOS delete Entity1 -Name
```

system data-protection QOS list

List all the QoS entries.

Format

```
system data-protection QOS list
```

Arguments

Argument	Description	Format
<name>	QOS entity name	

Options

Option	Description	Format
-Limitation_speed <speed>	Bandwidth allocation as KBps	

Example

List all the QoS entities:

```
CLI> system data-protection QOS list
```

system data-protection QOS modify

Modify a QoS entity.

Format

```
system data-protection QOS modify <name> {speed} {new name}
```

Arguments

Argument	Description	Format
<name>	QoS entity name	

Options

Option	Description	Format
-Limitation_speed <speed>	Bandwidth allocation as KBps	
-new name <new name>	New QoS name	

Example

Change the name of a QoS entity to NewName:

```
CLI> system data-protection QOS modify Entity1 -Name  NewName -new name
```

system data-protection QOS modify-schedule

Modify a limited timespan (hour) for some or all days in a QoS (quality of service) schedule.

Format

```
system data-protection QOS modify-schedule <name> <hour> [Monday] [Tuesday]
[Wednesday] [Thursday] [Friday] [Saturday] [Sunday]
```

Arguments

Argument	Description	Format
<name>	QoS entity name	
<hour>	Hour in a day	0–23

Options

Option	Description	Format
-Monday, -Tuesday, -Wednesday, -Thursday, -Friday, -Saturday, -Sunday	Bandwidth allocation percentage	10–100%
-new name <new name>	New QoS name	

Example

Change the limited hour on Mondays:

```
CLI> system data-protection QOS modify-schedule Entity1 -name  Monday -hour
```

system data-protection QOS view

View details of a QoS entity.

Format

```
system data-protection QOS view <name>
```

Arguments

Argument	Description	Format
<name>	QOS entity name	

Example

View details of Entity1:

```
CLI> system data-protection QOS view Entity1
```

system data-protection tape-devices add

Add a new Fibre Channel tape device.

The device should be configured to use a dynamic block size.

Format

```
system data-protection tape-devices add <DeviceName> <DeviceType>
```

Arguments

Argument	Description	Format
<DeviceName>	Name of the tape device	The name is the physical ID of the device, and needs to include

Argument	Description	Format
		the device type, model, SCSI ID, and the destination port of the tape drive.
<DeviceType>	Type of tape device	Possible values are Tape (actual tape), Library (media library)

Example

Add a new tape device:

```
CLI> system data-protection tape-devices add tape:IBM:ULT3580-HH4 tape
```

system data-protection tape-devices delete

Delete a Fibre Channel tape device.

Format

```
system data-protection tape-devices delete <DeviceName>
```

Argument

Argument	Description	Format
<DeviceName>	Name of the tape device	Existing tape device name

Example

Delete a tape device:

```
CLI> system data-protection tape-devices delete tape:IBM:ULT3580-HH4
```

system data-protection tape-devices edit

Modify the settings for a Fibre Channel tape device.

Format

```
system data-protection tape-devices modify <DeviceName> -DeviceType
```

Argument

Argument	Description	Format
<DeviceName>	Name of the tape device	Existing tape device name

Option

Option	Description	Format
-DeviceType <DeviceType>	Type of tape device	Possible values are Tape (actual tape), Library (media library)

Example

Modify a tape device:

```
CLI> system data-protection tape-devices modify tape:IBM:ULT3580-HH4 -
DeviceType tape
```

system data-protection tape-devices list

List all Fibre Channel tape devices.

Format

```
system data-protection tape-devices list
```

Example

Display a list of all tape devices:

```
CLI> system data-protection tape-devices list
```

Output

```
Name              = Name of tape device
Device type       = Type of tape device
Status summary    = Accessibility status (Optimal, Partial, Fail)
Controller status = Status of each controller (Connected, Not connected, N/A)
```

system data-protection tape-devices view

View a new Fibre Channel tape device.

Format

```
system data-protection tape-devices view <DeviceName>
```

Arguments

Argument	Description	Format
<DeviceName>	Name of the tape device	Existing name of tape device

Example

View information about a new tape device:

```
CLI> system data-protection tape-devices view tape:IBM:ULT3580-HH4
```

Output

```
Name              = Name of tape device
Device type       = Type of tape device
Status summary    = Accessibility status (Optimal, Partial, Fail)
Controller status = Status of each controller (Connected, Not connected, N/A)
```

system EM recipients add

Add an EM recipient.

CAUTION: This command should be used only by Dell Technical Support.

Format

```
system EM recipients add <URL> <IsActive> <IsEventsReceiver> <DataCollectorID>
```

Arguments

Argument	Description	Format
<URL>	URL or IP address of the EM data collector	Comma-separated list of recipients. Must be less than 255 characters.
<IsActive>	Indicates for EM if this Data Collector is actively managed by this cluster	
<IsEventsReceiver>	Indicates if this Data Collector expects to receive events from the cluster	
<DataCollectorID>	GUID of data collector or empty string	

Example

Add an EM recipient https://172.22.69.18:3033/dsfsevent:

```
CLI> system EM recipients add https://172.22.69.18:3033/dsfseventYes Yes
```

system EM recipients delete

Delete EM recipients.

CAUTION: This command should be used only by Dell Technical Support.

Format

```
system EM recipients delete <URL>
```

Arguments

Argument	Description	Format
<URL>	URL or IP address of the EM data collector	Comma-separated list of recipients. Must be less than 255 characters.

Example

Delete an EM recipient https://172.22.69.18:3033/dsfsevent:

```
CLI> system EM recipients delete https://172.22.69.18:3033
```

system EM recipients edit

Modify the EM recipients.

CAUTION: This command should be used only by Dell Technical Support.

Format

```
system EM recipients edit <Recipients>
```

Arguments

Argument	Description	Format
<Recipients>	EM recipients	Comma-separated list of recipients. Must be less than 255 characters.

Example

Add an EM recipient https://172.22.69.18:3033/dsfsevent:

```
CLI> system EM recipients edit https://172.22.69.18:3033/dsfsevent
```

system EM recipients view

Display the EM recipients configuration.

Format

```
system EM recipients view
```

Example

Display the current EM recipients configuration:

```
CLI> system EM recipients view
```

Output

```
.-------------------------.----------------------------.----------.-------------------.
| URL                     | Data Collector ID          | Is Active| Is Events Receiver|
|-------------------------|----------------------------|----------|-------------------|
| https://10.48.29.1:3033/| 782703d4-4b17-4b3f-9539-45e| Yes      | Yes               |
| /dsfsevent              |3ad5a084                    | Yes      | Yes               |
|-------------------------|----------------------------|----------|-------------------|
| https://172.41.200.16:  | cedbc17f-f5e5-437e-bef8-7b | No       | Yes               |
| 3033/dsfsevent          | 30648602ad                 | Yes      | Yes               |
|-------------------------|----------------------------|----------|-------------------|
| https://10.48.29.1:3033 | 782703d4-4b17-4b3f-9539-45 | Yes      | Yes               |
| /dsfsevent              | ef3ad5a084                 | Yes      | Yes               |
'-------------------------'----------------------------'----------'-------------------'
```

system event-filter update-filter

Modify the event filter settings.

Format

```
system event-filter update-filter <Workspace> {options}
```

Arguments

Argument	Description	Format
<Workspace>	Workspace to which the events belong	Possible values are ((enums.EventWorkspace))

Options

Option	Description	Format
-Enabled <Enabled>	Indicate whether SNMP traps should be sent for the events from this workspace. The optional values are Yes or No.	
-Severity<Severity>	Severity of the events that will be sent as SNMP traps from this workspace. Possible values are ((enums.FilterLevel)).	

system event-filter view

Display the event filter settings.

Format

```
system event-filter view
```

Output

```
.---------------------------.---------.----------.
| Workspace                 | Enabled | Severity |
|---------------------------|---------|----------|
| NasVolumes                | Yes     | All      |
|---------------------------|---------|----------|
| AccessControl             | Yes     | All      |
|---------------------------|---------|----------|
| Performance & Connectivity | Yes     | All      |
|---------------------------|---------|----------|
| Hardware                  | Yes     | All      |
|---------------------------|---------|----------|
| System                    | Yes     | All      |
|---------------------------|---------|----------|
| SACL Audit                | Yes     | All      |
'---------------------------'---------'----------'
```

system file-access-notifications disable

Disable file access notifications.

Format

```
system file-access-notifications disable
```

Example

Disable external auditing of the system:

```
CLI> system file-access-notifications disable
```

system file-access-notifications enable

Enables external auditing.

Format

```
system file-access-notifications enable
```

Example

Enable external auditing of the system:

```
CLI> system file-access-notifications enable
```

system file-access-notifications view

View external auditing status.

Format

```
system file-access-notifications view
```

Example

View external auditing status:

```
CLI> system file-access-notifications view
```

Output

```
Allow external servers auditing = Yes/No
```

system file-access-notifications subscribers add

Add an external auditing subscriber to file access notifications.

Format

```
system file-access-notifications subscribers add
```

Arguments

Argument	Description	Format
<SubscriberID>	Auditing servers cluster unique name	
<Port>	Auditing server port used for FluidFS Notify interface	
<Encryption_Enabled>	Enable or disable RPC encryption	
<Security_Blob> (optional)	Security blob used for RPC encryption	
<IP_Addr/Hostname>	List of IP addresses or host names of the auditing servers	Comma-separated list of IPs

Example

Add a subscriber to file access notifications:

```
CLI> system file-access-notifications <subscriberID> add
```

system file-access-notifications subscribers delete

Delete an external auditing subscriber from the file access notifications list.

Format

```
system file-access-notifications subscribers delete
```

Example

Delete an external auditing status:

```
CLI> system file-access-notifications <subscriberID> delete
```

Arguments

Argument	Description	Format
<SubscriberID>	Auditing servers cluster unique name	

system file-access-notifications subscribers edit

Edit external auditing subscriber settings such as IP or port.

Format

```
system file-access-notifications subscribers edit
```

Example

View the external auditing status:

```
CLI> system file-access-notifications <subscriberID> edit <port>
```

Arguments

Argument	Description	Format
<SubscriberID>	Auditing servers cluster unique name	
<Port>	Auditing server port used for FluidFS Notify interface	
<Encryption_Enabled>	Enable or disable RPC encryption	
<Security_Blob> (optional)	Security blob used for RPC encryption	
<IP_Addr/Hostname>	List of IP addresses or host names of the auditing servers	Comma-separated list of IPs

system file-access-notifications subscribers list

List all the auditing subscribers configured to receive file-access notifications.

Format

```
system file-access-notifications subscribers list
```

Example

View the external auditing status:

```
CLI> system file-access-notifications subscribers list
```

system-internal BMC-network disable

Disable BMC network settings.

Format

```
system-internal BMC-network disable <IPs> <Netmask or Prefix> <Gateway>
```

Arguments

Argument	Description	Format
<IPs>	Comma-separated list of IP addresses (IP address for each NAS controller)	Existing network IP address in IPv6 or IPv4 format
<Netmask or Prefix>	Netmask (IPv4) or Prefix (IPv6) of the BMC network	Existing network netmask or prefix
<Gateway>	Gateway for the BMC network	IP address in IPv6 or IPv4 format

system-internal BMC-network edit

Edit the BMC network settings.

Format

```
system-internal BMC-network edit [options]
```

Arguments

Argument	Description	Format
<IPs>	Comma-separated list of IP addresses (IP address for each NAS controller)	Existing network IP address
<Netmask or Prefix>	Netmask of the BMC network	Existing network netmask

Argument	Description	Format
<Gateway>	Gateway for the BMC network	IP address in IPv4 format

system-internal BMC-network enable

Enable BMC network settings.

Format

```
system-internal BMC-network enable [Options]
```

Arguments

Argument	Description	Format
<IPs>	Comma-separated list of IP addresses (IP address for each NAS controller)	Existing network IP address in IPv4 format
<Netmask or Prefix>	Netmask of the BMC network	Existing network netmask
<Gateway>	Gateway for the BMC network	IP address in IPv4 format

system-internal BMC-network view

Display the BMC network settings.

Format

```
system-internal BMC-network view
```

Output

```
Enabled = No
IPs     =
Netmask = 255.255.255.0
Gateway = 0.0.0.0
```

system internal cluster-name set

Modify the FluidFS cluster name.

Format

```
system internal cluster-name set <ClusterName>
```

Arguments

Argument	Description	Format
<ClusterName>	New FluidFS cluster name	Starts with a letter, and can contain letters, digits,

Argument	Description	Format
		underscores and hyphens, but cannot end in a hyphen. It can be up to 15 characters long.

Example

Change the FluidFS cluster name to idffs1:

```
CLI> system internal cluster-name set idffs1
```

system internal cluster-name view

Display the FluidFS cluster name.

Format

```
system internal cluster-name view
```

Example

Display the current FluidFS cluster name:

```
CLI> system internal cluster-name view
```

Output

```
Cluster Name = idffs2
```

system internal diagnostics list

Display the list of diagnostics.

Format

```
system internal diagnostics list
```

Option

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of available diagnostics:

```
CLI> system internal diagnostics list
```

Output

```
-------------------.-------.-----------.-------------------------------.-------------------------------.
| Diagnostics Name | Status| Last      | File name of main Diagnostics| File name of Logs Diagnostics|
|------------------|-------|-----------|-------------------------------|-------------------------------|
| General          | Idle  | 29-O      | Summary.3859981732.29_10_20   | Logs.3859981732.29_10_2014-   |
|                  |       | 12:46     | 14-12_46_39.tar.gz            | 12_46_39.tar.gz               |
|------------------|-------|-----------|-------------------------------|-------------------------------|
| File system core | Idle  | 25-Nov-14 | Summary.3690686228.25_11_     | Logs.3690686228.25_11_2014-   |
| General          |       | 14:14:20  | 14-14_14_20.tar.gz            | 14_14_20.tar.gz               |
|------------------|-------|-----------|-------------------------------|-------------------------------|
| Network          | Idle  |           |                               |                               |
|------------------|-------|-----------|-------------------------------|-------------------------------|
| Performance      | Idle  |           |                               |                               |
|------------------|-------|-----------|-------------------------------|-------------------------------|
|Client connectivity |Idle |           |                               |                               |
|------------------|-------|-----------|-------------------------------|-------------------------------|
|File accessibility | Idle |           |                               |                               |
|------------------|-------|-----------|-------------------------------|-------------------------------|
| SMB and NFS      | Idle  |           |                               |                               |
'------------------'-------'-----------'-------------------------------'-------------------------------'
```

system internal diagnostics run-client-connectivity-diagnostic

Run the client connectivity diagnostic for an SMB or NFS client.

In case of a client connectivity problem, ask the client to try connecting after the diagnostic is run. The diagnostic files should be downloaded by FTP from the following directory:

ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/diagnostic/archive/ClientConnectivityDiagnostic/

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see system internal security FTP configuration enable to re-enable FTP before using this command.

Format

```
system internal diagnostics run-client-connectivity-diagnostic <ClientIP>
<Protocol>
```

Arguments

Argument	Description	Format
<ClientIP>	IP address of the client	Existing client IP address in IPv6 or IPv4 format
<Protocol>	Client protocol	Possible values are SMB, NFS
-RepositoryType <RepositoryType>	Type of repository on which to run diagnostics	RepositoryType can be NAS_VOLUME or FTP. If it is NAS_VOLUME, then the values of RepositoryVolume and RepositoryPath determine where the files will be stored. The files can then be accessed by a share or export to the volume.
-RepositoryVolume <RepositoryVolume>	Volume on the repository on which to run diagnostics	

Argument	Description	Format
-RepositoryPath <RepositoryPath>	Path of the repository on which to run diagnostics	If it is FTP, the diagnostics should be transferred from the cluster via ftp under ftp://(UserName)@(ClusterVIP):44421/diagnostics/archive/.

Example

Run the client connectivity diagnostic for an SMB client with the IP address 172.22.69.18:

```
CLI> system internal diagnostics run-client-connectivity-diagnostic
172.22.69.18 SMB
```

system internal diagnostics run-file-system-diagnostic

Run the core file-system diagnostic.

If the problem occurs only while certain activity is running against the FluidFS cluster, retry after the diagnostic is run. The diagnostic files should be downloaded by FTP from the following directory:

ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/diagnostic/archive/FileSystemDiagnostic/

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see `system internal security FTP configuration enable` to reenable FTP before using this command.

Format

```
system internal diagnostics run-file-system-diagnostic
```

Arguments

Argument	Description	Format
<ClientIP>	IP address of the client	Existing client IP address in IPv6 or IPv4 format
<Protocol>	Client protocol	Possible values are SMB,, NFS
-RepositoryType <RepositoryType>	Type of repository on which to run diagnostics	RepositoryType can be NAS_VOLUME or FTP. If it is NAS_VOLUME, then the values of RepositoryVolume and RepositoryPath determine where the files will be stored. The files can then be accessed by a share or export to the volume.
-RepositoryVolume <RepositoryVolume>	Volume on the repository on which to run diagnostics	

Argument	Description	Format
-RepositoryPath <RepositoryPath>	Path of the repository on which to run diagnostics	If it is FTP, the diagnostics should be transferred from the cluster via ftp under ftp://(UserName)@(ClusterVIP):44421/diagnostics/archive/.

Example

Run the core file-system diagnostic:

```
CLI> system internal diagnostics run-file-system-diagnostic -RepositoryType
TypeA
```

system internal diagnostics run-general-diagnostic

Run the general diagnostic.

The diagnostic files should be downloaded by FTP from the following directory:

ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/diagnostic/archive/GeneralSystemDiagnostic/

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see `system internal security FTP configuration enable` to reenable FTP before using this command.

Format

```
CLI> system internal diagnostics run-general-diagnostic
```

Arguments

Argument	Description	Format
<ClientIP>	IP address of the client	Existing client IP address in IPv6 or IPv4 format
<Protocol>	Client protocol	Possible values are SMB, NFS
-RepositoryType <RepositoryType>	Type of repository on which to run diagnostics	RepositoryType can be NAS_VOLUME or FTP. If it is NAS_VOLUME, then the values of RepositoryVolume and RepositoryPath determine where the files will be stored. The files can then be accessed by a share or export to the volume.
-RepositoryVolume <RepositoryVolume>	Volume on the repository on which to run diagnostics	

Argument	Description	Format
-RepositoryPath <RepositoryPath>	Path of the repository on which to run diagnostics	If it is FTP, the diagnostics should be transferred from the cluster via ftp under ftp://(UserName)@(ClusterVIP):44421/diagnostics/archive/.

Example

Run the general diagnostic:

```
system internal diagnostics run-general-diagnostic
```

system internal diagnostics run-network-diagnostic

Run the networking diagnostic.

In case of a client connectivity problem, ask the client to repeat their attempt to connect to the FluidFS cluster after the diagnostic is run. The diagnostic files should be downloaded by FTP from the following directory:

ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/diagnostic/archive/NetworkDiagnostic/

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see `system internal security FTP configuration enable` to reenable FTP before using this command.

Format

```
system internal diagnostics run-network-diagnostic [options]
```

Arguments

<ClientIP>	IP address of the client	Existing client IP address in IPv6 or IPv4 foromat	Argument	Description	Format
<Protocol>	Client protocol	Possible values are SMB,, NFS	<ClientIP>	IP address of the client	Existing client IP address in IPv6 or IPv4 format
-RepositoryType <RepositoryType>	Type of repository on which to run diagnostics	RepositoryType can be NAS_VOLUME or FTP. If it is NAS_VOLUME, then the values of RepositoryVolu	<RepositoryType>	Type of repository on which to run network diagnostic	

<ClientIP>	IP address of the client	Existing client IP address in IPv6 or IPv4 foromat	Argument	Description	Format
		me and RepositoryPath determine where the files will be stored. The files can then be accessed by a share or export to the volume.			
-RepositoryVolume <RepositoryVolume>	Volume on the repository on which to run diagnostics		<RepositoryVolume>	Volume of repository on which to run network diagnostic	
-RepositoryPath <RepositoryPath>	Path of the repository on which to run diagnostics	If it is FTP, the diagnostics should be transferred from the cluster via ftp under ftp://(UserName)@(ClusterVIP):44421/diagnostics/archive/.	<RepositoryPath>	Path of repository on which to run network diagnostic	

Example

Run the networking diagnostic for a client with the IP address 172.22.69.18 on repository volume A:

```
CLI> system internal diagnostics run-network-diagnostic 172.22.69.18 -
RepositoryType NAS_VOLUME -RepositoryVolume jvol1 -RepositoryPath /mydiags
```

system internal diagnostics run-nfs-file-accessibility-diagnostic

Run the file-accessibility diagnostic for an NFS client.

In case of a file accessibility problem, ask the client to try accessing the file once the diagnostic is run. The diagnostic files should be downloaded by FTP from the following directory:

ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/diagnostic/archive/FileAccessibilityDiagnostic/

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see `system internal security FTP configuration enable` to reenable FTP before using this command.

Format

```
system internal diagnostics run-nfs-file-accessibility-diagnostic <ClientIP>
<ExportPath> <VolumeName> <Path>
```

Arguments

Argument	Description	Format
<ClientIP>	IP address of the client	Existing client IP address in the format: x.x.x.x
<ExportPath>	NFS export path	Existing NFS export path
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	File path (relative to NFS export path)	Existing file path
<RepositoryType>	Type of repository on which to run file accessibility diagnostics	
<RepositoryVolume>	Volume of repository on which to run file accessibility diagnostics	
<RepositoryPath>	Path of repository on which to run file accessibility diagnostics	

Example

Run the file-accessibility diagnostic for an NFS client with the IP address 172.22.69.18 to an NFS export at the path /folder on a NAS volume named vol1 with the relative file path subfolder:

```
CLI> system internal diagnostics run-nfs-file-accessibility-diagnostic
172.22.69.18 /folder vol1 subfolder
```

system internal diagnostics run-performance-diagnostic

Run the performance diagnostic on a NAS volume.

If possible, run the diagnostic when the activity on the FluidFS cluster is minimal. The diagnostic files should be downloaded by FTP from the following directory:

ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/diagnostic/archive/PerformanceDiagnostic/

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see system internal security FTP configuration enable to re-enable FTP before using this command.

Format

```
system internal diagnostics run-performance-diagnostic <VolumeName>
```

Arguments

<ClientIP>	IP address of the client	Existing client IP address in IPv6 or IPv4 foromat	Argument	Description	Format
<Protocol>	Client protocol	Possible values are SMB,, NFS	<VolumeName>	NAS volume name	Existing NAS volume name
-RepositoryType <RepositoryType>	Type of repository on which to run diagnostics	RepositoryType can be NAS_VOLUME or FTP. If it is NAS_VOLUME, then the values of RepositoryVolume and RepositoryPath determine where the files will be stored. The files can then be accessed by a share or export to the volume.	<RepositoryType>	Type of repository on which to run performance diagnostic	
-RepositoryVolume <RepositoryVolume>	Volume on the repository on which to run diagnostics		<RepositoryVolume>	Volume of repository on which to run performance diagnostic	
-RepositoryPath <RepositoryPath>	Path of the repository on which to run diagnostics	If it is FTP, the diagnostics should be transferred from the cluster via ftp under ftp://(UserName)@(ClusterVIP):44421/diagnostics/archive/.	<RepositoryPath>	Path of repository on which to run performance diagnostic	

Example

Run the performance diagnostic on a NAS volume named vol1:

```
CLI> system internal diagnostics run-performance-diagnostic vol1
```

system internal diagnostics run-smb-and-nfsdiagnostic

Run the general SMB and NFS diagnostic.

If the problem happens only while certain activity is running against the cluster, repeat it after the activity has finished. For NAS Volume repository, use SMB-Share or NFS-Export. The diagnostic files can be downloaded by FTP from the following directory:

ftp://<FluidFS_administrator_user_name>@<Cluster_VIP_or_name>:44421/diagnostic/archive/ProtocolsLogsDiagnostic/

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see `system internal security FTP configuration enable` to reenable FTP before using this command.

Format

```
CLI> system internal diagnostics run-smb-and-nfs-diagnostic
```

system internal diagnostics run-SMB-file-accessibility-diagnostic

Run the file-accessibility diagnostic for an SMB client.

In case of a file-accessibility problem, ask the client to try accessing the file after the diagnostic is run. The diagnostic files should be downloaded by FTP from the following directory:

ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/diagnostic/archive/FileAccessibilityDiagnostic/

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see system internal security FTP configuration enable to reenable FTP before using this command.

Format

```
system internal diagnostics run-SMB-file-accessibility-diagnostic <ClientIP>
<ShareName> <Path>
```

Arguments

Argument	Description	Format
<ClientIP>	IP address of the client	Existing client IP address in IPv6 or IPv4 format
<ShareName>	SMB share name	Existing SMB share name

Argument	Description	Format
<Protocol>	Client protocol	Possible values are SMB,, NFS
-RepositoryType <RepositoryType>	Type of repository on which to run diagnostics	RepositoryType can be NAS_VOLUME or FTP. If it is NAS_VOLUME, then the values of RepositoryVolume and RepositoryPath determine where the files will be stored. The files can then be accessed by a share or export to the volume.
-RepositoryVolume <RepositoryVolume>	Volume on the repository on which to run diagnostics	
-RepositoryPath <RepositoryPath>	Path of the repository on which to run diagnostics	If it is FTP, the diagnostics should be transferred from the cluster via ftp under ftp://(UserName)@(ClusterVIP):44421/diagnostics/archive/.

Example

Run the file-accessibility diagnostic for an SMB client with the IP address 172.22.69.18 to a file on an SMB share named share1 at the relative file path subfolder:

```
CLI> system internal diagnostics run-smb-file-accessibility-diagnostic
172.22.69.18 share1 subfolder
```

system internal diagnostics view

View details about a single diagnostic.

Format

```
system internal diagnostics view <DiagnosticName>
```

Arguments

Argument	Description	Format
<DiagnosticName>	Name of the diagnostic	Possible values are ClientConnectivity, FileAccessibility, FileSystemCore, General, Network, Performance, SMB-andNFS

Example

View details about the Network diagnostic:

```
CLI> system internal diagnostics view Network
```

Output

```
Diagnostic Name                  = Network
Status                           = DiagIdle
Last Run                         = 11-May-13 12:33:33
File Name General Diagnostic     = Summary.90fb2eb6-d44d-4440-abd8-adba59cb1101.
                                   11_05_2013-12_33_06.tar.gz
File Name Logs Diagnostic        = Logs.90fb2eb6-d44d-4440-abd8-adba59cb1101.11_
                                   05_2013-12_26_57.tar.gz
File size of general diagnostic  = 19
File size of logs diagnostic     = 98
Is Advanced Diagnostic Package Full = Yes
```

system internal file-system background-processes configuration data-reduction set

Modify the data reduction settings.

Format

```
system internal file-system background-processes configuration data-reduction
set [options]
```

Options

Option	Description	Format
-EnableDataReduction <EnableDataReduction>	Indicate whether data reduction is enabled	Possible values are Yes, No
-StartingHour <StartingHour>	Starting time of the data reduction background process	Zero-based, whole positive number (0 to 23)
-Duration <Duration>	Number of hours that the data reduction background process will run	Whole positive number (1 to 24)

Example

Enable data reduction to start at 23:00:00 and run for 6 hours:

```
CLI> system internal file-system background-processes configuration data-
reduction set -EnableDataReduction Yes -StartingHour 23 -Duration
```

system internal file-system background-processes configuration data-reduction view

Display the data reduction settings.

Format

```
system internal file-system background-processes configuration data-reduction
view
```

Example

Display the current data reduction settings:

```
CLI> system internal file-system background-processes configuration data-
reduction view
```

Output

```
Enable Data Reduction = Yes
Starting Hour         = 23
Duration in Hours     = 6
```

system internal file-system background-processes configuration health-scan set

Modify the health scan settings.

CAUTION: Dell recommends keeping the health scan throttling mode set to Normal unless specifically directed otherwise by Dell Technical Support.

Format

```
system internal file-system background-processes configuration health-scan set
{options}
```

Options

Option	Description	Format
-Throttling <Throttling>	Throttling of the health scan that runs as a background process	Possible values are MaintenanceMode, NormalMode, Off
-Crossref <Crossref>	Indicate whether the health scan will check cross reference file mappings	Possible values are Yes, No

Example

Enable the health scan to run in normal mode:

```
CLI> system internal file-system background-processes configuration healthscan
set -Throttling NormalMode
```

system internal file-system background-processes configuration health-scan view

Display the health scan settings.

Format

```
system internal file-system background-processes configuration health-scan view
```

Example

Display the current health scan settings:

```
CLI> system internal file-system background-processes
configuration health-scan view
```

Output

```
Throttling = Normal mode
Crossref   = Yes
```

system internal file-system background-processes list

Display a list of background processes with their status.

Format

```
system internal file-system background-processes list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the current background processes with their status:

```
CLI> system internal file-system background-processes list
```

Output

```
 .--------------------.--------.
 | Background Process | Status |
 |--------------------|--------|
 | Data Reduction     | Idle   |
 |--------------------|--------|
 | Health Scan        | Idle   |
 '--------------------'--------'
```

system internal file-system background-processes view

Display the status of a background process.

Format

```
system internal file-system background-processes view <BackgroundProcess>
```

Arguments

Argument	Description	Format
<BackgroundProcess>	Name of the background process	Possible values are DataReduction, HealthScan

Example

Display the status of a background process named DataReduction:

```
CLI> system internal file-system background-processes view DataReduction
```

Output

```
Backgr = Data Reduction
Status = Idle
```

system internal file-system domains list

Display a list of NAS appliances and their cache status.

Format

```
system internal file-system domains list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a current list of NAS appliances and their cache status:

```
CLI> system internal file-system domains list
```

Output

```
.---------------.----------------.----------------.---------.----------------.
 | NAS Appliance | Write Through  | Write Cache    |Status  | DomainsInfo    |
```

```
| ID             | Mode           | Usage          |         |                 |
|----------------|----------------|----------------|---------|-----------------|
| 1              | Mirroring      | 0              |Running  |  .---.---.-...  |
|                |                |                |         |  | D | R | ...  |
|                |                |                |         |  | o | u | ...  |
|                |                |                |         |  | m | n | ...  |
|                |                |                |         |  | a | n | ...  |
|                |                |                |         |  | i | i | ...  |
|                |                |                |         |  | n | n | ...  |
|                |                |                |         |  | I | g | ...  |
|                |                |                |         |  | D | N | ...  |
|                |                |                |         |  |   | o | ...  |
|                |                |                |         |  |   | d | ...  |
|                |                |                |         |  |   | e | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |---|---|-...  |
|                |                |                |         |  | 0 | 0 | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |   |   | ...  |
|                |                |                |         |  |---|---|-...  |
|                |                |                |         |  | 1 | 1 | ...  |
...[snip]...
```

system internal file-system domains view

Display information about a cache of a single NAS appliance.

Format

```
system internal file-system domains view <ApplianceID>
```

Arguments

Argument	Description	Format
<ApplianceID>	NAS appliance ID	Existing NAS appliance ID

Example

Display information about a cache of a NAS appliance with the ID 1:

```
CLI> system internal file-system domains view 1
```

Output

```
NAS Appliance ID   = 1
Write Through Mode = Mirroring
Write Cache Usage  = 0
Status             = Running
```

```
DomainsInfo        =  .--------.--------.--------.--------.---------.--------.
                      | Domain | Runnin | Preffe | Write  | Write   | Status |
                      | ID     | g Node | red    | Through| Cache   |        |
                      |        |        | Node   | Mode   | Usage   |        |
                      |--------|--------|--------|--------|---------|--------|
                      | 0      | 0      | 0      | Mirrori| 0       | Runnin |
                      |        |        |        | ng     |         | g      |
                      |--------|--------|--------|--------|---------|--------|
                      | 1      | 1      | 1      | Mirrori| 0       | Runnin |
                      |        |        |        | ng     |         | g      |
                      |--------|--------|--------|--------|---------|--------|
                      | 2      | 0      | 0      | Mirrori| 0       | Runnin |
                      |        |        |        | ng     |         | g      |
                      |--------|--------|--------|--------|---------|--------|
                      | 3      | 1      | 1      | Mirrori| 0       | Runnin |
                      |        |        |        | ng     |         | g      |
                      |--------|--------|--------|--------|---------|--------|
...[snip]...
```

system internal file-system internal-storage-reservation view

Display internal storage reservation information.

Format

```
system internal file-system internal-storage-reservation view
```

Example

Display current internal storage reservation information:

```
CLI> system internal file-system internal-storage-reservation view
```

Output

```
File System Domains Reservation     = 251.89 GB
Storage Management Reservation      = 36.00 GB
File System Health Scan Reservation = 10.24 GB
Data Reduction Reservation          = 10.00 GB
Total Reservation                   = 308.13 GB
Total Percentage Reservation        = 15
```

system internal file-system service-mode set

Modify the system serviceability mode.

Format

```
system internal file-system service-mode set <State>
```

Arguments

Argument	Description	Format
<State>	Indicate in which mode the FluidFS cluster should work	Possible values are NoService, Normal, Write-throughOn

Example

Change the system serviceability mode to Normal:

```
CLI> system internal file-system service-mode set Normal
```

system internal file-system service-mode view

Display the system serviceability mode settings.

Format

```
system internal file-system service-mode view
```

Example

Display the current system serviceability mode settings:

```
CLI> system internal file-system service-mode view
```

Output

```
State = Normal
```

system internal internal-network edit

Modify the internal network settings (class C subnet).

Format

```
system internal internal-network edit <NetworkID>
```

Arguments

Argument	Description	Format
<NetworkID>	Internal network ID	IP address in the format: x.x.x.x

Example

Change the internal network to 10.255.254.0:

```
CLI> system internal internal-network edit 10.255.254.0
```

system internal language set

Modify the language of the FluidFS cluster.

Format

```
system internal language set <Language>
```

Arguments

Argument	Description	Format
<Language>	Language of the FluidFS cluster	Possible value is English

Example

Modify the language of the FluidFS cluster to English:

```
CLI> system internal language set English
```

system internal language view

Display the language of the FluidFS cluster.

Format

```
system internal language view
```

Example

Display the current language of the FluidFS cluster:

```
CLI> system internal language view
```

Output

```
Language = English
```

system-internal protocols-settings NFS-settings edit

Modify the general settings of the NFS protocol.

Format

```
system-internal protocols-settings NFS-settings edit {options}
```

Options

Option	Description	Format
-MaxNFSVersionSupported <MaxNFSVersionSupported>	Maximum version of NFS supported by system (configuration restrictions)	Possible values are NFSv3, NFSv4, and NFSv4.1

Example

Set the maximum NFS version supported on a cluster:

```
CLI> system-internal protocols-settings NFS-settings edit MaxNfsVersionSupported
```

system internal protocols-settings NFS-settings view

Display the general settings of the NFS protocol.

Format

```
System internal protocols-settings NFS-settings view
```

Example

Display the current general settings of the NFS protocol:

```
CLI> system internal protocols-settings NFS-settings view
```

Output

```
Local Accounts Password Never Expires = No
Local Accounts Max Password Age       = 6 Weeks
Check Password Complexity             = Yes
```

system-internal protocols-settings SMB-settings edit

Modify the general settings of the SMB protocol.

Format

```
system-internal protocols-settings SMB-settings edit {options}
```

Options

Option	Description	Format
-LocalAccountsPasswordNeverExpires	Indicate whether the local accounts password never expires	Possible values are Yes, No

Option	Description	Format
<LocalAccountsPasswordNever Expires>		
-LocalAccountsMaxPasswordAge <LocalAccountsMaxPasswordAge>	Local accounts maximum password age	Integer number with suffix of units H/D/W (hours, days, or weeks) (for example, 10H)
-CheckPasswordComplexity <CheckPasswordComplexity>	Indicate whether the password-complexity checks should be enforced	Possible values are Yes, No
-RequireMessageSigning <RequireMessageSigning>	Defines whether SMB3 traffic connected to any share is required to be signed	
-RequireMessageEncryption <RequireMessageEncryption>	Defines whether SMB3 traffic connected to any share is required to be encrypted	
-MaxSmbVersinoSupported <MaxSmbVersionSupported>	Maximum version of SMB supported by system (configuration restrictions)	Possible values are ((enums.SmbVersion))
-ForceLeaseRestriction <ForceLeaseRestriction>	Restricts leases	Enable or Disable
-ForceOplocksRestriction <ForceOplocksRestrictions>	Restricts opportunistic locks	Enable or Disable
-DisconnectIdleSessions <DisconnectIdleSessions>	Disconnects idle sessions	Possible values are Yes, No
-IdleSessionTimeout <IdleSessionTimeout>	SMB idle session will be automatically disconnected after the timeout is reached.	Whole positive number (in seconds)
-IdleSessionsScanInterval <IdleSessionsScanInterval>	SMB sessions scan for idle sessions interval.	Whole positive number

Example

Enforce password-complexity checks for FluidFS users:

```
CLI> system-internal protocols-settings SMB-settings edit -
CheckPasswordComplexity Yes
```

system-internal protocols-settings SMB-settings view

Display the general settings for the SMB protocol.

Format

```
system internal protocols-settings SMB-settings view
```

Example

Display the current general settings for theSMB protocol:

```
CLI> system internal protocols-settings SMB-settings view
```

Output

```
Local Accounts Password Never Expires = No
Local Accounts Max Password Age       = 6 Weeks
Check Password Complexity             = Yes
```

system internal security FTP configuration disable

Disable FTP on the FluidFS cluster.

Format

```
system internal security FTP configuration disable
```

Example

Disable FTP on the FluidFS cluster:

```
CLI> system internal security FTP configuration disable
```

system internal security FTP configuration enable

Enable FTP on the FluidFS cluster.

Format

```
system internal security FTP configuration enable
```

Example

Enable FTP on the FluidFS cluster:

```
CLI> system internal security FTP configuration enable
```

system internal security FTP configuration view

Display the FTP settings on the FluidFS cluster.

Format

```
system internal security FTP configuration view
```

Example

Display the current FTP settings on the FluidFS cluster:

```
CLI> system internal security FTP configuration view
```

Output

```
Enabled = Yes
```

system internal security management-access management-subnet add

Add a management subnet.

Format

```
system internal security management-access management-subnet add <Netmask or
prefix> {options}
```

Arguments

Argument	Description	Format
<Netmask or prefix>	Netmask or prefix of the subnet	IP address in IPv6 or IPv4 format

Options

Option	Description	Format
-Interface <Interface>	Interface on which to define the subnet	Possible values are Client or Admin
-VLANTag <VLANTag>	VLAN ID of the subnet	Whole positive number (1 to 4094)
-PrivateIPs <PrivateIPs>	NAS controller IP addresses	Comma-separated list of IP addresses in IPv6 or IPv4 format
-PublicIP <PublicIP>	Client VIP that the administrator will use for management access	IP address in IPv6 or IPv4 format

Example

Add a management subnet on the client interface with the client VIP 10.10.10.44 and NAS controller IP addresses 10.10.10.42 and 10.10.10.43:

```
CLI> system internal security management-access management-subnet add
255.255.255.0 -Interface Client -PrivateIPs 10.10.10.42,10.10.10.43 -PublicIP
10.10.10.44
```

system internal security management-access management-subnet delete

Delete a management subnet.

Format

```
system internal security management-access management-subnet delete
```

Example

Delete a management subnet:

```
CLI> system internal security management-access management-subnet delete
```

system internal security management-access management-subnet edit

Modify management subnet settings.

Format

```
system internal security management-access management-subnet edit {options}
```

Options

Option	Description	Format
-Interface <Interface>	Interface on which to define the subnet	Possible values are Client or Admin
<Netmask or prefix>	Netmask or prefixof the subnet	IP address in IPv6 or IPv4 format
-VLANTag <VLANTag>	VLAN ID of the subnet	Whole positive number (1 to 4094)
-PrivateIPs <PrivateIPs>	NAS controller IP addresses	Comma-separated list of IP addresses in IPv6 or IPv4 format
-PublicIP <PublicIP>	Client VIP that the administrator will use for management access	IP address in IPv6 or IPv4 format

Example

Change the client VIP of a management subnet to 10.10.10.44:

```
CLI> system internal security management-access management-subnet edit -
PublicIP 10.10.10.44
```

system internal security management-access management-subnet view

Display management subnet settings.

Format

```
system internal security management-access management-subnet view
```

Example

Display the current management subnet settings:

```
CLI> system internal security management-access management-subnet view
```

Output

```
Interface  = Client
Network Id = 10.10.10.0
Netmask    = 255.255.255.0
VLAN Tag   = 0
PrivateIPs = 10.10.10.42,10.10.10.43
PublicIPs  = 10.10.10.44
```

system internal security management-access restrict

Restrict management access to a dedicated subnet.

Format

```
system internal security management-access restrict
```

Example

Restrict management access to a dedicated subnet:

```
CLI> system internal security management-access restrict
```

system internal security management-access restriction-status

Display the status of management access restriction.

Format

```
system internal security management-access restriction-status
```

Example

Display the current status of management access restriction:

```
CLI> system internal security management-access restriction-status
```

Output

```
Restriction Status = Unrestricted
```

system internal security management-access unrestrict

Unrestrict management access so that administrators will be able to access the system from any subnet.

Format

```
system internal security management-access unrestrict
```

Example

Unrestrict management access so that administrators will be able to access the system from any subnet:

```
CLI> system internal security management-access unrestrict
```

system internal security support-access change-password

Change the password of the support user.

Format

```
system internal security support-access change-password {options}
```

Options

Option	Description	Format
-Password <Password>	Password of the support user	Must include at least eight characters, and should contain at least three of the following character types: lowercase

Option	Description	Format
		character, uppercase character, digit, special characters (for example, +, ?, and *)

Example

Change the password of the support user to Password123:

```
CLI> system internal security support-access change-password -Password
Password123
```

system internal security support-access disable

Disable support access to the system.

Format

```
system internal security support-access disable
```

Example

Disable support access to the system:

```
CLI> system internal security support-access disable
```

system internal security support-access enable

Enable support access to the system.

Format

```
system internal security support-access enable
```

Example

Enable support access to the system:

```
CLI> system internal security support-access enable
```

system internal security support-access secure-console-access disable

Disable remote access to support secure console.

Format

```
CLI> system internal security support-access secure-console-access disable
```

system internal security support-access secure-console-access disable-proxy-authentication

Disable proxy-authentication.

Format

```
CLI> system internal security support-access secure-console-access disable-proxy-authentication
```

system internal security support-access secure-console-access enable

Enable remote access to support secure console.

Format

```
system internal security support-access secure-console-access enable {options}
```

Option	Description	Format
ReservationServerUrl <ReservationServerUrl>	Reservation Server URL	
SessionTtl	Session time to live	Specify the date in the following format: “DD-MMM-YY HH24:MI:ss” (double quotation marks are required); for example: “19-Mar-14 23:09:34”
EnableProxy <EnableProxy>	Enable proxy	
ProxyAddress <ProxyAddress>	Proxy address	
ProxyPort <ProxyPort>	Proxy port	
ProxyType	Proxy type	

system internal security support-access secure-console-access enable-proxy-authentication

Enable proxy-authentication.

Format

```
system internal security support-access secure-console-access enable-proxy-authentication {options}
```

Options

Option	Description	Format
ProxyUsername <ProxyUserName>	Proxy user name	
ProxyPassword <ProxyPassword>	Proxy password	

system internal security support-access secure-console-access view

Supports secure shell status view.

Format

```
CLI> system internal security secure-console-access view
```

system internal security support-access view

Display settings for support access to the system.

Format

```
system internal security support-access view
```

Example

Display the current settings for support access to the system:

```
CLI> system internal security support-access view
```

Output

```
Enabled = Yes
```

system internal security support-assist disable

Disable SupportAssist.

Format

```
system internal security support-assist disable
```

Example

Disable SupportAssist:

```
CLI> system internal security support-assist disable
```

system internal security support-assist enable

Enable SupportAssist.

Format

```
system internal security support-assist enable
```

Example

Enable SupportAssist:

```
CLI> system internal security support-assist enable
```

system internal security support-assist view

Display settings for SupportAssist.

Format

```
system internal security support-assist view
```

Example

Display the current settings for SupportAssist to the system:

```
CLI> system internal security support-assist view
```

system internal security ui-configuration edit

Modify the UI settings.

Format

```
system internal security ui-configuration edit {options}
```

Options

Option	Description	Format
-SessionExpirationPeriod <SessionExpirationPeriod>	UI expiration period	Whole positive number (in seconds)
-LoginBanner <LoginBanner>	The sign-on banner page that displays when you log in to Dell Storage Manager	

Example

Change the UI session expiation period to 1800 seconds:

```
CLI> system internal security ui-configuration edit -SessionExpirationPeriod
1800
```

system internal security ui-configuration view

Display the UI settings.

Format

```
system internal security ui-configuration view
```

Example

Display the current UI session expiation period settings:

```
CLI> system internal security ui-configuration view
```

Output

```
Session Expiration Period (in seconds) = 1800
```

system internal security ui-configuration wui-settings disable

Disable the WUI (web user interface) settings.

Format

```
system internal security ui-configuration wui-settings disable
```

system internal security ui-configuration wui-settings enable

Enable the WUI (web user interface) settings.

Format

```
CLI> system internal security ui-configuration wui-settings enable
```

system internal security ui-configuration wui-settings view

Display the WUI (web user interface) settings.

Format

```
CLI> system internal security ui-configuration wui-settings view
```

system internal system-configuration-state hardware-replacement-finished

Indicate that the hardware replacement is finished.

CAUTION: This command should be used only by Dell Technical Support. This command is used during a FluidFS cluster deployment.

Format

```
system internal system-configuration-state hardware-replacement-finished
```

Example

After performing a hardware replacement, indicate that the hardware replacement is finished:

```
system internal system-configuration-state hardware-replacement-finished
```

system internal system-configuration-state hardware-replacement-start

Indicate that the hardware replacement is starting.

CAUTION: This command should be used only by Dell Technical Support. This command is used during a FluidFS cluster deployment.

Format

```
system internal system-configuration-state hardware-replacement-start
```

Example

Before performing a hardware replacement, indicate that the hardware replacement is starting:

```
CLI> system internal system-configuration-state hardware-replacement-start
```

system internal system-configuration-state installation-finished

Indicate that the installation is finished.

CAUTION: This command should be used only by Dell Technical Support. This command is used during a FluidFS cluster deployment.

Format

```
system internal system-configuration-state installation-finished
```

Example

After completing a FluidFS cluster installation, indicate that the installation is finished:

```
CLI> system internal system-configuration-state installation-finished
```

system internal system-configuration-state view

Display the current state of the configuration.

Format

```
system internal system-configuration-state view
```

Example

Display the current state of the configuration:

```
CLI> system internal system-configuration-state view
```

Output

```
Installed                          = Yes
In middle of hardware replacement = No
```

system licenses delete

Delete the license of a feature.

Format

```
system licenses delete <Feature>
```

Arguments

Argument	Description	Format
<Feature>	Name of the feature	Possible values are AdvancedDeduplication,

Argument	Description	Format
		Replication, Deduplication, Snapshots

Example

Delete the license for the Snapshots feature:

```
CLI> system licenses delete Snapshots
```

system licenses list

Display a list of installed licenses.

Format

```
system licenses list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the current installed licenses:

```
CLI> system licenses list
```

Output

```
.---------------.----------------.-----------.------------.--------------.
 | Feature       | Entitlement Id | State     | Expiration| Is Violation |
 |---------------|----------------|-----------|-----------|--------------|
 | Snapshots     |                | Perpetual |           | No           |
 |---------------|----------------|-----------|-----------|--------------|
 | Replication   |                | Perpetual |           | No           |
 |---------------|----------------|-----------|-----------|--------------|
 | Deduplication |                | Perpetual |           | No           |
 '---------------'----------------'-----------'-----------'--------------'
```

system licenses load

Load a new license file.

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see `system internal security FTP configuration enable` to reenable FTP before using this command.

Format

```
system licenses load <LicenseFileName>
```

Arguments

Argument	Description	Format
<LicenseFileName>	File name of the new license file	Existing file name of license file uploaded to ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/licensing/

Example

Load a new license file named license:

```
CLI> system licenses load license
```

system licenses view

Display details about an installed license.

Format

```
system licenses view <Feature>
```

Arguments

Argument	Description	Format
<Feature>	Name of the feature	Possible values are AdvancedDeduplication, Replication, Deduplication, Snapshots

Example

Display details about the Snapshots license feature:

```
CLI> system licenses view Snapshots
```

Output

```
Feature        = Snapshots
Entitlement Id =
State          = Perpetual
Expiration     =
Is Violation   = No
```

system mail-configuration disable-authentication

Disable mail relays authentication.

Format

```
system mail-configuration disable-authentication
```

Example

Disable mail relays authentication:

```
CLI> system mail-configuration disable-authentication
```

system mail-configuration enable-authentication

Enable mail relays authentication.

Format

```
system mail-configuration enable-authentication <MailRelayUserName> {options}
```

Arguments

Argument	Description	Format
<MailRelayUserName>	Mail relays user name	Existing mail relay user name

Options

Option	Description	Format
-MailRelayPassword <MailRelayPassword>	Mail relays password	Existing mail relay password

Example

Enable mail relays authentication where the mail relay user name is admin and the password is Password123:

```
CLI> system mail-configuration enable-authentication admin -MailRelayPassword
Password123
```

system mail-configuration set

Modify mail settings.

Format

```
system mail-configuration set {options}
```

Options

Option	Description	Format
-MailRelays <MailRelays>	Mail relays	Comma-separated list of IP addresses in IPv6 or IPv4 format
-ClusterMailAddress <ClusterMailAddress>	Mail address from which the FluidFS cluster will send the emails	Email address in the following format: xxx@xxx.xxx
-MaximumMailSize <MaximumMailSize>	Maximum single email size	Whole positive number (in MB)
-MaximumMailFrequency <MaximumMailFrequency>	Maximum frequency in which the FluidFS cluster will send emails	Possible values are Onceevery10minutes, Onceeveryhour, Onceevery30minutes

Example

Add a mail relay with the IP address 172.22.69.1, set the mail address to cluster1@dell.com, and set the maximum email size to 50 MB:

```
CLI> system mail-configuration set -MailRelays 172.22.69.1 -ClusterMailAddress
cluster1@dell.com -MaximumMailSize 50
```

system mail-configuration view

Display mail settings.

Format

```
system mail-configuration view
```

Example

Display the current mail settings:

```
CLI> system mail-configuration view
```

Output

```
Mail Relay Use Authentication = Yes
Mail Relay User Name          = admin
MailRelays                    = 172.22.69.1
Cluster Mail Address          = cluster1@dell.com
Maximum Mail Size             = 50.00 MB
Maximum Mail Frequency        = Once every 10 minutes
```

system SNMP set

Modify SNMP settings.

Format

```
system SNMP set {options}
```

Options

Option	Description	Format
-Location <Location>	Location of the FluidFS cluster as it will appear in the SNMP traps that will be sent from the FluidFS cluster	Any string
-Contact <Contact>	Contact details of the FluidFS cluster as they will appear in the SNMP traps that will be sent from the FluidFS cluster	Any string
-ReadOnlyCommunity <ReadOnlyCommunity>	SNMP read community	Length must be less than 30 characters
-TrapRecipients <TrapRecipients>	SNMP trap recipients	Comma-separated list of host names. Host names must contain one or more sub names, each separated by a dot. Each sub name can contain letters, number,s or hyphens, but cannot start or end in a hyphen.

Example

Set the SNMP location to US, the FluidFS cluster contact details to idffs1, and trap recipient to mgmtstation.nas.test:

```
CLI> system SNMP set -Location US -Contact idffs1 -TrapRecipients
mgmtstation.nas.test
```

system SNMP update-filter

Modify the SNMP filter settings.

Format

```
system SNMP update-filter <Workspace> {options}
```

Arguments

Argument	Description	Format
<Workspace>	Workspace to which the events belong	Possible values are AccessControl, Hardware, NasVolumes, Performance&Connectivity, System

Options

Option	Description	Format
-Enabled <Enabled>	Indicate whether SNMP traps should be sent for the events from this workspace	Possible values are Yes, No
-Severity <Severity>	Severity of the events that will be sent as SNMP traps from this workspace	Possible values are All, Major

Example

Enable SNMP traps for all events from the Hardware workspace:

```
CLI> system SNMP update-filter Hardware -Enabled Yes -Severity Major
```

system SNMP view

Display SNMP settings.

Format

```
system SNMP view
```

Example

Display the current SNMP settings:

```
CLI> system SNMP view
```

Output

```
Location            = US
Contact             = idffs1
Read Only Community = public
TrapRecipients      = mgmtstation.nas.test
Filters             =  .---------------------------.---------.----------.
                       | Workspace                 |Enabled | Severity |
                       |---------------------------|--------|----------|
                       | NasVolumes                |Yes     | Major    |
                       |---------------------------|--------|----------|
                       | AccessControl             |Yes     | Major    |
```

```
|----------------------------|--------|----------|
| Performance & Connectivity| Yes     | Major    |
|----------------------------|--------|----------|
| Hardware                   |Yes     | Major    |
|----------------------------|--------|----------|
| System                     |Yes     | Major    |
'----------------------------'---------'----------'
```

system software-updates list

Display a list of the software updates.

Format

```
system software-updates list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of the current software updates:

```
CLI> system software-updates list
```

Output

```
.----------.---------------.--------------------.----------------------------.
| Release  | Status        | Installation Date  | FileName                   |
|----------|---------------|--------------------|----------------------------|
| 3.0.8331 | Not installed |                    | DellFluidFS-3.0.8331-SP.sh |
|----------|---------------|--------------------|----------------------------|
| 3.0.8290 | Installed     | 29-Jul-13 10:14:41 |                            |
'----------'---------------'--------------------'----------------------------'
```

system software-updates view

Display the software update details.

Format

```
system software-updates view <Release>
```

Arguments

Argument	Description	Format
<Release>	Software update version	Existing release name

Example

Display the software update details for release 3.0.8142:

```
CLI> system software-updates view 3.0.8142
```

Output

```
Release           = 3.0.8142
Status            = Installed
Installation Date = 12-Jul-13 13:19:36
File Name         =
```

system software-updates approve-eula

Approve that the administrator read the end-user license agreement.

Format

```
system software-updates approve-eula
```

Arguments

Argument	Description	Format
<ApproverName>	Name of the person approving the EULA	
<ApproverTitle>	Title of the person approving the EULA	

Example

Bob Smith approves that the administrator read the EULA:

```
CLI> system software-updates approve-eula -ApproverName <Bob Smith>
```

system software-updates current-version

Display the current version of the software.

Format

```
system software-updates current-version
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display the current version of the software:

```
CLI> system software-updates current-version
```

Output

```
Release 3.0.8331
```

system software-updates flash-standby-controller

Write the service pack image to the internal USB drive of the node.

Format

```
flash-standby-controller <FileName>
```

Arguments

Argument	Description	Format
<FileName>	File name of the software update	

system software-updates upgrade

Install a service pack.

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see `system internal security FTP configuration enable` to reenable FTP before using this command.

Format

```
system software-updates upgrade <Filename>
```

Arguments

Argument	Description	Format
<Filename>	File name of the software update	Existing file name of software update file uploaded to ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/servicepack/

Example

Install a service pack named DellFS-3.0.7640-SP.sh:

```
CLI> system software-updates upgrade DellFS-3.0.7640-SP.sh
```

Output

```
Confirmation: System upgrade is a lengthy operation.
It is recommended to upgrade during a maintenance window as users
will experience disconnections. Are you sure you want to perform
the upgrade now?
Are you sure that you want to complete the operation?
( Yes / No ):
```

system software-updates validate

Validate a service pack.

NOTE: FTP is enabled by default on the FluidFS cluster. However, if FTP has been disabled, see system internal security FTP configuration enable to re-enable FTP before using this command.

Format

```
system software-updates validate <Filename>
```

Arguments

Argument	Description	Format
<Filename>	File name of the software update	Existing file name of software update file uploaded to ftp://<FluidFS_administrator_user_name>@<client_VIP_or_name>:44421/servicepack/

Example

Validate a service pack named DellFS-3.0.7640-SP.sh:

```
CLI> system software-updates validate DellFS-3.0.7640-SP.sh
```

Output

```
Release = 3.0.7640
Status = Valid
```

system software-updates view-available

Display the available software update details.

Format

```
system software-updates view-available <Release>
```

Arguments

Argument	Description	Format
<Release>	Software update version	Existing release name

Example

Display the software update details for release 3.0.8142:

```
CLI> system software-updates view 3.0.8142
```

Output

```
Release           = 3.0.8142
Status            = Installed
Installation Date = 12-Jul-13 13:19:36
File Name         =
```

system time available-timezones

Display a list of available time zones.

Format

```
system time available-timezones
```

Example

View available time zones:

```
CLI> system time available-timezones
```

Output

```
.---------------------------------.
 | Time Zone                       |
 |---------------------------------|
 | Africa/Abidjan                  |
 |---------------------------------|
 | Africa/Accra                    |
 |---------------------------------|
 | Africa/Addis_Ababa              |
 |---------------------------------|
 | Africa/Algiers                  |
 |---------------------------------|
 | Africa/Asmara                   |
 |---------------------------------|
 | Africa/Asmera                   |
 |---------------------------------|
 | Africa/Bamako                   |
 |---------------------------------|
 | Africa/Bangui                   |
 |---------------------------------|
 | Africa/Banjul                   |
 |---------------------------------|
```

```
 | Africa/Bissau                    |
 |----------------------------------|
 | Africa/Blantyre                  |
 |----------------------------------|
 | Africa/Brazzaville               |
 |----------------------------------|
...[snip]...
```

system time edit

Modify the time zone and NTP settings.

Format

```
system time edit {options}
```

Options

Option	Description	Format
- TimeZone <TimeZone>	Time zone of the FluidFS cluster	For a list of valid time zones, see **system time available-timezones**.
-UseNTP <UseNTP>	Indicate whether NTP servers should be used	Possible values are Yes, No
-NTPServers <NTPServers>	NTP servers	Comma-separated list of host names or IP addresses. An IP address must be in the format x.x.x.x. A host name must contain one or more sub names, each separated by a dot. Each sub name can contain letters, numbers, or hyphens, but cannot start or end in a hyphen.

Example

Set the current time zone to US/Central and specify the NTP server time.lab.town:

```
CLI> system time edit -TimeZone US/Central -UseNTP Yes -NTPServers time.lab.town
```

system time view

Display the time zone and NTP settings.

Format

```
system time view
```

Example

Display the current time zone and NTP settings:

```
CLI> system time view
```

Output

```
Time Zone  = US/Central
Use NTP    = Yes
NTPServers = time.lab.town
```

system time set-current-time

Modify the current FluidFS cluster time.

Format

```
system time set-current-time <NewTime>
```

Arguments

Argument	Description	Format
<NewTime>	Current time	"DD-MMM-YY HH:MI:SS" (double quotation marks are required)

Example

Modify the current FluidFS cluster time to 05-Aug-13 11:24:15:

```
CLI> system time set-current-time "05-Aug-13 11:24:15"
```

system time view-current-time

Display the current time on the FluidFS cluster.

Format

```
system time view-current-time
```

Example

Display the current time on the cluster:

```
CLI> system time view-current-time
```

Output

```
Current Time = 05-Aug-13 11:42:01
```

system vmware compute-resources list

Display a list of all ESXi hosts and clusters mounting this FluidFS system.

Format

```
system vmware compute-resourcees list
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of current VMware servers:

```
CLI> system vmware vmware-servers list
```

system vmware compute-resources view

Display details of compute resources.

Format

```
system vmware compute-resources view
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list of current VMware servers:

```
CLI> system vmware vmware-servers list
```

system vmware virtual-machines clone

Clone a virtual machine using FluidFS file cloning.

Format

```
system vmware virtual-machines clone <VMwareServerName> <DestinationHost>
<CloneNamePrefix> <NumberofClones> [options]
```

Arguments

Argument	Description	Format
<VMwareServerName>	Unique name of the VMware server	
<DestinationHost>	Host name to register cloned virtual machines	
<CloneNamePrefix>	Prefix for names of cloned virtual machines. The machines will be named {CloneNamePrefix}1, {CloneNamePrefix}2, and so on.	

Options

Option	Description	Format
SourceVMPath <SourceVMPath>	Full path of source virtual machine in VMware server inventory	
SourceVMName<SourceVMName>	Source virtual machine name for cloning	
NumberOfClones <NumberOfClones>	Number of cloned virtual machines to create	
PowerOnClones<PowerOnClones>	Power on cloned virtual machines after creation	
ApplyCustomizationSpecOnClones <ApplyCustomizationSpecOnClones>	Apply existing customization specification on resulting cloned virtual machines	
CustomizationSpecName <CustomizationSpecName>	Name of the customized specification to apply on resulting cloned virtual machines	
UserName <Username>	VMware server user name; this field is required if VMware server credentials were not saved	

Option	Description	Format
Password <Password>	VMware server password; this field is required if VMware server credentials were not saved	

Example

Clone a virtual machine with a server named MyMachine:

```
CLI>system vmware virtual-machines -clone MyMachine 192.168.0.14 <SourceVMName>
[options]
```

system vmware virtual-machines clone-single

Create a single cloned virtual machine using FluidFS file cloning.

Format

```
system vmware virtual-machines clone-single <VMwareServerName> <SourceVMPath>
<SourceVMName> <DestinationHost> <CloneName> [options]
```

Arguments

Argument	Description	Format
VMwareServerName	Unique name of the VMware server	
SourceVMPath	Full path of source virtual machine in VMware server inventory	
SourceVMName	Souce virtual machine name for cloning	
DestinationHost <DestinationHost>	Host name to register cloned virtual machines	
CloneName <CloneName>	Name of cloned virtual machines. The machines will be named {CloneNamePrefix}1, {CloneNamePrefix}2, and so on.	

Options

Option	Description	Format
PowerOnClones <PowerOnClones>	Power on cloned virtual machines after creation	
ApplyCustomizationSpecOnClones <ApplyCustomizationSpecOnClones>	Apply existing customization specification on resulting cloned virtual machines	

Option	Description	Format
CustomizationSpecName <CustomizationSpecName>	Name of the customized specification to apply on resulting cloned virtual machines	
UserName <UserName>	VMware server user name; this field is required if VMware server credentials were not saved	
Password	VMware server password; this field is requuired if VMware server credentials were not saved	

Example

Create a single cloned virtual machine with a server named MyMachine:

```
CLI>system vmware virtual-machines -clone-single MyMachine 192.168.0.14
<SourceVMName> [options]
```

system vmware virtual-machines list

Display a list of the virtual machines located on the FluidFS system.

Format

```
system vmware virtual-machines list [options]
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-FilterByName <FilterByName>	Filter virtual machines by name	

Example

Display a list of current virtual machines:

```
CLI> system vmware virtual-machines list
```

system vmware virtual- machines view

Display details of the virtual machines located on the FluidFS system.

Format

```
system vmware virtual-machines view <VMWareServerName> <Path>
<VirtualMachineName>
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
-VMwareServerName <VMwareServerName>	VMware server containing the virtual machine	
-Path <Path>	Virtual machine full path in VMWare server inventory	
-VirtualMachineName <VirtualMachineName>	Virtual machine name	

Example

Display details about a virtual machine:

```
CLI> system vmware virtual-machines view MyVM
```

system vmware vmware-servers delete

Delete one or more VMware servers.

Format

```
system vmware vmware-servers delete [option]
```

Option

Option	Description	Format
-VMwareServerName <VMwareServerName>	Unique name of the server	

Example

Delete a VMware server:

```
CLI> system vmware vmware-servers delete MYServer
```

system vmware vmware-servers edit

Modify the VMware server.

The server can be either a vCenter server or a standalone ESXi host.

Format

```
system vmware vmware-servers edit <VMwareServerName> <Address>
```

Arguments

Argument	Description	Format
<VMwareServerName>	Unique name of the VMware server	
<Address>	Address of the VMware server	Can be a host name or IP address

Example

Modify a VMware server:

```
CLI>system vmware vmware-servers edit MYVMware 192.168.0.14
```

system vmware vmware-servers list

Display a list of the VMware servers.

Format

```
system vmware vmware-servers list [option]
```

Option

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command

Example

Display a list the current VMware servers:

```
CLI> system vmware vmware-servers list
```

system vmware vmware-servers view

Display details about the VMware servers.

Format

```
system vmware vmware-servers view [options]
```

Options

Option	Description	Format
--CSV	Displays the command output in a comma-delimited format with a header	Append --CSV to the command
--VMwareServerName <VMwareServerName>	Name of the server as it was defined during the add command.	

Example

Display details about a VMware server:

```
CLI> system vmware vmware-servers view Server1
```

3

CLI Procedures

Adding a NAS Appliance to a FluidFS Cluster Using the CLI

Use this procedure to add a NAS appliance to a FluidFS cluster using the CLI. The recommended way to add a NAS appliance is to use the FluidFS NAS Manager WebUI. This procedure should be performed only by Dell Technical Support Services.

1. Log on to the CLI of the existing FluidFS cluster (do not log on to the new NAS appliance) as described on Accessing the CLI.
2. Determine the network ID of the existing client subnets for use in Step 3.

   ```
   networking subnets list
   ```
3. Configure the client VIPs (PrivateIPs) and an IP address for each NAS controller that you are adding (PublicIPs). Dell recommends adding at least one client VIP per NAS controller.

   ```
   networking subnets edit <NetworkID> <netmask> -PrivateIPs <x.x.x.x,x.x.x.x>
   PublicIPs <x.x.x.x,x.x.x.x>
   ```

   For example:

   ```
   networking subnets edit 192.10.0.0 255.255.0.0 -PrivateIPs
   192.10.18.38,192.10.18.39,192.10.18.40,192.10.18.41 -PublicIPs
   192.10.18.42,192.10.18.43
   ```
4. Repeat Step 3 for additional client subnets.

   For example:

   ```
   networking subnets edit 10.10.76.0 255.255.252.0 -PrivateIPs
   10.10.78.121,10.10.78.122,10.10.78.123,10.10.78.124 -PublicIPs
   10.10.78.125,10.10.78.126
   ```
5. (iSCSI only) Configure additional IP addresses for the iSCSI SAN subnets.

   ```
   hardware fabrics iscsi edit <name> -ControllersIPs <x.x.x.x>
   ```

   For example:

   ```
   hardware fabrics iscsi edit SANb -ControllersIPs
   192.11.18.14,192.11.18.15,192.11.18.16,192.11.18.17
   hardware fabrics iscsi edit SAN -ControllersIps
   192.11.18.10,192.11.18.11,192.11.18.12,192.11.18.13
   ```
6. Add the NAS appliance.

   ```
   hardware nas-appliances add-appliance <ApplianceServiceTag>
   ```

   For example:

   ```
   hardware nas-appliances add-appliance L846185
   ```
7. For iSCSI, the IQNs will have **FluidFS NasController*X*** in the name.
8. In the output of the following command, make sure **Luns Accessibility** shows **Optimal** from all NAS controllers to all NAS volumes.

   ```
   hardware storage-subsystem view
   ```

9. Perform an incremental format and join the new NAS appliance to the FluidFS cluster.

   ```
   hardware nas-appliances join-appliance <ApplianceID>
   ```

   For example:

   ```
   hardware nas-appliances join-appliance 2
   ```

10. After the previous command completes, confirm that the NAS appliance **Status** is **Optimal** in the output of the following command.

    ```
    hardware nas-appliances status-list
    ```