Dell FluidFS V3 NAS Solutions For PowerVault NX3500, NX3600, And NX3610

CLI 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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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 • policy manual • available-backups	Use this menu to manage local and external users, user groups, and user mapping policies.
events		Use this menu to monitor FluidFS cluster 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 DNS • client-load-balancing	Use this menu to manage subnets, the default gateway, static routes, DNS, and client load balancing; view CIFS and NDMP

Menu	Submenus	Description
	• active-CIFS-sessions • active-ndmp-sessions • monitor – external-servers-states – performance-per-node – performance-summary * read * write * IOPS	sessions; and monitor performance.
system	• time • data-protection – antivirus-scanners – NDMP-configuration – cluster-partnerships • mail-configuration • 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 • cluster-name • language • diagnostics	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
	• 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 • CIFS-shares – home-share – general-settings • quota – rules * users • default * users-in-groups * groups • default – usage * users * groups • snapshots – schedules • replication – schedules • configuration-backups	Use this menu to manage NAS volumes, clone volumes, NFS exports, CIFS shares, quota rules, snapshots, replication, and configuration backups; and monitor quota usage.

CLI Command Syntax

The structure of a CLI command is:

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

Where:

- **CLI>** — The command prompt where you type the command
- ***<main_menu>*** — The name of the main menu
- ***<submenu(s)>*** —The name of one or more submenus (separated with a space). Certain menus have multiple levels of submenus.
- ***<command>*** — The name of the command that you want to execute
- ***<argument(s)>*** — The arguments (separated with a space) that you must enter with the command to execute the command successfully. You may 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)>*** — The options (separated with a space) that you have available for a command. You may have none or multiple options depending on the command that you want to execute and you may need to enter at least one of the available options for the command to execute successfully. Each option for a command must be preceded by 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
            edit
            delete
            restore
```

Example 2

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

Usage: edit <WindowsUserDomain> <WindowsUserName> <UNIXUserName> [Options]

                Options:
                    -EnableWindowsToUNIXMapping <EnableWindowsToUNIXMapping>
                    -EnableUNIXToWindowsMapping <EnableUNIXToWindowsMapping>

Parameters:
        WindowsUserDomain          - Domain of the Windows user, the available
    domains are displayed by "domains-list" command
    WindowsUserName            - Name of the Windows user
    UNIXUserName               - Name of the UNIX user
    EnableWindowsToUNIXMapping - Indicate whether the Windows to
    UNIX mapping is enabled. The optional values are: Yes or No
    EnableUNIXToWindowsMapping - Indicate whether the UNIX to Windows mapping
    is enabled. The optional values are: Yes or No
```

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 edit Administrator -SSHKey "<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 domains-list

Description

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

Output

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

access-control users-list

Description

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            |               |         |          |
'--------'--------'---------------------'---------------'---------'----------'|
```

access-control groups-list

Description

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

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 users-database view

Description

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 TLS           = No
LDAP Use Not Anonymous = No
LDAP Bind DN           = cn=proxyuser,dc=example,dc=com
LdapUseCertificate     = No
LdapCertificate        =
```

access-control users-database edit

Description

Modify the NIS/LDAP settings.

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

Option	Description	Format
-LDAPServers <LDAPServers>	List of LDAP servers	Comma-separated list of existing LDAP servers
-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 mapping policy view

Description

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 mapping policy edit

Description

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 manual view

Description

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 johns:

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

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 manual restore

Description

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 list

Description

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 edit

Description

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 delete

Description

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 johns:

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

access-control mapping manual add

Description

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

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

Description

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

Description

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 NAS-volumes CIFS-shares general-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, 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 view

Description

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

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

Description

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 restore

Description

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 list

Description

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 edit

Description

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

Example

Move a local user named user1 to the group groupB:

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

access-control local-users delete

Description

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 change-password

Description

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 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 add

Description

Add a local user.

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 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	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 *)

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-groups view

Description

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

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-groups restore

Description

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 list

Description

Display a list of the local groups.

Format

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

Options

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

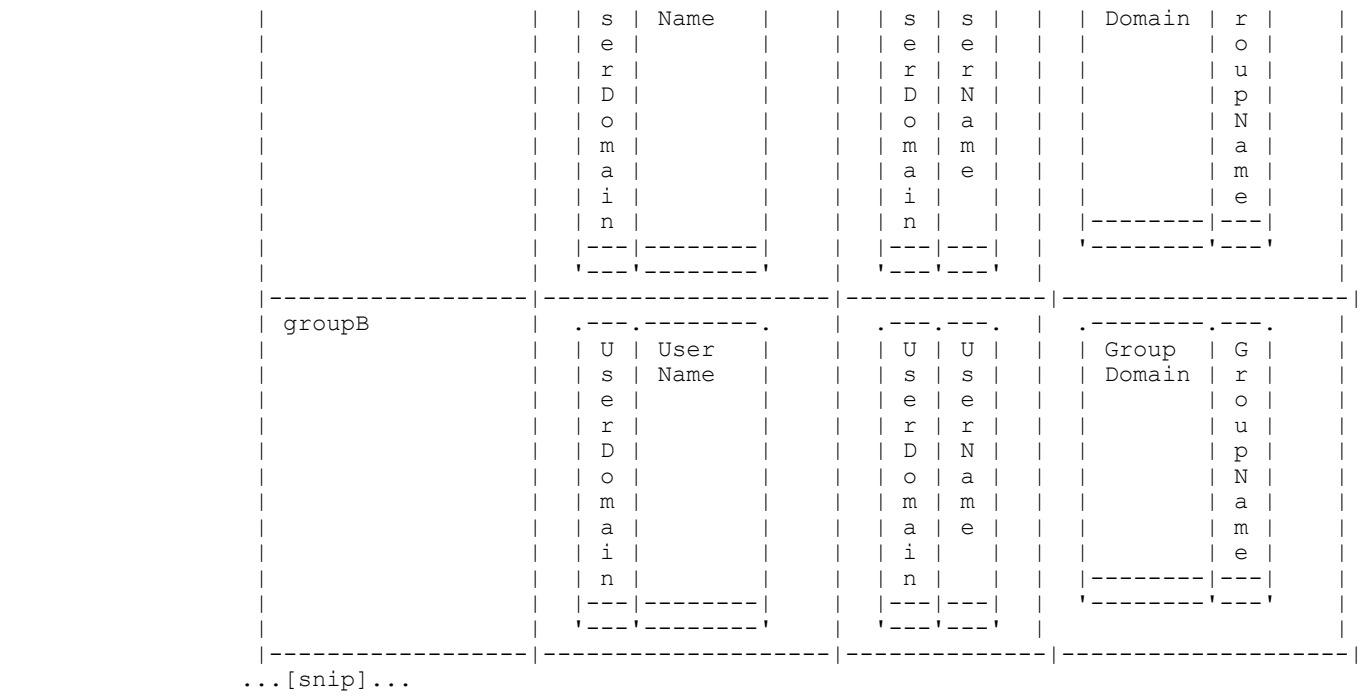
Example

Display the current list of local groups:

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

Output

```
.------------------.--------------------.--------------.--------------------.
| Group Name       | LocalUsers         | DomainUsers  | DomainGroups       |
|------------------|--------------------|--------------|--------------------|
| Administrators   |  .---.--------.    |  .---.---.   |  .--------.---.    |
|                  |  | 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 |   |   |  |--------|---|    |
|                  |  |---|--------|    |  |---|---|   |  '--------'---'    |
|                  |  | i | Admini |    |  '---'---'   |                    |
|                  |  | d | strato |    |              |                    |
|                  |  | f | r      |    |              |                    |
|                  |  | f |        |    |              |                    |
|                  |  | s |        |    |              |                    |
|                  |  | 1 |        |    |              |                    |
|                  |  '---'--------'    |              |                    |
|------------------|--------------------|--------------|--------------------|
| Backup Operators |  .---.--------.    |  .---.---.   |  .--------.---.    |
|                  |  | 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 |   |   |  |--------|---|    |
|                  |  |---|--------|    |  |---|---|   |  '--------'---'    |
|                  |  '---'--------'    |  '---'---'   |                    |
|------------------|--------------------|--------------|--------------------|
| groupA           |  .---.--------.    |  .---.---.   |  .--------.---.    |
|                  |  | U | User   |    |  | U | U |   |  | Group  | G |    |
```



```
...[snip]...
```

access-control local-groups delete

Description

Delete a local group.

NOTE: A group must be empty to 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-local-user

Description

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 delete-external-user

Description

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 add

Description

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 can not be used as the last character of the account name.

Example

Add a local group named groupA:

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

access-control local-groups add-local-user

Description

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 add-external-user

Description

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 available-backups list

Description

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-13 09:19:02 |
'---------------'--------------------'
```

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 status

Description

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
Domain            = NAS.TEST
DomainControllers =  .-------------------.-----------.------------.
                     | Domain Controller | Preferred| Accessible |
                     |-------------------|-----------|------------|
                     | 172.22.144.2      | Yes       | Yes        |
                     |-------------------|-----------|------------|
                     | 172.22.144.3      | Yes       | No         |
                     '-------------------'-----------'------------'
```

access-control active-directory join

Description

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
-DomainControllers <DomainControllers>	List of preferred Active Directory domain controllers	Comma-separated list of existing, preferred Active Directory domain controllers. Host name containing one or more sub names, each separated by a dot. Each sub name may contain letters, numbers or hyphens, but may not start nor end in a hyphen.
-Username <Username>	Active Directory administrator name	Existing Active Directory administrator user name
-Password <Password>	Active Directory administrator password	Existing Active Directory administrator password

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
```

events list

Description

Display a list of the 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

Example

Display a current list of the events:

```
CLI> events list
```

Output

```
.-----------.-----------.-------------.----------.-------------.-------------.
| Unique ID | Event ID  | Event Time  | Severity | Workspace   | Headline    |
|-----------|-----------|-------------|----------|-------------|-------------|
| 1975780   | 114000003 | 30-Jul-13   | Info     | System      | Fluid FS    |
|           |           | 12:05:06    |          |             | Health Scan |
|           |           |             |          |             | finished a  |
|           |           |             |          |             | scanning    |
|           |           |             |          |             | cycle.      |
|-----------|-----------|-------------|----------|-------------|-------------|
| 1975784   | 115000112 | 30-Jul-13   | Info     | System      | The user    |
|           |           | 12:35:41    |          |             | Administrat |
|           |           |             |          |             | or has      |
|           |           |             |          |             | successfull |
|           |           |             |          |             | y added new |
|           |           |             |          |             | Local User  |
|           |           |             |          |             | 'user1' to  |
|           |           |             |          |             | cluster     |
|           |           |             |          |             | repository  |
|-----------|-----------|-------------|----------|-------------|-------------|
...[snip]...
```

events view

Description

Display the details of a single event.

Format

```
events view <UniqueID>
```

Arguments

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

Example

Display the details of event 1975784:

```
CLI> events view 1975784
```

Output

```
Event ID   = 115000112
Event Time = 30-Jul-13 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 storage-subsystem view

Description

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            =
36000d31000fad8000000000000000017
                           |  |- 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]...
```

hardware storage-subsystem rescan

Description

Trigger the LUNs discovery.

Format

```
hardware storage-subsystem rescan
```

Example

Detect available LUNs:

```
CLI> hardware storage-subsystem rescan
```

hardware storage-subsystem expand-NAS-pool

Description

Expand the NAS pool.

Format

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

Example

Expand the NAS pool:

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

hardware storage-subsystem create-NAS-pool

Description

Create a NAS pool.

Format

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

Example

Create a NAS pool:

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

hardware storage-identifiers view

Description

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-identifiers list

Description

Display a list of the storage identifiers.

Format

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

Description

Restore NAS volumes from the storage.

CAUTION: This command should be used only by Dell Technical Support Services. 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 restore-configuration-from-storage restore-lost-volumes

Description

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 Services. 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-configuration

Description

Restore the configuration from the storage.

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

Format

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

Example

Restore the configuration from the storage:

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

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

Description

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 Services. 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 | 80.00|
|           | MB   |
'------'------'
```

hardware NAS-appliances view

Description

Display details for a single NAS appliance.

Format

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

Arguments

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

Example

Display details for a single NAS appliance with the appliance ID 1:

```
CLI> hardware NAS-appliances view 1
```

Output

```
Appliance ID          = 1
Appliance Service Tag = 17XZSW1
Is File System Member = Yes
Controllers           =  .----------------.----------------.
                         |Controllers ID  | Cluster Member|
                         |----------------|----------------|
                         | 0              | Yes            |
                         |----------------|----------------|
                         | 1              | Yes            |
                         '----------------'----------------'
```

hardware NAS-appliances status

Description

Display the status for a single NAS appliance.

Format

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

Arguments

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

Example

Display the current status for a single NAS appliance with the ID 1:

```
CLI> hardware NAS-appliances status 1
```

Output

```
'--+- Appliance ID               = 1
   |- Status                     = NotOptimal
   |- Appliance Service Tag      = 17XZSW1
   |- Model                      = NX3500
   |- San Type                   = iSCSI
   |- Client Network Speed       = 1 GbE
   |- Admin Network Speed        = 1 GbE
   |- Internal Network Speed     = 1 GbE
   |- Backplane Network Speed    = 1 GbE
   |- San Network Speed          = 1 GbE
   |- Fans Overall Status        = Optimal
...[snip]...
```

hardware NAS-appliances status-mesh

Description

Display the network mesh connectivity status.

Format

```
hardware NAS-appliances status-mesh
```

Example

Display the current network mesh connectivity status:

```
CLI> hardware NAS-appliances status-mesh
```

Output

```
ConnectivityGroups   = +--+- Nics =  .---------------.-----------.
                       |             | Controller ID| Interface |
                       |             |---------------|-----------|
                       |             | 1             | eth30     |
                       |             |---------------|-----------|
                       |             | 1             | eth31     |
                       |             |---------------|-----------|
                       |             | 0             | eth30     |
                       |             |---------------|-----------|
                       |             | 0             | eth31     |
                       |             '---------------'-----------'
                       '--+- Nics =  .---------------.-----------.
                                     | Controller ID| Interface |
                                     |---------------|-----------|
                                     | 0             | eth20     |
                                     |---------------|-----------|
                                     | 1             | eth20     |
DownNics             =  .---------------.-----------.
                        | Controller ID | Interface |
                        |---------------|-----------|
                        | 1             | eth10     |
                        |---------------|-----------|
                        | 0             | eth10     |
                        '---------------'-----------'
ConnectivityProblems =  .----------.----------.----------.----------.--------.
                        | First    | First    | Second   | Second   | Problem |
                        | Controll | Interfac | Controll| Interfac |         |
                        | er ID    | e        | er ID    | e        |         |
                        |----------|----------|---------|----------|--------|
                        '----------'----------'---------'----------'--------'
```

hardware NAS-appliances status-list

Description

Display a list of NAS appliances and their status.

Format

```
hardware NAS-appliances status-list
```

Example

Display a current list of NAS appliances and their status:

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

Output

```
'--+- Appliance ID              = 1
   |- Status                    = NotOptimal
   |- Appliance Service Tag     = 17XZSW1
   |- Model                     = NX3500
   |- San Type                  = iSCSI
   |- Client Network Speed      = 1 GbE
   |- Admin Network Speed       = 1 GbE
```

```
   |- Internal Network Speed     = 1 GbE
   |- Backplane Network Speed    = 1 GbE
   |- San Network Speed          = 1 GbE
   |- Fans Overall Status        = Optimal
...[snip]...
```

hardware NAS-appliances reboot-controller

Description

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 NAS-appliances list

Description

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 join-appliance

Description

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 discovery view

Description

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 Tag

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          = 3.0.7440
              |  |- Model            = NX3610
              |  |- 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          = 3.0.7440
                 |- Model            = NX3610
                 |- Controller ID    = 7DSS3V1-2
                 |- Is Clean         = Yes
                 '- AllIPv6Addresses = fe80::a236:9fff:fe03:1492,
                                       fe80::a236:9fff:fe03:1490
```

hardware NAS-appliances discovery list

Description

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                 |  |
|                       |  |--------|----------|-------------------------| |
|                       |  | NX3610 | 3.0.7440 | fe80::a236:9fff:fe03:134|  |
|                       |  |        |          | e                       |  |
|                       |  |--------|----------|-------------------------| |
|                       |  | NX3610 | 3.0.7440 | fe80::a236:9fff:fe03:149|  |
|                       |  |        |          | 2                       |  |
|                       |  '--------'----------'-------------------------' |
'----------------------'-------------------------------------------------'
```

hardware NAS-appliances detach-controller

Description

Detach a NAS controller.

Format

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

Arguments

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

Description

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 create-cluster

Description

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

Example

Create a FluidFS cluster:

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

hardware NAS-appliances blink-appliance

Description

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 attach-controller

Description

Attach a NAS controller.

NOTE: The NAS controller 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 attach-controller <ApplianceID>
<ControllerID>
```

Arguments

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

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 add-appliance

Description

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 fabrics status

Description

Display a connectivity status to the storage for a single fabric.

NOTE: This command is available only on 10GbE iSCSI NX3600 appliances.

Format

```
hardware fabrics status <Name>
```

Arguments

Argument	Description	Format
<Name>	Fabric name	Existing fabric name

Example

Display the current connectivity status to the storage for a single fabric named SANb:

```
CLI> hardware fabrics status SANb
```

Output

```
Name                          = SANb
Overall Connectivity Status = Accessible
DetailedConnectivityStatus  =  .-----------.----------.-----------.----------.
                               | Controlle | IP       | Descripti | Status   |
                               | r ID      |          | on        |          |
                               |-----------|----------|-----------|----------|
                               | 0         | 172.22.15| port_172. | Accessib |
                               |           | 8.167    | 22.158.16 | le       |
                               |           |          | 7         |          |
                               |-----------|----------|-----------|----------|
                               | 1         | 172.22.15| port_172. | Accessib |
                               |           | 8.167    | 22.158.16 | le       |
                               |           |          | 7         |          |
                               |-----------|----------|-----------|----------|
                               | 2         | 172.22.15| port_172. | Accessib |
                               |           | 8.167    | 22.158.16 | le       |
                               |           |          | 7         |          |
                               |-----------|----------|-----------|----------|
...[snip]...
```

hardware fabrics status-list

Description

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

NOTE: This command is available only on 10GbE iSCSI NX3600 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
=  .-----------.-----------.-----------.----------.
|                                  | Controlle | IP       | Descripti |
Status   |
|                                  | r 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
=  .-----------.-----------.-----------.----------.
                                   | Controlle | IP       | Descripti |
Status   |
                                   | r 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 fabrics iSCSI-portals view

Description

Display the settings of iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI NX3600 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|
                      '----------------'---------------------'
IscsiPortalsV6     =  .----.-------------.
                      | IP | Description |
                      |----|-------------|
                      '----'-------------'
```

hardware fabrics iSCSI-portals rediscover-all

Description

Rediscover storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI NX3600 appliances.

Format

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

Example

Rediscover storage iSCSI portals:

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

hardware fabrics iSCSI-portals enable-authentication

Description

Enable authentication to storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI NX3600 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 disable-authentication

Description

Disable authentication to storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI NX3600 appliances.

Format

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

Example

Disable authentication to storage iSCSI portals:

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

hardware fabrics iSCSI-portals delete-IPv6

Description

Delete an IPv6 address from the storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI NX3600 appliances.

Format

```
hardware fabrics iSCSI-portals delete-IPv6 <IP>
```

Arguments

Argument	Description	Format
<IP>	IPv6 address of the iSCSI storage	Existing IPv6 address of the iSCSI storage

Example

Delete the IPv6 address fe80::a236:9fff:fe01:529a from the storage iSCSI portals:

```
CLI> hardware fabrics iSCSI-portals delete-IPv6 fe80::a236:9fff:fe01:529a
```

hardware fabrics iSCSI-portals delete-IPv4

Description

Delete an IPv4 address from the storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI NX3600 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 add-IPv6

Description

Add an IPv6 address to storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI NX3600 appliances.

Format

```
hardware fabrics iSCSI-portals add-IPv6 <IP> <Description>
```

Arguments

Argument	Description	Format
<IP>	IPv6 address of the iSCSI storage	IPv6 address in the format: 'FFFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF:FFFF'
<Description>	Description for the IPv6 address of the iSCSI storage	Any string

Example

Add the IPv6 address fe80::a236:9fff:fe01:529a to storage iSCSI portals with the description ‚Äúport_fe80::a236:9fff:fe01:529a‚Äù:

```
CLI> hardware fabrics iSCSI-portals add-IPv6 fe80::a236:9fff:fe01:529a
port_fe80::a236:9fff:fe01:529a
```

hardware fabrics iSCSI-portals add-IPv4

Description

Add an IPv4 address to storage iSCSI portals.

NOTE: This command is available only on 10GbE iSCSI NX3600 appliances.

Format

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

Arguments

Argument	Description	Format
<IP>	IPv4 address of the iSCSI storage	IP address in the format: 'x.x.x.x'
<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 the description ‚Äúport_172.22.158.167‚Äù:

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

hardware fabrics iSCSI view

Description

Display settings of an iSCSI fabric.

NOTE: This command is available only on 10GbE iSCSI NX3600 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 iSCSI list

Description

Display a list of iSCSI fabrics.

NOTE: This command is available only on 10GbE iSCSI NX3600 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 edit

Description

Modify settings of an iSCSI fabric.

NOTE: This command is available only on 10GbE iSCSI NX3600 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 the format: 'x.x.x.x'
-ControllersIPs <ControllersIPs>	NAS controller IP addresses	Comma-separated list of IP addresses in the format: 'x.x.x.x'

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 delete

Description

Delete the iSCSI fabric.

NOTE: This command is available only on 10GbE iSCSI NX3600 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 add

Description

Add an iSCSI fabric.

NOTE: This command is available only on 10GbE iSCSI NX3600 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 the format: 'x.x.x.x'
<ControllersIPs>	NAS controller IP addresses	Comma-separated list of IP addresses in the format: 'x.x.x.x'

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 destroy-cluster destroy

Description

Destroy the FluidFS cluster.

CAUTION: This command should be used only by Dell Technical Support Services. 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
```

Example

Destroy the FluidFS cluster:

```
CLI> hardware destroy-cluster destroy
```

hardware destroy-cluster destroy-and-change-model

Description

Destroy the FluidFS cluster and change its model.

CAUTION: This command should be used only by Dell Technical Support Services. 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

Argument	Description	Format
<Model>	Required model	Possible values are NX3500, NX3600, NX3610

Example

Destroy the FluidFS cluster and change its model to NX3610:

```
CLI> hardware destroy-cluster destroy-and-change-model NX3610
```

networking subnets view

Description

Display client network subnet settings.

Format

```
networking subnets view <NetworkID> <Netmask>
```

Arguments

Argument	Description	Format
<NetworkID>	Network ID of the subnet	Existing network ID
<Netmask>	Netmask of the subnet	Existing netmask

Example

Display the settings for a client network with the ID 172.22.69.0 and the netmask 255.255.255.0:

```
CLI> networking subnets view 172.22.69.0 255.255.255.0
```

Output

```
Network Id = 172.22.69.0
Netmask    = 255.255.255.0
VLAN Tag   = 0
PrivateIPs = 172.22.69.42,172.22.69.43
PublicIPs  = 172.22.69.40,172.22.69.41
```

networking subnets list

Description

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 the current list of client network subnets:

```
CLI> networking subnets list
```

Output

```
.-------------.---------------.----------.-----------------.-----------------.
 | Network Id  | Netmask       | VLAN Tag | PrivateIPs      | PublicIPs       |
 |-------------|---------------|----------|-----------------|-----------------|
 | 172.22.69.0 | 255.255.255.0 | 0        | 172.22.69.42,   | 172.22.69.40,   |
 |             |               |          | 172.22.69.43    | 172.22.69.41    |
 '-------------'---------------'----------'-----------------'-----------------'
```

networking subnets edit

Description

Modify client network subnet settings.

Format

```
networking subnets edit <NetworkID> <Netmask> {options}
```

Arguments

Argument	Description	Format
<NetworkID>	Current network ID of the subnet	Existing network ID
<Netmask>	Current netmask of the subnet	Existing netmask

Options

Option	Description	Format
-NewNetmask <NewNetmask>	New netmask of the subnet	IP address in the format: 'x.x.x.x'
-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 the format: 'x.x.x.x'
-PublicIPs <PublicIPs>	Client VIPs	Comma-separated list of IP addresses in the format: 'x.x.x.x'

Example

Edit a client subnet with the ID 192.168.0.0 to change the netmask from 255.255.128.0 to 255.255.255.0:

```
CLI> networking subnets edit 192.168.0.0 255.255.128.0 -NewNetmask 255.255.255.0
```

networking subnets delete

Description

Delete a subnet from the client network.

Format

```
networking subnets delete <NetworkID> <Netmask>
```

Arguments

Argument	Description	Format
<NetworkID>	Network ID of the subnet	Existing network ID
<Netmask>	Netmask of the subnet	Existing netmask

Example

Delete a client subnet with the ID 192.168.0.0 and netmask 255.255.255.0:

```
CLI> networking subnets delete 192.168.0.0 255.255.255.0
```

networking subnets add

Description

Add a subnet on the client network.

Format

```
networking subnets add <Netmask> {options}
```

Arguments

Argument	Description	Format
<Netmask>	Netmask of the subnet	IP address in the format: 'x.x.x.x'

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 IP addresses in the format: 'x.x.x.x'
-PublicIPs <PublicIPs>	Client VIPs	Comma-separated list of IP addresses in the format: 'x.x.x.x'

Example

Add a client subnet with the client VIPs 192.168.0.14 and 192.168.0.15 and NAS controller IP addresses 192.168.0.16 and 192.168.0.17:

```
CLI> networking subnets add 255.255.128.0 -PublicIPs 192.168.0.14,192.168.0.15 -
PrivateIPs 192.168.0.16,192.168.0.17
```

networking static-routes view

Description

Display static route settings for a destination subnet.

Format

```
networking static-routes view <DestinationNetworkID> <DestinationNetMask>
```

Arguments

Argument	Description	Format
<DestinationNetworkID>	Network ID of the destination subnet	Existing network ID
<DestinationNetMask>	Netmask of the destination subnet	Existing network netmask

Example

Display static route settings for a subnet with ID 10.1.100.0 and netmask 255.255.255.0:

```
CLI> networking static-routes view 10.1.100.0 255.255.255.0
```

Output

```
Destination Network ID = 10.1.100.0
Destination Netmask    = 255.255.255.0
Gateway IP             = 172.22.69.7
```

networking static-routes list

Description

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 Netmask | GatewayIP  |
|------------------------|--------------------|------------|
| 10.1.100.0             | 255.255.255.0      | 172.22.69.7|
'------------------------'--------------------'------------'
```

networking static-routes edit

Description

Modify the gateway for a destination subnet.

Format

```
networking static-routes edit <DestinationNetworkID> <DestinationNetMask>
<GatewayIP>
```

Arguments

Argument	Description	Format
<DestinationNetworkID>	Network ID of the destination subnet	Existing network ID
<DestinationNetMask>	Netmask of the destination subnet	Existing network netmask
<GatewayIP>	Gateway for the destination subnet	IP address in the format: 'x.x.x.x'

Example

Modify a static route to a subnet with the ID 10.1.100.0 and netmask 255.255.255.0 to use the gateway 172.22.69.8:

```
CLI> networking static-routes edit 10.1.100.0 255.255.255.0 172.22.69.8
```

networking static-routes delete

Description

Delete the static route for a destination subnet.

Format

```
networking static-routes delete <DestinationNetworkID> <DestinationNetMask>
```

Arguments

Argument	Description	Format
<DestinationNetworkID>	Network ID of the destination subnet	Existing network ID
<DestinationNetMask>	Netmask of the destination subnet	Existing network netmask

Example

Delete the static route to a subnet with the address 10.1.100.0 and netmask 255.255.255.0:

```
CLI> networking static-routes delete 10.1.100.0 255.255.255.0
```

networking static-routes add

Description

Add a static route for a destination subnet.

Format

```
networking static-routes add <DestinationNetworkID> <DestinationNetMask>
<GatewayIP>
```

Arguments

Argument	Description	Format
<DestinationNetworkID>	Network ID of the destination subnet	IP address in the format: 'x.x.x.x'
<DestinationNetMask>	Netmask of the destination subnet	IP address in the format: 'x.x.x.x'
<GatewayIP>	Gateway for the destination subnet	IP address in the format: 'x.x.x.x'

Example

Add a static route to a subnet with the address 10.1.100.0 and netmask 255.255.255.0 through the gateway 172.22.69.7:

```
CLI> networking static-routes add 10.1.100.0 255.255.255.0 172.22.69.7
```

networking monitor performance-summary write last-year

Description

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   | CIFS 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

Description

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   | CIFS 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-month

Description

Display the last month,Äôs 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,Äôs write traffic statistics:

```
CLI> networking monitor performance-summary write last-month
```

Output

```
.--------.--------.--------.--------------.--------------.--------------.
 | Time   | NFS    | NDMP   | CIFS 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-day

Description

Display the last day,Äôs 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,Äôs write traffic statistics:

```
CLI> networking monitor performance-summary write last-day
```

Output

```
.--------.--------.--------.--------------.--------------.--------------.
 | Time   | NFS    | NDMP   | CIFS 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 read last-year

Description

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   | CIFS 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-summary read last-week

Description

Display the last week,Äôs read traffic statistics.

Format

```
networking monitor performance-summary read 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,Äôs read traffic statistics:

```
CLI> networking monitor performance-summary read last-week
```

Output

```
 .--------.--------.--------.--------------.-------------.--------------.
 | Time   | NFS    | NDMP   | CIFS 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:  |         |         |               |              |               |
| 13      |         |         |               |              |               |
|---------|---------|---------|---------------|--------------|---------------|
| 10-May  | 0.00    | 0.00    | 0.00 MB       | 0.00 MB      | 0.00 MB       |
| -13     | MB      | MB      |               |              |               |
| 06:00:  |         |         |               |              |               |
| 00      |         |         |               |              |               |
|---------|---------|---------|---------------|--------------|---------------|
...[snip]...
```

networking monitor performance-summary read last-month

Description

Display the last month‚Äôs 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‚Äôs read traffic statistics:

```
CLI> networking monitor performance-summary read last-month
```

Output

```
.--------.--------.--------.--------------.-------------.--------------.
| Time   | NFS    | NDMP   | CIFS 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-summary read last-day

Description

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   | CIFS 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 IOPS last-year

Description

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    | CIFS   |CIFS    | CIFS IOPS    |
 |              | IOPS   | IOPS   | IOPS   | IOPS   |IOPS    | Other        |
 |              | Read   | Write  | Other  | Read   |Write   |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-13    | 0      | 0      | 0      | 0      |0      | 0            |
 | 14:43:02     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 26-Apr-13    | 0      | 0      | 8      | 0      |0      | 0            |
 | 00:00:00     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
...[snip]...
```

networking monitor performance-summary IOPS last-week

Description

Display the last week,Äôs 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,Äôs IOPS traffic statistics:

```
CLI> networking monitor performance-summary IOPS last-week
```

Output

```
.--------------.--------.--------.--------.--------.--------.--------------.
 | Time         | NFS    | NFS    | NFS    | CIFS   |CIFS    | CIFS IOPS    |
 |              | IOPS   | IOPS   | IOPS   | IOPS   |IOPS    | Other        |
 |              | Read   | Write  | Other  | Read   |Write   |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-13    | 0      | 0      | 0      | 0      |0      | 0            |
 | 14:43:33     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-13    | 0      | 0      | 8      | 0      |0      | 0            |
 | 06:00:00     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
...[snip]...
```

networking monitor performance-summary IOPS last-month

Description

Display the last month,Äôs 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,Äôs IOPS traffic statistics:

```
CLI> networking monitor performance-summary IOPS last-month
```

Output

```
 .--------------.--------.--------.--------.--------.--------.-------------.
 | Time         | NFS    | NFS    | NFS    | CIFS   |CIFS    | CIFS IOPS   |
 |              | IOPS   | IOPS   | IOPS   | IOPS   |IOPS    | Other       |
 |              | Read   | Write  | Other  | Read   |Write   |             |
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-13    | 0      | 0      | 0      | 0      |0      | 0            |
 | 14:42:44     |        |        |        |        |       |              |
```

```
 |--------------|--------|--------|--------|--------|-------|--------------|
 | 10-May-13    | 0      | 0      | 8      | 0      |0      | 0            |
 | 06:00:00     |        |        |        |        |       |              |
 |--------------|--------|--------|--------|--------|-------|--------------|
...[snip]...
```

networking monitor performance-summary IOPS last-day

Description

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    | CIFS   |CIFS    | CIFS 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-per-node last-year

Description

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 | CIF | CIF | Rep| Rep | Net | Net | Tot |
 | nt | e   | Rea | Wri | P   | P   | S   | S   | 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: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 33: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 50  |     |     |     |     |     |     |    |     |     |     |     |
 |----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
 | 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: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 33: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 50  |     |     |     |     |     |     |    |     |     |     |     |
 |----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
...[snip]...
```

networking monitor performance-per-node last-week

Description

Display the last week,Äôs 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,Äôs traffic statistics per NAS controller:

```
CLI> networking monitor performance-per-node last-week
```

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 | 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-per-node last-month

Description

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 | CIF | CIF | Rep| Rep | Net | Net | Tot |
 | nt | e   | Rea | Wri | P   | P   | S   | S   | 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: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 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   |
 |    | -13 | MB  | MB  | MB  | MB  | MB  | MB  | MB | MB  | MB  | MB  | MB  |
 |    | 11: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 33: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 05  |     |     |     |     |     |     |    |     |     |     |     |
 |----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
...[snip]...
```

networking monitor performance-per-node last-day

Description

Display the last day,Äôs 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,Äôs 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 | 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: |     |     |     |     |     |     |    |     |     |     |     |
 |    | 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 external-servers-states view

Description

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 the format: 'x.x.x.x'. A host name must contain one or more sub names, each separated by a dot. Each sub name may contain letters, numbers or hyphens, but may not start nor end in a hyphen.
<Type>	Type of the 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 external-servers-states list

Description

Display a list of external servers and their accessibility status.

Format

```
networking monitor external-servers-states 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 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 DNS view

Description

Display DNS settings.

Format

```
networking DNS view
```

Example

Display the current DNS settings:

```
CLI> networking DNS view
```

Output

```
DnsServers = 172.22.144.3
Suffixes   = nas.test
```

networking DNS edit

Description

Modify DNS settings.

Format

```
networking DNS edit {options}
```

Options

Option	Description	Format
-DNSServers <DNSServers>	DNS servers	Comma-separated list of IP addresses in the format: 'x.x.x.x'
-Suffixes <Suffixes>	DNS suffixes	Comma-separated list of DNS suffixes. A DNS suffix must be a domain name containing one or more sub names, each separated by a dot, and followed by a single top-level domain name. Each sub name has a maximum length of 63 characters, and may contain letters, numbers or hyphens, but may not start nor end in a hyphen. The top-level domain name must consist of 2 to 6 letters only.

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 -Suffixes nas.test
```

networking default-gateway view

Description

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 default-gateway edit

Description

Modify the default gateway.

Format

```
networking default-gateway edit <GatewayIP>
```

Arguments

Argument	Description	Format
<GatewayIP>	Default gateway IP address	IP address in the format: 'x.x.x.x'

Example

Change the default gateway to IP address 172.22.69.2:

```
CLI> networking default-gateway edit 172.22.69.2
```

networking default-gateway delete

Description

Delete the default gateway.

Format

```
networking default-gateway delete
```

Example

Delete the current default gateway:

```
CLI> networking default-gateway delete
```

networking client-network-interface view

Description

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 client-network-interface edit

Description

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-load-balancing view

Description

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 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'

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                    = CIFS
Is Required Manual Failback = No
```

networking client-load-balancing unpin

Description

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 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'

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 pin

Description

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 move

Description

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 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 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 mass-rebalance

Description

Rebalance all the clients between the NAS controllers.

Format

```
networking client-load-balancing mass-rebalance
```

Example

Rebalance all clients between the NAS controllers:

```
CLI> networking client-load-balancing mass-rebalance
```

networking client-load-balancing mass-failback

Description

Move all clients back to their preferred NAS controller.

Format

```
networking client-load-balancing mass-failback
```

Example

Fail back all clients to their preferred NAS controller:

```
CLI> networking client-load-balancing mass-failback
```

networking client-load-balancing list

Description

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      |       |       | CIFS  | No     |
| 2.69. | 2.69. |        |        |        |       |       |       |        |
| 18    | 40    |        |        |        |       |       |       |        |
'-------'-------'--------'--------'--------'-------'-------'-------'--------'
```

networking active-ndmp-sessions view

Description

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-ndmp-sessions logoff

Description

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 list

Description

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 Id | Session Id | Session Type | DMA IP       | Session Path |
Session Start Time |
|---------------|------------|--------------|--------------|--------------|-----
---------------|
| 1             | 151691     | Restore      | 172.41.200.70| /volume2     | 03-
Jun-13 11:25:14 |
'---------------'------------'--------------'--------------'--------------'-----
---------------'
```

networking active-CIFS-sessions view

Description

Display information about an active CIFS session.

Format

```
networking active-CIFS-sessions view <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 the format: 'x.x.x.x'

Example

Display information about an active CIFS session for the user idffs2\user1 on the computer win2k8d-m380.lab.town using NAS controller 1:

```
CLI> networking active-CIFS-sessions view 1 idffs2\user1 win2k8d-m380.lab.town
```

Output

```
Protocol          = CIFS
Controller ID     = 1
User              = idffs2\user1
Computer          = ::ffff:172.22.69.18
Number Open Files = 0
Connected Time    = 32:42:58
Idle Time         = 00:00:00
Guest             = No
```

networking active-CIFS-sessions logoff

Description

Disconnect an active CIFS session.

Format

```
networking active-CIFS-sessions logoff <ControllerID> <ClientComputerName>
<UserName>
```

Arguments

Argument	Description	Format
<ControllerID>	ID of the NAS controller to which the session is connected	Existing NAS controller ID
<ClientComputerName>	Computer name from where the session was established	Existing computer name or IP address in the format: 'x.x.x.x'
<UserName>	User name that established the session	Existing user name

Example

Disconnect an active CIFS session for the user idffs2\user1 on the computer win2k8d-m380.lab.town using NAS controller 1:

```
CLI> networking active-CIFS-sessions logoff 1 win2k8d-m380.lab.town idffs2\user1
```

networking active-CIFS-sessions list

Description

Display a list of active CIFS sessions.

Format

```
networking active-CIFS-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 a current list of active CIFS sessions:

```
CLI> networking active-CIFS-sessions list
```

Output

```
.--------.--------.--------------.--------.--------.--------.--------.-------.
 | Protoc | Contro | User         | Comput | Number |Connec | Idle   | Guest |
 | ol     | ller   |              | er     | Open   |ted    | Time   |       |
 |        | Id     |              |        | Files  |Time   |        |       |
 |--------|--------|--------------|--------|-------|--------|--------|-------|
 | CIFS   | 0      | idffs1\user1 | ::ffff | 1      |00:14: | 00:00: | No    |
 |        |        |              | :172.2 |        |16     | 00     |       |
 |        |        |              | 2.69.1 |        |       |        |       |
 |        |        |              | 8      |        |       |        |       |
 '--------'--------'--------------'--------'--------'--------'--------'-------'
```

system time view

Description

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 view-current-time

Description

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 time set-current-time

Description

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 quotes 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 edit

Description

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 on page 72<Default ¬[1] Font>.
-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 may contain letters, numbers or hyphens, but may not start nor 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 available-timezones

Description

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]...
```

networking default-gateway add

Description

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 the format: 'x.x.x.x'

Example

Add a default gateway with the IP address 172.22.69.1:

```
CLI> networking default-gateway add 172.22.69.1
```

system time available-timezones

Description

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 software-updates view

Description

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 upgrade

Description

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 re-enable 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 list

Description

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 current list of the 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 eula-approval-status

Description

Display whether the EULA was approved.

Format

```
system software-updates eula-approval-status
```

Example

Display whether the EULA was approved:

```
CLI> system software-updates eula-approval-status
```

Output

```
Is EULA Approved = Yes
```

system software-updates approve-eula

Description

Approve that the administrator read the EULA.

Format

```
system software-updates approve-eula
```

Example

Approve that the administrator read the EULA:

```
CLI> system software-updates approve-eula
```

system SNMP view

Description

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 SNMP update-filter

Description

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 set

Description

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 may contain letters, numbers or hyphens, but may not start nor 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 mail-configuration view

Description

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 mail-configuration set

Description

Modify mail settings.

Format

```
system mail-configuration set {options}
```

Options

Option	Description	Format
-MailRelays <MailRelays>	Mail relays	Comma-separated list of IP addresses in the format: 'x.x.x.x'
-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 enable-authentication

Description

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 disable-authentication

Description

Disable mail relays authentication.

Format

```
system mail-configuration disable-authentication
```

Example

Disable mail relays authentication:

```
CLI> system mail-configuration disable-authentication
```

system licenses view

Description

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 licenses load

Description

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 re-enable 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://

Argument	Description	Format
		<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 list

Description

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 current list of 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 delete

Description

Delete the license of a feature.

Format

```
system licenses delete <Feature>
```

Arguments

Argument	Description	Format
<Feature>	Name of the feature	Possible values are AdvancedDeduplication, Replication, Deduplication, Snapshots

Example

Delete the license for the Snapshots feature:

```
CLI> system licenses delete Snapshots
```

system internal system-configuration-state view

Description

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 internal system-configuration-state installation-finished

Description

Indicate that the installation is finished.

CAUTION: This command should be used only by Dell Technical Support Services. 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 hardware-replacement-start

Description

Indicate that the hardware replacement is starting.

CAUTION: This command should be used only by Dell Technical Support Services. 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 hardware-replacement-finished

Description

Indicate that the hardware replacement is finished.

CAUTION: This command should be used only by Dell Technical Support Services. 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 security ui-configuration view

Description

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 edit

Description

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)

Example

Change the UI session expiation period to 1800 seconds:

```
CLI> system internal security ui-configuration edit -SessionExpirationPeriod
1800
```

system internal security support-access view

Description

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-access enable

Description

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 disable

Description

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 change-password

Description

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 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 management-access unrestrict

Description

Unrestrict management access, so administrators will be able to access the system from any subnet.

Format

```
system internal security management-access unrestrict
```

Example

Unrestrict management access, so administrators will be able to access the system from any subnet:

```
CLI> system internal security management-access unrestrict
```

system internal security management-access restriction-status

Description

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 restrict

Description

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 management-subnet view

Description

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 management-subnet edit

Description

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>	Netmask of the subnet	IP address in the format: 'x.x.x.x'
-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 the format: 'x.x.x.x'
-PublicIP <PublicIP>	Client VIP that the administrator will use for management access	IP address in the format: 'x.x.x.x'

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 delete

Description

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 add

Description

Add a management subnet.

Format

```
system internal security management-access management-subnet add <Netmask>
{options}
```

Arguments

Argument	Description	Format
<Netmask>	Netmask of the subnet	IP address in the format: 'x.x.x.x'

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 the format: 'x.x.x.x'
-PublicIP <PublicIP>	Client VIP that the administrator will use for management access	IP address in the format: 'x.x.x.x'

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 FTP configuration view

Description

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 FTP configuration enable

Description

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 disable

Description

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 language view

Description

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 language set

Description

Modify the language of the FluidFS cluster.

Format

```
system internal language set <Language>
```

Arguments

Argument	Description	Format
<Language>	Language of the FluidFS cluster	Possible values are English

Example

Modify the language of the FluidFS cluster to English:

```
CLI> system internal language set English
```

system internal internal-network view

Description

Display the internal network settings.

Format

```
system internal internal-network view
```

Example

Display the internal network settings:

```
CLI> system internal internal-network view
```

Output

```
Range   = 10.255.254.0
Netmask = 255.255.255.0
```

system internal internal-network edit

Description

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 file-system service-mode view

Description

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 file-system service-mode set

Description

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 internal-storage-reservation view

Description

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 domains view

Description

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 domains list

Description

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 background-processes view

Description

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 Data Reduction:

```
CLI> system internal file-system background-processes view DataReduction
```

Output

```
Backgr = Data Reduction
Status = Idle
```

system internal file-system background-processes list

Description

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 current list of 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 configuration health-scan view

Description

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 configuration health-scan set

Description

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 Services.

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 data-reduction view

Description

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 data-reduction set

Description

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 6
```

system internal diagnostics view

Description

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, CIFSAndNFS

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 Name Advanced Diagnostic    = Advanced.90fb2eb6-d44d-4440-abd8-adba59cb1101
                                   .11_05_2013-12_26_48.tar.gz
File size of general diagnostic  = 19
File size of logs diagnostic     = 98
File size of advanced diagnostic = 0
Is Advanced Diagnostic Package Full = Yes
```

system internal diagnostics run-performance-diagnostic

Description

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

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

Example

Run the performance diagnostic on a NAS volume named vol1:

```
CLI> system internal diagnostics run-performance-diagnostic vol1
```

system internal diagnostics run-nfs-file-accessibility-diagnostic

Description

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 re-enable 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

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-network-diagnostic

Description

Run the networking diagnostic. In case of a client connectivity problem, ask the client to repeat their attempt to connect to the FluidFS cluster 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/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 re-enable FTP before using this command.

Format

```
system internal diagnostics run-network-diagnostic <ClientIP>
```

Arguments

Argument	Description	Format
<ClientIP>	IP address of the client	Existing client IP address in the format: 'x.x.x.x'

Example

Run the networking diagnostic for a client with the IP address 172.22.69.18:

```
CLI> system internal diagnostics run-network-diagnostic 172.22.69.18
```

system internal diagnostics run-general-diagnostic

Description

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 re-enable FTP before using this command.

Format

```
CLI> system internal diagnostics run-general-diagnostic
```

Example

Run the general diagnostic:

```
system internal diagnostics run-general-diagnostic
```

system internal diagnostics run-file-system-diagnostic

Description

Run the core file system diagnostic. If the problem occurs only while certain activity is running against the FluidFS cluster, retry 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/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 re-enable FTP before using this command.

Format

```
system internal diagnostics run-file-system-diagnostic
```

Example

Run the core file system diagnostic:

```
CLI> system internal diagnostics run-file-system-diagnostic
```

system internal diagnostics run-client-connectivity-diagnostic

Description

Run the client connectivity diagnostic for a CIFS or NFS client. In case of a client connectivity problem, ask the client to try connecting 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/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 the format: 'x.x.x.x'
<Protocol>	Client protocol	Possible values are CIFS, NDMP, NFS, NFS4, Other

Example

Run the client connectivity diagnostic for a CIFS client with the IP address 172.22.69.18:

```
CLI> system internal diagnostics run-client-connectivity-diagnostic
172.22.69.18 CIFS
```

system internal diagnostics run-cifs-file-accessibility-diagnostic

Description

Run the file accessibility diagnostic for a CIFS 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 re-enable FTP before using this command.

Format

```
system internal diagnostics run-cifs-file-accessibility-diagnostic <ClientIP>
<ShareName> <Path>
```

Arguments

Argument	Description	Format
<ClientIP>	IP address of the client	Existing client IP address in the format: 'x.x.x.x'
<ShareName>	CIFS share name	Existing CIFS share name
<Path>	File path (relative to CIFS share path)	Existing file path

Example

Run the file accessibility diagnostic for a CIFS client with the IP address 172.22.69.18 to a file on a CIFS share named share1 at the relative file path subfolder:

```
CLI> system internal diagnostics run-cifs-file-accessibility-diagnostic
172.22.69.18 share1 subfolder
```

system internal diagnostics run-cifs-and-nfs-diagnostic

Description

Run the general CIFS and NFS diagnostic. If the problem happens only while certain activity is running against the FluidFS cluster, retry 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/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 re-enable FTP before using this command.

Format

```
system internal diagnostics run-cifs-and-nfs-diagnostic
```

Example

Run the general CIFS and NFS diagnostics:

```
CLI> system internal diagnostics run-cifs-and-nfs-diagnostic
```

system internal diagnostics list

Description

Display the list of diagnostics.

Format

```
system internal diagnostics 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 available diagnostics:

```
CLI> system internal diagnostics list
```

Output

```
.------------.----------.------------.------------.------------.-------------.
| Diagnostic | Status   | Last Run   | File Name  |File Name   | File Name   |
| Name       |          |            | General    |Logs        | Advanced    |
|            |          |            | Diagnostic |Diagnostic  | Diagnostic  |
|------------|----------|------------|------------|------------|-------------|
| General    | DiagIdle |            |            |            |             |
|------------|----------|------------|------------|------------|-------------|
| File       | DiagIdle |            |            |            |             |
| system     |          |            |            |            |             |
| core       |          |            |            |            |             |
|------------|----------|------------|------------|------------|-------------|
| Network    | DiagIdle | 11-May-13  | Summary.90 |Logs.90fb2  | Advanced.90 |
|            |          | 12:33:33   | fb2eb6-d44 |eb6-d44d-4  | fb2eb6-d44d |
|            |          |            | d-4440-abd |440-abd8-a  | -4440-abd8- |
|            |          |            | 8-adba59cb |dba59cb110  | adba59cb110 |
|            |          |            | 1101.11_05 |1.11_05_20  | 1.11_05_201 |
|            |          |            | _2013-12_3 |13-12_26_5  | 3-12_26_48. |
|            |          |            | 3_06.tar.g |7.tar.gz    | tar.gz      |
|            |          |            | z          |            |             |
|------------|----------|------------|------------|------------|-------------|
| Performanc | DiagIdle |            |            |            |             |
| e          |          |            |            |            |             |
|------------|----------|------------|------------|------------|-------------|
| Client     | DiagIdle |            |            |            |             |
| connectivi |          |            |            |            |             |
| ty         |          |            |            |            |             |
|------------|----------|------------|------------|------------|-------------|
| File       | DiagIdle |            |            |            |             |
| accessibil |          |            |            |            |             |
| ity        |          |            |            |            |             |
|------------|----------|------------|------------|------------|-------------|
| CIFS and   | DiagIdle |            |            |            |             |
| NFS        |          |            |            |            |             |
'------------'----------'------------'------------'------------'-------------'
```

system internal cluster-name view

Description

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 cluster-name set

Description

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 may contain letters, digits, underscores and hyphens, but may not 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 EM recipients view

Description

Display the EM recipients configuration.

Format

```
system EM recipients view
```

Example

Display the current EM recipients configuration:

```
CLI> system EM recipients view
```

Output

```
Recipients = https://172.22.69.18:3033/dsfsevent
```

system EM recipients edit

Description

Modify the EM recipients.

CAUTION: This command should be used only by Dell Technical Support Services.

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 data-protection NDMP-configuration view

Description

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 NDMP-configuration update-user

Description

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 which may 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 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 edit

Description

Modify NDMP settings.

Format

```
system data-protection NDMP-configuration edit {options}
```

Options

Option	Description	Format
-DMAServers <DMAServers>	DMA servers	Comma-separated list of IP addresses in the format: 'x.x.x.x'
-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 cluster-partnerships update-protocol-version

Description

Upgrade the communication type for a remote FluidFS cluster.

NOTE: If there is a firewall between two FluidFS clusters, 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 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

Upgrade 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 cluster-partnerships list

Description

Display a list of the FluidFS cluster‚Äôs 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‚Äôs partnerships:

```
CLI> system data-protection cluster-partnerships list
```

Output

```
.--------------------.------------------.----------.
| Remote System Name | Remote System Ip | Status   |
|--------------------|------------------|----------|
| idffs1             | 172.22.69.32     | Available|
'--------------------'------------------'----------'
```

system data-protection cluster-partnerships edit

Description

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 the format: 'x.x.x.x'

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 delete

Description

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 add

Description

Create a partnership between two FluidFS clusters.

NOTE: If there is a firewall between two FluidFS clusters, 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 the format: 'x.x.x.x'

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 antivirus-scanners view

Description

Display a list of anti-virus servers.

Format

```
system data-protection antivirus-scanners view
```

Example

Display a current list of anti-virus 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 antivirus-scanners delete

Description

Delete an anti-virus server.

Format

```
system data-protection antivirus-scanners delete <Name> <Port>
```

Arguments

Argument	Description	Format
<Name>	Anti-virus server	Existing anti-virus server host name or IP address
<Port>	Anti-virus server port	Existing anti-virus server port

Example

Delete an anti-virus 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 add

Description

Add an anti-virus server.

Format

```
system data-protection antivirus-scanners add <Name> <Port>
```

Arguments

Argument	Description	Format
<Name>	Anti-virus server	Existing anti-virus server host name or IP address. An IP address must be in the format: 'x.x.x.x'. A host name must contain one or

Argument	Description	Format
		more sub names, each separated by a dot. Each sub name may contain letters, numbers or hyphens, but may not start nor end in a hyphen.
<Port>	Anti-virus server port	Whole positive number

Example

Add an anti-virus 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 background-operations wait-to-finish

Description

The command blocks 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 background-operations running

Description

Display a list of current 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 current list of running background operations:

```
CLI> system background-operations running
```

Output

```
 .-----------------------.----------------------------------.-----------.--------
------.-----------.----------------------------------.--------------------.----
------.----------.
 | BackgroundOperationId | SessionId                        | RequestId |
RequestTag | Operation | ObjectType                       |
StartTime          | Rollback | Progress |

|-----------------------|----------------------------------|-----------|--------
----|-----------|----------------------------------|--------------------|-----
-----|----------|
 | 13                    | 52010B0C63B050A55A9545CB374A0FB9 | 4         |
Default    | Action    | RunCifsFileAccessibilityDiagnostic | 06-Aug-13
09:43:27 | No       | 7        |

'-----------------------'----------------------------------'-----------'--------
----'-----------'----------------------------------'--------------------'-----
-----'----------'
```

system background-operations recent

Description

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

```
 .----------------------.----------------------------------.----------.-------
--------.----------.----------------------------------.--------------------.-
------------------.----------.----------.
 | BackgroundOperationId | SessionId                        | RequestId |
RequestTag    | Operation | ObjectType                         |
StartTime          | EndTime            | Rollback | Status   |

|----------------------|----------------------------------|----------|--------
-------|----------|----------------------------------|--------------------|--
------------------|----------|----------|
 | 5                    | 51FFC00B63B05F297E89465B0AC6FE3D | 196       |
Default       | Action    | RunCifsFileAccessibilityDiagnostic | 05-Aug-13
14:03:48 | 05-Aug-13 14:44:04 | No       | Finished |

|----------------------|----------------------------------|----------|--------
-------|----------|----------------------------------|--------------------|--
------------------|----------|----------|
 | 4                    | 51FFC00B63B05F297E89465B0AC6FE3D | 190       |
Default       | Action    | RunClientConnectivityDiagnostic    | 05-Aug-13
13:33:59 | 05-Aug-13 14:14:20 | No       | Finished |

|----------------------|----------------------------------|----------|--------
-------|----------|----------------------------------|--------------------|--
------------------|----------|----------|
 | 3                    | 51DFC15C08EA1A7E9BAF0B871DB85E6A | 56275     |
Default       | Action    | ServicePackRun                     | 12-Jul-13
14:15:51 | 12-Jul-13 14:20:52 | No       | Finished |

'----------------------'----------------------------------'----------'--------
-------'----------'----------------------------------'--------------------'--
------------------'----------'----------'
```

system administrators view

Description

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
SSHKey                          =
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 list

Description

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 current list of the administrators:

```
CLI> system administrators list
```

Output

```
.----------------.--------------------.--------.---------------------------.
| User Name      | Email              | SSHKey | Scope                     |
|----------------|--------------------|--------|---------------------------|
| Administrator  |                    |        | NAS cluster administrator |
|----------------|--------------------|--------|---------------------------|
| Administrator2 | storage@domain.com |        | NAS cluster administrator |
'----------------'--------------------'--------'---------------------------'
```

system administrators edit

Description

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'
-SSHKey <SSHKey>	Public SSH key that will allow the administrator to enter the CLI without a user name and password	Existing SSH key
-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

Option	Description	Format
-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

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 delete

Description

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 add

Description

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'
-SSHKey <SSHKey>	Public SSH key that will allow the administrator to enter the CLI without a user name and password	Existing SSH key
-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
```

NAS-volumes view

Description

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 Cifs Shares                         = 0
Report Zero Disk Usage                        = No
```

NAS-volumes snapshots view

Description

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        =
```

NAS-volumes snapshots set-expiry

Description

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 quotes 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 schedules view

Description

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

```
Frequency      Schedule Name    = snapsched1
Volume Name      = vol1
Enable Retention = Yes
Retention Period = 1 Weeks
Frequency  = Every 1440 minutes
```

NAS-volumes snapshots schedules list

Description

Display a list of snapshot schedules.

Format

```
NAS-volumes snapshots schedules 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 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 edit

Description

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)

Option	Description	Format
-ScheduleType <ScheduleType>	List of days in which the snapshots should be taken. This option is relevant only for ScheduleType SpecificTime.	Possible values are Periodic, SpecificTime
-Days <Days>	List of hours in 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 in 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>	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 delete

Description

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 add

Description

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 in 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 in 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 in 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 seven days:

```
CLI> NAS-volumes snapshots schedules add vol1 snapsched1 Periodic -Period 1440 -
EnableRetention Yes -RetentionPeriod 7D
```

NAS-volumes snapshots restore

Description

Restore a NAS volume to a snapshot.

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 rename

Description

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 may contain letters, numbers, spaces, and

Argument	Description	Format
		underscores. Control characters, 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 list

Description

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 current list of 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 disable-expiry

Description

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 delete

Description

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 add

Description

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 may contain letters, numbers, spaces, and underscores. Control characters, 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 replication view

Description

Display the status of replication.

Format

```
NAS-volumes replication view <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

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 volsource idffs2 voldest
```

Output

```
Role                    = Source
Volume Name             = volsource
Remote Cluster Name     = idffs2
Remote Volume Name      = voldest
Achieved Recovery Point = 13-Aug-13 14:52:06
```

```
Target Recovery Point   = 13-Aug-13 14:52:06
Status                  = Idle
Error                   = None
Next Recovery Point     =
Seconds To Complete     =
Transferred MB          =
```

NAS-volumes replication start

Description

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 where the remote FluidFS cluster name is idffs2:

```
CLI> NAS-volumes replication start volsource idffs2 voldest
```

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

Argument	Description	Format
<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 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 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 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 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 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 list-source

Description

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 Name | Destination Cluster Name | Destination Volume Name | Achieved
Recovery Point | Status | Error | Next Recovery Point | Seconds To Complete |
Transferred MB |

|-------------|--------------------------|--------------------------|------------
-------------|--------|-------|--------------------|---------------------|-----
-----------|
 | volsource   | idffs2                   | voldest                  | 13-Aug-13
14:52:06      | Idle   | None  |                    |
|               |

'-------------'--------------------------'--------------------------'------------
-------------'--------'-------'--------------------'---------------------'-----
-----------'
```

NAS-volumes replication list-destination

Description

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 destination NAS volumes:

```
CLI> NAS-volumes replication list-destination
```

Output

```
.-------.--------.--------.--------.-------.-------.--------.--------.-------.
 | Volum | Source | Source | Achiev | Statu | Error | Next   | Second | Trans |
 | e     | Cluste | Volume | ed     | s     |       | Recove | s To   | ferre |
 | Name  | r Name | Name   | Recove |       |       | ry     | Comple | d MB  |
 |       |        |        | ry     |       |       | Point  | te     |       |
 |       |        |        | Point  |       |       |        |        |       |
 |-------|--------|--------|--------|-------|-------|--------|--------|-------|
 | volde | idffs1 | volsou | 13-Aug | Idle  | None  |        |        |       |
 | st    |        | rce    | -13    |       |       |        |        |       |
 |       |        |        | 14:52: |       |       |        |        |       |
```

```
|       |         |         | 06      |        |        |         |         |        |
'-------'---------'---------'---------'--------'--------'---------'---------'--------'
```

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 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 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 demote

Description

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

Argument	Description	Format
<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 connect

Description

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

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 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-effective-rules

Description

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 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 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-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 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-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 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 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 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 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 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 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 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 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 default edit

Description

Modify the default rule for 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)

Option	Description	
-DefaultUserQuotaIsQuotaLimited <DefaultUserQuotaIsQuotaLimited>	Indicate whether the hard quota is enabled	Possible values are Yes, No
-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 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 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 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 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 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 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 default edit

Description

Modify the default rule for 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 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 add

Description

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 NFS-exports view

Description

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 NFS-exports list

Description

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 general-settings view

Description

Display the NFSv4 protocol settings of the NFS protocol.

Format

```
NAS-volumes NFS-exports general-settings view
```

Example

Display the current NFSv4 protocol settings of the NFS protocol:

```
CLI> NAS-volumes NFS-exports general-settings view
```

Output

```
Is NFSv4 Enabled = No
```

NAS-volumes NFS-exports general-settings NFSv4-enable

Description

Enable the NFSv4 protocol.

Format

```
NAS-volumes NFS-exports general-settings NFSv4-enable
```

Example

Enable the NFSv4 protocol:

```
CLI> NAS-volumes NFS-exports general-settings NFSv4-enable
```

NAS-volumes NFS-exports general-settings NFSv4-disable

Description

Disable the NFSv4 protocol.

Format

```
NAS-volumes NFS-exports general-settings NFSv4-disable
```

Example

Disable the NFSv4 protocol:

```
CLI> NAS-volumes NFS-exports general-settings NFSv4-disable
```

NAS-volumes NFS-exports edit

Description

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
-Sys <Sys>	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 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 limited the reported size to 50 MB:

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

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-single-client

Description

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 delete-acl for-clients-in-subnet

Description

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> <ClientsNetmask> <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 the format: 'x.x.x.x'
<ClientsNetmask>	Netmask of the clients to which this NFS export should be available	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 all clients in the subnet 172.22.69.0 255.255.255.0 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
172.22.69.0 255.255.255.0 Everyone
```

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

Description

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-all-clients

Description

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 to which this NFS export should be available	Possible values are Nobody, Everyone, 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 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 add

Description

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 may contain letters, numbers, and

Argument	Description	Format
		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
-Sys <Sys>	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 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

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-exports add-acl for-single-client

Description

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 the format: 'x.x.x.x'
<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 add-acl for-clients-in-subnet

Description

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> <ClientsNetmask> <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 the format: 'x.x.x.x'
<ClientsNetmask>	Netmask of the clients to which this NFS export should be available	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
<ReadWrite>	Indicate whether the NFS export is read-write	Possible values are Yes, No

Example

Add an ACL for all clients in a subnet 172.22.69.0 255.255.255.0 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
172.22.69.0 255.255.255.0 Everyone Yes
```

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

Description

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>	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

Argument	Description	Format
<ReadWrite>	Indicate whether the NFS export is read-write	Possible values are Yes, No

Example

Add an ACL for all clients in a netgroup named group1 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
group1 Everyone Yes
```

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

Description

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, Everyone, EveryoneExceptRoot
<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 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 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 configuration edit

Description

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 from 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 capacity-overtime last-year

Description

Display the last year,Äôs 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,Äôs 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           |

|--------------------|----------|---------|-----------------|------------------
|
 | 04-Apr-13 00:00:00 | 0.00 MB  | 0.00 MB | 0.00 MB         | 0.00
MB           |

|--------------------|----------|---------|-----------------|------------------
|
 | 21-Mar-13 00:00:00 | 0.00 MB  | 0.00 MB | 0.00 MB         | 0.00
MB           |

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

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

Description

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           |

|--------------------|----------|---------|-----------------|------------------
|
 | 15-May-13 18:00:00 | 1.70 TB  | 0.00 MB | 19.00 MB        | 1.70
TB           |

|--------------------|----------|---------|-----------------|------------------
|
 | 15-May-13 12:00:00 | 1.70 TB  | 0.00 MB | 19.00 MB        | 1.70
TB           |

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

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

Description

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           |

|--------------------|----------|---------|-----------------|------------------
|
 | 13-May-13 00:00:00 | 1.70 TB  | 0.00 MB | 19.00 MB        | 1.70
TB           |

|--------------------|----------|---------|-----------------|------------------
|
 | 12-May-13 00:00:00 | 1.70 TB  | 0.00 MB | 19.00 MB        | 1.70
TB           |

|--------------------|----------|---------|-----------------|------------------
|
 | 11-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-day

Description

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 list space

Description

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 Space | Over Committed Space |
Space Provisioning | Unused Reserved Space | Clone |

|------------|----------|------------|--------------|----------------------|----
-----------------|-----------------------|-------|
 | cifsvol    | 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 MB | 0.27 MB    | 19.73 MB     | 0.00 MB              |
Thin               | 0.00 MB               | No    |

'------------'----------'------------'--------------'----------------------'----
-----------------'-----------------------'-------'
```

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 data-reduction

Description

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 Enabled | Data Reduction
```

```
Type              | Data Reduction Rehydrate On Read | Data Reduction Savings |
Data Reduction Savings Percent |

|-------------------|------------------------|---------------------------------
|---------------------------------|------------------------|------------------
-------------|
 | cifsvol            | No                     | De-
duplication                  | No                                | 0.00
MB               | 0%                                |

|-------------------|------------------------|---------------------------------
|---------------------------------|------------------------|------------------
-------------|
 | nfsvol             | Yes                    | De-duplication with
compression | No                          | 0.00 MB                |
0%                              |

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

|-------------------|------------------------|---------------------------------
|---------------------------------|------------------------|------------------
-------------|
```

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 Name | Base Volume Name | Base Snapshot Name | Base Volume
Space Status |
```

```
|--------------------|-----------------|--------------------|-----------------
--------|
 | clonevol3          | vol3            | vol3snap           |
Warning                  |

'--------------------'-----------------'--------------------'-----------------
--------'
```

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

Description

Display the last year‚Äôs 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‚Äôs 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 Reserved
Space | Unused Uneserved Space | Over Committed Space |

|-------------|--------------------|----------|------------|-------------------
---|------------------------|----------------------|
 | vol3        | 09-Aug-13 13:31:27 | 20.00 MB | 0.00 MB    | 0.00
MB               | 19.00 MB               | 0.00 MB              |

|-------------|--------------------|----------|------------|-------------------
---|------------------------|----------------------|
 | vol3        | 26-Jul-13 00:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |
```

```
|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 12-Jul-13 00:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 28-Jun-13 00:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 14-Jun-13 00:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

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

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

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

Description

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 Reserved
Space | Unused Uneserved Space | Over Committed Space|

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 09-Aug-13 00:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 08-Aug-13 18:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB               |

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 08-Aug-13 12:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 08-Aug-13 06:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB               |

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 08-Aug-13 00:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 07-Aug-13 18:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

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

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

Description

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 Name | Time                | Size     | Used Space | Unused Reserved
Space | Unused Uneserved Space | Over Committed Space|

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

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

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

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 30-Jul-13 00:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 29-Jul-13 00:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

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

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

Description

Display the last day,Äôs 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,Äôs NAS volumes statistics for a NAS volume named vol3:

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

Output

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

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

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 09-Aug-13 12:00:00 | 20.00 MB | 0.00 MB    | 0.00
MB               | 19.00 MB               | 0.00 MB              |

|-------------|--------------------|----------|------------|--------------------
---|------------------------|----------------------|
 | vol3        | 09-Aug-13 11:00:00 | 0.00 MB  | 0.00 MB    | 0.00
MB               | 0.00 MB                | 0.00 MB              |

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

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 owner

Description

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	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 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 interoperability-policy

Description

Modify the interoperability policy of a NAS 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 data-reduction

Description

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	Whole positive number (in days) greater than or equal to 30
-DataReductionFilesFilterModificationTime <DataReductionFilesFilterModificationTime>	Threshold of modify time	Whole positive number (in days) greater than or equal to 30
-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 advance-settings

Description

Modify the advanced settings of a NAS volume.

Format

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

Arguments

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

Options

Option	Description	Format
-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

Example

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

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

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 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

Description

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 CifsShare, 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 configuration-backups list-available

Description

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 (.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 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 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 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
<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 CIFS-shares view

Description

Display CIFS share settings.

Format

```
NAS-volumes CIFS-shares view <ShareName>
```

Arguments

Argument	Description	Format
<ShareName>	CIFS share name	Existing CIFS share name

Example

Display the current settings for a CIFS share named share:

```
CLI> NAS-volumes CIFS-shares view share
```

Output

```
Volume Name                                = vol2
Share Name                                 = share
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
```

NAS-volumes CIFS-shares list

Description

Display a list of CIFS shares.

Format

```
NAS-volumes CIFS-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 CIFS shares on a NAS volume named vol1:

```
CLI> NAS-volumes CIFS-shares list -VolumeName vol1
```

Output

```
.------------.-------------.----------.-----------.
| Share Name | Volume Name | Path     | Antivirus |
|------------|-------------|----------|-----------|
| share      | vol2        | /folder1 | No        |
'------------'-------------'----------'-----------'
```

NAS-volumes CIFS-shares home-share view

Description

Display CIFS home shares settings.

Format

```
NAS-volumes CIFS-shares home-share view
```

Example

Display CIFS home shares settings:

```
CLI> NAS-volumes CIFS-shares home-share view
```

Output

```
Volume Name                          =
Enabled                              = No
Antivirus Check                      = Yes
Enable Antivirus Extensions Filters  = No
AvExtensions                         =
Enable Antivirus Exclude Dirs Filters = No
AvExcludeDirs                        =
```

NAS-volumes CIFS-shares home-share enable

Description

Enable CIFS home shares on a NAS volume.

Format

```
NAS-volumes CIFS-shares home-share enable <VolumeName> <PathPrefix>
<PathTemplate>
```

Arguments

Argument	Description	Format
<VolumeName>	NAS volume name	Existing NAS volume name
-PathPrefix <PathPrefix>	Prefix of the CIFS home shares	Existing path
-PathTemplate <PathTemplate>	Template of the CIFS home shares	Possible values are DomainUser, User

Example

Enable CIFS home shares on a NAS volume named vol1 at the path /users/<username>:

```
CLI> NAS-volumes CIFS-shares home-share enable vol1 /users User
```

NAS-volumes CIFS-shares home-share edit

Description

Modify the CIFS home shares settings.

Format

```
NAS-volumes CIFS-shares home-share edit {options}
```

Options

Option	Description	Format
-AntiVirusCheck <AntiVirusCheck>	Indicate whether the files that are opened from this CIFS share must pass an anti-virus check	Possible values are Yes, No
-EnableAvExtensionsFilters <EnableAvExtensionsFilters>	Indicate whether to exclude specified file extensions from anti-virus scanning	Possible values are Yes, No
-AvExtensions <AvExtensions>	File extensions to exclude from anti-virus scanning	Any string
-EnableAvExcludeDirsFilters <EnableAvExcludeDirsFilters>	Indicate whether to exclude specified directories from anti-virus scanning	Possible values are Yes, No
-AvExcludeDirs <AvExcludeDirs>	Directories to exclude from anti-virus scanning	Any string
-AvMaxFileSizeForScanning <AvMaxFileSizeForScanning>	Maximum size of files that will be sent for anti-virus 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

Example

Disable anti-virus scanning on CIFS home shares:

```
CLI> NAS-volumes CIFS-shares home-share edit -AntiVirusCheck No
```

NAS-volumes CIFS-shares home-share disable

Description

Disable CIFS home shares.

Format

```
NAS-volumes CIFS-shares home-share disable
```

Example

Disable CIFS home shares:

```
CLI> NAS-volumes CIFS-shares home-share disable
```

NAS-volumes CIFS-shares general-settings view

Description

Display the general settings for the CIFS protocol.

Format

```
NAS-volumes CIFS-shares general-settings view
```

Example

Display the current general settings for the CIFS protocol:

```
CLI> NAS-volumes CIFS-shares general-settings view
```

Output

```
Local Accounts Password Never Expires = No
Local Accounts Max Password Age       = 6 Weeks
Check Password Complexity             = Yes
```

NAS-volumes CIFS-shares general-settings edit

Description

Modify the general settings of the CIFS protocol.

Format

```
NAS-volumes CIFS-shares general-settings edit {options}
```

Options

Option	Description	Format
-LocalAccountsPasswordNeverExpires <LocalAccountsPasswordNeverExpires>	Indicate whether the local accounts password never expires	Possible values are Yes, No
-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

Example

Enforce password-complexity checks for FluidFS users:

```
CLI> NAS-volumes CIFS-shares general-settings edit -CheckPasswordComplexity Yes
```

NAS-volumes CIFS-shares edit

Description

Modify CIFS share settings.

Format

```
NAS-volumes CIFS-shares edit <ShareName> {options}
```

Arguments

Argument	Description	Format
<ShareName>	CIFS share name	Existing CIFS share name

Options

Option	Description	Format
-Comment <Comment>	Comment for the CIFS share	Any string
-AntiVirus <AntiVirus>	Indicate whether the files that are opened from this CIFS share must pass an anti-virus check	Possible values are Yes, No
-EnableAvExtensionsFilters <EnableAvExtensionsFilters>	Indicate whether to exclude specified file extensions from anti-virus scanning	Possible values are Yes, No
-AvExtensions <AvExtensions>	File extensions to exclude from anti-virus scanning	Any string
-EnableAvExcludeDirsFilters <EnableAvExcludeDirsFilters>	Indicate whether to exclude specified directories from anti-virus scanning	Possible values are Yes, No
-AvExcludeDirs <AvExcludeDirs>	Directories to exclude from anti-virus scanning	Any string
-AvMaxFileSizeForScanning <AvMaxFileSizeForScanning>	Maximum size of files that will be sent for anti-virus 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

Option	Description	Format
-AccessBasedEnumeration <AccessBasedEnumeration>	Defines whether access-based share enumeration is active	Possible values are Yes, No

Example

Enable anti-virus scanning on a CIFS share named share and exclude .docx files from anti-virus scanning:

```
CLI> NAS-volumes CIFS-shares edit share –AntiVirus Yes –
EnableAvExtensionsFilters Yes –AvExtensions docx
```

NAS-volumes CIFS-shares delete

Description

Delete a CIFS share.

Format

```
NAS-volumes CIFS-shares delete <ShareName>
```

Arguments

Argument	Description	Format
<ShareName>	CIFS share name	Existing CIFS share name

Example

Delete a CIFS share named share1:

```
CLI> NAS-volumes CIFS-shares delete share1
```

NAS-volumes CIFS-shares create-folder

Description

Create a folder for a CIFS share.

Format

```
NAS-volumes CIFS-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

Argument	Description	Format
<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 a folder named folder1 with a parent folder / on a NAS volume named vol1:

```
CLI> NAS-volumes CIFS-shares create-folder vol1 / folder1
```

NAS-volumes CIFS-shares add

Description

Add a CIFS (Common Internet File System) share to a NAS volume.

Format

```
NAS-volumes CIFS-shares add <ShareName> <VolumeName> <Path> {options}
```

Arguments

Argument	Description	Format
<ShareName>	CIFS share name	A maximum length of 80 characters, and may contain letters, numbers, and underscores
<VolumeName>	NAS volume name	Existing NAS volume name
<Path>	CIFS share path in the NAS volume	Existing CIFS share path

Options

Option	Description	Format
-Comment <Comment>	Comment for the CIFS share	Any string
-AntiVirus <AntiVirus>	Indicate whether the files that are opened from this CIFS share must pass an anti-virus check	Possible values are Yes, No
-EnableAvExtensionsFilters <EnableAvExtensionsFilters>	Indicate whether to exclude specified file extensions from anti-virus scanning	Possible values are Yes, No
-AvExtensions <AvExtensions>	File extensions to exclude from anti-virus scanning	Any string

Option	Description	Format
-EnableAvExcludeDirsFilters <EnableAvExcludeDirsFilters>	Indicate whether to exclude specified directories from anti-virus scanning	Possible values are Yes, No
-AvExcludeDirs <AvExcludeDirs>	Directories to exclude from anti-virus scanning	Any string
-AvMaxFileSizeForScanning <AvMaxFileSizeForScanning>	Maximum size of files that will be sent for anti-virus 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

Example

Add a CIFS share named share to a NAS volume named vol1 at the path /folder1:

```
CLI> NAS-volumes CIFS-shares add share vol1 /folder1
```

NAS-volumes add

Description

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
-DataReductionFilesFilterModificationTime <DataReductionFilesFilterModificationTime>	Threshold of modify time	Whole positive number (in days) greater than or equal to 30
-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

Option	Description	Format
-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

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
```

3

CLI Procedures

Installing a FluidFS Cluster Using the CLI

Use this procedure to install a FluidFS cluster using the CLI. The recommended way to deploy a FluidFS cluster 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 on NAS controller 0 (located on the left as viewed from the back) using a VGA console as described in Accessing the CLI.
2. Configure the client VIPs (PrivateIPs) and an IP address for each NAS controller (PublicIPs). Dell recommends adding at least one client VIP per NAS controller.

   ```
   networking subnets add <netmask> -PrivateIPs <x.x.x.x,x.x.x.x> -PublicIPs
   <x.x.x.x,x.x.x.x>
   ```

   For example:

   ```
   networking subnets add 255.255.252.0 -PrivateIPs 10.10.77.111,10.10.77.112 -
   PublicIPs 10.10.77.113,10.10.77.114,10.10.77.115,10.10.77.116
   ```

3. Add the default gateway.

   ```
   networking default-gateway add <x.x.x.x>
   ```

   For example:

   ```
   networking default-gateway add 10.10.77.118
   ```

4. (Optional) If you want to complete the installation remotely, log out of the CLI from the VGA console and log back on to the CLI using SSH as described in Accessing the CLI. Otherwise, you can continue the installation from the VGA console.
5. Set the FluidFS cluster name.

   ```
   system internal cluster-name set <ClusterName>
   ```

   For example:

   ```
   system internal cluster-name set ia-Dev1
   ```

6. Set the internal address range.

   ```
   system internal internal-network edit <x.x.x.x>
   ```

   For example:

   ```
   system internal internal-network edit 10.255.254.0
   ```

7. Create the FluidFS cluster.

   ```
   hardware NAS-appliances create-cluster -CurrentApplianceServiceTag
   <ServiceTag>
   ```

   For example:

   ```
   hardware NAS-appliances create-cluster -CurrentApplianceServiceTag L846185
   ```

8. After the previous command completes, configure the iSCSI IP addresses.

   To configure iSCSI IP addresses run the following command:

   ```
   hardware fabrics iSCSI add <Interface> <Netmask> <ControllersIPs>
   ```

   For example:

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

   (This adds the first SAN subnet containing all the eth30 ports.)

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

   For example:

   ```
   hardware fabrics iSCSI-portals add-IPv4 192.11.18.6 "MD-1"
   ```

   (This points the FluidFS cluster to the PowerVault iSCSI Control Port.)
9. On the MD system, create the volumes, server objects, and mappings for the FluidFS cluster.
10. Rescan to find the volumes.

    ```
    hardware storage-subsystem rescan
    ```
11. Show the volumes and make sure that you see all of the volumes you expect to see.

    ```
    hardware storage-subsystem view
    ```
12. Create the NAS pool.

    ```
    hardware storage-subsystem create-NAS-pool
    ```
13. After the previous command completes, set the flag to show that the setup completed.

    ```
    system internal system-configuration-state installation-finished
    ```
14. Accept the EULA (End User License Agreement).

    ```
    system software-updates approve-eula
    ```
15. Set the support user password.

    ```
    system internal security support-access change-password -Password <password>
    ```
16. Change the Administrator password.

    ```
    access-control local-users change-password Administrator -Password
    <password>
    ```

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
    ```