

Hammerspace Command Line Reference

Version 5.3



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About This Documentation

This guide is a comprehensive reference for the Hammerspace Admin CLI — the restricted administrative shell available on Anvil and DSX nodes. It documents every available command, its syntax, options, arguments, and expected output, organized alphabetically for quick lookup.

This guide is intended for system administrators and automation engineers who interact with Hammerspace through the command line. Readers should be familiar with general Hammerspace concepts and have access to a running Hammerspace deployment.

For GUI-based administration, see the *Hammerspace Administration Guide*.

For support resources, see the [Hammerspace Support Hub](#) and the [Hammerspace Licensing and Delivery Portal](#).



Do not install additional or third-party software, agents, or packages directly on Hammerspace Anvil (metadata) or DSX (data) nodes. These nodes run a managed appliance software stack; anything installed outside that stack is unsupported and is removed during a software upgrade. Such software can also interfere with node operation. If you need monitoring or integration with an external tool, contact Hammerspace Support for a supported approach.

Chapter 1. Using the Admin CLI

The Hammerspace product (Product) provides a custom, administrator Command Line Interface (*Admin CLI*, or CLI) with a restricted shell and a set of administration-specific commands.

The shell and commands provide auto completion and built-in help. The Admin CLI does not provide access to bash, other shells, or common Linux commands. The CLI provides a history function that is accessible by using the up and down arrow keys.

The CLI can be accessed by logging on as admin on the physical or remote console of a bare-metal server, on the virtual console of a VM, or by SSH to the IP address, hostname, or FQDN of the management IP of the cluster.

```
ssh admin@<server_ip_address>
```

In cloud deployments, the username and authentication protocol are specific to the cloud.

Platform	Admin username
ISO-based installs (bare-metal, VMware, Hyper-V, KVM)	admin
Amazon AWS	ec2-user using Key Pair or IAM
Microsoft Azure	admin
Google Cloud	admin

Note: The password for the cluster is set during installation.

1.1. Getting Help in the Admin CLI

The following tips will help you use the Admin CLI more easily:

- Typing a question mark alone on the command line will display a list of all available commands and a brief description of each one. For example, `admin@anvil-1.selab.hammer.space> ?`
- Typing part of a command name followed by Tab or Space will list possible matching commands. If there is only one match, pressing Tab or Space will complete the command.
- Pressing Enter after typing part of a command will list possible matches if there are more than one, or complete and execute the command if there is only one match. Typing part of a command followed by `?*` will list possible matches along with a brief description of each matching command.
- The help command gives general help for using the CLI and editing commands.

Admin CLI

```
admin@anvil-1.selab.hammer.space> help
```

```
CONTEXT SENSITIVE HELP
```

[?] - Display context sensitive help. This is either a list of possible command completions with summaries, or the full syntax of the current command. A subsequent repeat of this key, when a command has been resolved, will display a detailed reference.

AUTO-COMPLETION

The following keys both perform auto-completion for the current command line.

If the command prefix is not unique then the bell will ring and a subsequent repeat of the key will display possible completions.

[enter] - Auto-completes, syntax-checks then executes a command. If there is a syntax error then offending part of the command line will be highlighted and explained.

[space] or [tab] - Auto-completes, or if the command is already resolved inserts a space.

USEFUL KEYS

[CTRL-A] - Move to the start of the line

[CTRL-E] - Move to the end of the line.

[CTRL-C] - Delete and abort the current line

[CTRL-D] - Delete the character to the right on the insertion point.

[CTRL-K] - Delete all the characters to the right of the insertion point.

[CTRL-U] - Delete the whole line.

[backspace] - Delete the character to the left of the insertion point.

The Product commands include built-in, context-sensitive help. Typing the command name followed by ? or --help* will list options and their descriptions.

You can even use ? or --help* after entering some parameters. Using ? in this way will return you to the partially completed command line. Using --help will return to a blank command prompt, but clicking the up arrow will retrieve the partially completed command.

The CLI gives hints as to syntax errors when typing or editing commands, especially when complete or partially complete with options and parameters. If you are unable to type a space where one is needed, that means that there is a syntax error somewhere else in the command, such as a space

missing earlier in the parameters. Values for parameters containing spaces and some other special characters must escape the space with a backslash (*) before each space, or by putting the whole parameter in single or double quotes.

1.1.1. Common Options

--name* is the name of an object managed within Hammerspace, such as a share, volume name, storage system name, or objective. They are primarily used internally and not visible to regular users. One exception is the share name, which is also used as the SMB name of a share. When creating or adding most objects, the name is arbitrary in that it does not have to match the object's actual name. For example, you can name a storage system something other than its host name or FQDN. For some objects, the name can be changed arbitrarily without impact to users and applications, again, share name being an exception.

--id* is a UUID for an object.

--internal-id* is a short, sequentially assigned numeric identifier for an object. These are useful when copying and pasting a lengthy UUID is not possible, such as in a remote desktop or virtual console session.

* Commands that operate on an object require that the name, id, or internal-id option be specified.

Chapter 2. Share Management

2.1. label-create

```
label-create [options]
```

Create a new label

Options

```
--help
```

Display this help and exit

```
--implied-labels
```

A comma-separated list of labels implied by this label. All labels in the implied label list must exist

```
--name
```

The name of the label. Label names are case-insensitive and must be unique (Required)

2.2. label-delete

```
label-delete [options]
```

Delete a label

Options

```
--help
```

Display this help and exit

```
--name
```

The name of the label to be deleted. When a label is deleted, its name is changed to reflect this fact and references to this label will use the modified name. (Required)

2.3. label-list

```
label-list [options]
```

List labels

Options

```
--help
```

Display this help and exit

```
--name
```

List a label by name

2.4. label-update

```
label-update [options]
```

Update a label

Options

```
--help
```

Display this help and exit

```
--implied-labels
```

A comma-separated list of labels implied by this label. Any existing implied labels are overridden. All labels in the implied label list must exist. Required unless any of the following is specified: `--implied-labels-clear`, `--new-name`

```
--implied-labels-clear
```

Remove the list of implied labels. Required unless any of the following is specified: --implied-labels, --new-name

```
--name
```

The name of the label to update (Required)

```
--new-name
```

A new name for the label. Required unless any of the following is specified: --implied-labels-clear, --implied-labels

2.5. objective-create

```
objective-create [options]
```

Create an objective

Options

```
--allowed-online-delay
```

Max time (in nanoseconds) for the file to be restored from offline Location back to online Location

```
--applied-objective
```

An objective and applicability statement Format: <objective-identifier>[,<applicability expression>] Example: durability-5-nines,IS_ONLINE May be repeated

```
--archive
```

Sets the archiving intent for data in a snapshot. Applicable only if selected by a Snapshot Condition. Possible values: NONE | ONSITE | OFFSITE.

```
--availability
```

Availability, specified as the number of nines (number between 0 and 20)

```
--confine-to
```

Confine to specific locations. Format: node|volume|object-volume|volume-group:{identifier}. The identifier must be either UUID or name

```
--description
```

The objective's description

```
--do-not-move
```

Do not move

```
--durability
```

Durability, specified as the number of nines (number between 0 and 20)

```
--exclude-from
```

Exclude from specific locations. Format: node|volume|object-volume|volume-group:{identifier}. The identifier must be either UUID or name

```
--expression
```

Objective expression. Deprecated. Use --applied-objectives

```
--help
```

Display this help and exit

```
--max-read-response-time
```

Maximal read response time, in nanoseconds

```
--max-write-response-time
```

Maximal write response time, in nanoseconds

```
--min-read-iops
```

Minimum read IOPS

```
--min-read-throughput
```

Minimum read throughput, in bytes per second

```
--min-write-iops
```

Minimum write IOPS

```
--min-write-throughput
```

Minimum write throughput, in bytes per second

```
--name
```

The objective's name (Required)

```
--optimize-for-capacity
```

Optimize for capacity

```
--place-on-list
```

Place on specific locations. Format: node|volume|object-volume|volume-group:{identifier}. The identifier must be either UUID or name

```
--priority
```

The objective's priority. Possible values: LOW | MEDIUM_LOW | MEDIUM | MEDIUM_HIGH | HIGH.

2.6. objective-delete

```
objective-delete [options]
```

Delete an objective

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the objective to delete. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the objective to delete. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the objective to delete. Required unless any of the following is specified: --internal-id, --id

2.7. objective-export

```
objective-export [options]
```

Export objectives

Options

```
--help
```

Display this help and exit

```
--ids
```

The UUIDs of the objectives to export

```
--names
```

The names of the objectives to export

```
--target
```

The target path to export the objective

2.8. objective-import

```
objective-import [options]
```

Import objectives from file

Options

```
--help
```

Display this help and exit

```
--insecure
```

Connect with trust all certificate in case of https

```
--merge
```

Merge with existing or fail in case of collision

```
--names
```

The names of the objectives to import

```
--prefix
```

The prefix to be added to the names of the imported objectives

```
--source
```

The path of the file listing the objective to import (Required)

2.9. objective-list

```
objective-list [options]
```

List objectives

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the objective to list

```
--internal-id
```

The internal ID of the objective to list

```
--name
```

The name of the objective to list

2.10. objective-update

```
objective-update [options]
```

Update an objective

Options

```
--allowed-online-delay
```

Max time (in nanoseconds) for the file to be restored from offline Location back to online Location

```
--allowed-online-delay-clear
```

Clear the allowed online delay

```
--applied-objective-add
```

Adds a new applied objective Format: <objective-identifier>[<applicability expression>] Example: durability-5-nines,IS_ONLINE May be repeated

```
--applied-objective-clear
```

Removes all existing applied objective.

```
--applied-objective-remove
```

Removes an existing applied objective. The value is the id of the applied objective being removed May be repeated

```
--applied-objective-update
```

Updates an existing applied objective with a different objective, or applicability expression, or both. The id must match that of the applied objective being updated Format: <id>,<objective-identifier>[<applicability expression>] Example: 12,durability-5-nines,IS_ONLINE May be repeated

```
--archive
```

Sets the archiving intent for data in a snapshot. Applicable only if selected by a Snapshot Condition. Possible values: NONE | ONSITE | OFFSITE.

```
--archive-clear
```

Clear the archiving intent for data in a snapshot

```
--availability
```

Availability, specified as the number of nines (number between 0 and 20)

```
--availability-clear
```

Clear the availability

```
--confine-to
```

Confine to specific locations. Format: node|volume|object-volume|volume-group:{identifier}. The identifier must be either UUID or name

```
--confine-to-clear
```

Clear the confine to locations

```
--description
```

The objective's description

```
--description-clear
```

Clear the objective's description

```
--do-not-move
```

Do not move

```
--do-not-move-clear
```

Clear the do not move instruction

```
--durability
```

Durability, specified as the number of nines (number between 0 and 20)

```
--durability-clear
```

Clear the durability

```
--exclude-from
```

Exclude from specific locations. Format: node|volume|object-volume|volume-group:{identifier}. The identifier must be either UUID or name

```
--exclude-from-clear
```

Clear the exclude from locations

```
--expression
```

Objective expression

```
--help
```

Display this help and exit

```
--id
```

The ID of the objective to update. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the objective to update. Required unless any of the following is specified: `--name`, `--id`

```
--max-read-response-time
```

Maximal read response time, in nanoseconds

```
--max-read-response-time-clear
```

Clear the maximal read response time

```
--max-write-response-time
```

Maximal write response time, in nanoseconds

```
--max-write-response-time-clear
```

Clear the maximal write response time

```
--min-read-iops
```

Minimum read IOPS

```
--min-read-iops-clear
```

Clear the minimum read IOPS

```
--min-read-throughput
```

Minimum read throughput, in bytes per second

```
--min-read-throughput-clear
```

Clear the minimum read throughput

```
--min-write-iops
```

Minimum write IOPS

```
--min-write-iops-clear
```

Clear the minimum write IOPS

```
--min-write-throughput
```

Minimum write throughput, in bytes per second

```
--min-write-throughput-clear
```

Clear the minimum write throughput

```
--name
```

The name of the objective to update. Required unless any of the following is specified: `--internal-id`, `--id`

```
--new-name
```

New name.

```
--optimize-for-capacity
```

Optimize for capacity

```
--optimize-for-capacity-clear
```

Clear the optimize for capacity instruction

```
--place-on-list
```

Place on specific locations. Format: node|volume|object-volume|volume-group:{identifier}. The identifier must be either UUID or name

```
--place-on-list-clear
```

Clear the place on locations

```
--priority
```

The objective's priority. Possible values: LOW | MEDIUM_LOW | MEDIUM | MEDIUM_HIGH | HIGH.

```
--priority-clear
```

Reset the priority

2.11. privileged-delete

```
privileged-delete [options]
```

Delete a WORM protected file or empty directory. Cannot be used to delete non-WORM files or directories

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--path
```

The path of the file or empty directory to be deleted. The path is relative within the specified share and must start with / (Required)

```
--share-id
```

The ID of the share containing the entry to be deleted. Required unless any of the following is specified: `--share-internal-id`, `--share-name`

```
--share-internal-id
```

The internal id of the share containing the entry to be deleted. Required unless any of the following is specified: `--share-id`, `--share-name`

```
--share-name
```

The name of the share containing the entry to be deleted. Required unless any of the following is specified: `--share-id`, `--share-internal-id`

2.12. share-clone-create

```
share-clone-create [options]
```

Clone share snapshot

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--destination-path
```

Destination directory path for clone. The path must be relative to the share's root directory (Required)

```
--help
```

Display this help and exit

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--overwrite-destination
```

Whether to overwrite the destination directory if it exists

```
--share-id
```

Share ID. Required unless "--share-name" is specified

```
--share-name
```

Share name. Required unless "--share-id" is specified

```
--snapshot-name
```

Name of snapshot to be cloned (Required)

2.13. share-create

```
share-create [options]
```

Create a share

Example

```
share-create --name share2 --path /share2 --export-option *,rw,no-root-squash
```

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--default-selinux-context
```

A default SELinux security context for the share in the form of <user>:<role>:<type>:<sensitivity>[:<categories>].

```
--default-selinux-context system_u:object_r:default_t:s0
--default-selinux-context system_u:object_r:default_t:s0:c0,c1
```

```
--description
```

A textual description of the share

```
--export-option
```

Export options for the share.

A 3, 4 or 5-tuple including <client specification>,ro|rw,[no-]root-squash[,insecure][,sec=<security options>].

<client specification> (an IP address, hostname, netgroup, network address, or subdomain)

'ro' or 'rw' (read-only or read-write)

'no-root-squash' or 'root-squash'

'insecure' (Optional. If not specified, secure is used.)

'sec=<security options>' colon-separated list of security options. Ex: sec=sys:krb5

Possible values: 'sys', 'krb5', 'krb5i', 'krb5p'

(Optional, if not specified, system default of 'sys' is used)

The --export-option param can be used multiple times. Export options are identified by client specification.

```
--export-option *,rw,no-root-squash
--export-option @netgroup,ro,root-squash,insecure
--export-option 192.168.1.0/255.255.255.0,rw,no-root-squash
--export-option 192.168.1.0/24,rw,no-root-squash
--export-option 2001:0db8::/32,rw,no-root-squash,sec=krb5
--export-option fe80:0:0:0:213:72ff:fe3c:21bf,rw,no-root-squash
--export-option example.com,rw,no-root-squash,insecure,sec=sys:krb5
--export-option *.example.co.uk,rw,no-root-squash
--export-option *.domain[1-3].example.com,rw,no-root-squash
--export-option *.domain?.example.com,rw,no-root-squash
```

```
--help
```

Display this help and exit

```
--name
```

The name the system uses to identify the share. This name should be unique across all shares. When creating an SMB share, this name serves as the SMB Share Name used when accessing the share via SMB. (Required)

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--objective
```

An objective to be set on the share. Each value may comprise an objective name and optionally a comma followed by an applicability statement. When no applicability statement is supplied, TRUE is assumed. May be repeated

```
--override-mem-check
```

Allow share creation even when it would exceed memory requirements.

```
--path
```

The share's NFS export path (i.e. /share1). If omitted, the share's name will be used.

```
--preferred-domain
```

Preferred domain in which users have accounts. This field is required for mapping users from another domain into this domain.

```
--referral-address
```

Referral server addresses for client redirection. Specify IPv4 addresses, IPv6 addresses, or hostnames where clients should be redirected. The --referral-address param can be used multiple times. Multiple addresses can be specified as comma-separated values.

```
--referral-address 192.168.1.100  
--referral-address 2001:db8::1  
--referral-address 192.168.1.100,192.168.1.101  
--referral-address 192.168.1.100 --referral-address 192.168.1.101
```

```
--referral-path
```

The NFS export path of the referred-to share (i.e. /target/data).

```
--replication-latency-alert-threshold
```

Number of seconds of replication latency which will be tolerated before an alert is created

```
--size
```

Limit the share size (quota).

```
--size-warning-threshold
```

Threshold (1-99 percent) for share capacity usage, an event will be sent if this threshold is reached.

```
--smb-browsable-off
```

Prevent the share from being listed among available shares in net view and in "My Network Places" in Windows.

```
--unmapped-group
```

Default group name, if there is no mapping discovered into the preferred domain.

```
--unmapped-user
```

Default username, if there is no mapping discovered into the preferred domain.

2.14. share-delete

```
share-delete [options]
```

Delete a share

You can only delete a share with a confirmation prompt. By default, the share delete will not be executed for 24 hours. If you have a share snapshot schedule, share deletion is not allowed.



Deleting a share also deletes all data on the share. This is destructive and cannot be reversed.

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--delay
```

Postpone share space reclaim for period of time (for example 24h). Mutually exclusive with "--now"

```
--delete-path
```

Delete the share path directory when the share is purged. Directory must be empty in order to be deleted

```
--help
```

Display this help and exit

```
--id
```

The ID of the share to delete. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the share to delete. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the share to delete. Required unless any of the following is specified: --internal-id, --id

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--now
```

Share space will be reclaimed immediately. Mutually exclusive with "--delay"

2.15. share-list

```
share-list [options]
```

Display a list of all shares available in the system. Two types of lists can be displayed: a full list and a summary list (default)

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the share to list

```
--internal-id
```

The internal ID of the share to list

```
--name
```

The name of the share to list

2.16. share-mount

```
share-mount [options]
```

Mount a share

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--id
```

The ID of the share to mount. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the share to mount. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the share to mount. Required unless any of the following is specified: --internal-id, --id

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

2.17. share-move

```
share-move [options]
```

Move share to a different path

This command only changes the export map of the share while leaving the old path intact.

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--id
```

The ID of the share to move. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the share to move. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the share to move. Required unless any of the following is specified: --internal-id, --id

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--path
```

Path to mount the share on (i.e. /share1). The / prefix must be specified. (Required)

2.18. share-objective-add

```
share-objective-add [options]
```

Apply an objective to a share (or at a path within the share)

Options

```
--applicability
```

A statement used to conditionally apply the objective. When no applicability statement is supplied, it defaults to TRUE

```
--help
```

Display this help and exit

```
--id
```

The ID of the share. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the share. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the share. Required unless any of the following is specified: --internal-id, --id

```
--objective
```

The objective name (Required)

```
--path
```

A path within the share to apply the objective to. When omitted, the objective is added to the share itself

2.19. share-objective-list

```
share-objective-list [options]
```

List the applied and active objectives for a share (or at a path within the share)

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the share. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the share. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the share. Required unless any of the following is specified: --internal-id, --id

```
--path
```

A path within the share to list the objectives for. When omitted, the share's objectives are listed

2.20. share-objective-remove

```
share-objective-remove [options]
```

Remove an applied objective from a share (or from a path within the share) When used with an objective which is inherited & not applied locally, this will mask it by adding the objective locally with an applicability that negates the inherited applicability.

Options

```
--applicability
```

The applicability statement of the objective being removed. Defaults to TRUE

```
--help
```

Display this help and exit

```
--id
```

The ID of the share. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the share. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the share. Required unless any of the following is specified: --internal-id, --id

```
--objective
```

The objective name to be removed. (Required)

```
--path
```

A path within the share to remove the objective from. When omitted, the objective is removed from the share itself

2.21. share-objective-reset

```
share-objective-reset [options]
```

Resets the objectives applied to a share (or at a path within the share) back to their defaults. For a share, this will result in the same applied objectives as those that are applied to new shares. For a path, this will result in all locally-applied objectives being removed

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the share. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the share. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the share. Required unless any of the following is specified: --internal-id, --id

```
--path
```

A path within the share to reset the objectives on. When omitted, the share objectives are reset to default

2.22. share-offline

```
share-offline [options]
```

Take a share to the offline state

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--id
```

The ID of the share to take offline. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the share to take offline. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the share to take offline. Required unless any of the following is specified: `--internal-id`, `--id`

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

2.23. share-online

```
share-online [options]
```

Bring a share to the online state

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--id
```

The ID of the share to bring online. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the share to bring online. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the share to bring online. Required unless any of the following is specified: `--internal-id`, `--id`

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

2.24. share-snapshot-create

```
share-snapshot-create [options]
```

Create share snapshot

Example

```
share-snapshot-create --share-name test --now
```

Options

```
--help
```

Display this help and exit

```
--now
```

Create immediate snapshot of the share. Required unless "--schedule-name" is specified

```
--retention-name
```

The name of the snapshot retention policy.

```
--schedule-name
```

Name for the schedule of periodic snapshots of the share. Required unless "--now" is specified

```
--share-id
```

Share ID. Required unless "--share-name" is specified

```
--share-name
```

Share name. Required unless "--share-id" is specified

```
--snapshot-name
```

Name to identify the snapshot. Applicable only with --now option

2.25. share-snapshot-delete

```
share-snapshot-delete [options]
```

Delete share snapshot

Options

```
--help
```

Display this help and exit

```
--share-id
```

Share ID. Required unless "--share-name" is specified

```
--share-name
```

Share name. Required unless "--share-id" is specified

```
--snapshot-name
```

Snapshot name. May include wild-card characters (for example 2001-01-01T12-00*) (Required)

2.26. share-snapshot-list

```
share-snapshot-list [options]
```

List snapshots for share

Options

```
--help
```

Display this help and exit

```
--share-id
```

Share ID. Required unless "--share-name" is specified

```
--share-name
```

Share name. Required unless "--share-id" is specified

2.27. share-snapshot-restore

```
share-snapshot-restore [options]
```

Restore files from a share snapshot (when used with --filename option) or a complete share snapshot.

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

This option can be used only when restoring the entire share.

```
--filename
```

Paths for files to be restored from the share snapshot. Multiple paths may be provided. A path must be relative to the share root directory. The filename in the path may include wild-card characters (for example, /dir/file*.txt)

```
--help
```

Display this help and exit

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--share-id
```

Share ID. Required unless "--share-name" is specified

```
--share-name
```

Share name. Required unless "--share-id" is specified

```
--snapshot-name
```

Share snapshot name (Required)

2.28. share-snapshot-schedule-list

```
share-snapshot-schedule-list [options]
```

List scheduled snapshots for share

Options

```
--help
```

Display this help and exit

```
--share-id
```

Share ID

```
--share-name
```

Share name

2.29. share-snapshot-update

```
share-snapshot-update [options]
```

Update share snapshot schedule

Options

```
--clear-snapshots
```

Delete all snapshots taken for the schedule. Can be provided along with remove-schedule

```
--help
```

Display this help and exit

```
--new-retention-name
```

The name of the snapshot retention policy. Required unless any of the following is specified: `--remove-schedule`, `--remove-retention`

```
--remove-retention
```

Remove retention from share snapshot schedule. Required unless any of the following is specified: `--remove-schedule`, `--new-retention-name`

```
--remove-schedule
```

Remove both schedule and retention from share snapshot. Required unless any of the following is specified: `--new-retention-name`, `--remove-retention`

```
--schedule-name
```

Name for the schedule of periodic snapshots of the share (Required)

```
--share-id
```

Share ID. Required unless `--share-name` is specified

```
--share-name
```

Share name. Required unless `--share-id` is specified

2.30. share-undelete

```
share-undelete [options]
```

Abort scheduled deletion a share

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--id
```

The ID of the share to undelete. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the share to undelete. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the share to undelete. Required unless any of the following is specified: `--internal-id`, `--id`

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

2.31. share-unmount

```
share-unmount [options]
```

Unmount a share

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--id
```

The ID of the share to unmount. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the share to unmount. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the share to unmount. Required unless any of the following is specified: `--internal-id`, `--id`

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

2.32. share-update

```
share-update [options]
```

Update a share

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--default-selinux-context
```

A default SELinux security context for the share in the form of `<user>:<role>:<type>:<sensitivity>[:<categories>]`.

```
--default-selinux-context system_u:object_r:default_t:s0
```

```
--default-selinux-context system_u:object_r:default_t:s0:c0,c1
```

```
--default-selinux-context-clear
```

Clear the default SELinux security context

```
--description
```

A textual description of the share

```
--description-clear
```

Clears the share's description

```
--export-option
```

Export options for the share.

A 3, 4 or 5-tuple including <client specification>,ro|rw,[no-]root-squash[,insecure][,sec=<security options>].

<client specification> (an IP address, hostname, netgroup, network address, or subdomain)

'ro' or 'rw' (read-only or read-write)

'no-root-squash' or 'root-squash'

'insecure' (Optional. If not specified, secure is used.)

'sec=<security options>' colon-separated list of security options. Ex: sec=sys:krb5

Possible values: 'sys', 'krb5', 'krb5i', 'krb5p'

(Optional, if not specified, system default of 'sys' is used)

The --export-option param can be used multiple times. Export options are identified by client specification.

```
--export-option *,rw,no-root-squash
--export-option @netgroup,ro,root-squash,insecure
--export-option 192.168.1.0/255.255.255.0,rw,no-root-squash
--export-option 192.168.1.0/24,rw,no-root-squash
--export-option 2001:0db8::/32,rw,no-root-squash,sec=krb5
--export-option fe80:0:0:0:213:72ff:fe3c:21bf,rw,no-root-squash
--export-option example.com,rw,no-root-squash,insecure,sec=sys:krb5
--export-option *.example.co.uk,rw,no-root-squash
--export-option *.domain[1-3].example.com,rw,no-root-squash
--export-option *.domain?.example.com,rw,no-root-squash
```

```
--export-option-add
```

Adds export option(s) to the share, without removing existing export options. Each value must contain <client specification>,ro|rw,[no-]root-squash[,insecure][,sec=<security options>]. This param can be used multiple times

```
--export-option-clear
```

Resets the export options back to the default (*,rw,no-root-squash,sec=sys)

```
--export-option-delete
```

Removes existing export option(s) from the share. Provide only the client specification of the export option that should be removed; do not include access permissions, root-squash, or other options. This param can be used multiple times

```
--export-option-update
```

Modifies an export option that already exists on the share. Export options are uniquely identified by their client specification. Each value must contain <client specification>,ro|rw,[no-]root-squash[,insecure][,sec-<security options>]. This param can be used multiple times

```
--help
```

Display this help and exit

```
--id
```

The ID of the share to update. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the share to update. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the share to update. Required unless any of the following is specified: --internal-id, --id

```
--new-name
```

A new name for the share

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--preferred-domain
```

Preferred domain in which users have accounts. This field is required for mapping users from another domain into this domain

```
--preferred-domain-clear
```

Clear preferred domain attribute

```
--referral-address
```

Referral addresses (replaces existing list).

```
--referral-address-add
```

Add referral addresses to existing list.

```
--referral-address-remove
```

Remove referral addresses from existing list.

```
--referral-path
```

The NFS export path of the referred-to share (i.e. /target/data).

```
--replication-latency-alert-threshold
```

Number of seconds of replication latency which will be tolerated before an alert is created

```
--replication-latency-alert-threshold-clear
```

Clear replication latency alert threshold

```
--size
```

Limit the share size (quota).

```
--size-clear
```

Set no size limit on the share (no quota).

```
--size-warning-threshold
```

Threshold (1-99 percent) for share capacity usage, an event will be sent if this threshold is reached.

```
--smb-alias
```

Set SMB aliases. May be specified multiple times. Each alias has a name, a browsable flag, and a path within the share. An alias path must be created before creating the alias. Format: <alias-name>[,<browsable-[yes|no|on|off|true|false]>][,<alias-path>]. Path defaults to /. Browsable defaults to the share's browsable setting. This command will replace any existing aliases for the share.

```
--smb-alias-add
```

Similar to smb-alias but appends SMB aliases, leaving existing SMB aliases in place.

```
--smb-alias-clear
```

Clear SMB aliases

```
--smb-alias-delete
```

Delete specified SMB alias(es). May be specified multiple times. Format: <alias-name>

```
--smb-browsable-off
```

Prevent the share from being listed among available shares in net view and in "My Network Places" in Windows.

```
--smb-browsable-on
```

Allow the share to be listed among available shares in net view and in "My Network Places" in Windows.

```
--unmapped-group
```

Default group name, if there is no mapping discovered into the preferred domain

```
--unmapped-group-clear
```

Clear unmapped group attribute

```
--unmapped-user
```

Default username, if there is no mapping discovered into the preferred domain

```
--unmapped-user-clear
```

Clear unmapped user attribute

Chapter 3. Windows

3.1. ad-discover

```
ad-discover [options]
```

Discover Active Directory realm

Options

```
--help
```

Display this help and exit

```
--realm
```

Active Directory realm name (Required)

3.2. ad-config

```
ad-config [options]
```

View and modify Active Directory configuration.

Options

```
--ad-servers
```

An ordered, comma-separated list of Active Directory servers to be used when authenticating. This may be used to prefer closer, or faster servers first. Values may be in IP or DNS form and may optionally have a colon port suffix.

192.168.5.5:389,my.ad.net

```
--ad-servers-clear
```

Removes the list of ad_servers.

```
--anvil-dns-name
```

Specifies a DNS name for this anvil to be known by in AD.

Specifies a separate DNS name for the Anvil, distinct from the data portals' name set with `--portal-dns-name`. Required for NFS v4.2 clients that mount with Kerberos security (`sec=krb5`) — if it cannot be resolved, those mounts hang and eventually time out or fail. See [Joining an Active Directory Domain](#) for how the Anvil and Portal DNS names differ and what each defaults to.

```
--computer-ou
```

The distinguished name of an organizational unit in which to create the computer account.

```
--dns-auto-register-floating-ips-disable
```

Prevents the product from automatically keeping floating IPs registered with Active Directory's DNS. When disabled, only IPs in the list of DNS configured IPs are registered.

```
--dns-auto-register-floating-ips-enable
```

Causes the product to automatically keep floating IPs registered with Active Directory's DNS. When enabled, there is no need to specify floating IPs in the list of DNS configured IPs. Note that this functionality requires that the username be an account with privileges to manage DNS records.

```
--dns-configured-ip-add
```

Add an address (which is listed among the DNS available IPs) to be registered with Active Directory's DNS. This parameter may be repeated.

Add an address (which is listed among the DNS available IPs) to be registered with Active Directory's DNS. Only portal floating IPs and Data Portal IPs in the DATA role may be specified. This parameter may be repeated.

```
--dns-configured-ip-remove
```

Remove a value from the list DNS configured IPs. This parameter may be repeated.

```
--dns-configured-ips
```

A manually-specified, comma-separated list of IP addresses to register with Active Directory's DNS. Valid IPs include portal floating IPs, cluster floating IPs, and Data Portal IPs in the DATA role.

```
--dns-configured-ips-clear
```

Remove all values from the list of IP addresses to register with Active Directory's DNS.

```
--flush-cache
```

Flush Active Directory cache.

```
--help
```

Display this help and exit

```
--id-mapping-domains
```

An ordered, comma-separated list of local domains for use with ID mapping. This can be used to configure the order in which domains will be used when resolving a user.

example.local,example.internal,corp.example.com,forest.example.com

```
--id-mapping-domains-clear
```

Clear customized local domains and use the default list for ID mapping.

```
--identity-mapping-schema
```

The schema used to map Active Directory SIDs to uids and gids. When AD (which is the default) is specified, no cross-protocol user mapping between NFS and SMB takes place. Possible values: RFC2307 | RFC2307BIS | AD.

```
--join
```

Join Active Directory domain.

```
--leave
```

Leave from Active Directory domain.

```
--password
```

Password for the username.

```
--portal-dns-name
```

Specifies a DNS name for the data portals to be known by in AD. Sometimes referred to as the NetBIOS name. May only be specified when joining. When not specified, the current cluster name is used, or if portal-dns-name was previously set, it is used.

Specifies the DNS/NetBIOS name the data portals are known by in AD. May only be specified when joining. When not specified, the current cluster name is used, or if a portal DNS name was previously set, it is used. In Hammerspace 5.2 this option was named `--smb-server-name`; scripts using the old name must switch to `--portal-dns-name`.

```
--realm
```

Active Directory realm.

```
--recreate-nfs-spns
```

Recreate NFS SPNs.

```
--remove-computer
```

Attempt to remove the computer from the domain (password required if specified).

```
--username
```

Active directory account name with privileges to add or remove workstations to or from a domain.

```
--view
```

View Active Directory configuration.

3.3. domain-idmap-add

```
domain-idmap-add [options]
```

Create domain ID mapping rule

Options

```
--attribute
```

Rule attribute (Required)

```
--bidirectional
```

Create bidirectional rule

```
--from
```

Domain to map from (Required)

```
--help
```

Display this help and exit

```
--inherit-from
```

Inherit by subtrees of domain to map from

```
--inherit-to
```

Inherit by subtrees of domain to map to

```
--no-inherit-from
```

Don't Inherit by subtrees of domain to map from

```
--no-inherit-to
```

Don't Inherit by subtrees of domain to map to

```
--order
```

Rule order

```
--to
```

Domain to map to (Required)

3.4. domain-idmap-delete

```
domain-idmap-delete [options]
```

Delete domain ID mapping rule

Options

```
--from
```

Domain to map from

```
--help
```

Display this help and exit

```
--id
```

Domain mapping ID

```
--to
```

Domain to map to

3.5. domain-idmap-list

```
domain-idmap-list [options]
```

List domain ID mapping rules

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

domain ID mapping ID

3.6. domain-idmap-reload

```
domain-idmap-reload [options]
```

Reload domain ID mapping rules

Options

```
--help
```

Display this help and exit

3.7. smb-config

```
smb-config [options]
```

Configures and views SMB parameters.



These options set System Management configuration values. For most options the effect on SMB services follows directly from the option name, but not in every case. Where the effect differs from what the name implies, it is called out on the individual option — read the option description before changing a setting on a production cluster.

Options

```
--acl
```

Access Control List for the SMB autohome directory. Possible values: PUBLIC | GROUP | PRIVATE.

Access control list to apply to the autohome entry. Requires `--autohome-create` or `--autohome-update`.

```
--autohome-create
```

Create a new SMB autohome entry

Create an SMB autohome entry. Requires a share selector (`--share-id`, `--share-name`, or `--share-internal-id`), `--home-share-name`, and exactly one of `--username` or `--default`.

```
--autohome-delete
```

Delete an SMB autohome entry

Delete an SMB autohome entry. Requires one of `--id`, `--internal-id`, `--default`, or `--username`.

```
--autohome-disable
```

Disable SMB autohome feature system-wide

```
--autohome-enable
```

Enable SMB autohome feature system-wide

```
--autohome-update
```

Update an existing SMB autohome entry

Update an existing SMB autohome entry. Requires one of `--id`, `--internal-id`, `--default`, or `--username`.

```
--create-homedir
```

Whether to auto-create the autohome directory if missing. The parent path must exist, or the autohome share won't be published.

Create the home directory for the autohome entry. Requires `--autohome-create` or `--autohome-update`.

```
--default
```

Indicates this is the default SMB autohome entry

Applies the autohome operation to the default entry rather than to a named user. Mutually exclusive with `--username`, `--id`, and `--internal-id`.

```
--distributed-lock-manager-disable
```

Disable the distributed lock manager for SMB data access. Only use when file locking, including byte-range locking is not required. This setting applies to all shares.

```
--distributed-lock-manager-enable
```

Enable the distributed lock manager for SMB data access.

```
--help
```

Display this help and exit

```
--home-share-name
```

Home share name presented to the SMB user

Name of the home share created for the autohome entry. Requires `--autohome-create` or `--autohome-update`.

```
--id
```

The ID of the SMB autohome entry to update, or delete

Identifier of the autohome entry to update or delete. Mutually exclusive with `--username` and `--default`.

```
--internal-id
```

The internal ID of the SMB autohome entry to update, or delete

Internal identifier of the autohome entry to update or delete. Mutually exclusive with `--username` and `--default`.

```
--min-smb-client
```

The minimal SMB client protocol (SMB1, SMB2, SMB2_10, SMB3, SMB3_11).

Sets the minimum SMB dialect (SMB1, SMB2, SMB2_10, SMB3, SMB3_11). Requires an argument.



Do not use this option. It does not take effect, and Hammerspace does not support using it to change the minimum SMB dialect.

```
--multichannel-disable
```

Disable multichannel support

```
--multichannel-enable
```

Enable multichannel support

```
--path
```

The path to the SMB autohome directory

Path used for the autohome entry. Requires `--autohome-create` or `--autohome-update`.

```
--share-id
```

The ID of the share to be used for the SMB autohome

Identifies the share the autohome entry applies to, by ID. Requires `--autohome-create` or `--autohome-update`.

```
--share-internal-id
```

The internal ID of the share to be used for the SMB autohome

Identifies the share the autohome entry applies to, by internal ID. Requires `--autohome-create` or `--autohome-update`.

```
--share-name
```

The name of the share to be used for the SMB autohome

Identifies the share the autohome entry applies to, by name. Requires `--autohome-create` or `--autohome-update`.

```
--username
```

Username for which this SMB autohome is created

Applies the autohome operation to the entry for this user. Mutually exclusive with `--default`, `--id`, and `--internal-id`.

```
--view
```

View current Active Directory configuration.

Chapter 4. System

4.1. cert-add

```
cert-add [options]
```

Add a certificate or certificate chain to the system's trust store

Adds a certificate or CA to the Hammerspace trust store. By default, `cert-add` accepts only root CA certificates. You do not need to add the Hammerspace system root CA — it is generated and distributed automatically.

Options

```
--help
```

Display this help and exit

```
--pem
```

The certificate or certificate chain in PEM format (Required)

PEM-format certificate content to add. Accepts a multi-line, quoted PEM string.

```
--pem "<pem_content>"
```

```
--trust-intermediate-ca
```

Allow adding intermediate CA certificates to the trust store (defaults to only adding root CA certificates)

Adds an intermediate CA certificate (rather than a root CA).

```
--trust-self-signed-certificate
```

Allow adding self-signed non-CA certificates to the trust store (defaults to only adding root CA certificates)

Adds a self-signed, non-CA certificate (for example, a pinned server certificate).

4.2. cert-ca-list

```
cert-ca-list [options]
```

List the system root CA certificate(s)

Lists the Hammerspace-generated system root CA certificate(s). The active CA is used to sign all internal node certificates.

Options

```
--help
```

Display this help and exit

```
--role
```

List a specific CA by role. Possible values: SYSTEM_ACTIVE | SYSTEM_OLD.

Lists a specific CA by role. Valid values: SYSTEM_ACTIVE (the CA that signs node certificates and CSR-signed certificates) and SYSTEM_OLD (reserved for a CA that has been replaced; Hammerspace 5.3 provides no way to replace the system CA).

4.3. cert-csr-sign

```
cert-csr-sign [options]
```

Sign a certificate signing request (CSR) with the system root CA certificate

Signs a Certificate Signing Request (CSR) using the Hammerspace system CA and returns a signed certificate that a client can install. The certificate is valid for 365 days and supports client authentication (`clientAuth`) only, so it cannot be used by a storage server. Include at least one IP address in the CSR's Subject Alternative Name (SAN) field: the command does not require it, but peers that check the certificate generally match against the SAN.

Options

```
--help
```

Display this help and exit

```
--pem
```

The certificate signing request in PEM format

PEM-format CSR content to sign. Accepts a multi-line, quoted PEM string.

```
--pem "<csr_pem_content>"
```

```
--track
```

Add the certificate to the system's inventory of known certificates

Adds the signed certificate to the Hammerspace certificate inventory, where its expiration date is shown. Hammerspace does not alert you before the certificate expires. Recommended.

4.4. cert-list

```
cert-list [options]
```

List the known certificate(s)

Lists all certificates known to the system, including the system root CA and the per-node certificates signed by it.

Options

```
--full
```

Print extra information for each element

Displays detailed output, including validity dates and subject information.

```
--help
```

Display this help and exit

```
--id
```

The ID of the certificate to list

Retrieves a specific certificate by its ID.

```
--origin
```

List certificates that have this origin. Possible values: SYSTEM_CA | SYSTEM_ISSUED | CSR_SIGNED_BY_CA | UPLOADED_ROOT_CA | UPLOADED_INTERMEDIATE_CA | UPLOADED_PINNED_CERT.

Filters the list by how a certificate was added to the system. Valid values: SYSTEM_CA (the Hammerspace root CA), SYSTEM_ISSUED (the certificate issued to each Anvil and DSX node), CSR_SIGNED_BY_CA (certificates created by signing a CSR with the system CA), UPLOADED_ROOT_CA (an uploaded self-signed CA certificate), UPLOADED_INTERMEDIATE_CA (an uploaded intermediate CA certificate, added with `--trust-intermediate-ca`), and UPLOADED_PINNED_CERT (an uploaded self-signed certificate that is not a CA, added with `--trust-self-signed-certificate`).

4.5. cert-remove

```
cert-remove [options]
```

Remove a certificate from the system's trust store

Removes an uploaded CA certificate or pinned certificate, or a certificate signed from a CSR, from the trust store. Retrieve the certificate ID with `cert-list` first. SYSTEM_CA and SYSTEM_ISSUED certificates are managed by Hammerspace and cannot be removed.

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the certificate to remove (Required)

4.6. cluster-config

```
cluster-config [options]
```

Update cluster configuration

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--gfs-participant-max-suspected-time
```

The amount of time any GFS participant may remain in a SUSPECTED operational state before that state automatically transitioned to DOWN. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, minutes are assumed

```
--help
```

Display this help and exit

```
--nfs-tls-forbidden
```

Disallow TLS for all external and internal NFS connections

```
--nfs-tls-required
```

Require TLS with mutual authentication for all external and internal NFS connections

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--online-activation-support
```

Determines whether online license activation is allowed. Allowed values:[YES, NO]

```
--prometheus-exporters-disable
```

Disable Prometheus exporters

```
--prometheus-exporters-enable
```

Enable Prometheus exporters

```
--proxy-url
```

The URL of the HTTP proxy server (in the form <http://a.b.c.d:pp>)

```
--proxy-url-clear
```

Clear the HTTP proxy server configuration

```
--server-certificate-chain
```

An X.509 certificate, with an optional CA chain, in certificate PEM format that identifies the management server to the client

```
--server-certificate-reset
```

Reset the server to use an internally-generated self-signed certificate

```
--server-private-key
```

An unencrypted RSA private key in PKCS#1 or PKCS#8 PEM format that is paired with the server certificate in the server-certificate-chain bundle

```
--timezone
```

Specifies the timezone

```
--view
```

View the cluster configuration

4.7. dns-config

```
dns-config [options]
```

Configure DNS

Options

```
--force
```

Skip validation of new DNS server configuration

```
--help
```

Display this help and exit

```
--servers
```

Set DNS server(s)

```
--servers-clear
```

Clear DNS servers

```
--view
```

View the DNS configuration

4.8. dp-update

```
dp-update [options]
```

Update data portal

Options

```
--data-portal-id
```

The data portal UUID. Required unless any of the following is specified: --data-portal-type, --node-name

```
--data-portal-type
```

The data portal type. Required unless any of the following is specified: --data-portal-id, --node-name Possible values: SMB | NFS_V3 | NFS_V4_1 | S3.

```
--disable
```

Set the data portal admin state to DOWN

```
--enable
```

Set the data portal admin state to UP

```
--help
```

Display this help and exit

```
--node-name
```

The node name. Required unless any of the following is specified: `--data-portal-type`, `--data-portal-id`

4.9. email-config

```
email-config [options]
```

Add an SMTP gateway which will be used for events and call home through a mail server

Options

```
--connection-security
```

The type of connection security to use (default: NONE). Possible values: NONE | TLS | STARTTLS.

The connection security mode used for the SMTP connection. Choose the mode that matches what your mail server expects:

- NONE — Connect without encryption.
- TLS — Use implicit TLS. The connection is encrypted immediately on connect. Typically used with port 465.
- STARTTLS — Connect unencrypted, then upgrade the connection to TLS using the STARTTLS command. Typically used with port 587.

```
--disable
```

Disable SMTP email

```
--enable
```

Enable SMTP email

```
--from-address
```

Source email address from which the events will be sent

```
--help
```

Display this help and exit

```
--host
```

SMTP host

```
--password
```

SMTP password

```
--port
```

SMTP port

```
--username
```

SMTP username

```
--view
```

View current configuration

4.10. event-list

```
event-list [options]
```

List events generated by the system

Options

`--cleared`

Include only cleared events

`--from-date`

List events after "from-date", in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss] Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30"

`--full`

Print extra information for each element

`--help`

Display this help and exit

`--id`

The ID of the event to list

`--last-emitted`

The number of last-emitted events to list

`--severity`

List all events with severity greater than or equal to the given severity. Possible values: DEBUG | INFORMATIONAL | NOTICE | WARNING | ERROR | CRITICAL | ALERT | EMERGENCY.

`--type`

List all events of a given type.

▼ Possible values

ACTUAL_ALLOCATED_CAPACITY_EXCEEDED | ADDED | ADD_FAILED | AD_CACHE_FLUSH_FAILED |
AD_CACHE_FLUSH_SUCCESS | AD_COMPUTER_ISSUE | AD_DC_OUT_OF_TIME_SYNC | AD_SERVER_ISSUE |

AD_WITHOUT_NTP | ALLOCATED_CAPACITY_APPROACHING_LIMIT | ALLOCATED_CAPACITY_EXCEEDED |
ASSIMILATION_CANCELLED | ASSIMILATION_FAILED | ASSIMILATION_STOPPED |
ASSIMILATION_SUCCESS | AUDIT | BACKUP_COMPLETED | BACKUP_CREATION_FAILED | BACKUP_FAILED |
BACKUP_NOT_SCHEDULED | BORROWING_LICENSE_ABOUT_TO_EXPIRE | BORROWING_LICENSE_EXPIRED |
CANCELLED | CAPACITY_HEARTBEAT_DISABLED | CAPACITY_THRESHOLD_PASSED | CLUSTER_DEGRADED |
CLUSTER_FAILOVER | CLUSTER_MISCONFIGURED | CLUSTER_REPLICATION_EVENT |
CLUSTER_SPLIT_BRAIN | COLLECTIONS_ENTER | COLLECTIONS_LEAVE | COMB_MIGRATION_INCOMPLETE |
COMPONENT_MISSING | CREATED | CREATE_FAILED | CTDB_IN_RECOVERY |
CTDB_NODES_FILE_SYNC_FAILED | CTDB_NODE_FAILURE | CTDB_NOT_RESPONDING |
DATA_COPY_TO_OBJECT_FAILED | DATA_COPY_TO_OBJECT_SUCCESS | DATA_REPLICATION_ISSUE |
DD_CLUSTER_PLANNED_SHUTDOWN | DD_CLUSTER_PLANNED_SHUTDOWN_FAILED | DELETED |
DELETE_FAILED | DISK_USAGE_LIMIT_EXCEEDED | DISK_USAGE_LIMIT_WARNING | DNS_ISSUE |
ECGROUP_ARRAY | ECGROUP_MOUNTPOINT | ECGROUP_STORAGE | EVAL_ABOUT_TO_EXPIRE |
EVAL_EXPIRED | EXPIRED_LICENSE_IN_GRACE | FAILURE_REPORTING_LICENSED_USAGE |
GFS_PARTICIPANT_ADDED | GFS_PARTICIPANT_ADD_FAILED |
GFS_PARTICIPANT_OPER_STATE_CHANGED | GFS_PARTICIPANT_REMOVED |
GFS_PARTICIPANT_REMOVE_FAILED | HW_DRIVE_FAILED | HW_FAN_FAILED | HW_FRU_EVENT |
HW_NIC_LINK_EVENT | HW_PSU_FAILED | HW_RAID_EVENT | IDMAPD_SYNC_ISSUE | INDEXING_SENT |
INVALID_ADDITIONAL_ADDRESS | INVALID_COMB_STRUCTURE | KERBEROS_CLUSTER_UNHEALTHY |
KERBEROS_REQUIRED_NFS_SPNS_MISSING | KERBEROS_SHARE_WITH_NO_NFS_SPNS |
KERBEROS_SHARE_WITH_UNJOINED_AD | KERBEROS_SYNC_FAILURE |
KERBEROS_USER_MAPPING_NONFUNCTIONAL | KEYTAB_MISMATCH | KMS_OPERATION_CHECK_FAILED |
LICENSE_ABOUT_TO_ENTER_GRACE | LICENSE_ABOUT_TO_EXPIRE | LICENSE_ACTIVATED |
LICENSE_ACTIVATION_FAILED | LICENSE_EXPIRED | LICENSE_IN_GRACE_ABOUT_TO_EXPIRE |
LICENSE_STATE_CHANGED | LICENSING_MISCONFIGURED | METADATA_REPLICATION_ISSUE |
METERED_LICENSE_IN_GRACE | METRIC_COLLECTION_DEGRADED | MGMT_GENERIC_EVENT |
MGMT_STARTED | MGMT_STARTED_FROM_RESTORE | MISSING_CLOUD_MOVER |
MISSING_COMB_STRUCTURE | MISSING_DATA_MOVER | MISSING_SHARED_OBJECT_STORAGE_VOLUME |
MISSING_STORAGE_VOLUME | MODELER_SHARE_SWEEP_COMPLETED | MOVER_AT_CAPACITY |
MOVER_BAD_IP | MOVER_CONNECTED | MOVER_DROPPED | MOVER_UNKNOWN |
NAME_SERVICE_UNHEALTHY | NETWORK_LDAP_UNREACHABLE | NETWORK_NTP_UNREACHABLE |
NFS_LAYOUT_ERROR_ACCESS | NFS_LAYOUT_ERROR_IO | NFS_LAYOUT_ERROR_NXIO |
NFS_LAYOUT_ERROR_STALE | NFS_TLS_CONFIGURATION_UNHEALTHY | NODE_MODE_ISSUE | NONE |
NO_AVAILABLE_STORAGE_ON_NODE | NO_REGISTERED_MOVER | NO_REGISTERED_STORAGE_VOLUME |
NTP_NOT_SYNCHRONIZED | NVMEOF_PATH_DEGRADED | NVMEOF_PATH_LOST |
OBJECT_VOLUME_GC_BLOCKED | OBJECT_VOLUME_GC_CANCELLED | OBJECT_VOLUME_GC_COMPLETED |
OBJECT_VOLUME_GC_FAILED | OBJECT_VOLUME_IO_TEST_ALL_FAILED |
OBJECT_VOLUME_IO_TEST_FAILED | OBJECT_VOLUME_RESERVATION_OLD | OSV_CSP_CONN_FAILED |
OSV_HMDB_CLOUD_DELETES_FAILING | OSV_HMDB_DEGRADED_BLOOM_FILTER_ALLOCATED |
OSV_HMDB_INSUFFICIENT_GC_MEMORY | OSV_HMDB_REPLICATION_OUT_OF_SYNC |
OSV_QUORUM_IN_FLUX | OSV_SITE_TO_SITE_CONN_FAILED | OVER_CAPACITY_GRACE_ABOUT_TO_EXPIRE |
OVER_CAPACITY_LICENSE_VIOLATION | PDDM_EXITED | PDDM_KILLED_DI | PDDM_RESTART |
PKI_CA_CREATION_FAILED | PKI_NODE_CERT_CREATION_FAILED | PKI_NODE_CERT_SYNC_FAILED |
PKI_NODE_CHECK_FAILED | PKI_TRUST_SYNC_FAILED | PORTAL_EXPORT_FAILED |
PORTAL_FLOATING_IP_SYNC_FAILED | PORTAL_UNEXPORT_FAILED | PROMETHEUS_DEGRADED |
QUORUM_DEVICE_CONFIGURED | QUORUM_DEVICE_UNCONFIGURED | QUORUM_DEVICE_UNHEALTHY |
READ_LATENCY_THRESHOLD_CROSSED | REMOVED | REMOVE_FAILED |

REPLICATION_CLOCK_OUT_OF_SYNC | REPLICATION_LATENCY_THRESHOLD_EXCEEDED |
REPLICATION_PORT_CHECK_FAILED | REPLICATION_WITHOUT_NTP | S3_MULTIPART_UPLOAD_ABORTED |
S3_SERVICE_RELOADED | S3_SERVICE_RELOAD_ERROR | SALT_NOT_FUNCTIONAL |
SERVICE_OPER_STATE_ISSUE | SHARE_CLONED | SHARE_CLONE_FAILED | SHARE_EVENTS_PROCESSED |
SHARE_EVENTS_PROCESSING | SHARE_EVENT_PROCESSING_BLOCKED | SHARE_PRUNING |
SHARE_PRUNING_BLOCKED | SHARE_QUOTA_EXCEEDED | SHARE_QUOTA_WARNING | SHARE_RESTORED |
SHARE_RESTORE_FAILED | SHARE_SNAPSHOT_CREATED | SHARE_SNAPSHOT_CREATE_FAILED |
SHARE_SNAPSHOT_DELETED | SHARE_SNAPSHOT_DELETE_FAILED | SOFTWARE_UPDATE_FAILED |
SOFTWARE_UPDATE_STARTED | SOFTWARE_UPDATE_SUCCESS | SOFTWARE_VERSION_CHANGED |
SSSD_CONFIG_SYNC_FAILED | SUPPORT_CALL_HOME_EVENT | SYSTEM | UPDATED | UPDATE_FAILED |
USER_PASSWORD_CHANGED | VASA_VAAI_PROVIDER_EVENT | VOLUME_ASSIMILATION_EVENT |
VOLUME_CLONE_TEST_FAILED | VOLUME_CONFIG_TEST_ALL_FAILED | VOLUME_CONFIG_TEST_FAILED |
VOLUME_DECOMMISSION_EVENT | VOLUME_EVICTION_FAILED | VOLUME_STATE_CHANGED |
WRITE_LATENCY_THRESHOLD_CROSSED

```
--uncleared
```

Include only uncleared events

```
--until-date
```

List events before "until-date", in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss] Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30"

4.11. event-update

```
event-update [options]
```

Clear events generated by the system

Options

```
--all
```

Clear all events. Required unless any of the following is specified: --type, --created-before, --created-after, --id

```
--clear
```

Clear events (Required)

```
--created-after
```

Clear events after "created-after", in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss] Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30". Required unless any of the following is specified: --type, --all, --created-before, --id

```
--created-before
```

Clear events before "created-before", in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss] Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30". Required unless any of the following is specified: --type, --all, --created-after, --id

```
--help
```

Display this help and exit

```
--id
```

The ID of the event to clear. Required unless any of the following is specified: --type, --all, --created-before, --created-after

```
--type
```

Clear all events of a given type. Required unless any of the following is specified: --all, --created-before, --created-after, --id

▼ *Possible values*

ACTUAL_ALLOCATED_CAPACITY_EXCEEDED | ADDED | ADD_FAILED | AD_CACHE_FLUSH_FAILED |
AD_CACHE_FLUSH_SUCCESS | AD_COMPUTER_ISSUE | AD_DC_OUT_OF_TIME_SYNC | AD_SERVER_ISSUE |
AD_WITHOUT_NTP | ALLOCATED_CAPACITY_APPROACHING_LIMIT | ALLOCATED_CAPACITY_EXCEEDED |
ASSIMILATION_CANCELLED | ASSIMILATION_FAILED | ASSIMILATION_STOPPED |
ASSIMILATION_SUCCESS | AUDIT | BACKUP_COMPLETED | BACKUP_CREATION_FAILED | BACKUP_FAILED |
BACKUP_NOT_SCHEDULED | BORROWING_LICENSE_ABOUT_TO_EXPIRE | BORROWING_LICENSE_EXPIRED |
CANCELLED | CAPACITY_HEARTBEAT_DISABLED | CAPACITY_THRESHOLD_PASSED | CLUSTER_DEGRADED |
CLUSTER_FAILOVER | CLUSTER_MISCONFIGURED | CLUSTER_REPLICATION_EVENT |
CLUSTER_SPLIT_BRAIN | COLLECTIONS_ENTER | COLLECTIONS_LEAVE | COMB_MIGRATION_INCOMPLETE |
COMPONENT_MISSING | CREATED | CREATE_FAILED | CTDB_IN_RECOVERY |
CTDB_NODES_FILE_SYNC_FAILED | CTDB_NODE_FAILURE | CTDB_NOT_RESPONDING |
DATA_COPY_TO_OBJECT_FAILED | DATA_COPY_TO_OBJECT_SUCCESS | DATA_REPLICATION_ISSUE |
DD_CLUSTER_PLANNED_SHUTDOWN | DD_CLUSTER_PLANNED_SHUTDOWN_FAILED | DELETED |
DELETE_FAILED | DISK_USAGE_LIMIT_EXCEEDED | DISK_USAGE_LIMIT_WARNING | DNS_ISSUE |
ECGROUP_ARRAY | ECGROUP_MOUNTPOINT | ECGROUP_STORAGE | EVAL_ABOUT_TO_EXPIRE |
EVAL_EXPIRED | EXPIRED_LICENSE_IN_GRACE | FAILURE_REPORTING_LICENSED_USAGE |

GFS_PARTICIPANT_ADDED | GFS_PARTICIPANT_ADD_FAILED |
GFS_PARTICIPANT_OPER_STATE_CHANGED | GFS_PARTICIPANT_REMOVED |
GFS_PARTICIPANT_REMOVE_FAILED | HW_DRIVE_FAILED | HW_FAN_FAILED | HW_FRU_EVENT |
HW_NIC_LINK_EVENT | HW_PSU_FAILED | HW_RAID_EVENT | IDMAPD_SYNC_ISSUE | INDEXING_SENT |
INVALID_ADDITIONAL_ADDRESS | INVALID_COMB_STRUCTURE | KERBEROS_CLUSTER_UNHEALTHY |
KERBEROS_REQUIRED_NFS_SPNS_MISSING | KERBEROS_SHARE_WITH_NO_NFS_SPNS |
KERBEROS_SHARE_WITH_UNJOINED_AD | KERBEROS_SYNC_FAILURE |
KERBEROS_USER_MAPPING_NONFUNCTIONAL | KEYTAB_MISMATCH | KMS_OPERATION_CHECK_FAILED |
LICENSE_ABOUT_TO_ENTER_GRACE | LICENSE_ABOUT_TO_EXPIRE | LICENSE_ACTIVATED |
LICENSE_ACTIVATION_FAILED | LICENSE_EXPIRED | LICENSE_IN_GRACE_ABOUT_TO_EXPIRE |
LICENSE_STATE_CHANGED | LICENSING_MISCONFIGURED | METADATA_REPLICATION_ISSUE |
METERED_LICENSE_IN_GRACE | METRIC_COLLECTION_DEGRADED | MGMT_GENERIC_EVENT |
MGMT_STARTED | MGMT_STARTED_FROM_RESTORE | MISSING_CLOUD_MOVER |
MISSING_COMB_STRUCTURE | MISSING_DATA_MOVER | MISSING_SHARED_OBJECT_STORAGE_VOLUME |
MISSING_STORAGE_VOLUME | MODELER_SHARE_SWEEP_COMPLETED | MOVER_AT_CAPACITY |
MOVER_BAD_IP | MOVER_CONNECTED | MOVER_DROPPED | MOVER_UNKNOWN |
NAME_SERVICE_UNHEALTHY | NETWORK_LDAP_UNREACHABLE | NETWORK_NTP_UNREACHABLE |
NFS_LAYOUT_ERROR_ACCESS | NFS_LAYOUT_ERROR_IO | NFS_LAYOUT_ERROR_NXIO |
NFS_LAYOUT_ERROR_STALE | NFS_TLS_CONFIGURATION_UNHEALTHY | NODE_MODE_ISSUE | NONE |
NO_AVAILABLE_STORAGE_ON_NODE | NO_REGISTERED_MOVER | NO_REGISTERED_STORAGE_VOLUME |
NTP_NOT_SYNCHRONIZED | NVMEOF_PATH_DEGRADED | NVMEOF_PATH_LOST |
OBJECT_VOLUME_GC_BLOCKED | OBJECT_VOLUME_GC_CANCELLED | OBJECT_VOLUME_GC_COMPLETED |
OBJECT_VOLUME_GC_FAILED | OBJECT_VOLUME_IO_TEST_ALL_FAILED |
OBJECT_VOLUME_IO_TEST_FAILED | OBJECT_VOLUME_RESERVATION_OLD | OSV_CSP_CONN_FAILED |
OSV_HMDB_CLOUD_DELETES_FAILING | OSV_HMDB_DEGRADED_BLOOM_FILTER_ALLOCATED |
OSV_HMDB_INSUFFICIENT_GC_MEMORY | OSV_HMDB_REPLICATION_OUT_OF_SYNC |
OSV_QUORUM_IN_FLUX | OSV_SITE_TO_SITE_CONN_FAILED | OVER_CAPACITY_GRACE_ABOUT_TO_EXPIRE |
OVER_CAPACITY_LICENSE_VIOLATION | PDDM_EXITED | PDDM_KILLED_DI | PDDM_RESTART |
PKI_CA_CREATION_FAILED | PKI_NODE_CERT_CREATION_FAILED | PKI_NODE_CERT_SYNC_FAILED |
PKI_NODE_CHECK_FAILED | PKI_TRUST_SYNC_FAILED | PORTAL_EXPORT_FAILED |
PORTAL_FLOATING_IP_SYNC_FAILED | PORTAL_UNEXPORT_FAILED | PROMETHEUS_DEGRADED |
QUORUM_DEVICE_CONFIGURED | QUORUM_DEVICE_UNCONFIGURED | QUORUM_DEVICE_UNHEALTHY |
READ_LATENCY_THRESHOLD_CROSSED | REMOVED | REMOVE_FAILED |
REPLICATION_CLOCK_OUT_OF_SYNC | REPLICATION_LATENCY_THRESHOLD_EXCEEDED |
REPLICATION_PORT_CHECK_FAILED | REPLICATION_WITHOUT_NTP | S3_MULTIPART_UPLOAD_ABORTED |
S3_SERVICE_RELOADED | S3_SERVICE_RELOAD_ERROR | SALT_NOT_FUNCTIONAL |
SERVICE_OPER_STATE_ISSUE | SHARE_CLONED | SHARE_CLONE_FAILED | SHARE_EVENTS_PROCESSED |
SHARE_EVENTS_PROCESSING | SHARE_EVENT_PROCESSING_BLOCKED | SHARE_PRUNING |
SHARE_PRUNING_BLOCKED | SHARE_QUOTA_EXCEEDED | SHARE_QUOTA_WARNING | SHARE_RESTORED |
SHARE_RESTORE_FAILED | SHARE_SNAPSHOT_CREATED | SHARE_SNAPSHOT_CREATE_FAILED |
SHARE_SNAPSHOT_DELETED | SHARE_SNAPSHOT_DELETE_FAILED | SOFTWARE_UPDATE_FAILED |
SOFTWARE_UPDATE_STARTED | SOFTWARE_UPDATE_SUCCESS | SOFTWARE_VERSION_CHANGED |
SSSD_CONFIG_SYNC_FAILED | SUPPORT_CALL_HOME_EVENT | SYSTEM | UPDATED | UPDATE_FAILED |
USER_PASSWORD_CHANGED | VASA_VAAI_PROVIDER_EVENT | VOLUME_ASSIMILATION_EVENT |
VOLUME_CLONE_TEST_FAILED | VOLUME_CONFIG_TEST_ALL_FAILED | VOLUME_CONFIG_TEST_FAILED |
VOLUME_DECOMMISSION_EVENT | VOLUME_EVICTION_FAILED | VOLUME_STATE_CHANGED |
WRITE_LATENCY_THRESHOLD_CROSSED

4.12. heartbeat-list

```
heartbeat-list [options]
```

List the configured heartbeats

Options

```
--help
```

Display this help and exit

4.13. heartbeat-send

```
heartbeat-send [options]
```

Sends the specified heartbeat type to support

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the heartbeat to send. Required unless any of the following is specified: --type, --name

```
--name
```

The name of the heartbeat to send. Required unless any of the following is specified: --type, --id

```
--type
```

The type of the heartbeat to send. Required unless any of the following is specified: --name, --id Possible values: HEALTH | CAPACITY.

4.14. heartbeat-update

```
heartbeat-update [options]
```

Update the heartbeat configuration

Options

```
--disable
```

Disables periodic heartbeat sending. Required unless any of the following is specified: `--enable`, `--interval`

```
--enable
```

Enables periodic heartbeat sending. Required unless any of the following is specified: `--disable`, `--interval`

```
--help
```

Display this help and exit

```
--id
```

The ID of the heartbeat configuration to be updated. Required unless any of the following is specified: `--type`, `--name`

```
--interval
```

Periodic heartbeat sending interval (default units: seconds, otherwise specify units, e.g. "5 minutes"). Required unless any of the following is specified: `--enable`, `--disable`

```
--name
```

The name of the heartbeat configuration to be updated. Required unless any of the following is specified: `--type`, `--id`

```
--type
```

The type of the heartbeat configuration to be updated. Required unless any of the following is specified: `--name`, `--id` Possible values: HEALTH | CAPACITY.

4.15. identity-group-mapping-create

```
identity-group-mapping-create [options]
```

Map a federated user's group to an internal Role. For example, map the members of a particular Active Directory group to the admin Role

Options

```
--group
```

Name of the group to map to the internal role (Required)

```
--help
```

Display this help and exit

```
--mgmt-role-id
```

The ID of an internal role. Required unless "--mgmt-role-name" is specified

```
--mgmt-role-name
```

The name of an internal role. Required unless "--mgmt-role-id" is specified

```
--name
```

A name for the group to role mapping. If missing, group::role is used. (Required)

4.16. identity-group-mapping-delete

```
identity-group-mapping-delete [options]
```

Delete an identity group mapping

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the identity group mapping to delete. Required unless "--name" is specified

```
--name
```

The name of the identity group mapping to delete. Required unless "--id" is specified

4.17. identity-group-mapping-list

```
identity-group-mapping-list [options]
```

List the identity group mappings

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

List a specific identity group mapping by ID

```
--name
```

List a specific identity group mapping by name

4.18. identity-group-mapping-update

```
identity-group-mapping-update [options]
```

Update an identity group mapping

Options

```
--group
```

The name of a new identity group to associate with the role

```
--help
```

Display this help and exit

```
--id
```

The ID of the identity group mapping to update. Required unless "--name" is specified

```
--mgmt-role-id
```

The ID the role to associate with the identity group

```
--mgmt-role-name
```

The name the role to associate with the identity group

```
--name
```

The name of the identity group mapping to update. Required unless "--id" is specified

4.19. idp-add

```
idp-add [options]
```

Add an Identity Provider (IdP) such as Active Directory for purposes of federated authentication and authorization. See also the identity-group-mapping commands

Options

```
--connect-timeout
```

The amount of time to wait for the system to connect to the IdP. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, seconds are assumed

```
--connection-security
```

The type of connection security to use (default: NONE). Possible values: NONE | TLS | STARTTLS.

The connection security mode used for the LDAP connection to the identity provider. NONE connects in cleartext (normally port 389). TLS uses LDAPS, negotiating TLS immediately on connect (normally port 636). STARTTLS connects in cleartext and then upgrades the connection in place with the STARTTLS command. SSL is accepted as a synonym for TLS.

```
--domain
```

The name of an IdP domain. When adding an AD IdP, this specifies the AD domain (Required)

```
--follow-referrals
```

Instructs the system to follow referrals when resolving usernames. Typically, only required when there are cross-domain memberships

```
--help
```

Display this help and exit

```
--name
```

The name of this IdP (Required)

```
--read-timeout
```

The amount of time to wait for the system to read from the IdP. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, seconds are assumed

```
--servers
```

A comma-separated list of fully-qualified domain names or IP addresses, optionally followed by a colon-

separated TCP port. The list may not contain spaces.

```
--servers server1.example.com
--servers server1.example.com,server2.example.com
--servers 127.0.0.5:8389
```

(Required)

A comma-separated list of fully-qualified domain names or IP addresses. The list may not contain spaces. To use a non-standard port, append it to a server entry, for example `dc1.example.com:636`

```
--type
```

The type of IdP being added. Possible values: AD.

```
--validate-server-certs-enable
```

Enable validation of server certificates for SSL/TLS connections.

Enable validation of the identity provider's server certificate. Applies when `--connection-security` is TLS or STARTTLS. Before enabling validation, install the issuing CA (and any intermediates) so Hammerspace trusts the server certificate, from the GUI under **Administration > TLS > Trusted Certificates** or with `cert-add`; otherwise logins fail during the TLS handshake.

If you omit this option, certificate validation is disabled. `idp-add` has no option to disable validation; to turn validation off after enabling it, use `idp-update --validate-server-certs-disable`.

4.20. idp-list

```
idp-list [options]
```

List the federated Identity Providers (IdPs)

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

List a specific IdP by ID

```
--name
```

List a specific IdP by name

4.21. idp-remove

```
idp-remove [options]
```

Remove a federated Identity Provider (IdP)

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the IdP to remove. Required unless "--name" is specified

```
--name
```

The name of the IdP to remove. Required unless "--id" is specified

4.22. idp-update

```
idp-update [options]
```

Update a federated Identity Provider (IdP)

Options

```
--connect-timeout
```

The amount of time to wait for the system to connect to the IdP. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, seconds are assumed

```
--connection-security
```

The type of connection security to use. Possible values: NONE | TLS | STARTTLS.

```
--domain
```

A domain name

```
--follow-referrals
```

Instructs the system to follow referrals when resolving usernames. Typically, only required when there are cross-domain memberships

```
--help
```

Display this help and exit

```
--id
```

The ID of the IdP to update. Required unless "--name" is specified

```
--ignore-referrals
```

Instructs the system to not follow referrals when resolving usernames

```
--name
```

The name of the IdP to update. Required unless "--id" is specified

```
--read-timeout
```

The amount of time to wait for the system to read from the IdP. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, seconds are assumed

```
--servers
```

A comma-separated list of fully-qualified domain names or IP addresses, optionally followed by a colon-separated TCP port. The list may not contain spaces.

```
--servers server1.example.com  
--servers server1.example.com,server2.example.com  
--servers 127.0.0.5:8389
```

```
--validate-server-certs-disable
```

Disable validation of server certificates for SSL/TLS connections.

```
--validate-server-certs-enable
```

Enable validation of server certificates for SSL/TLS connections.

4.23. kms-add

```
kms-add [options]
```

Add a key management system (KMS)

Options

```
--access-id
```

Authentication username (* required for AWS_KMS)

```
--client-certificate
```

An X.509 certificate in certificate PEM format that identifies the client to the server (* required for NCIPHER_WSOP)

```
--client-private-key
```

An RSA private key in PKCS#1 or PKCS#8 PEM format that is paired with the client-certificate (* required for NCIPHER_WSOP)

```
--comment
```

Any comment to be associated with the KMS

```
--endpoint
```

The endpoint (URI or host:port) of the KMS (* required for and exclusive to NCIPHER_WSOP)

```
--help
```

Display this help and exit

```
--key-id
```

The key identifier to use with the KMS (* required for AWS_KMS and NCIPHER_WSOP)

```
--name
```

A name for the KMS (Required)

```
--passphrase
```

The passphrase (* required for and exclusive to PASSPHRASE). If not specified, it will be prompted for.

```
--secret
```

Authentication password (* required for AWS_KMS)

```
--server-certificate-chain
```

An X.509 certificate, with optional CA chain, in certificate PEM format that identifies the KMS server to the client (* required for and exclusive to NCIPHER_WSOP)

```
--type
```

The type of KMS system being added. Possible values: NCIPHER_WSOP | AWS_KMS | PASSPHRASE.
(Required)

4.24. kms-list

```
kms-list [options]
```

List the key management systems (KMS)s

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the KMS to list

```
--internal-id
```

The internal ID of the KMS to list

```
--name
```

The name of the KMS to list

4.25. kms-remove

```
kms-remove [options]
```

Remove a key management system

Options

```
--force
```

Force the removal of a KMS, even if object storage volumes exist

```
--help
```

Display this help and exit

```
--id
```

The ID of the KMS to remove. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the KMS to remove. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the KMS to remove. Required unless any of the following is specified: `--internal-id`, `--id`

4.26. kms-update

```
kms-update [options]
```

Update a key management system (KMS)

Options

```
--access-id
```

Authentication username (exclusive to AWS_KMS)

```
--add-passphrase
```

Prompt for a new passphrase for the PASSPHRASE KMS

```
--client-certificate
```

An X.509 certificate in Base64-encoded PEM format (with the BEGIN and END tags) that identifies the client to the server (exclusive to NCIPHER_WSOP)

```
--client-private-key
```

An RSA private key in Base64-encoded PEM format (with the BEGIN and END tags) that is paired with the client-certificate (exclusive to NCIPHER_WSOP)

```
--comment
```

Any comment to be associated with the KMS

```
--endpoint
```

The endpoint (URI or host:port) of the NCIPHER_WSOP KMS

```
--help
```

Display this help and exit

```
--id
```

The ID of the KMS to update. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the KMS to update. Required unless any of the following is specified: --name, --id

```
--key-id
```

The key identifier to use with the KMS

```
--name
```

The name of the KMS to update. Required unless any of the following is specified: --internal-id, --id

```
--new-name
```

A new name for the KMS

```
--passphrase
```

A new passphrase for the PASSPHRASE KMS

```
--secret
```

Authentication password (exclusive to AWS_KMS)

```
--server-certificate-chain
```

An X.509 certificate with optional CA chain in Base64-encoded PEM format (with the BEGIN and END tags) that identifies the NCIPHER_WSOP KMS server to the client

4.27. local-site-config

```
local-site-config [options]
```

Update information for the local site.

Options

```
--data-center
```

The name of the data center location of the site

```
--data-center-clear
```

Clears the data center location

```
--geo-coordinates
```

Alternate specification of the location in <latitude>,<longitude> format

```
--geo-coordinates-clear
```

Clears both the latitude and longitude

```
--help
```

Display this help and exit

```
--latitude
```

The latitude (-90.0 to 90.0) of the site

```
--latitude-clear
```

Clears the latitude

```
--longitude
```

The longitude (-180.0 to 180.0) of the site

```
--longitude-clear
```

Clears the longitude

```
--name
```

The new name of the local site

```
--override-data-address
```

An address which overrides the site's data address. When specified, this address will be used as the effective data address advertised to other sites. When not specified, the cluster's data address will be used as the effective address

```
--override-data-address-clear
```

Clears the override-data-address

```
--override-mgmt-address
```

An address which overrides the site's mgmt address. When specified, this address will be used as the effective mgmt address advertised to other sites. When not specified, the cluster's mgmt address will be used as the effective address

```
--override-mgmt-address-clear
```

Clears the override-mgmt-address

```
--plus-code
```

Alternate specification of the location in Plus Code format

```
--view
```

View the local site

4.28. license-add

```
license-add [options]
```

Add and activate a license

Options

```
--activation-id
```

The license activation ID

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--capacity
```

Number of 1TB units of storage capacity to allocate to this license. Only applicable with capacity-based licenses

```
--help
```

Display this help and exit

```
--license-server-ip
```

A management IP of a metered license server

```
--license-server-password
```

The password for the user named by the license-server-username parameter

```
--license-server-username
```

A user who has administrative rights on the metered license server

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--type
```

The type of license to add. Possible values: NODE | FILE_CAPACITY | OBJECT_CAPACITY | METERED.
(Required)

4.29. license-list

```
license-list [options]
```

List all licenses

Options

```
--activation-id
```

The activation ID of the license to list

```
--help
```

Display this help and exit

4.30. license-offline-add

```
license-offline-add [options]
```

Add and activate a license via an offline process. A request file is generated and obtained via one of the export parameters. The request file is then exchanged for a response file by the license administrator or at the license portal. The response file is then uploaded to complete the process.

Options

`--activation-id`

The license activation ID (Required)

`--capacity`

Number of 1TB units of storage capacity to allocate to this license. Only applicable with capacity-based licenses

`--export-uri`

Causes an activation request to be copied to an ftp, scp, or mailto location. Examples: <ftp://example.com/uploads>, <scp://example.com/uploads>, <mailto:john.doe@example.com>. Required unless "`--import-uri`" is specified

`--help`

Display this help and exit

`--import-uri`

The location of the activation response file to be uploaded which will complete the offline license add process. Examples: <ftp://example.com/uploads/capabilityResponse.bin>, <scp://example.com/uploads/capabilityResponse.bin>. Required unless any of the following is specified: `--export-uri`, `--type`

`--type`

The type of license to add. Required unless "`--import-uri`" is specified. Possible values: `NODE` | `FILE_CAPACITY` | `OBJECT_CAPACITY`.

4.31. license-offline-cancel

```
license-offline-cancel [options]
```

Cancel a pending offline license operation for a given activation ID. If the initial request has already been uploaded to the license server, use the appropriate license-offline command to complete the operation.

Options

```
--activation-id
```

The license activation ID associated with the pending offline request (Required)

```
--help
```

Display this help and exit

4.32. license-offline-remove

```
license-offline-remove [options]
```

Deactivate and remove a license via an offline process. A request file is generated and obtained via one of the export parameters. The request file is then exchanged for a response file by the license administrator or at the license portal. The response file is then uploaded to complete the update process.

Options

```
--activation-id
```

The license activation ID (Required)

```
--export-uri
```

Causes a remove request file to be copied to an ftp, scp, or mailto location. Examples: <ftp://example.com/uploads>, <scp://example.com/uploads>, <mailto:john.doe@example.com>. Required unless "--import-uri" is specified

```
--help
```

Display this help and exit

```
--import-uri
```

The location of the activation response file to be uploaded which will complete the offline license add process. Examples: <ftp://example.com/uploads/capabilityResponse.bin>, <scp://example.com/uploads/capabilityResponse.bin>. Required unless "--export-uri" is specified

4.33. license-offline-update

```
license-offline-update [options]
```

Update a license via an offline process. This supports administrative changes that do not affect capacity, such as expiration date extensions. A request file is generated and obtained via one of the export parameters. The request file is then exchanged for a response file by the license administrator or at the license portal. The response file is then uploaded to complete the update process.

Options

```
--activation-id
```

The license activation ID (Required)

```
--capacity
```

New number of 1TB units of storage capacity to allocate to this license

```
--export-uri
```

Causes an update request file to be copied to an ftp, scp, or mailto location. Examples: <ftp://example.com/uploads>, <scp://example.com/uploads>, <mailto:john.doe@example.com>. Required unless "--import-uri" is specified

```
--help
```

Display this help and exit

```
--import-uri
```

The location of the activation response file to be uploaded which will complete the offline license add process. Examples: <ftp://example.com/uploads/capabilityResponse.bin>,

scp://example.com/uploads/capabilityResponse.bin. Required unless "--export-uri" is specified

4.34. license-remove

```
license-remove [options]
```

Deactivate and remove a license

Options

```
--activation-id
```

The license activation ID (Required)

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--force
```

When license-remove is invoked from the licensed client, the presence of the force parameter will cause the license to be removed from the client even if the license server can not be reached. When invoked from the license server, the force parameter is required and will cause the license server's record of the license to be deleted.

```
--help
```

Display this help and exit

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

4.35. license-update

```
license-update [options]
```

Update the allocated capacity for a capacity-based license

Options

```
--activation-id
```

The license activation ID (Required)

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--capacity
```

New number of 1TB units of storage capacity to allocate to this license

```
--help
```

Display this help and exit

```
--license-server-ip
```

For a metered license, update the IP of server to which usage reporting is sent. The IP must identify the license server which originally granted the client license.

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

4.36. metric-list

```
metric-list [options]
```

List metrics

Options

```
--field
```

Field names in the format: <table-name>.<column-name> (e.g., network.bytesSent) (Required)

```
--from-date
```

Shows metrics after date "from-date" (default: now - 1h)

```
--func
```

Computational aggregate function. Possible values: MIN | MAX | MEAN | MEDIAN.

```
--group-by
```

Time grouping interval. For example, 60s (seconds), 60m (minutes), 24h (hours), 7d (days), 52w (weeks)

```
--help
```

Display this help and exit

```
--limit
```

Total number of samples per column (default: 1000)

```
--name
```

Name criteria on the metrics

```
--object-type
```

Object type criteria on the metrics

```
--until-date
```

Shows metrics before date "until-date"

```
--uuid
```

Shows metrics on an object with the specified UUID

4.37. name-service-config

```
name-service-config [options]
```

Manage configured Name Services

Configures and manages LDAP name services used for user and group resolution on the NFS data path. When called without an operation flag, `name-service-config` defaults to `--list`. Operations (`--add`, `--list`, `--update`, `--remove`, `--resolution-order`, `--resolve-user`, `--resolve-group`, `--resolve-user-groups`, `--test-connect`) cannot be combined in one command.

Options

```
--add
```

Add a new LDAP Name Service

```
--address
```

The network address of the LDAP server in the form `<host>[:port]`. Host can be an IP address or a DNS name. Port is optional. Can be repeated. Required when adding, optional for update

IP address or DNS hostname of the LDAP server, with an optional `:port` suffix (1–65535). Required for `--add`, optional for `--update`. If the port is omitted, the connection test tries port 389 and then 636; a port is required if `--no-connection-test` is used. Repeat `--address` once per server; do not separate addresses with commas. On `--update`, the addresses given replace all existing addresses. More than one address works only with `--no-connection-test`, `--transport-mode`, and a port on every address.

```
--bind-clear
```

Clear both the Bind Distinguished Name (Bind DN) and the Bind Secret/password

Removes the Bind DN and Bind Secret from the name service. Used with `--update`.

```
--bind-dn
```

The Bind Distinguished Name used to authenticate and search the directory. Example: `cn=search-user,ou=people,dc=example,dc=com`

Bind distinguished name for authenticated access. Must be used with `--bind-secret`. On `--add`, a plain account name is expanded to `cn=<name>,<domain in dc= form>`; on `--update`, give a full DN.

```
--bind-secret
```

The Bind Secret/password of the LDAP user described by the Bind Distinguished Name (Bind DN)

Password for the Bind DN. Must be used with `--bind-dn` when adding a name service; on `--update`, give it alone to change only the secret. The CLI does not prompt for the secret; it is given on the command line. In 5.3, `--bind-secret` is also required on every `--update` of a name service that has a Bind DN, except with `--bind-clear`.

```
--domain
```

The domain name of the LDAP Name Service. Optional: the management name will be used if not provided. Add only

Domain name (for example, `corp.example.com`). If omitted on `--add`, the `--name` value is used as the domain name and must be a valid domain name. Must be unique (case-insensitive) and is immutable after creation. The LDAP server must serve a naming context for the domain (`dc=corp,dc=example,dc=com`).

```
--help
```

Display this help and exit

```
--id
```

The ID (UUID) of the Name Service

UUID of the name service. Valid on `--list`, `--update`, and `--remove`. Illegal on `--add`.

```
--internal-id
```

The internal ID of the Name Service

Integer ID of the name service. Valid on `--list`, `--update`, and `--remove`. Illegal on `--add`.

```
--list
```

List configured Name Services

Lists all configured name services in resolution order.

```
--name
```

The management name of the Name Service

Management name of the name service. Maximum 255 characters; must be unique (case-insensitive). Required for `--add`; optional for `--list`, `--update`, and `--remove`.

```
--new-name
```

The new management name of the LDAP Name Service. Update only

```
--no-connection-test
```

Skip the pre-add or pre-update connectivity validation test

Skips the connection test. Requires `--transport-mode` and a port in each `--address` value. On `--update`, the connection test runs only when the addresses, ports, transport mode, or search base change, even without this option.

```
--remove
```

Remove a configured LDAP Name Service

```
--resolution-order
```

A comma-separated list of Name Service identifiers (names, UUIDs, or internal IDs) describing the order in which they will be used for name resolution.

Any configured Name Services not provided will be sorted to the end of the list in indeterminate order

Reorders existing name services. Provide a comma-separated list of names, UUIDs, or internal IDs (all identifiers must be of the same type). Any name service whose identifier is not listed is sorted to the end with no guaranteed order.

```
--resolve-group
```

Supply a group name to test how Hammerspace resolves it. Can be qualified or unqualified

Looks up a group. Uses the same qualified/unqualified domain behavior as `--resolve-user`.

```
--resolve-user
```

Supply a username to test how Hammerspace resolves it. Can be qualified or unqualified

Looks up a user against configured name services via SSSD. Unqualified names (for example, `jsmith`) are looked up in every configured domain, with a result for each domain; qualified names (for example,

jsmith@corp.example.com) are looked up only in the specified domain, and a domain that is not configured returns an error.

```
--resolve-user-groups
```

Supply a username to test how Hammerspace resolves its groups. Can be qualified or unqualified

Lists all groups a user belongs to. Uses the same qualified/unqualified domain behavior as `--resolve-user`.

```
--schema
```

The LDAP schema. Defaults to RFC2307. Possible values: RFC2307 | RFC2307BIS.

```
--search-base
```

The LDAP search base. Defaults to the domain's root if not provided.

(default) dc=example,dc=com; (custom) ou=people,dc=example,dc=com

LDAP search base in domain-component syntax, for example dc=corp,dc=example,dc=com. Pass "" to set a blank search base.

```
--search-base-reset
```

Reset the LDAP search base to the domain's root. Update only

Resets the search base to the domain's root (for example, dc=corp,dc=example,dc=com). Used with `--update`.

```
--test-connect
```

Test connectivity to provided Name Service(s). Provide a single identifier, or a comma-separated list of Name Service identifiers (names, UUIDs, or internal IDs) describing the Name Service(s) to test

Reruns the connection test for configured name services, using their saved address, port, transport mode, search base, and bind credentials. All identifiers in a list must be of the same type. The test checks that an LDAPS or StartTLS certificate names the configured address, but not that it is trusted.

```
--transport-mode
```

The Transport to use for connections. Optional: a connection test will determine the most secure supported transport if not provided. Possible values: STARTTLS | LDAPS | LDAP.

Connection transport mode: LDAP, LDAPS, or STARTTLS (not case-sensitive). If omitted, the connection test tries

STARTTLS, then LDAPS, then LDAP, and keeps the first that works. Required if `--no-connection-test` is used.

```
--transport-mode-reset
```

Reset the transport mode to use the default (discovered) value for the LDAP server

Clears the transport mode so it is re-determined. Used with `--update`. Cannot be used with `--no-connection-test`.

```
--update
```

Update a configured LDAP Name Service

4.38. nis-config

```
nis-config [options]
```

Configure NIS servers

Options

```
--disable
```

Disable NIS service, clear NIS servers

```
--enable
```

Enable NIS service

```
--help
```

Display this help and exit

```
--servers
```

NIS servers configuration in the form domain:server, example: `--servers somedomain.local:192.168.3.17`. This parameter may be repeated.

```
--view
```

View NIS configuration

4.39. notification-rule-create

```
notification-rule-create [options]
```

Create a notification rule

Options

```
--format
```

Notification format. Possible values: PLAIN | XML. (Required)

```
--help
```

Display this help and exit

```
--name
```

Rule name (Required)

```
--threshold
```

Severity threshold. Selecting a threshold means that users will be notified on any events with severity greater than or equal to the selected threshold. Possible values: DEBUG | INFORMATIONAL | NOTICE | WARNING | ERROR | CRITICAL | ALERT | EMERGENCY. (Required)

```
--users
```

Destination users (each must have an email address)

4.40. notification-rule-list

```
notification-rule-list [options]
```

List notification rules

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

Notification rule identifier

```
--name
```

Notification rule name

4.41. notification-rule-remove

```
notification-rule-remove [options]
```

Remove a notification rule

Options

```
--help
```

Display this help and exit

```
--id
```

Notification rule identifier. Required unless "--name" is specified

```
--name
```

Notification rule name. Required unless "--id" is specified

4.42. notification-rule-update

```
notification-rule-update [options]
```

Update a notification rule

Options

```
--help
```

Display this help and exit

```
--id
```

Notification rule identifier. Required unless "--name" is specified

```
--name
```

Notification rule name. Required unless "--id" is specified

```
--new-format
```

New notification format. Required unless any of the following is specified: --new-threshold, --new-name
Possible values: PLAIN | XML.

```
--new-name
```

New name. Required unless any of the following is specified: --new-format, --new-threshold

```
--new-threshold
```

New severity threshold. Required unless any of the following is specified: --new-format, --new-name Possible

values: DEBUG | INFORMATIONAL | NOTICE | WARNING | ERROR | CRITICAL | ALERT | EMERGENCY.

4.43. ntp-config

```
ntp-config [options]
```

Configure NTP

Options

```
--help
```

Display this help and exit

```
--servers
```

Comma-separated list of NTP server hostnames or IP addresses.

```
--servers time1.google.com,time2.google.com,192.168.1.10
```

```
--servers-clear
```

Clear all NTP servers

```
--view
```

View NTP configuration

4.44. support-bundle

```
support-bundle [options]
```

Collect logs and information from all nodes

Options

```
--all
```

Collect from all available nodes. Required unless any of the following is specified: `--current`, `--push`, `--node`

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--current
```

Collect from current node. For push requests, use this option to send only the current node. Required unless any of the following is specified: `--all`, `--push`, `--node`

```
--help
```

Display this help and exit

```
--local
```

Collect locally

```
--message
```

Optional message to include with the support bundle request. Use quotes if the message contains spaces

Optional message to include with the support bundle request. Use quotes if the message contains spaces. Do not include passwords or other secrets.

The message is recorded in the System Management logs, which are collected in the generated bundle. For example:

```
support-bundle --push --message "Case 12345, issue after failover"
```

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--node
```

Collect from specific node. Required unless any of the following is specified: `--current`, `--all`, `--push`

```
--push
```

Collect and push to Support Center. Defaults to all nodes unless `--current`, `--all`, or `--node` is specified. Required unless any of the following is specified: `--current`, `--all`, `--node`

4.45. remote-site-add

```
remote-site-add [options]
```

Add a remote site

Options

```
--help
```

Display this help and exit

```
--mgmt-address
```

The management address of the remote site (Required)

```
--trust-client-certificate
```

Automatically trust the remote site's client certificate

4.46. remote-site-discover

```
remote-site-discover [options]
```

Discover a remote site and, optionally, synchronize data on the local instance of the remote site

Options

```
--help
```

Display this help and exit

```
--mgmt-address
```

The management address (IP or DNS) of the remote site (Required)

```
--sync
```

Synchronize data on the local site instance with discovered remote values

4.47. remote-site-list

```
remote-site-list [options]
```

List known remote sites

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the site to be listed

```
--internal-id
```

The internal ID of the site to be listed

```
--name
```

The name of the site to be listed

4.48. remote-site-remove

```
remote-site-remove [options]
```

Remove a remote site. Note that if the site is sharing an object volume with this site, it will automatically be re-added

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the site to be removed. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the site to be removed. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the site to be removed. Required unless any of the following is specified: --internal-id, --id

4.49. remote-site-update

```
remote-site-update [options]
```

Update a remote site. Use this to override the management and data address when configuring a Global File System. Overriding addresses is commonly used when network topologies are using NAT.

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the site to be updated. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the site to be updated. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The remote site's name. Required unless any of the following is specified: `--internal-id`, `--id`

```
--no-trust-client-certificate
```

Do not automatically trust the remote site's client certificate

```
--override-data-address
```

An address which overrides the remote site's data address. When specified, this will be the effective data address used to communicate with the remote site

```
--override-data-address-clear
```

Clears the `override-data-address`

```
--override-mgmt-address
```

An address which overrides the remote site's mgmt address. When specified, this will be the effective mgmt address used to communicate with the remote site

```
--override-mgmt-address-clear
```

Clears the `override-mgmt-address`

```
--trust-client-certificate
```

Automatically trust the remote site's client certificate

4.50. schedule-create

```
schedule-create [options]
```

Create a schedule

Expression values follow cron syntax where:

' ,' Commas separate lists

'-' Hyphens define ranges

'*' Wildcard matches all cases

'/' Slashes define step values i.e. */5 = every 5 minutes

To create a schedule at 1:30 AM, 12:30 PM and 6:30 PM, Monday-Friday

```
schedule-create --name schedule_name --minute 30 --hour 1,12,18 --day-of-week MON-FRI
```

Options

```
--day-of-month
```

The day of month for schedule. Allowed values are: 1-31,-*/ (default value: *)

```
--day-of-week
```

The day of week for schedule. Allowed values are: 1-7,SUN-SAT,-*/ (default value: *)

```
--help
```

Display this help and exit

```
--hour
```

The hour for schedule. Allowed values are: 0-23,-*/ (default value: *)

```
--minute
```

The minute for schedule. Allowed values are: 0-59,-*/ (default value: *)

```
--month
```

The month for schedule. Allowed values are: 1-12,-*/ (default value: *)

```
--name
```

The name of the schedule (Required)

4.51. schedule-delete

```
schedule-delete [options]
```

Delete a schedule

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the schedule to delete. Required unless "--name" is specified

```
--name
```

The name of the schedule to delete. Required unless "--id" is specified

4.52. schedule-list

```
schedule-list [options]
```

List schedules

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the schedule to list

```
--name
```

The name of the schedule to list

4.53. schedule-update

```
schedule-update [options]
```

Update a schedule

Expression values follow cron syntax where:

' ' Commas separate lists

'-' Hyphens define ranges

'*' Wildcard matches all cases

'/' Slashes define step values i.e. */5 = every 5 minutes

To update a schedule to 1:30 AM, 12:30 PM and 6:30 PM, Monday-Friday

```
schedule-update --name schedule_name --minute 30 --hour 1,12,18 --day-of-week MON-FRI
```

Options

```
--day-of-month
```

The day of month for schedule. Allowed values are: 1-31,-*/ (default value: *)

```
--day-of-week
```

The day of week for schedule. Allowed values are: 1-7,SUN-SAT,-*/ (default value: *)

```
--help
```

Display this help and exit

```
--hour
```

The hour for schedule. Allowed values are: 0-23,-*/ (default value: *)

```
--id
```

ID to identify the schedule. Required unless "--name" is specified

```
--minute
```

The minute for schedule. Allowed values are: 0-59,-*/ (default value: *)

```
--month
```

The month for schedule. Allowed values are: 1-12,-*/ (default value: *)

```
--name
```

Name to identify the schedule. Required unless "--id" is specified

4.54. snmp-config

```
snmp-config [options]
```

Configure SNMP service

Options

```
--contact
```

The textual identification of the contact person for this managed node, together with information on how to contact this person

```
--description
```

A textual description of the entity

```
--dest
```

SNMP trap destination configuration. A 3-tuple including <IP>,<version>,<community>. For example:
172.31.12.216,V2C,public

```
--disable
```

Disable SNMP service. Required unless any of the following is specified: --enable, --view

```
--enable
```

Enable SNMP service. Required unless any of the following is specified: --disable, --view

```
--help
```

Display this help and exit

```
--location
```

The physical location of this node

```
--manager
```

SNMP manager configuration. A 3-tuple including <subnet>,<version (V1|V2C)>,<community>. For example:
172.31.0.0/16,V2C,public

```
--name
```

An administratively-assigned name for this managed node

```
--view
```

View SNMP configuration. Required unless any of the following is specified: --enable, --disable

4.55. software-apply

```
software-apply [options]
```

Apply software version

Options

```
--all
```

Update all nodes, mutually exclusive with "--node-name". Required unless "--node-name" is specified

```
--help
```

Display this help and exit

```
--node-name
```

Node name, mutually exclusive with "--all". Required unless "--all" is specified

```
--skip-order-validation
```

Bypass software update ordering and versioning validation

```
--version
```

Version (Required)

4.56. software-list

```
software-list [options]
```

List software versions

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

4.57. software-package-delete

```
software-package-delete [options]
```

Delete software update packages

Options

```
--help
```

Display this help and exit

```
--package-name
```

Package name to delete (Required)

4.58. software-update-cancel

```
software-update-cancel [options]
```

Cancel software update task

Options

```
--help
```

Display this help and exit

```
--task-id
```

Task ID (Required)

4.59. software-update-status

```
software-update-status [options]
```

Monitor update status

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--last
```

The number of last-started software updates to list

```
--task-id
```

Update task id

4.60. software-upload

```
software-upload [options]
```

Upload a software package with UPD format

Options

```
--help
```

Display this help and exit

```
--package-location
```

The path to the UPD software package (Required)

4.61. syslog-config

```
syslog-config [options]
```

Configure syslog servers

Options

```
--disable
```

Disable syslog event forwarding, clear syslog configuration. Required unless any of the following is specified: `--enable`, `--view`

```
--enable
```

Enable syslog event forwarding. Required unless any of the following is specified: `--disable`, `--view`

```
--help
```

Display this help and exit

```
--server
```

Syslog server configuration. A 3 or 4-tuple including `<server>`, `<port>`, `<transport>`, [`<message types delimited by |>`].

Server may be an IP address or a hostname (requires DNS).

Transport values may be `tcp`, `udp`, or `relp`.

Message types may be `event` and/or `filesystem`. When the `relp` transport is specified, only `filesystem` is allowed.

'event' causes system events to be forwarded to the remote syslog server.

'filesystem' causes filesystem access audit records to be forwarded.

When both are present, they are separated by a `|`.

The message type defaults to `event|filesystem` for `udp` and `tcp`, and `filesystem` for `relp`.

The entire `--server` param can be used multiple times.

```
--server 192.168.1.23,601,tcp
```

```
--server syslog-server.hostname,514,udp  
--server 192.168.1.24,20514,relp,filesystem  
--server 192.168.1.24,514,udp,event --server syslog-server.hostname,514,tcp,event|filesystem
```

```
--view
```

View syslog configuration. Required unless any of the following is specified: `--enable`, `--disable`

4.62. system-backup-config

```
system-backup-config [options]
```

Configure product configuration and metadata backups. Optionally create a backup now

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--ip
```

IP address of the backup volume

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--now
```

Create an immediate system backup of configuration and metadata (`--ip` and `--path` parameters are required if specified). Required unless any of the following is specified: `--schedule-remove`, `--schedule-name`, `--view`

```
--path
```

The NFS export path to the backup volume

```
--schedule-name
```

Name for the periodic backup schedule. Required unless any of the following is specified: --now, --schedule-remove, --view

```
--schedule-remove
```

Remove the scheduled backup configuration. Required unless any of the following is specified: --now, --schedule-name, --view

```
--view
```

View the system backup configuration. Required unless any of the following is specified: --now, --schedule-remove, --schedule-name

4.63. system-backup-list

```
system-backup-list [options]
```

List the names of the product configuration and metadata backups in the backup volume

Options

```
--help
```

Display this help and exit

```
--ip
```

IP address of the backup volume (Required)

```
--path
```

The NFS export path to the backup volume (Required)

4.64. system-backup-restore

```
system-backup-restore [options]
```

Restore product configuration and metadata backup

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--backup-name
```

The name of the backup. If not specified, the most recent backup is restored

```
--cluster-uuid
```

The UUID of the cluster that created the backup from which you would like to restore

```
--help
```

Display this help and exit

```
--ip
```

IP address of the backup volume (Required)

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--path
```

The NFS export path to the backup volume (Required)

4.65. system-shutdown

```
system-shutdown [options]
```

Use this command to cleanly shut down all product nodes.

Options

```
--force
```

Confirm shutdown execution (Required)

```
--help
```

Display this help and exit

```
--reason
```

Shutdown reason

4.66. system-view

```
system-view [options]
```

Show an overview of the system

Options

```
--help
```

Display this help and exit

```
--timeout
```

A timeout in seconds to use when executing the command

4.67. task-cancel

```
task-cancel [options]
```

Attempt to cancel a task. If the task is HALTED, it will be restarted and the new task will be cancelled.

Options

```
--help
```

Display this help and exit

```
--id
```

The task ID

4.68. task-list

```
task-list [options]
```

List all running tasks in the system. The command can also be used to list completed tasks using the status filter, showing both successful and failed tasks. When no time-based filter is specified, tasks created over the past 31 days are returned.

Options

```
--created-after
```

List tasks that were created at or after ($\geq$) the specified time, in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss] Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30"

```
--created-before
```

List tasks that were created before ($<$) the specified time, in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss] Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30"

```
--ended-after
```

List tasks that ended at or after ($\geq$) the specified time, in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss]

Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30"

```
--ended-before
```

List tasks that ended before (<) the specified time, in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss]

Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30"

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The task ID

```
--last-created
```

The number of last-created tasks to list

```
--name
```

The task name

```
--started-after
```

List tasks that started at or after (>=) the specified time, in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss]

Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30"

```
--started-before
```

List tasks that started before (<) the specified time, in the format [yyyy-MM-dd|dd-MMM-yyyy] [HH:mm:ss]

Examples: "2025-06-21 02:42", "25-FEB-2025 19:25:30"

```
--status
```

Filter by the status of the task. Possible values: NONE | QUEUED | VALIDATING | VALIDATED |

VALIDATION_FAILED | EXECUTING | CANCELLING | HALTED | RECOVERING | RESUMED | FAILED | CANCELLED | COMPLETED.

4.69. task-resume

```
task-resume [options]
```

Resume a task that is HALTED, or retry a task that is FAILED

Options

```
--help
```

Display this help and exit

```
--id
```

The task ID

Chapter 5. User and Group Management

5.1. builtin-group-user-add

```
builtin-group-user-add [options]
```

Add user to a builtin group

Options

```
--group
```

Group name to be added to (Required)

```
--help
```

Display this help and exit

```
--username
```

The username to be added (Required)

5.2. builtin-group-user-list

```
builtin-group-user-list [options]
```

List users of a builtin group

Options

```
--group
```

The group name to be listed (Required)

```
--help
```

Display this help and exit

5.3. builtin-group-user-remove

```
builtin-group-user-remove [options]
```

Remove user from a builtin group

Options

```
--group
```

Group name to be removed from (Required)

```
--help
```

Display this help and exit

```
--username
```

The username to be removed (Required)

5.4. login-policy-config

```
login-policy-config [options]
```

Configure the system login policies

Options

```
--allowed-networks
```

Space separated list of allowed networks in CIDR notation (i.e. 10.50.100.0/24)

```
--allowed-networks-clear
```

Allow access from all remote networks

```
--help
```

Display this help and exit

```
--lock-after-failures
```

The number of consecutive login failures after which an account will be locked. When not set, the account lockout feature is disabled

```
--lock-after-failures-clear
```

Clears all login failure lock attributes. Resets failure counts for all users

```
--lock-failure-interval
```

The time in seconds between failed login attempts that constitutes consecutive failures. When not set, the default is 15 minutes. Requires that lock-after-failures is, or has been set

```
--lockout-time
```

The amount of time in seconds an account remains locked due to too many consecutive login failures. When not set, the default is 10 minutes. Requires that lock-after-failures is, or has been set

```
--view
```

View the default login policies

5.5. role-create

```
role-create [options]
```

Create a user role with access permissions

Example

```
role-create --name graham --acl "ANY:+c+r+u+d"
```

Available OBJECT_TYPES include

```
ANY,EVENT,NODE,DATA_MOVER,NETWORK_IF,SHARE,USER,USER_GROUP,ROLE,TASK,SMTP,NOTIFICATION_RULE,HEARTBEAT,NTP,LOGICAL_VOLUME,LDAP,CLUSTER,ELEMENTAL_OBJECTIVE,OBJECTIVE,SCHEDULE,SNAPSHOT_RETENTION,FILE_SNAPSHOT,OBJECT_STORAGE_VOLUME,CLOUD_MOVER,OBJECT_STORE_LOGICAL_VOLUME,SNMP,SW_UPDATE_TASK,CTDB,SHARE_SNAPSHOT,BACKUP,
```

```
SAMBA_AD,DOMAIN_IDMAP,DATA_PORTAL,DNS,VOLUME_GROUP
```

Options

```
--acl
```

ACL, in the format: {OBJECT_TYPE}:{+{grant permissions}}{-{revoke permissions}}. Possible permissions: 'c'-create, 'r'-read, 'u'-update, 'd'-delete (Required)

```
--help
```

Display this help and exit

```
--idle-timeout
```

This role's idle timeout for user interfaces (Web UI, CLI). When not specified, the default is 1 hour. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, minutes are assumed

```
--name
```

The role name (Required)

```
--no-idle-timeout
```

Disables this role's idle timeout for user interfaces

5.6. role-delete

```
role-delete [options]
```

Remove a user role

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the role to be deleted. Required unless "--name" is specified

```
--name
```

The name of the role to be deleted. Required unless "--id" is specified

5.7. role-list

```
role-list [options]
```

List user roles

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the role to list

```
--name
```

The name of the role to list

5.8. role-update

```
role-update [options]
```

Update an existing user role

Example

```
role-update --name graham --acl "ANY:+c+r+u-d"
Available OBJECT_TYPES include
ANY,EVENT,NODE,DATA_MOVER,NETWORK_IF,SHARE,USER,USER_GROUP,ROLE,TASK,SMTP,NOTIFICATION_RULE,HEARTBEAT,NTP
,LOGICAL_VOLUME,LDAP,CLUSTER,ELEMENTAL_OBJECTIVE,OBJECTIVE,SCHEDULE,SNAPSHOT_RETENTION,FILE_SNAPSHOT,OBJE
CT_STORAGE_VOLUME,CLOUD_MOVER,OBJECT_STORE_LOGICAL_VOLUME,SNMP,SW_UPDATE_TASK,CTDB,SHARE_SNAPSHOT,BACKUP,
SAMBA_AD,DOMAIN_IDMAP,DATA_PORTAL,DNS,VOLUME_GROUP
```

Options

`--acl`

ACL, in the format: {OBJECT_TYPE}:{+{grant permissions}}{-{revoke permissions}}. Possible permissions: 'c'-create, 'r'-read, 'u'-update, 'd'-delete

`--help`

Display this help and exit

`--id`

The ID of the role to update. Required unless "--name" is specified

`--idle-timeout`

This role's idle timeout for user interfaces (Web UI, CLI). May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, minutes are assumed

`--idle-timeout-clear`

Disables this role's idle timeout for user interfaces

`--name`

The name of the role to update. Required unless "--id" is specified

5.9. user-create

```
user-create [options]
```

Create a system user

Options

```
--data-access-role
```

Data access role(s) assigned to user. Required unless any of the following is specified: --mgmt-role-name, --mgmt-role-id Possible values: SMB | S3.

```
--email
```

The user's email address

```
--first-name
```

The user's first name

```
--gid
```

Group identifier

```
--help
```

Display this help and exit

```
--last-name
```

The user's last name

```
--mgmt-role-id
```

The management role ID to apply to the user (that includes the user's management permissions). Required unless any of the following is specified: --mgmt-role-name, --data-access-role

```
--mgmt-role-name
```

The management role name to apply to the user (that includes the user's management permissions). Required unless any of the following is specified: `--mgmt-role-id`, `--data-access-role`

```
--password
```

The user's password. Passwords must be 8-20 characters long and contain at least one each of: lower case letter, upper case letter, digit and non-alphanumeric. (Required)

```
--public-key
```

The user's public encryption key

```
--uid
```

User identifier

```
--username
```

The username that will be used to identify the user in the system. Valid usernames contain the following characters: a-z, A-Z, 0-9, '-', '_', '.', and can optionally end with a '\$'. Valid usernames must start with a-z, A-Z, or '_'. (Required)

5.10. user-delete

```
user-delete [options]
```

Delete a system user

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the user to delete. Required unless `--name` is specified

```
--name
```

The name of the user to delete. Required unless "--id" is specified

5.11. user-import

```
user-import [options]
```

Imports users from CSV file

Example of a CSV file:

```
username,password,uid,gid,role,groups,public-key,first-name,last-name,email,data-access-roles
user1,P@ssword1,0,0,,,"group1,group2",,John,Doe,john@example.com,"S3,SMB"
```

Options

```
--help
```

Display this help and exit

```
--uri
```

The URI for the CSV file containing users details. For example: file:/tmp/user.csv (Required)

5.12. user-list

```
user-list [options]
```

List all existing users

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the user to list

```
--name
```

The name of the user to list

5.13. user-password-update

```
user-password-update [options]
```

Update a user password

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the user whose password will be updated. Required unless "--name" is specified

```
--name
```

The name of the user whose password will be updated. Required unless "--id" is specified

```
--new-password
```

The new password. Passwords must be 8-20 characters long and contain at least one each of: lower case letter, upper case letter, digit and non-alphanumeric. (Required)

```
--old-password
```

The user's old password

5.14. user-update

```
user-update [options]
```

Update the user's properties, including the applied user role. If a new role is provided it overwrites the current user's role

Options

```
--data-access-role-add
```

Add a data access role to the user. May be repeated. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--disable`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id` Possible values: SMB | S3.

```
--data-access-role-clear
```

Remove all data access roles. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--public-key`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--disable`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id`

```
--data-access-role-remove
```

Remove a data access role from the user. May be repeated. Required unless any of the following is specified: `--enable`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--disable`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id` Possible values: SMB | S3.

```
--disable
```

Disable the user. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id`

```
--email
```

The user's email address. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--disable`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id`

```
--enable
```

Enable the user. Required unless any of the following is specified: `--data-access-role-remove`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--disable`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id`

```
--first-name
```

The user's first name. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--disable`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--gid-clear`, `--mgmt-role-id`

```
--first-name-clear
```

Clear the first name. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--disable`, `--email`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id`

```
--gid
```

Group identifier

```
--gid-clear
```

Clear the group identifier. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--disable`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--mgmt-role-id`

```
--help
```

Display this help and exit

```
--id
```

The ID that identifies the user in the system. Required unless "--name" is specified

```
--last-name
```

The user's last name. Required unless any of the following is specified: --data-access-role-remove, --enable, --public-key, --data-access-role-clear, --last-name-clear, --public-key-clear, --mgmt-role-clear, --uid-clear, --data-access-role-add, --disable, --email, --first-name-clear, --mgmt-role-name, --first-name, --gid-clear, --mgmt-role-id

```
--last-name-clear
```

Clear the last name. Required unless any of the following is specified: --data-access-role-remove, --enable, --public-key, --data-access-role-clear, --public-key-clear, --mgmt-role-clear, --uid-clear, --data-access-role-add, --disable, --email, --first-name-clear, --last-name, --mgmt-role-name, --first-name, --gid-clear, --mgmt-role-id

```
--mgmt-role-clear
```

Clear the management role. Required unless any of the following is specified: --data-access-role-remove, --enable, --public-key, --data-access-role-clear, --last-name-clear, --public-key-clear, --uid-clear, --data-access-role-add, --disable, --email, --first-name-clear, --last-name, --mgmt-role-name, --first-name, --gid-clear, --mgmt-role-id

```
--mgmt-role-id
```

The management role ID to apply to the user (that includes the user's management permissions). Required unless any of the following is specified: --data-access-role-remove, --enable, --public-key, --data-access-role-clear, --last-name-clear, --public-key-clear, --mgmt-role-clear, --uid-clear, --data-access-role-add, --disable, --email, --first-name-clear, --mgmt-role-name, --last-name, --first-name, --gid-clear

```
--mgmt-role-name
```

The management role name to apply to the user (that includes the user's management permissions). Required unless any of the following is specified: --data-access-role-remove, --enable, --public-key, --data-access-role-clear, --last-name-clear, --public-key-clear, --mgmt-role-clear, --uid-clear, --data-access-role-add, --disable, --email, --first-name-clear, --last-name, --first-name, --gid-clear, --mgmt-role-id

```
--name
```

The username that identifies the user in the system. Required unless "--id" is specified

```
--password
```

Password to assign to user being updated. Required if adding SMB data access role. Passwords must be 8-20 characters long and contain at least one each of: lower case letter, upper case letter, digit and non-

alphanumeric

```
--public-key
```

The user's public encryption key. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--disable`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id`

```
--public-key-clear
```

Clear the public key. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--mgmt-role-clear`, `--uid-clear`, `--data-access-role-add`, `--disable`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id`

```
--uid
```

User identifier

```
--uid-clear
```

Clear the user identifier. Required unless any of the following is specified: `--data-access-role-remove`, `--enable`, `--public-key`, `--data-access-role-clear`, `--last-name-clear`, `--public-key-clear`, `--mgmt-role-clear`, `--data-access-role-add`, `--disable`, `--email`, `--first-name-clear`, `--last-name`, `--mgmt-role-name`, `--first-name`, `--gid-clear`, `--mgmt-role-id`

Chapter 6. Storage and Volumes

6.1. drive-list

```
drive-list [options]
```

List disk drives

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the disk drive to list. Required unless "--node-name" is specified

```
--node-name
```

The node name. Required unless "--id" is specified

6.2. logical-volume-create

```
logical-volume-create [options]
```

Create logical volume

Options

```
--device-path
```

The physical device path

```
--force
```

Force creation will reformat existing volume

```
--help
```

Display this help and exit

```
--node-name
```

The node name

6.3. logical-volume-delete

```
logical-volume-delete [options]
```

Delete logical volume

Options

```
--help
```

Display this help and exit

```
--id
```

The logical volume ID (Required)

6.4. logical-volume-discover

```
logical-volume-discover [options]
```

Discover information about logical volume

Options

```
--help
```

Display this help and exit

```
--id
```

The logical volume ID (Required)

6.5. logical-volume-list

```
logical-volume-list [options]
```

List logical volumes

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the logical volume to list. Required unless "--node-name" is specified

```
--node-name
```

The node name. Required unless "--id" is specified

6.6. node-add

```
node-add [options]
```

Create a node in the system

Options

```
--access-id
```

Authentication username. This option is mandatory for third-party nodes. This option is mutually exclusive with the cert option

```
--additional-info
```

Additional value. Format: key=value

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--cert
```

The node's authentication certificate. This option is mandatory for third-party nodes, and is mutually exclusive of the access-id and secret options

```
--create-placement-objectives
```

Create default "place-on", "confine-to" and "exclude-from" objectives for this node

```
--help
```

Display this help and exit

```
--ignore-ip-conflicts
```

Proceed even if the node is configured with IP addresses already in use within the cluster. Warning: if this is used in order to add the same system multiple times, it can cause behavior inconsistencies

```
--ip
```

Node IP address. This option is mandatory for third-party nodes

```
--name
```

The name to assign to the node (Required)

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--node-uuid
```

Lowercase node UUID to use for NFS OTHER nodes only

```
--secret
```

Authentication password. This option is mandatory for third-party nodes. This option is mutually exclusive with the cert option

```
--type
```

Node type (Required)

▼ *Possible values*

PD | NETAPP_CMODE | NETAPP_7MODE | NETAPP_CLOUD | EMC_ISILON | EMC_VNX | EMC_UNITY |
GOOGLE_CLOUD_FILESTORE | QUMULO | RCLONE | HNAS | ROZOFs | ROZOFs_HS | SOFTNAS_CLOUD |
WINDOWS_FILE_SERVER | DELL_ENAS | PURE_FB | VAST | WEKA | NETAPP_FSX | OTHER | HAMMERSPACE

6.7. node-list

```
node-list [options]
```

List all nodes in the system

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the node to list

```
--internal-id
```

The internal ID of the node to list

```
--name
```

The name of the node to list

```
--name-contains
```

Filter nodes by name substring (case-sensitive)

```
--name-regex
```

Filter nodes by name regular expression pattern

```
--name-starts-with
```

Filter nodes by name prefix (case-sensitive)

```
--type
```

Filter nodes by a specific NodeType

▼ *Possible values*

HAMMERSPACE | PD | NETAPP_CMODE | NETAPP_7MODE | NETAPP_CLOUD | EMC_ISILON | EMC_VNX |
EMC_UNITY | GOOGLE_CLOUD_FILESTORE | QUMULO | RCLONE | HNAS | ROZOFs | ROZOFs_HS |
SOFTNAS_CLOUD | WINDOWS_FILE_SERVER | DELL_ENAS | PURE_FB | VAST | WEKA | NETAPP_FSX |
AMAZON_S3 | ACTIVE_SCALE_S3 | IBM_S3 | CLOUDIAN_S3 | ECS_S3 | GENERIC_S3 | GOOGLE_S3 |
SCALITY_S3 | STORAGE_GRID_S3 | SWIFT | AZURE | GOOGLE_CLOUD | HCP_S3 | ATMOS | WASABI_S3 |
NETAPP_S3 | MCAFEE_AV | CLAM_AV | SNOWFLAKE | INTERNAL_S3 | PURE_FB_S3 | SEAGATE_LYVE_S3 |
CARINGO_SWARM_S3 | ISILON_S3 | BACKBLAZE_S3 | HAMMERSPACE_S3 | STORJ_S3 | OTHER |
MOVER_EXT

```
--unauthorized
```

List only discovered unauthorized nodes connected to the system

6.8. node-mode-change

```
node-mode-change [options]
```

Modify node's mode

Options

```
--help
```

Display this help and exit

```
--id
```

Node ID. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

Node internal ID. Required unless any of the following is specified: `--name`, `--id`

```
--mode
```

Target mode. Possible values: `ONLINE` | `MAINTENANCE` | `POWEROFF` | `REBOOT`. (Required)

```
--name
```

Node name. Required unless any of the following is specified: `--internal-id`, `--id`

6.9. node-refresh

```
node-refresh [options]
```

Refresh a node in the system

Options

`--async`

Causes the command to be executed asynchronously. A reference task identifier will be returned

`--help`

Display this help and exit

`--id`

Node ID. Required unless any of the following is specified: `--internal-id`, `--name`

`--internal-id`

Node internal ID. Required unless any of the following is specified: `--name`, `--id`

`--name`

Node name. Required unless any of the following is specified: `--internal-id`, `--id`

`--no-timeout`

When running a task-based command synchronously, monitor for task completion indefinitely

`--reconcile-components`

Remove components from persisted model that have been removed from the node

`--rescan`

Rescan disk drives in node

6.10. node-remove

```
node-remove [options]
```

Remove a node from the system. A node that contains system services cannot be removed

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--force
```

Force remove, whether the node is up or down, possibly leaving the node in an irreparable state

```
--help
```

Display this help and exit

```
--id
```

The ID of the node to remove. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the node to remove. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the node to remove. Required unless any of the following is specified: `--internal-id`, `--id`

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

6.11. node-storage-repair

```
node-storage-repair [options]
```

Repair node storage volumes

Options

```
--help
```

Display this help and exit

```
--id
```

Node ID to be repaired. Required unless "--name" is specified

```
--name
```

Node name to be repaired. Required unless "--id" is specified

6.12. node-update

```
node-update [options]
```

Update a node in the system

Options

```
--access-id
```

Authentication username

```
--additional-info
```

Additional value. Format: key=value

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--cert
```

The node's authentication certificate

```
--help
```

Display this help and exit

```
--id
```

Node ID. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

Node internal ID. Required unless any of the following is specified: --name, --id

```
--ip
```

Node IP address

```
--name
```

Node name. Required unless any of the following is specified: --internal-id, --id

```
--new-name
```

The name to assign to this node

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--secret
```

Authentication password

6.13. nvmeof-config

```
nvmeof-config [options]
```

Configure and view NVMe-oF enclosures and configurations

Options

```
--connect-all
```

Connect all targets of the specified NVMe-oF enclosure

```
--connect-nqn
```

Subsystem NQN(s) to connect

```
--ctrl-loss-tmo
```

Number of seconds to wait for a controller to reconnect before giving up (-1 uses the special no-timeout value)

```
--disconnect-all
```

Disconnect all targets of the specified NVMe-oF enclosure

```
--disconnect-nqn
```

Subsystem NQN(s) to disconnect

```
--dsx-id
```

The ID of the DSX node when adding an NVMe-oF enclosure

```
--dsx-internal-id
```

The internal ID the DSX when adding an NVMe-oF enclosure

```
--dsx-name
```

The name of the DSX node when adding an NVMe-oF enclosure

```
--enclosure-add
```

Add an NVMe-oF enclosure to a DSX

```
--enclosure-id
```

UUID of enclosure to operate on

```
--enclosure-name
```

The name of the enclosure to be operated on

```
--enclosure-remove
```

Remove an NVMe-oF enclosure by name or Id

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--io-policy
```

Controller I/O policy. Possible values: ROUND_ROBIN | NUMA | QUEUE_DEPTH.

```
--io-queue-pairs
```

Number of request/completion queue pairs

```
--list
```

List all NVMe-oF enclosures across all DSXs

```
--queue-depth
```

Maximum number of I/O queue entries

```
--target
```

The target(s) and optionally port and transport type when adding or updating an enclosure

```
--target 10.10.1.1  
--target nvme1.local  
--target 10.10.1.1,8009  
--target nvme2.local,1234,TCP
```

```
--target-port
```

Network target port

```
--transport
```

Network transport type. Possible values: TCP | RDMA.

6.14. object-logical-volume-discover

```
object-logical-volume-discover [options]
```

Discover information about an object logical volume (bucket)

Options

```
--help
```

Display this help and exit

```
--id
```

The logical volume ID (Required)

6.15. object-storage-add

```
object-storage-add [options]
```

Add an object storage node to the product

Options

```
--access-id
```

Object Storage access identifier

```
--allow-self-signed-certificate
```

Trust the server's certificate without checking its CA chain

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--aws-instance-profile-auth
```

When the product is running in AWS, use the STS token supplied by the EC2 instance for authentication. When this option is enabled, access-id/secret are not required.

```
--bucket-naming-virtual-host
```

Bucket names are prefixed to the hostname (mybucket.example.org)

```
--create-placement-objectives
```

Create default "place-on", "confine-to" and "exclude-from" objectives for this object storage node

```
--endpoint
```

- Object storage endpoint. Required unless `--type` specifies `AMAZON_S3`, `AZURE`, or `GOOGLE_CLOUD`

```
--help
```

Display this help and exit

```
--name
```

The name to assign to the object storage (Required)

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--project-name
```

for GOOGLE_CLOUD types, overrides the email suffix found in the access-id for purposes of specifying a project name

```
--proxy-host
```

Proxy host name/IP

```
--proxy-password
```

Proxy password

```
--proxy-port
```

Proxy port

```
--proxy-username
```

Proxy username

```
--s3-signing-type
```

S3 auth signing type. Possible values: S3_DEFAULT_SIGNING | S3_V4_SIGNING.

```
--secret
```

Object Storage secret

```
--security-token
```

AWS STS token. Only valid for AMAZON_S3. When setting, the access_id and secret must be correct for the token.

```
--type
```

Object storage type

▼ Possible values

AMAZON_S3 | ACTIVE_SCALE_S3 | IBM_S3 | CLOUDIAN_S3 | ECS_S3 | GENERIC_S3 | GOOGLE_S3 | SCALITY_S3 | STORAGE_GRID_S3 | AZURE | GOOGLE_CLOUD | HCP_S3 | WASABI_S3 | NETAPP_S3 | SNOWFLAKE | INTERNAL_S3 | PURE_FB_S3 | SEAGATE_LYVE_S3 | CARINGO_SWARM_S3 | ISILON_S3 | BACKBLAZE_S3 | HAMMERSPACE_S3 | STORJ_S3

6.16. object-storage-update

```
object-storage-update [options]
```

Update an object storage node

Options

```
--access-id
```

Object storage access key

```
--allow-self-signed-certificate
```

Trust the server's certificate without checking its CA chain

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--aws-instance-profile-auth-disable
```

Do not use the STS token supplied by an AWS EC2 instance for authentication

```
--aws-instance-profile-auth-enable
```

When the product is running in AWS, use the STS token supplied by the EC2 instance for authentication. When this option is enabled, access-id/secret are not required.

```
--bucket-naming-path-style
```

Bucket names are suffixed as a path (example.org/mybucket)

```
--bucket-naming-virtual-host
```

Bucket names are prefixed to the hostname (mybucket.example.org)

```
--disallow-self-signed-certificate
```

Validate the server certificate's CA chain

```
--endpoint
```

- Object storage endpoint. Required unless `--type` specifies `AMAZON_S3`, `AZURE`, or `GOOGLE_CLOUD`

```
--endpoint-clear
```

Reset the endpoint to its default

```
--help
```

Display this help and exit

```
--id
```

The ID of the object storage to update. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the object storage to update. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the object storage to update. Required unless any of the following is specified: `--internal-id`, `--id`

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--project-name
```

for GOOGLE_CLOUD types, overrides the email suffix found in the access-id for purposes of specifying a project name

```
--project-name-clear
```

Clears the project name override

```
--proxy-clear
```

Remove the proxy definitions, i.e. don't use proxy for this Object storage

```
--proxy-host
```

Proxy host name/IP

```
--proxy-password
```

Proxy password

```
--proxy-port
```

Proxy port

```
--proxy-username
```

Proxy username

```
--secret
```

Object storage secret key

```
--security-token
```

AWS STS token. Only valid for AMAZON_S3. When setting, the access_id and secret must be correct for the token.

```
--security-token-clear
```

Clear the AWS STS token. When clearing, the access_id and secret must be set for use without a token.

```
--skip-object-volume-validations
```

Force update even when new configuration may cause object storage volumes to become unusable

```
--type
```

Object storage type

▼ *Possible values*

AMAZON_S3 | ACTIVE_SCALE_S3 | IBM_S3 | CLOUDIAN_S3 | ECS_S3 | GENERIC_S3 | GOOGLE_S3 |
SCALITY_S3 | STORAGE_GRID_S3 | AZURE | GOOGLE_CLOUD | HCP_S3 | WASABI_S3 | NETAPP_S3 |
SNOWFLAKE | INTERNAL_S3 | PURE_FB_S3 | SEAGATE_LYVE_S3 | CARINGO_SWARM_S3 | ISILON_S3 |
BACKBLAZE_S3 | HAMMERSPACE_S3 | STORJ_S3

6.17. object-volume-add

```
object-volume-add [options]
```

Add an object storage volume to the product

Options

```
--access-key
```

Access key, if not provided, the object storage credentials will be used

```
--availability
```

Volume availability capability, specified as the number of nines (number between 0 and 20)

```
--create-placement-objectives
```

Create default "place-on", "confine-to" and "exclude-from" objectives for this object volume

```
--durability
```

Volume durability capability, specified as the number of nines (number between 0 and 20)

```
--gc-disable
```

Disable coordinated garbage collection. Only applicable for shared object volumes.

```
--gc-enable
```

Enable coordinated garbage collection. Only applicable for shared object volumes.

```
--help
```

Display this help and exit

```
--high-threshold
```

The percent [0,100] of total capacity which when reached, will trigger the system to begin evacuating data from the volume. When not specified, 75 percent is used

```
--logical-volume-id
```

object logical volume ID. Required unless "--logical-volume-name" is specified

```
--logical-volume-name
```

object logical volume. Required unless "--logical-volume-id" is specified

```
--low-threshold
```

When the high threshold is reached and data is moving off of the volume, this is the target percent [0,high threshold] to reach before stopping the evacuation of data. When not specified, the default is the high threshold * 0.8

```
--max-suspected-time
```

The amount of time a volume may remain in a SUSPECTED operational state before its storage volume state is automatically transitioned to UNAVAILABLE. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, minutes are assumed

```
--name
```

The object storage volume name. If not provided, a default name will be assigned

```
--native
```

Data is stored as non-chunked, unencrypted, and uncompressed.

```
--no-compression
```

Do not compress when storing.

```
--no-encryption
```

Do not encrypt.

```
--node-id
```

The node ID. Required unless "--node-name" is specified

```
--node-name
```

The node name. Required unless "--node-id" is specified

```
--online-delay
```

Max time (in nanoseconds) for the file to be restored

```
--realign-on-protection-drop-disabled
```

Prevents objects with instances on the volume from being aggressively realigned when availability or durability is reduced for the volume.

```
--secret-key
```

Secret key, if not provided, the object storage credentials will be used

```
--shared
```

Indicates that the ownership of the object volume is, or will be, shared with other sites

```
--storage-class
```

Storage class for cost-optimized storage tiers. Defaults to STANDARD if not specified. Cannot be changed after creation. Possible values: STANDARD | AWS_GLACIER_INSTANT_RETRIEVAL.

```
--total-capacity
```

Specifies the total amount of data allowed to be stored on the volume. When not specified, a practically unlimited amount is assumed

```
--use-high-compression
```

Use high compression when storing.

6.18. object-volume-decommission

```
object-volume-decommission [options]
```

Start the object volume decommission process

Decommission runs as a restartable task, although this command itself is deprecated.

If normal garbage collection is active when decommission cleaning starts, garbage collection is aborted gracefully and the task waits for it to finish before the cleaner starts.

The task then follows the cleaning session:

- PENDING and IN_PROGRESS — the task continues polling.
- COMPLETED — the task advances to the next stage.
- ABORTED, FAILED, or CANCELLED — the task starts one replacement cleaning session. If that session also ends in a terminal state, or cannot start at all, the task fails rather than hanging.

A failure at this point leaves the object storage volume in DECOMMISSIONING at the cleaning stage. To recover, rerun `object-volume-remove`. The `task-resume` command cannot restart a cleaning session that has already ended.



Start-cleaning, cleaning, unprepare, and final removal cannot be cancelled once entered. Use `object-volume-decommission-cancel` before those stages begin.

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--force
```

Force decommission, even if it will impact access to data

```
--help
```

Display this help and exit

```
--id
```

Object Storage Volume ID. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

Object Storage Volume internal ID. Required unless any of the following is specified: --name, --id

```
--name
```

Object Storage Volume name. Required unless any of the following is specified: --internal-id, --id

```
--replace-with
```

List of locations to replace the decommissioned volume. Example: node:<name>,volume-group:<name>,volume:<name>,object-volume:<name>

6.19. object-volume-decommission-cancel

```
object-volume-decommission-cancel [options]
```

Cancel the object storage volume decommission process

Options

```
--help
```

Display this help and exit

```
--id
```

Object Storage Volume identifier. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

Object Storage Volume internal ID. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

Object Storage Volume name. Required unless any of the following is specified: `--internal-id`, `--id`

```
--task-id
```

The ID of the task that is decommissioning the Object Storage Volume

6.20. object-volume-fail

```
object-volume-fail [options]
```

Set an object volume to the FAILED state. Typically used to allow the removal of an object volume that no longer exists

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the object volume to set to the FAILED state. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the object volume to set to the FAILED state. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the object volume to set to the FAILED state. Required unless any of the following is specified: `--internal-id`, `--id`

6.21. object-volume-gc-start

```
object-volume-gc-start [options]
```

Start garbage collection on a given object volume.

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the object volume. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the object volume. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the object volume. Required unless any of the following is specified: `--internal-id`, `--id`

6.22. object-volume-gc-stop

```
object-volume-gc-stop [options]
```

Stop garbage collection on a given object volume.

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the object volume. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the object volume. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the object volume. Required unless any of the following is specified: `--internal-id`, `--id`

6.23. object-volume-list

```
object-volume-list [options]
```

List object volumes

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the volume to list

```
--internal-id
```

The internal ID of the volume to list

```
--name
```

The name of the volume to list

6.24. object-volume-remove

```
object-volume-remove [options]
```

Remove an object volume from the system. Removal is task-based and first determines whether the volume must be decommissioned. Volumes in OK, UNAVAILABLE, or DECOMMISSIONING state first get decommissioned, then removed. Volumes already in ADDED or DECOMMISSIONED state skip decommissioning and get directly removed. Volumes in FAILED state also skip decommissioning and go straight to being removed, but they also skip the final teardown during removal, so that accidental data-loss is minimized.

If the volume is currently in a FAILED or DECOMMISSIONED state, it will be removed immediately. Otherwise, the volume's state will transition from DECOMMISSIONING to CLEANING to DECOMMISSIONED before being removed.

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--id
```

The ID of the object volume to remove. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the object volume to remove. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the object volume to remove. Required unless any of the following is specified: `--internal-id`, `--id`

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--replace-with
```

List of locations to replace references to the removed object volume with. Example: `node:<name>,volume-group:<name>,volume:<name>,object-volume:<name>`

```
--skip-gfs-validation
```

Skip validation to ensure that removing this object volume will not negatively impact data replication

6.25. object-volume-remove-cancel

```
object-volume-remove-cancel [options]
```

Cancel the removal of an object volume. This cancels the active object-volume-remove task while it is still in the cancelable decommission phase. Once the task has advanced into the non-cancelable removal phase, the task will continue to completion instead of rolling back.

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the object volume whose removal will be cancelled. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the object volume whose removal will be cancelled. Required unless any of the following is specified: `--name`, `--id`

`--name`

The name of the object volume whose removal will be cancelled. Required unless any of the following is specified: `--internal-id`, `--id`

6.26. object-volume-reservation-delete

`object-volume-reservation-delete [options]`

Delete a site's reservation from an object volume. This is typically done in order to clean up a reservation file left on the object volume when a site has failed or been removed without first removing the object volume.

WARNING: deleting a site's reservation from an object volume where the site is still using that object volume may result in data loss. Before using this command, verify that the site is no longer using the object volume.

Options

`--force`

Required to acknowledge the potentially destructive nature of this command (Required)

`--help`

Display this help and exit

`--id`

The ID of the volume from which to delete the reservation. Required unless any of the following is specified: `--internal-id`, `--name`

`--internal-id`

The internal ID of the volume from which to delete the reservation. Required unless any of the following is specified: `--name`, `--id`

`--name`

The name of the volume from which to delete the reservation. Required unless any of the following is specified: `--internal-id`, `--id`

```
--site-id
```

The ID of the site whose reservation is to be deleted. Required unless any of the following is specified: `--site-name`, `--site-internal-id`

```
--site-internal-id
```

The internal ID of the site whose reservation is to be deleted. Required unless any of the following is specified: `--site-id`, `--site-name`

```
--site-name
```

The name of the site whose reservation is to be deleted. Required unless any of the following is specified: `--site-id`, `--site-internal-id`

6.27. object-volume-set-available

```
object-volume-set-available [options]
```

Mark an unavailable object volume as available

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the object volume to mark available. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the object volume to mark available. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the object volume to mark available. Required unless any of the following is specified: `--internal-id`, `--id`

6.28. object-volume-set-unavailable

```
object-volume-set-unavailable [options]
```

Mark an object volume as unavailable

Options

```
--force
```

Force unavailable, even if it will break existing replication agreements

```
--help
```

Display this help and exit

```
--id
```

The ID of the object volume to mark unavailable. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the object volume to mark unavailable. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the object volume to mark unavailable. Required unless any of the following is specified: `--internal-id`, `--id`

6.29. object-volume-update

```
object-volume-update [options]
```

Update object volume

Options

```
--access-key
```

Access key

```
--availability
```

Volume availability capability, specified as the number of nines (number between 0 and 20)

```
--durability
```

Volume durability capability, specified as the number of nines (number between 0 and 20)

```
--gc-disable
```

Disable coordinated garbage collection. Only applicable for shared object volumes.

```
--gc-enable
```

Enable coordinated garbage collection. Only applicable for shared object volumes.

```
--help
```

Display this help and exit

```
--high-threshold
```

The percent [0,100] of total capacity which when reached, will trigger the system to begin evacuating data from the volume

```
--high-threshold-clear
```

Reset the high threshold to its default (75 percent)

```
--id
```

object volume ID. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

object volume internal ID. Required unless any of the following is specified: --name, --id

```
--low-threshold
```

When the high threshold is reached and data is moving off of the volume, this is the target percent [0,high threshold] to reach before stopping the evacuation of data

```
--low-threshold-clear
```

Reset the low threshold to its default (20 percent less than the high threshold)

```
--max-suspected-time
```

The amount of time a volume may remain in a SUSPECTED operational state before its storage volume state is automatically transitioned to UNAVAILABLE. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, minutes are assumed

```
--name
```

object volume name. Required unless any of the following is specified: --internal-id, --id

```
--new-name
```

object storage new name

```
--no-compression
```

Do not compress when storing.

```
--no-encryption
```

Do not encrypt.

```
--online-delay
```

Max time (in nanoseconds) for the file to be restored

```
--realign-on-protection-drop-disabled
```

Prevents objects with instances on the volume from being aggressively realigned when availability or durability is reduced for the volume.

```
--realign-on-protection-drop-enabled
```

Allows objects with instances on the volume to be aggressively realigned when availability or durability is reduced for the volume.

```
--secret-key
```

Secret key

```
--total-capacity
```

Specifies the total amount of data allowed to be stored on the volume

```
--total-capacity-clear
```

Resets the total-capacity to its default

```
--use-default-encryption
```

Use the system-configured KMS (if one is configured) for encrypting.

```
--use-high-compression
```

Use high compression when storing.

6.30. s3-server-bucket-create

```
s3-server-bucket-create [options]
```

Add a new bucket or bucket container to an existing S3 server

Options

```
--acl
```

Access permissions applied to the bucket. Possible values: PUBLIC | GROUP | PRIVATE.

```
--alias
```

Optional bucket alias

```
--bucket-container
```

Create a bucket container

```
--default-container
```

Make this bucket container the default for new buckets

```
--deny-create
```

Disallow creation of new buckets in a bucket container (allowed by default)

```
--deny-delete
```

Do not allow this bucket to be deleted, or child buckets to be deleted if creating a bucket container (allowed by default)

```
--help
```

Display this help and exit

```
--owner
```

User that owns the bucket

```
--path
```

Additional path below the share root (defaults to '/')

```
--region
```

The geographic region for this bucket. If creating a container then this will be the default region for buckets created in the container

```
--server-id
```

ID of an S3 server. Required unless any of the following is specified: `--server-name`, `--server-internal-id`

```
--server-internal-id
```

Internal ID of an S3 server. Required unless any of the following is specified: `--server-name`, `--server-id`

```
--server-name
```

Name of an S3 server. Required unless any of the following is specified: `--server-id`, `--server-internal-id`

```
--share-id
```

ID of a share. Required unless any of the following is specified: `--share-internal-id`, `--share-name`

```
--share-internal-id
```

Internal ID of a share. Required unless any of the following is specified: `--share-id`, `--share-name`

```
--share-name
```

Name of a share. Required unless any of the following is specified: `--share-id`, `--share-internal-id`

```
--umask
```

Umask for objects created in the bucket

6.31. s3-server-bucket-remove

```
s3-server-bucket-remove [options]
```

Remove a bucket or bucket container from an S3 server

Options

```
--delete-content
```

Delete bucket data

```
--help
```

Display this help and exit

```
--name
```

Name of bucket or bucket container to remove (Required)

```
--server-id
```

ID of an S3 server. Required unless any of the following is specified: `--server-name`, `--server-internal-id`

```
--server-internal-id
```

Internal ID of an S3 server. Required unless any of the following is specified: `--server-name`, `--server-id`

```
--server-name
```

Name of an S3 server. Required unless any of the following is specified: `--server-id`, `--server-internal-id`

6.32. s3-server-create

```
s3-server-create [options]
```

Create an S3 server

Options

```
--acl
```

Access permissions applied to the bucket. Possible values: PUBLIC | GROUP | PRIVATE.

```
--default-server
```

Make this the default server, only one is allowed at a time

```
--endpoint-prefix
```

Endpoint prefix, used to support virtual host bucket addressing. Default is 's3'

```
--endpoints
```

One or more DNS endpoints for the server. Required unless this is the default server

```
--help
```

Display this help and exit

```
--identity-provider
```

Identity provider for users of this service. Possible values: LOCAL | AD. (Required)

```
--max-keys
```

The maximum number of entries to return when listing objects in a bucket, default is 1,000

```
--mpu-abort-threshold-days
```

Multipart uploads will be aborted and cleaned up if initiated this many days ago

```
--name
```

Management name for the S3 server (Required)

```
--ports
```

TCP port(s) to listen on, must be one or both of 80 and 443. Defaults to 443

```
--region
```

The default geographic region for buckets

```
--strict-bucket-listing
```

Only list buckets owned by requester, off by default

```
--strict-bucket-naming
```

Enforce AWS bucket name requirements

```
--umask
```

Umask for objects created in buckets

6.33. s3-server-delete

```
s3-server-delete [options]
```

Delete an S3 server

Options

```
--help
```

Display this help and exit

```
--id
```

ID of S3 server to delete

```
--internal-id
```

Internal ID of S3 server to delete

```
--name
```

Name of S3 server to delete

6.34. s3-server-list

```
s3-server-list [options]
```

List S3 servers

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

View an S3 server by ID

```
--internal-id
```

View an S3 server by internal ID

```
--name
```

View an S3 server by name

6.35. s3-server-update

```
s3-server-update [options]
```

Update an S3 server

Options

```
--acl
```

Access permissions applied to buckets. Possible values: PUBLIC | GROUP | PRIVATE.

```
--acl-clear
```

Remove default ACL

```
--default-server
```

Make this the default server, only one is allowed at a time

```
--default-server-clear
```

Remove default server designation, requires that at least one endpoint is assigned

```
--endpoint-prefix
```

Endpoint prefix, used to support virtual host bucket addressing. Default is 's3'

```
--endpoint-prefix-clear
```

Clear the endpoint prefix setting, revert to default 's3'

```
--endpoints
```

One or more DNS endpoints for the server. Required unless this is the default server

```
--endpoints-clear
```

Remove all endpoints from the server

```
--help
```

Display this help and exit

```
--id
```

Id of the S3 server to update. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

Internal Id of the S3 server to update. Required unless any of the following is specified: --name, --id

```
--max-keys
```

The maximum number of entries to return when listing objects in a bucket, default is 1,000

```
--mpu-abort-threshold-days
```

Multipart uploads will be aborted and cleaned up if initiated this many days ago

```
--name
```

Management name of the S3 server to update. Required unless any of the following is specified: --internal-id, --id

```
--ports
```

TCP port(s) to listen on, must be one or both of 80 and 443. Defaults to 443

```
--region
```

Default geographic region for buckets

```
--region-clear
```

Remove default region

```
--strict-bucket-listing
```

Only list buckets owned by requester, off by default

```
--strict-bucket-listing-clear
```

Bucket list will show buckets for all bucket owners

```
--strict-bucket-naming
```

Enforce AWS bucket name requirements

```
--strict-bucket-naming-clear
```

Do not enforce AWS bucket name requirements

```
--umask
```

Umask for objects created in buckets

```
--umask-clear
```

Remove any umask set for this server

6.36. s3-server-user-add

```
s3-server-user-add [options]
```

Add an authorized users to an S3 server

Options

```
--access-key
```

S3 access key for user (Required)

```
--help
```

Display this help and exit

```
--secret-key
```

S3 secret key for user (Required)

```
--server-id
```

ID of an S3 server. Required unless any of the following is specified: `--server-name`, `--server-internal-id`

```
--server-internal-id
```

Internal ID of an S3 server. Required unless any of the following is specified: `--server-name`, `--server-id`

```
--server-name
```

Name of an S3 server. Required unless any of the following is specified: `--server-id`, `--server-internal-id`

```
--username
```

Name of AD or local user to add (Required)

6.37. s3-server-user-remove

```
s3-server-user-remove [options]
```

Remove user from an S3 server

Options

```
--help
```

Display this help and exit

```
--server-id
```

ID of an S3 server. Required unless any of the following is specified: `--server-name`, `--server-internal-id`

```
--server-internal-id
```

Internal ID of an S3 server. Required unless any of the following is specified: `--server-name`, `--server-id`

```
--server-name
```

Name of an S3 server. Required unless any of the following is specified: `--server-id`, `--server-internal-id`

```
--username
```

Name of the AD or local user to remove (Required)

6.38. volume-add

```
volume-add [options]
```

Add a storage volume to the product

Options

```
--access-type
```

The access type of the storage volume. Possible values: READ_ONLY | READ_WRITE.

```
--additional-ip
```

Allows specification of addresses which are not listed among the logical volume's IP addresses and which may be used to access data on the volume. This is a comma-separated tuple consisting of: IP, port, transport, node-num, stripe-class, failover-class (where port, transport, node-num, stripe-class and failover-class are optional). The IP may be in CIDR format. The transport may be one of: tcp, tcp6, rdma, rdma6. The node-num allows grouping of IPs which are common to a physical node. The stripe-class allows grouping of IPs which may be used to access the same instance stripe. When omitted, striping is not enabled via this address. The failover-class allows grouping of IPs which may be used interchangeably for node failover. A value may be omitted by leaving it empty. 10.20.30.40,,rdma,1 is an example where the port, stripe-class and failover-class are omitted. This parameter may be repeated

```
--assimilation
```

Assimilate data from the volume

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--availability
```

The storage volume availability capability, specified as the number of nines (number between 0 and 20)

```
--availability-drop-enabled
```

Causes the volume's advertised availability to other components to drop to zero when the volume's storage volume state becomes UNAVAILABLE. This has the effect of causing files with instances on the volume to be re-mirrored/moved

```
--cost
```

Estimated cost of the storage volume

```
--create-placement-objectives
```

Create default "place-on", "confine-to" and "exclude-from" objectives for this storage volume

```
--destination-path
```

The path within the share into which data is assimilated

```
--disable-offloaded-cloning
```

Disable support for performing offloaded cloning on the volume

```
--durability
```

The storage volume durability capability, specified as the number of nines (number between 0 and 20)

```
--exclude-free-space
```

Exclude the volume from the calculation of the cluster's free capacity

```
--excluded-ip
```

A comma-separated list of IP addresses and/or ranges (x.x.x.x-y.y.y) to exclude from the list of discovered IP addresses

```
--force
```

Delete a previous installation's data from the volume

```
--help
```

Display this help and exit

```
--high-threshold
```

The percent [0,100] of total capacity which when reached, will trigger the system to begin evacuating data from the volume. When not specified, 75 percent is used

```
--log-assimilation
```

Causes assimilation to log data into <share/mount/path>/assimilation-logs-<date>/

```
--logical-volume-id
```

The logical volume ID. Required unless "--logical-volume-name" is specified

```
--logical-volume-name
```

The logical volume name. Required unless "--logical-volume-id" is specified

```
--low-threshold
```

When the high threshold is reached and data is moving off of the volume, this is the target percent [0,high threshold] to reach before stopping the evacuation of data. When not specified, the default is the high threshold * 0.8

```
--max-suspected-time
```

The amount of time a volume may remain in a SUSPECTED operational state before its storage volume state is automatically transitioned to UNAVAILABLE. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, minutes are assumed

```
--name
```

The storage volume name. If not provided, default name will be assigned

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--node-id
```

The node ID. Required unless "--node-name" is specified

```
--node-name
```

The node name. Required unless "--node-id" is specified

```
--path
```

The path within the share into which data is assimilated

```
--random-writes-disabled
```

Disable random writes for the volume

```
--read-bandwidth
```

The storage volume read bandwidth (in kb/sec)

```
--read-iops
```

The storage volume read number of IOPS

```
--read-latency
```

The storage volume read latency. An integer or decimal number, optionally followed by one of [ns, us, ms, s]. If a time unit is not explicitly provided, it is assumed to be in milliseconds. The value will be displayed in milliseconds, rounded to six decimal places. Examples: 5, 5ms, 20000ns, 1009.98us, 0.0046s

```
--realign-on-protection-drop-disabled
```

Prevents objects with instances on the volume from being aggressively realigned when availability or durability is reduced for the volume.

```
--share-id
```

The ID of the share into which data is assimilated

```
--share-name
```

The name of the share into which data is assimilated

```
--skip-configuration-test
```

Do not verify the configuration of the volume being added

```
--skip-file-access-test
```

Skip file access test when assimilating data from the volume

```
--skip-performance-test
```

Do not calculate performance metrics while adding the volume

```
--smb-default-group
```

An Active Directory group to use for SID mapping if a group SID does not have a mapping (because the group has been deleted). Valid forms are <name>@<domain>, <domain>\\<name> or <name>. If <name> is used, the current AD domain is assumed.

```
--smb-default-user
```

An Active Directory user to use for SID mapping if a user SID does not have a mapping (because the account has been deleted). Valid forms are <name>@<domain>, <domain>\\<name> or <name>. If <name> is used, the current AD domain is assumed.

```
--smb-password
```

Password for SMB username used to assimilate SMB data

```
--smb-path
```

A UNC-style path (e.g. //example.com/Share/path/to/data) which must include the fully-qualified domain name of the SMB server from which data is being assimilated as well as the SMB share name from which data is being assimilated. It may also contain an SMB source path for cases where the SMB source path differs from the NFS path specified in the source-path parameter

```
--smb-username
```

SMB username used to assimilate SMB data. Valid forms are <name>@<domain>, <domain>\\<name> or <name>. If <name> is used, the current AD domain is assumed.

```
--source-path
```

The path within the volume from which data is assimilated (the named directory will itself be assimilated). This is used as the NFS source path, and when doing SMB assimilation, and the UNC-style smb_path is missing the path part, this is also used as the SMB source path

```
--stripe-alignment
```

The stripe alignment size in bytes when striping is supported. When specified, there should be at least two different stripe-class values among the effective addresses (use additional-ip to specify stripe classes)

```
--stripe-alignment-default
```

Sets the stripe alignment to the default value for the volume

```
--tolerable-read-latency
```

The storage volume tolerable read latency. An integer or decimal number, optionally followed by one of [ns, us, ms, s]. If a time unit is not explicitly provided, it is assumed to be in milliseconds. The value will be displayed in milliseconds, rounded to six decimal places. Examples: 5, 5ms, 20000ns, 1009.98us, 0.0046s

```
--tolerable-write-latency
```

The storage volume tolerable write latency. An integer or decimal number, optionally followed by one of [ns, us, ms, s]. If a time unit is not explicitly provided, it is assumed to be in milliseconds. The value will be displayed in milliseconds, rounded to six decimal places. Examples: 5, 5ms, 20000ns, 1009.98us, 0.0046s

```
--write-bandwidth
```

The storage volume write bandwidth (in kb/sec)

```
--write-iops
```

The storage volume write number of IOPS

```
--write-latency
```

The storage volume write latency. An integer or decimal number, optionally followed by one of [ns, us, ms, s]. If a time unit is not explicitly provided, it is assumed to be in milliseconds. The value will be displayed in milliseconds, rounded to six decimal places. Examples: 5, 5ms, 20000ns, 1009.98us, 0.0046s

6.39. volume-assimilation

```
volume-assimilation [options]
```

Assimilate an existing storage volume

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--destination-path
```

The path within the share into which data is assimilated

```
--help
```

Display this help and exit

```
--id
```

The volume ID. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the volume. Required unless any of the following is specified: `--name`, `--id`

```
--log
```

Causes assimilation to log data into `<share/mount/path>/assimilation-logs-<date>/`

```
--name
```

The volume name. Required unless any of the following is specified: `--internal-id`, `--id`

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--path
```

The path within the share into which data is assimilated

```
--share-id
```

The ID of the share into which data is assimilated. Required unless "--share-name" is specified

```
--share-name
```

The name of the share into which data is assimilated. Required unless "--share-id" is specified

```
--skip-file-access-test
```

Skip file access test when assimilating data from the volume

```
--smb-default-group
```

An Active Directory group to use for SID mapping if a group SID does not have a mapping (because the group has been deleted). Valid forms are <name>@<domain>, <domain>\\<name> or <name>. If <name> is used, the current AD domain is assumed.

```
--smb-default-user
```

An Active Directory user to use for SID mapping if a user SID does not have a mapping (because the account has been deleted). Valid forms are <name>@<domain>, <domain>\\<name> or <name>. If <name> is used, the current AD domain is assumed.

```
--smb-password
```

Password for SMB username used to assimilate SMB data

```
--smb-path
```

A UNC-style path (e.g. //example.com/Share/path/to/data) which must include the fully-qualified domain name of the SMB server from which data is being assimilated as well as the SMB share name from which data is being assimilated. It may also contain an SMB source path for cases where the SMB source path differs from the NFS path specified in the source-path parameter

```
--smb-username
```

SMB username used to assimilate SMB data. Valid forms are <name>@<domain>, <domain>\\<name> or <name>. If <name> is used, the current AD domain is assumed.

```
--source-path
```

The path within the volume from which data is assimilated (the named directory will itself be assimilated). This is used as the NFS source path, and when doing SMB assimilation, and the UNC-style smb_path is missing the path part, this is also used as the SMB source path

6.40. volume-assimilation-cancel

```
volume-assimilation-cancel [options]
```

Cancel a running assimilation

Options

```
--help
```

Display this help and exit

```
--task-id
```

The task ID associated with the running assimilation (Required)

6.41. volume-decommission

```
volume-decommission [options]
```

Start the storage volume decommission process

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--id
```

Storage Volume identifier. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

Storage Volume internal identifier. Required unless any of the following is specified: --name, --id

```
--name
```

Storage Volume name. Required unless any of the following is specified: --internal-id, --id

```
--replace-with
```

List of locations to replace the decommissioned volume. Example: node:<name>,volume-group:<name>,volume:<name>,object-volume:<name>

6.42. volume-decommission-cancel

```
volume-decommission-cancel [options]
```

Cancel the storage volume decommission process

Options

```
--help
```

Display this help and exit

```
--id
```

Storage Volume identifier. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

Storage Volume internal identifier. Required unless any of the following is specified: --name, --id

```
--name
```

Storage Volume name. Required unless any of the following is specified: `--internal-id`, `--id`

```
--task-id
```

The ID of the task that is decommissioning the Storage Volume

6.43. volume-fail

```
volume-fail [options]
```

Set a storage volume to the FAILED state. Typically used to allow the removal of a storage volume that no longer exists. The FAILED state is terminal, meaning that the data on the volume will be lost, and the volume cannot be reused.

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the storage volume to set to the FAILED state. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the storage volume to set to the FAILED state. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the storage volume to set to the FAILED state. Required unless any of the following is specified: `--internal-id`, `--id`

6.44. volume-group-create

```
volume-group-create [options]
```

Create a new volume group

Options

```
--description
```

The volume group's description

```
--expressions
```

The volume group expression(s). Expressions are separated by '&'

```
--help
```

Display this help and exit

```
--name
```

The volume group name (Required)

6.45. volume-group-delete

```
volume-group-delete [options]
```

Delete a volume group

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the volume group to delete. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the volume group to delete. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the volume group to delete. Required unless any of the following is specified: --internal-id, --id

6.46. volume-group-list

```
volume-group-list [options]
```

Display a detailed list of all volume groups available in the system

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the volume group to list

```
--internal-id
```

The internal ID of the volume group to list

```
--name
```

The name of the volume group to list

6.47. volume-group-update

```
volume-group-update [options]
```

Update a volume group

Options

```
--description
```

The volume group's description. Required unless any of the following is specified: `--expressions`, `--expressions-clear`, `--new-name`, `--description-clear`

```
--description-clear
```

Clear the volume group's description. Required unless any of the following is specified: `--expressions`, `--expressions-clear`, `--description`, `--new-name`

```
--expressions
```

The volume group expression(s). Expressions are separated by '&'. Required unless any of the following is specified: `--expressions-clear`, `--description`, `--new-name`, `--description-clear`

```
--expressions-clear
```

Clear the volume group expression(s). Required unless any of the following is specified: `--expressions`, `--description`, `--new-name`, `--description-clear`

```
--help
```

Display this help and exit

```
--id
```

The ID of the volume group to update. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the volume group to update. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the volume group to update. Required unless any of the following is specified: `--internal-id`, `--id`

```
--new-name
```

The volume group updated name. Required unless any of the following is specified: `--expressions`, `--expressions-clear`, `--description`, `--description-clear`

6.48. volume-list

```
volume-list [options]
```

Display a detailed list of all storage volumes available in the system. Two types of lists can be displayed: a detailed list and a Summary list (default)

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the storage volume to list

```
--internal-id
```

The internal ID of the volume to list

```
--name
```

The name of the storage volume to list

6.49. volume-remove

```
volume-remove [options]
```

Remove a storage volume from the system. Removal is task-based and first determines whether the volume must be decommissioned. Volumes in OK, UNAVAILABLE, or DECOMMISSIONING state first get decommissioned, then removed. Volumes already in ADDED or DECOMMISSIONED state skip decommissioning and get directly removed. Volumes in FAILED state also skip decommissioning and go straight to being removed, but they also skip the final teardown during removal, so that accidental data-loss is minimized.

If the volume is currently in a FAILED or DECOMMISSIONED state, it will be removed immediately. Otherwise, the volume's state will transition from DECOMMISSIONING to CLEANING to DECOMMISSIONED before being removed.

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--help
```

Display this help and exit

```
--id
```

The ID of the storage volume to remove. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the storage volume to remove. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the storage volume to remove. Required unless any of the following is specified: --internal-id, --id

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--replace-with
```

List of locations to replace references to the removed storage volume with. Example: node:<name>,volume-group:<name>,volume:<name>,object-volume:<name>

6.50. volume-remove-cancel

```
volume-remove-cancel [options]
```

Cancel the removal of a storage volume. This cancels the active volume-remove task while it is still in the cancelable decommission phase. Once the task has advanced into the non-cancelable removal phase, the task will continue to completion instead of rolling back.

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the storage volume whose removal will be cancelled. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the storage volume whose removal will be cancelled. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the storage volume whose removal will be cancelled. Required unless any of the following is specified: `--internal-id`, `--id`

6.51. volume-set-available

```
volume-set-available [options]
```

Mark an unavailable storage volume as available

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the storage volume to mark available. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the storage volume to mark available. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the storage volume to mark available. Required unless any of the following is specified: `--internal-id`, `--id`

6.52. volume-set-unavailable

```
volume-set-unavailable [options]
```

Mark a storage volume as unavailable

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the storage volume to mark unavailable. Required unless any of the following is specified: `--internal-id`, `--name`

```
--internal-id
```

The internal ID of the storage volume to mark unavailable. Required unless any of the following is specified: `--name`, `--id`

```
--name
```

The name of the storage volume to mark unavailable. Required unless any of the following is specified: `--internal-id`, `--id`

6.53. volume-update

```
volume-update [options]
```

Update storage volume attributes, including the volume performance and availability attributes

Options

```
--additional-ip-add
```

Add an address which is listed among the logical volume's IP addresses and which may be used to access data on the volume. This is a comma-separated tuple consisting of: IP, port, transport, node-num, stripe-class, failover-class (where port, transport, node-num, stripe-class and failover-class are optional). The IP may be in CIDR format. The transport may be one of: tcp, tcp6, rdma, rdma6. The node-num allows grouping of IPs which are common to a physical node. The stripe-class allows grouping of IPs which may be used to access the same instance stripe. When omitted, striping is not enabled via this address. The failover-class allows grouping of IPs which may be used interchangeably for node failover. A value may be omitted by leaving it empty. 10.20.30.40,,rdma,1 is an example where the port, stripe-class and failover-class are omitted. This parameter may be repeated

```
--additional-ip-remove
```

Remove a value from the list of additional IP addresses. The format is the same as that for `additional-ip-add`, but the port and transport are not optional. This parameter may be repeated

```
--additional-ips-clear
```

Remove all values from the list of additional IP addresses

```
--availability
```

The storage volume availability capability, specified as the number of nines (number between 0 and 20)

```
--availability-drop-disabled
```

Causes the volume's advertised availability to other components to remain unaltered when the volume's storage volume state becomes UNAVAILABLE.

```
--availability-drop-enabled
```

Causes the volume's advertised availability to other components to drop to zero when the volume's storage volume state becomes UNAVAILABLE. This has the effect of causing files with instances on the volume to be re-mirrored/moved

```
--disable-offloaded-cloning
```

Disallow offloaded cloning from being performed on the volume, whether supported or not

```
--durability
```

The storage volume durability capability, specified as the number of nines (number between 0 and 20)

```
--enable-offloaded-cloning
```

Allow offloaded cloning to be performed on the volume when supported

```
--exclude-free-space
```

Exclude the volume from the calculation of the cluster's free capacity

```
--exclude-free-space-clear
```

Stop excluding the volume from the calculation of the cluster's free capacity

```
--excluded-ip-add
```

A comma-separated list of IP addresses and/or ranges (x.x.x.x-y.y.y.y) to be added to the list of excluded IP

addresses

```
--excluded-ip-remove
```

A comma-separated list of IP addresses and/or ranges (x.x.x.x-y.y.y.y) to be removed from the list of excluded IP addresses

```
--excluded-ips-clear
```

Remove all values from the list of excluded IP addresses

```
--help
```

Display this help and exit

```
--high-threshold
```

The percent [0,100] of total capacity which when reached, will trigger the system to begin evacuating data from the volume

```
--high-threshold-clear
```

Reset the high threshold to its default (75 percent)

```
--id
```

The ID of the storage volume to update. Required unless any of the following is specified: --internal-id, --name, --volume-group-internal-id, --volume-group-name, --volume-group-id

```
--internal-id
```

The internal ID of the storage volume to update. Required unless any of the following is specified: --name, --volume-group-internal-id, --id, --volume-group-name, --volume-group-id

```
--low-threshold
```

When the high threshold is reached and data is moving off of the volume, this is the target percent [0,100] to reach before stopping the evacuation of data

```
--low-threshold-clear
```

Reset the low threshold to its default (20 percent less than the high threshold)

```
--max-suspected-time
```

The amount of time a volume may remain in a SUSPECTED operational state before its storage volume state is automatically transitioned to UNAVAILABLE. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, minutes are assumed.

```
--name
```

The name of the storage volume to update. Required unless any of the following is specified: --internal-id, --volume-group-internal-id, --id, --volume-group-name, --volume-group-id

```
--new-name
```

The storage volume new name

```
--random-writes-disabled
```

Disable random writes for the volume

```
--random-writes-enabled
```

Enable random writes for the volume

```
--read-bandwidth
```

The storage volume read bandwidth (in kb/sec)

```
--read-iops
```

The storage volume read number of IOPS

```
--read-latency
```

The storage volume read latency. An integer or decimal number, optionally followed by one of [ns, us, ms, s]. If a time unit is not explicitly provided, it is assumed to be in milliseconds. The value will be displayed in milliseconds, rounded to six decimal places. Examples: 5, 5ms, 20000ns, 1009.98us, 0.0046s

```
--realign-on-protection-drop-disabled
```

Prevents objects with instances on the volume from being aggressively realigned when availability or durability is reduced for the volume.

```
--realign-on-protection-drop-enabled
```

Allows objects with instances on the volume to be aggressively realigned when availability or durability is reduced for the volume.

```
--stripe-alignment
```

The stripe alignment size in bytes when striping is supported. When specified, there should be at least two different stripe-class values among the effective addresses (use `additional-ip` to specify stripe classes)

```
--stripe-alignment-clear
```

Clear the stripe alignment size (disable striping)

```
--stripe-alignment-default
```

Sets the stripe alignment to the default value for the volume

```
--tolerable-read-latency
```

The storage volume tolerable read latency. An integer or decimal number, optionally followed by one of [ns, us, ms, s]. If a time unit is not explicitly provided, it is assumed to be in milliseconds. The value will be displayed in milliseconds, rounded to six decimal places. Examples: 5, 5ms, 20000ns, 1009.98us, 0.0046s

```
--tolerable-write-latency
```

The storage volume tolerable write latency. An integer or decimal number, optionally followed by one of [ns, us, ms, s]. If a time unit is not explicitly provided, it is assumed to be in milliseconds. The value will be displayed in milliseconds, rounded to six decimal places. Examples: 5, 5ms, 20000ns, 1009.98us, 0.0046s

```
--volume-group-id
```

The ID a volume group which represents all volumes to be updated. Required unless any of the following is specified: `--internal-id`, `--volume-group-internal-id`, `--name`, `--volume-group-name`, `--id`

```
--volume-group-internal-id
```

The internal ID of a volume group which represents all volumes to be updated. Required unless any of the

following is specified: --internal-id, --name, --volume-group-name, --id, --volume-group-id

```
--volume-group-name
```

The name of a volume group which represents all volumes to be updated. Required unless any of the following is specified: --internal-id, --volume-group-internal-id, --name, --id, --volume-group-id

```
--write-bandwidth
```

The storage volume write bandwidth (in kb/sec)

```
--write-iops
```

The storage volume write number of IOPS

```
--write-latency
```

The storage volume write latency. An integer or decimal number, optionally followed by one of [ns, us, ms, s]. If a time unit is not explicitly provided, it is assumed to be in milliseconds. The value will be displayed in milliseconds, rounded to six decimal places. Examples: 5, 5ms, 20000ns, 1009.98us, 0.0046s

Chapter 7. Snapshots and Cloning

7.1. file-snapshot-create

```
file-snapshot-create [options]
```

Create file snapshot

Example

```
file-snapshot-create --filename /test/VM2/*.vmdk --now
```

Options

```
--filename
```

Source file path. The filename in the path may include wild-card characters (for example, /share/dir/file*.txt) (Required)

```
--help
```

Display this help and exit

```
--now
```

Create immediate snapshot of the file. Required unless "--schedule-name" is specified

```
--retention-name
```

The name of the snapshot retention policy.

```
--schedule-name
```

The name of the schedule policy. Required unless "--now" is specified

7.2. file-snapshot-delete

```
file-snapshot-delete [options]
```

Delete file snapshots

Options

```
--all
```

Deletes all existing snapshots. Required unless "--time" is specified

```
--filename
```

Source file path. The filename in the path may include wild-card characters (for example: /share/dir/file*.txt) (Required)

```
--help
```

Display this help and exit

```
--time
```

Date-time expression in format yyyy-MM-ddThh-mm-ss. The expression may contain wild-card characters (for example: 2000-01-30*). Required unless "--all" is specified

7.3. file-snapshot-list

```
file-snapshot-list [options]
```

List file snapshots

Options

```
--filename
```

Source file path. The filename in the path may include wild-card characters (for example: /share/dir/file*.txt) (Required)

```
--help
```

Display this help and exit

7.4. file-snapshot-restore

```
file-snapshot-restore [options]
```

Restore files from snapshots

Options

```
--filename
```

Source file path. The filename in the path may include wild-card characters (for example: /share/dir/file*.txt) (Required)

```
--help
```

Display this help and exit

```
--time
```

Date-time expression in format yyyy-MM-ddThh-mm-ss. The expression may contain wild-card characters (for example: 2000-01-30*) (Required)

7.5. file-snapshot-schedule-list

```
file-snapshot-schedule-list [options]
```

List scheduled file snapshots

Options

```
--filename
```

Source file path. The filename in the path may include wild-card characters (for example: /share/dir/file*.txt)

```
--help
```

Display this help and exit

```
--id
```

The ID of the file snapshot schedule to list

7.6. file-snapshot-update

```
file-snapshot-update [options]
```

Update file snapshot schedule

Options

```
--filename
```

Source file path. The filename in the path may include wild-card characters (for example: /share/dir/file*.txt)
(Required)

```
--help
```

Display this help and exit

```
--remove-retention
```

Remove the retention policy from file snapshots. Required unless any of the following is specified: `--remove-schedule`, `--retention-name`, `--schedule-name`

```
--remove-schedule
```

Remove both schedule and retention from file snapshots. Required unless any of the following is specified: `--retention-name`, `--schedule-name`, `--remove-retention`

```
--retention-name
```

The name of the snapshot retention policy. Required unless any of the following is specified: `--remove`

-schedule, --schedule-name, --remove-retention

--schedule-name

The name of the schedule policy. Required unless any of the following is specified: --remove-schedule, --retention-name, --remove-retention

7.7. snapshot-retention-create

snapshot-retention-create [options]

Create a snapshot retention policy

Options

--help

Display this help and exit

--name

The name of the snapshot retention policy (Required)

--number-of-copies

The number of copies the policy should create. Required unless "--retention-time" is specified

--retention-time

The time interval to retain snapshots, from the time of the last snapshot, in the format: dd:HH:mm. Required unless "--number-of-copies" is specified

7.8. snapshot-retention-delete

snapshot-retention-delete [options]

Delete snapshot retention policy

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the snapshot policy to delete. Required unless "--name" is specified

```
--name
```

The name of the snapshot policy to delete. Required unless "--id" is specified

7.9. snapshot-retention-list

```
snapshot-retention-list [options]
```

List snapshot retention policies

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the snapshot retention policy to list

```
--name
```

The name of the snapshot retention policy to list

7.10. snapshot-retention-update

```
snapshot-retention-update [options]
```

Update snapshot retention policy

Options

```
--help
```

Display this help and exit

```
--id
```

The name of the snapshot retention policy to list. Required unless "--name" is specified

```
--name
```

The ID of the snapshot retention policy to list. Required unless "--id" is specified

```
--number-of-copies
```

The number of copies the policy should create. Required unless "--retention-time" is specified

```
--retention-time
```

The time interval to retain snapshots, from the time of the last snapshot, in the format: dd:HH:mm. Required unless "--number-of-copies" is specified

Chapter 8. Networking

8.1. floating-ip-add

```
floating-ip-add [options]
```

Add new floating IP address (cluster or portal)

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--cluster
```

Add cluster floating IP address. Required unless "--portal" is specified

```
--help
```

Display this help and exit

```
--ip
```

Floating IP address to add (Required)

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--portal
```

Add portal floating IP address. Required unless "--cluster" is specified

8.2. floating-ip-remove

```
floating-ip-remove [options]
```

Remove existing floating IP address (cluster or portal)

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--cluster
```

Remove cluster floating IP address. Required unless "--portal" is specified

```
--help
```

Display this help and exit

```
--ip
```

Floating IP address to remove (Required)

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--portal
```

Remove portal floating IP address. Required unless "--cluster" is specified

8.3. gateway-update

```
gateway-update [options]
```

Update gateway configuration

Options

```
--help
```

Display this help and exit

```
--ipv4
```

Set the gateway IPv4 address

```
--ipv4-clear
```

Clear the gateway IPv4 address

```
--ipv6
```

Set the gateway IPv6 address

```
--ipv6-clear
```

Clear the gateway IPv6 address

```
--node-name
```

The node name (Required)

8.4. gateway-list

```
gateway-list [options]
```

List gateway configuration

Options

```
--help
```

Display this help and exit

```
--node-name
```

The node name

8.5. interface-create

```
interface-create [options]
```

Create virtual network interface

Options

```
--help
```

Display this help and exit

```
--interface-id
```

The physical network interface ID

```
--interface-name
```

The physical network interface name

```
--ip
```

Set the network interface IP address

```
--mtu
```

Set the network interface mtu

```
--node-name
```

The node name

```
--roles
```

Set the network interface role(s). Possible values: mgmt | data | ha | portal.

```
--vlan-id
```

Set the network interface vlan ID (Required)

8.6. interface-delete

```
interface-delete [options]
```

Delete virtual network interface

Options

```
--help
```

Display this help and exit

```
--interface-id
```

The virtual network interface ID

```
--interface-name
```

The virtual network interface name

```
--node-name
```

The node name

8.7. interface-list

```
interface-list [options]
```

List network interfaces

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--interface-id
```

The ID of the network interface to list. Required unless "--node-name" is specified

```
--node-name
```

The node name. Required unless "--interface-id" is specified

8.8. interface-update

```
interface-update [options]
```

Update physical/virtual network interface

Options

```
--help
```

Display this help and exit

```
--interface-id
```

The network interface ID. Required unless any of the following is specified: --interface-name, --node-name

```
--interface-name
```

The network interface name. Required unless any of the following is specified: --interface-id, --node-name

```
--ip
```

Set the network interface IP address. Required unless any of the following is specified: --roles, --ip-clear, --vlan-id, --roles-clear, --mtu

```
--ip-clear
```

Remove the network interface IP address. Required unless any of the following is specified: `--roles`, `--ip`, `--vlan-id`, `--roles-clear`, `--mtu`

```
--mtu
```

Set the network interface mtu. Required unless any of the following is specified: `--roles`, `--ip-clear`, `--ip`, `--vlan-id`, `--roles-clear`

```
--node-name
```

The node name. Required unless any of the following is specified: `--interface-name`, `--interface-id`

```
--override-data-check
```

Override guardrails preventing change of the original DATA interface IP

```
--override-ip-check
```

Override checks preventing duplicate IPs with different netmasks. This override is meant to be used only for two-step subnet swapping procedures.

```
--roles
```

Set the network interface role(s). Required unless any of the following is specified: `--ip-clear`, `--ip`, `--vlan-id`, `--roles-clear`, `--mtu` Possible values: `mgmt` | `data` | `ha` | `portal`.

```
--roles-clear
```

Clear the network interface role(s). Required unless any of the following is specified: `--roles`, `--ip-clear`, `--ip`, `--vlan-id`, `--mtu`

```
--vlan-id
```

Set the network interface vlan ID (may change the interface name). Required unless any of the following is specified: `--roles`, `--ip-clear`, `--ip`, `--roles-clear`, `--mtu`

8.9. static-route-add

```
static-route-add [options]
```

Add a new static route

Options

```
--destination
```

The static route destination IP address (CIDR notation optional) (Required)

```
--help
```

Display this help and exit

```
--next-hop
```

The IP address of the next hop (Required)

8.10. static-route-delete

```
static-route-delete [options]
```

Delete a static route

Options

```
--destination
```

The destination IP address of the route to be deleted (Required)

```
--help
```

Display this help and exit

```
--next-hop
```

The next hop IP address of the route to be deleted (Required)

8.11. static-route-list

```
static-route-list [options]
```

List static routes

Options

```
--help
```

Display this help and exit

8.12. subnet-gateway-add

```
subnet-gateway-add [options]
```

Add a new subnet gateway

Options

```
--gateway
```

The IP address of the subnet gateway (Required)

```
--help
```

Display this help and exit

```
--subnet
```

The subnet IP address in CIDR notation (Required)

8.13. subnet-gateway-delete

```
subnet-gateway-delete [options]
```

Delete a subnet gateway

Options

```
--help
```

Display this help and exit

```
--subnet
```

The subnet IP address in CIDR notation (Required)

8.14. subnet-gateway-list

```
subnet-gateway-list [options]
```

List subnet gateways

Options

```
--help
```

Display this help and exit

Chapter 9. Global File System

9.1. gfs-participant-add

```
gfs-participant-add [options]
```

Configure another site to participate in a global file system share by creating a share on the remote site and adding all configured sites as participants

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--force-master-acquisition
```

Proceed even if a quorum of participants does not acknowledge this site as master for share replication management. This will not allow acquisition of master status while another site is actively operating on the share. Warning: this may leave the share replication configuration in an undefined state

```
--help
```

Display this help and exit

```
--interval
```

The interval at which to replicate. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, seconds are assumed

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--remote-share-name
```

A name for the new remote share (defaults to the local share's name)

```
--remote-share-path
```

A path for the new remote share (defaults to the local share's path)

```
--share-id
```

The ID of the local share to be replicated. Required unless any of the following is specified: `--share-internal-id`, `--share-name`

```
--share-internal-id
```

The internal ID of the local share to be replicated. Required unless any of the following is specified: `--share-id`, `--share-name`

```
--share-name
```

The name of the local share to be replicated. Required unless any of the following is specified: `--share-id`, `--share-internal-id`

```
--site-address
```

The IP or DNS address of an interface on the remote site which has the MGMT role. Required unless any of the following is specified: `--site-id`, `--site-name`, `--site-internal-id`

```
--site-id
```

The ID of the remote site. Required unless any of the following is specified: `--site-address`, `--site-name`, `--site-internal-id`

```
--site-internal-id
```

The internal ID of the remote site. Required unless any of the following is specified: `--site-id`, `--site-address`, `--site-name`

```
--site-name
```

The name of the remote site. Required unless any of the following is specified: `--site-id`, `--site-address`, `--site-internal-id`

```
--site-password
```

The password for the remote site user (Required)

```
--site-username
```

A user which has sufficient rights to create shares on the remote site. Required unless the remote site has been configured to trust this site's client certificate (Required)

```
--skip-participant-validations
```

Skip checks for open replication ports and shared object storage volumes at the participant

9.2. gfs-participant-disable

```
gfs-participant-disable [options]
```

Stop replication of data and metadata 'to' share participant(s). When one of id, internal-id, or name is specified, the command is applied to that share participant. When site-id, site-internal-id, or site-name is specified and no share identifier is specified, the command is applied to all share participants related to the specified site across all shares. When a site identifier is specified along with a share identifier, the command is applied to the participants related to the specified site for the share(s) specified. Note that the share identifiers may be repeated, and are only applicable when paired with a site identifier

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the share participant to disable. Required unless any of the following is specified: --internal-id, --site-id, --name, --site-name, --site-internal-id

```
--internal-id
```

The internal ID of the share participant to disable. Required unless any of the following is specified: --site-id, --name, --id, --site-name, --site-internal-id

```
--name
```

The name of the share participant to disable. Required unless any of the following is specified: --internal-id,

--site-id, --id, --site-name, --site-internal-id

--share-id

Specifies share participants associated with a share ID. May only be used with a site identifier

--share-internal-id

Specifies share participants associated with a share internal ID. May only be used with a site identifier

--share-name

Specifies share participants associated with a share name. May only be used with a site identifier

--site-id

Specifies share participants associated with a site ID. Required unless any of the following is specified:
--internal-id, --name, --site-name, --id, --site-internal-id

--site-internal-id

Specifies share participants associated with a site internal ID. Required unless any of the following is specified:
--internal-id, --site-id, --name, --site-name, --id

--site-name

Specifies share participants associated with a site name. Required unless any of the following is specified:
--internal-id, --site-id, --name, --id, --site-internal-id

9.3. gfs-participant-enable

gfs-participant-enable [options]

Allow replication of data and metadata 'to' share participant(s). When one of id, internal-id, or name is specified, the command is applied to that share participant. When site-id, site-internal-id, or site-name is specified and no share identifier is specified, the command is applied to all share participants related to the specified site across all shares. When a site identifier is specified along with a share identifier, the command is applied to the participants related to the specified site for the share(s) specified. Note that the share identifiers may be repeated, and are only applicable when paired with a site identifier

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the share participant to enable. Required unless any of the following is specified: `--internal-id`, `--site-id`, `--name`, `--site-name`, `--site-internal-id`

```
--internal-id
```

The internal ID of the share participant to enable. Required unless any of the following is specified: `--site-id`, `--name`, `--id`, `--site-name`, `--site-internal-id`

```
--name
```

The name of the share participant to enable. Required unless any of the following is specified: `--internal-id`, `--site-id`, `--id`, `--site-name`, `--site-internal-id`

```
--share-id
```

Specifies share participants associated with a share ID. May only be used with a site identifier

```
--share-internal-id
```

Specifies share participants associated with a share internal ID. May only be used with a site identifier

```
--share-name
```

Specifies share participants associated with a share name. May only be used with a site identifier

```
--site-id
```

Specifies share participants associated with a site ID. Required unless any of the following is specified: `--internal-id`, `--name`, `--site-name`, `--id`, `--site-internal-id`

```
--site-internal-id
```

Specifies share participants associated with a site internal ID. Required unless any of the following is specified: `--internal-id`, `--site-id`, `--name`, `--site-name`, `--id`

```
--site-name
```

Specifies share participants associated with a site name. Required unless any of the following is specified: `--internal-id`, `--site-id`, `--name`, `--id`, `--site-internal-id`

9.4. gfs-participant-list

```
gfs-participant-list [options]
```

Display a list of all configured global file system participants, or a list filtered to a specific share

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the participant to list

```
--internal-id
```

The internal ID of the participant to list

```
--name
```

The name of the participant to list

```
--share-id
```

The ID of a share to filter the listing to

```
--share-internal-id
```

The internal ID of a share to filter the listing to

```
--share-name
```

The name of a share to filter the listing to

9.5. gfs-participant-remove

```
gfs-participant-remove [options]
```

Remove a site from a share replication by removing the site as a participant of the share.

Options

```
--async
```

Causes the command to be executed asynchronously. A reference task identifier will be returned

```
--force-master-acquisition
```

Proceed even if a quorum of participants does not acknowledge this site as master for share replication management. This will not allow acquisition of master status while another site is actively operating on the share. Warning: this may leave the share replication configuration in an undefined state

```
--help
```

Display this help and exit

```
--id
```

The ID (uuid) of the participant to be removed. Required unless any of the following is specified: --internal-id, --share-id, --share-internal-id, --name, --share-name

```
--ignore-remove-failures
```

Proceed even if remote sites are unavailable or have already been removed from the replicating share. Warning: this may leave the share replication configuration in an undefined state

```
--internal-id
```

The internal ID of the participant to be removed. Required unless any of the following is specified: --share-id, --share-internal-id, --name, --id, --share-name

```
--name
```

The name of the participant to be removed. Required unless any of the following is specified: --internal-id, --share-id, --share-internal-id, --id, --share-name

```
--no-timeout
```

When running a task-based command synchronously, monitor for task completion indefinitely

```
--participant-id
```

The integer participant id being removed

```
--share-id
```

The ID of the share from which the participant is being removed. Required unless any of the following is specified: --internal-id, --share-internal-id, --name, --share-name, --id

```
--share-internal-id
```

The internal ID of the share from which the participant is being removed. Required unless any of the following is specified: --internal-id, --share-id, --name, --share-name, --id

```
--share-name
```

The name of the share from which the participant is being removed. Required unless any of the following is specified: --internal-id, --share-id, --share-internal-id, --name, --id

```
--site-address
```

The IP or DNS address having a MGMT role of the site being removed as a participant

```
--site-id
```

The ID of the site being removed as a participant

```
--site-internal-id
```

The internal ID of the site being removed as a participant

```
--site-name
```

The name of the site being removed as a participant

Appendices

Appendix A: Technology Preview

A.1. antivirus-add

```
antivirus-add [options]
```

Add an antivirus service

Options

```
--create-placement-objectives
```

Create default "place-on", "confine-to" and "exclude-from" objectives for this antivirus service

```
--endpoint
```

The endpoint (URI or host:port) of the antivirus service (Required)

```
--help
```

Display this help and exit

```
--name
```

A name for the antivirus service (Required)

```
--password
```

The password (if required) for the antivirus service

```
--type
```

The type of antivirus service being added. Possible values: MCAFEE_AV | CLAM_AV. (Required)

```
--username
```

The username (if required) for the antivirus service

A.2. antivirus-list

```
antivirus-list [options]
```

List the antivirus services

Options

```
--full
```

Print extra information for each element

```
--help
```

Display this help and exit

```
--id
```

The ID of the antivirus service to list

```
--internal-id
```

The internal ID of the antivirus service to list

```
--name
```

The name of the antivirus service to list

A.3. antivirus-remove

```
antivirus-remove [options]
```

Remove an antivirus service

Options

```
--help
```

Display this help and exit

```
--id
```

The ID of the antivirus service to remove. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the antivirus service to remove. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the antivirus service to remove. Required unless any of the following is specified: --internal-id, --id

A.4. antivirus-update

```
antivirus-update [options]
```

Update an antivirus service

Options

```
--endpoint
```

The endpoint (URI or host:port) of the antivirus service

```
--help
```

Display this help and exit

```
--id
```

The ID of the antivirus service to update. Required unless any of the following is specified: --internal-id, --name

```
--internal-id
```

The internal ID of the antivirus service to update. Required unless any of the following is specified: --name, --id

```
--name
```

The name of the antivirus service to update. Required unless any of the following is specified: --internal-id, --id

```
--new-name
```

A new name for the antivirus service

```
--password
```

The password for the antivirus service

```
--username
```

The username for the antivirus service

A.5. preview-no-upload-object-volume-add

```
preview-no-upload-object-volume-add [options]
```

Technology Preview: Add a zero durability object storage volume to the product. This feature is NOT supported for production data due to risk of data loss. Please contact support for assistance in using this functionality.

Options

```
--access-key
```

Access key, if not provided, the object storage credentials will be used

```
--help
```

Display this help and exit

```
--logical-volume-id
```

object logical volume ID. Required unless "--logical-volume-name" is specified

```
--logical-volume-name
```

object logical volume. Required unless "--logical-volume-id" is specified

```
--max-suspected-time
```

The amount of time a volume may remain in a SUSPECTED operational state before its storage volume state is automatically transitioned to UNAVAILABLE. May be formatted as 10seconds, 1minute, "1 hour 30 minutes", etc. When no units are specified, minutes are assumed.

```
--name
```

The object storage volume name. If not provided, a default name will be assigned

```
--node-id
```

The node ID. Required unless "--node-name" is specified

```
--node-name
```

The node name. Required unless "--node-id" is specified

```
--secret-key
```

Secret key, if not provided, the object storage credentials will be used

```
--total-capacity
```

Specifies the total amount of data allowed to be stored on the volume. When not specified, a practically unlimited amount is assumed

Appendix B: Alphabetical Command Index

- ad-config
- ad-discover
- antivirus-add
- antivirus-list
- antivirus-remove
- antivirus-update
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- builtin-group-user-list
- builtin-group-user-remove
- cert-add
- cert-ca-list
- cert-csr-sign
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- cluster-config
- dns-config
- domain-idmap-add
- domain-idmap-delete
- domain-idmap-list
- domain-idmap-reload
- dp-update
- drive-list
- email-config
- event-list
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- file-snapshot-list
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- floating-ip-add
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- gfs-participant-add
- gfs-participant-disable
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```
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```

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volume-group-list  
volume-group-update  
volume-list  
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volume-remove-cancel  
volume-set-available  
volume-set-unavailable  
volume-update
```

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Appendix C: Additional Documentation Resources

Additional Hammerspace documentation can be viewed or downloaded as PDF files on the *Hammerspace Licensing and Delivery Portal* and the *Hammerspace Support Hub*. A Hammerspace account is required to access both sites.

Note: Because our titles are available as PDF downloads (and not currently viewable as *always-latest-version* HTML), please check the download pages and download often to verify you are working with the latest version of the documentation.

Licensing and Delivery Portal

The following Product documentation titles are available on the *Hammerspace License and Delivery Portal*, [Hammerspace Documentation](#) downloads page:

- Hammerspace Hardware and Software Compatibility List
- Hammerspace Global File System Deployment Guide
- Hammerspace Installation and Licensing Guide
- Hammerspace Configuration guide
- Hammerspace Administration Guide
- Hammerspace Command Line Reference
- Hammerspace Release Notes

Hammerspace Support Hub

Extensive documentation and guidance is available on the [Hammerspace Support Hub, Resources](#) page. The Support Portal library includes Solution Guides, Technical Briefs, and Knowledge-Base Articles, among other content types. The following titles may be of special interest to users of this guide:

- [{kb-assimilation-url}](#)[\[{kb-assimilation-title}\]](#) [{kb-login-note}](#) [Knowledge Article]: This article includes a technical guide that provides an overview of a typical data migration with Hammerspace using assimilation and data orchestration.
- [{kb-objectives-url}](#)[\[{kb-objectives-title}\]](#) [{kb-login-note}](#) [Knowledge article]: This article includes a technical guide that outlines the configuration of Hammerspace Objectives.
- [{kb-hstk-url}](#)[\[{kb-hstk-title}\]](#) [{kb-login-note}](#) [Knowledge article]: This document is an introduction to the concepts of Hammerspace metadata, and the tools to manipulate and use metadata and put it to work to achieve business objectives for data.
- [Hammerspace S3 Guide](#) [Solution Guide]: This document covers the creation and management of S3 servers, bucket containers, and buckets, as well as user access control and security considerations, ensuring seamless multi-protocol data access and efficient data management.