# Qumulo qq CLI Command Guide



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## qq ad\_cancel

This section explains how to use the qq ad\_cancel command.

### Description

Cancel current AD join/leave operation and clear errors

### Usage

qq ad\_cancel [-h]

## qq ad\_distinguished\_name\_to\_account

This section explains how to use the qq ad\_distinguished\_name\_to\_account command.

### Description

Get all account info for a distinguished name

### Usage

qq ad\_distinguished\_name\_to\_account [-h] -d DISTINGUISHED\_NAME

Flag Name	Required	Description
-d	Yes	Get the account with this DN (e.g. CN=user,DC=example,DC=com

## qq ad\_expand\_groups

This section explains how to use the qq ad\_expand\_groups command.

### Description

Get the SIDs of all the groups that the given SID is a member of (including nested groups).

### Usage

qq ad\_expand\_groups [-h] -s SID

Flag Name	Required	Description
- S	Yes	Get the SIDS of all the groups this SID belongs (including all nested groups).

## qq ad\_get\_advanced\_settings

This section explains how to use the qq ad\_get\_advanced\_settings command.

### Description

Get advanced Active Directory settings

#### Usage

qq ad\_get\_advanced\_settings [-h]

# qq ad\_gid\_to\_sids

This section explains how to use the qq ad\_gid\_to\_sids command.

### Description

Get SIDs from GID

### Usage

qq ad\_gid\_to\_sids [-h] -g GID

Flag Name	Required	Description
- g	Yes	Get the SIDs that corresponds to this GID

## qq ad\_join

This section explains how to use the qq ad\_join command.

### Description

Join an Active Directory Domain

### Usage

```
qq ad_join [-h] -d DOMAIN -u USERNAME [-p PASSWORD] [--domain-netbios DOMAIN_NETBIO
S] [-o OU] [--disable-search-trusted-domains] [--use-ad-posix-attributes] [--base-d
n BASE_DN]
```

Flag Name	Required	Description
-d	Yes	Fully-qualified name of Active Directory Domain
-u	Yes	Domain user to perform the operation, e.g., Administrator
- p	No	Domain password (insecure, visible via ps)
domain- netbios	No	NetBIOS name of the domain. By default, the first part of the domain name is used.
-0	No	Organizational Unit to join to
disable- search- trusted-do- mains	No	Disallows the cluster from using trusted domains for user information. Disabling may prevent the cluster from finding all relevant user and group membership data for authenticated users.
use-ad- posix-at- tributes	No	Use AD POSIX attributes.
base-dn	No	When using LDAP POSIX extensions, query using this base DN

## qq ad\_leave

This section explains how to use the qq ad\_leave command.

### Description

Leave an Active Directory Domain

### Usage

```
qq ad_leave [-h] -d DOMAIN [-u USERNAME] [-p PASSWORD]
```

Flag Name	Required	Description
-d	Yes	Fully-qualified name of Active Directory Domain
-u	No	Domain user to perform the operation, e.g., Administrator
- p	No	Domain password (insecure, visible via ps)

# qq ad\_list

This section explains how to use the qq ad\_list command.

### Description

Get Active Directory configuration and connection status

### Usage

qq ad\_list [-h]

## qq ad\_name\_to\_accounts

This section explains how to use the qq ad\_name\_to\_accounts command.

### Description

Get all account info for a sAMAccountName

### Usage

```
qq ad_name_to_accounts [-h] -n NAME
```

F	lag Name	Required	Description
-	·n	Yes	Get account info for this sAMAccountName

# qq ad\_poll

This section explains how to use the qq ad\_poll command.

### Description

Get details on a join or leave operation

### Usage

qq ad\_poll [-h]

## qq ad\_reconfigure

This section explains how to use the qq ad\_reconfigure command.

### Description

Reconfigure Active Directory POSIX Attributes

### Usage

qq ad\_reconfigure [-h] [--enable-search-trusted-domains | --disable-search-trusted-d
omains] [--enable-ad-posix-attributes | --disable-ad-posix-attributes] [--base-dn BA
SE\_DN]

Flag Name	Required	Description
enable- search- trusted-do- mains	No	Allows the cluster to search trusted domains for user information.
disable- search- trusted-do- mains	No	Disallows the cluster from using trusted domains for user information. Disabling may prevent the cluster from finding all relevant user and group membership data for authenticated users.
enable- ad-posix- attributes	No	Use AD POSIX attributes.
disable- ad-posix- attributes	No	Do not use AD POSIX attributes.
base-dn	No	When using AD POSIX extensions, query using this base DN

## qq ad\_set\_advanced\_settings

This section explains how to use the qq ad\_set\_advanced\_settings command.

### Description

Modify advanced Active Directory settings

#### Usage

qq ad\_set\_advanced\_settings [-h] [--signing {off,prefer,require}] [--sealing {off,pr
efer,require}] [--crypto {off,prefer,require}]

Flag Name	Required	Description
sign- ing	No	Configure DCERPC signing to be off, prefer signing, or require signing.  The default is to prefer signing.
seal- ing	No	Configure DCERPC sealing to be off, prefer sealing, or require sealing.  The default is to prefer sealing.
cryp-	No	Configure DCERPC to not use encryption, prefer AES encryption, or require AES encryption. The default is to prefer AES encryption.

## qq ad\_sid\_to\_account

This section explains how to use the qq ad\_sid\_to\_account command.

### Description

Get all account info for a SID

### Usage

qq ad\_sid\_to\_account [-h] -s SID

Flag Name	Required	Description
- S	Yes	Get the GID that corresponds to this SID

# qq ad\_sid\_to\_gid

This section explains how to use the qq ad\_sid\_to\_gid command.

### Description

Get GID from SID

### Usage

qq ad\_sid\_to\_gid [-h] -s SID

Flag Name	Required	Description
- S	Yes	Get the GID that corresponds to this SID

# qq ad\_sid\_to\_uid

This section explains how to use the qq ad\_sid\_to\_uid command.

### Description

Get UID from SID

### Usage

qq ad\_sid\_to\_uid [-h] -s SID

Flag Name	Required	Description
- S	Yes	Get the UID that corresponds to this SID

## qq ad\_sid\_to\_username

This section explains how to use the qq ad\_sid\_to\_username command.

### Description

Get AD username from SID

### Usage

qq ad\_sid\_to\_username [-h] -s SID

Flag Name	Required	Description
- S	Yes	Get the AD username that corresponds to this SID

# qq ad\_uid\_to\_sids

This section explains how to use the qq ad\_uid\_to\_sids command.

### Description

Get SIDs from UID

### Usage

qq ad\_uid\_to\_sids [-h] -u UID

Flag Name	Required	Description
- u	Yes	Get the SIDs that correspond to this UID

## qq ad\_username\_to\_sids

This section explains how to use the qq ad\_username\_to\_sids command.

### Description

Get SIDs from an AD username

### Usage

qq ad\_username\_to\_sids [-h] -u USERNAME

Flag Name	Required	Description
-u	Yes	Get the SIDs that correspond to this username

## qq add\_nodes

This section explains how to use the qq add\_nodes command.

### Description

Add unconfigured nodes to a Qumulo cluster

#### Usage

Flag Name	Required	Description
node- uuids	No	The UUIDs of the unconfigured nodes to add to the cluster. The system adds nodes to the cluster in the same order that you list them after this flag.
node-ips	No	The IP addresses of the unconfigured nodes to add to the cluster. The system adds nodes to the cluster in the same order that you list them after this flag.
all-uncon- figured	No	Add all network-connected, unconfigured nodes to the cluster. This flag does not allow specifying the order of the nodes and does not apply to cloud clusters.
target- stripe-con- fig	No	The stripe configuration to use
target- max-node- failures	No	The minimum node fault tolerance level for the resulting cluster configuration. Note: In certain cases, a lower node fault tolerance level can result in higher usable capacity
dry-run	No	Validate the node-add operation and calculate the resulting usable cluster capacity. When you use this flag, Qumulo Core does not add nodes or begin to change data protection configuration
batch	No	Begin the node-add operation without asking for confirmation.

## qq add\_object\_storage\_uris

This section explains how to use the qq add\_object\_storage\_uris command.

### Description

Add object storage URIs for configuring the cluster's data persistence. As the system provisions additional storage capacity on the cluster (which increases together with the clamp increase functionality), the file system recognizes and uses any new object storage URIs. Ensure that the new URIs point to empty S3 buckets or storage accounts and that the nodes on the cluster have sufficient permissions to perform LIST, PUT, GET, and DELETE operations on these buckets or accounts. Performing this action on a cluster not backed by objects results in an error.

#### Usage

```
qq add_object_storage_uris [-h] [--uris URIS [URIS ...]]
```

Flag Name	Required	Description
uris	No	The new URIs to add to the cluster.

# qq audit\_get\_cloudwatch\_config

This section explains how to use the qq audit\_get\_cloudwatch\_config command.

### Description

Get audit CloudWatch configuration

#### Usage

qq audit\_get\_cloudwatch\_config [-h]

# qq audit\_get\_cloudwatch\_status

This section explains how to use the qq audit\_get\_cloudwatch\_status command.

### Description

Get audit CloudWatch status

#### Usage

qq audit\_get\_cloudwatch\_status [-h]

# qq audit\_get\_syslog\_config

This section explains how to use the qq audit\_get\_syslog\_config command.

### Description

Get audit syslog server configuration

#### Usage

qq audit\_get\_syslog\_config [-h]

# qq audit\_get\_syslog\_status

This section explains how to use the qq audit\_get\_syslog\_status command.

### Description

Get audit syslog server status

#### Usage

qq audit\_get\_syslog\_status [-h]

# qq audit\_set\_cloudwatch\_config

This section explains how to use the qq audit\_set\_cloudwatch\_config command.

#### Description

Change audit CloudWatch configuration

#### Usage

qq audit\_set\_cloudwatch\_config [-h] [--enable | --disable] [-l LOG\_GROUP\_NAME] [-r R
EGION]

Flag Name	Required	Description	
enable	No	Enable audit log.	
disable	No	Disable audit log.	
-1	No	The group name in CloudWatch Logs to send logs to.	
-r	No	The AWS region to send logs to.	

## qq audit\_set\_syslog\_config

This section explains how to use the qq audit\_set\_syslog\_config command.

#### Description

Change audit syslog server configuration

#### Usage

```
qq audit_set_syslog_config [-h] [--enable | --disable] [--csv | --json] [--local-ena
ble | --local-disable] [--server-address SERVER_ADDRESS] [--server-port SERVER_PORT]
```

Flag Name	Required	Description
enable	No	Enable audit log.
disable	No	Disable audit log.
CSV	No	Output audit log as CSV.
json	No	Output audit log as JSON.
local-en- able	No	Enable per-node local audit log.
local-dis- able	No	Disable per-node local audit log.
server-ad- dress	No	The IP address, hostname, or fully qualified domain name of your remote syslog server.
server- port	No	The port to connect to on your remote syslog server.

# qq auth\_add\_group

This section explains how to use the qq auth\_add\_group command.

### Description

Add a new group

### Usage

```
qq auth_add_group [-h] --name NAME [--gid GID]
```

Flag Name	Required	Description
name	Yes	New group's name (windows style)
gid	No	Optional NFS gid

# qq auth\_add\_user

This section explains how to use the qq auth\_add\_user command.

### Description

Add a new user

#### Usage

Flag Name	Required	Description	
name	Yes	New user's name (windows style)	
primary-group	No	name or id of primary group (default is Users)	
uid	No	optional NFS uid	
home-directory	No	optional home directory	
-p	No	Set user password; reads password from terminal if omitted	

## qq auth\_assign\_role

This section explains how to use the <a href="qq">qq">qq">auth\_assign\_role</a> command.

For more information, see Managing Role-Based Access Control (RBAC) for Users and Groups in Qumulo Core in the Qumulo Administrator Guide.

#### Examples

#### To Add a Trustee to an Existing Qumulo Core Role

Run the qq auth\_assign\_role command and specify the role and trustee. For example:

```
qq auth_assign_role \
   --role Observers \
   --trustee Everyone
```

```
qq auth_assign_role \
   --role Administrators \
   --trustee uid:1000
```

#### Description

Assign a user to a role

### Usage

```
qq auth_assign_role [-h] -r ROLE -t TRUSTEE
```

Flag Name	Required	Description
-r	Yes	Name of the role to assign
-t	Yes	Assign the role to this trustee. e.g. Everyone, uid:1000, gid:1001, sid:S-1-5-2-3-4, or auth_id:500

# qq auth\_clear\_cache

This section explains how to use the qq auth\_clear\_cache command.

## Description

Clear all cached authorization information

### Usage

qq auth\_clear\_cache [-h]

## qq auth\_create\_access\_token

This section explains how to use the qq auth\_create\_access\_token command.

### Description

Create a long-lived access token

#### Usage

qq auth\_create\_access\_token [-h] [--self] [--expiration-time EXPIRATION\_TIME] [--fil
e PATH] [identifier]

### Flags

Flag Name	Required	Description	
self	No	Create an access key that targets the currently logged in user.	
expira- tion-time	No	The expiration time of the access token. After this time, the token will no longer be usable for authentication. For example, "Jan 20 2024", "1/20/2024", or "2024-01-20 12:00", with times interpreted in UTC timezone.	
file	No	File to store the access token credential. That file can be passed to thecredentials-store argument to authenticate using the created access token.	

## Positional Options

Option Name	Description
identifier	An auth_id, SID, or name optionally qualified with a domain prefix (e.g "local:name", "ad:name", "AD\name") or an ID type (e.g. "auth_id:513", "SID:S-1-1-0"). Groups are not supported for access tokens, must be a user.

## qq auth\_create\_role

This section explains how to use the qq auth\_create\_role command.

For more information, see Managing Role-Based Access Control (RBAC) for Users and Groups in Qumulo Core in the Qumulo Administrator Guide.

#### Examples

#### To Create a New Custom Qumulo Core Role

Run the qq auth\_create\_role command and specify the custom role name, description, and the file that lists the necessary privileges. For example:

```
qq auth_create_role \
    --role "SMB-Manager" \
    --description "Manage SMB Shares" \
    --privileges-file privileges.txt
```

#### To Create a Custom Qumulo Core Role with Multiple Privileges

For this operation, you must run the qq auth\_list\_privileges and qq auth\_create\_role commands.

1. Run the qq auth\_list\_privileges command and use grep to write only the privileges that contain the word WRITE to the privileges.txt file. For example:

```
qq auth_list_privileges | \
grep WRITE > privileges.txt
```

2. Run the qq auth\_create\_role command and specify the privileges.txt file to create a custom role. For example:

```
qq auth_create_role -r "Write-Everything" \
  -d "Can write, create, modify everything" \
  -p all-write-privileges.txt
```

#### Description

Create a custom role.

## Usage

qq auth\_create\_role [-h] -r ROLE [-d DESCRIPTION] [-p PRIVILEGES\_FILE]

Flag Name	Required	Description	
- r	Yes	Name of the role to create	
-d	No	Description of the new role	
- p	No	File with privileges for the role (see auth_list_privileges)	

# qq auth\_delete\_access\_token

This section explains how to use the qq auth\_delete\_access\_token command.

### Description

Delete the specified access token

#### Usage

```
qq auth_delete_access_token [-h] id
```

### **Positional Options**

Option Name	Description	
id	The unique ID of the access token to be deleted.	

# qq auth\_delete\_group

This section explains how to use the qq auth\_delete\_group command.

### Description

Delete a group

### Usage

```
qq auth_delete_group [-h] --id ID
```

Flag Name	Required	Description
id	Yes	Name or ID of group to delete

# qq auth\_delete\_role

This section explains how to use the qq auth\_delete\_role command.

## Description

Delete a custom role.

### Usage

qq auth\_delete\_role [-h] -r ROLE

Flag Name	Required	Description
-r	Yes	Name of the role to delete

# qq auth\_delete\_user

This section explains how to use the qq auth\_delete\_user command.

### Description

Delete a user

### Usage

```
qq auth_delete_user [-h] --id ID
```

Flag Name	Required	Description
id	Yes	Name or ID of user to delete

# qq auth\_expand\_identity

This section explains how to use the qq auth\_expand\_identity command.

### Description

Find equivalent identities and full group membership.

#### Usage

qq auth\_expand\_identity [-h] [--auth-id AUTH\_ID] [--uid UID] [--gid GID] [--sid SI
D] [--name NAME] [--domain {LOCAL,WORLD,POSIX\_USER,POSIX\_GROUP,ACTIVE\_DIRECTORY}]
[--json] [identifier]

Flag Name	Required	Description	
 auth- id	No	The canonical identifier used internally by QumuloFS.	
uid	No	An NFS UID	
gid	No	An NFS GID	
sid	No	An SMB SID	
 name	No	A local, AD, or LDAP name. AD names may be unqualified, qualified with NetBIOS name (e.g. DOMAIN\user), or a universal principal name (e.g. user@domain.example.com). LDAP names may be either login names, or distinguished names (e.g. CN=John Doe,OU=users,DC=example,DC=com). Names of cluster-local users and groups may qualified with the cluster name (e.g. cluster\user).	
do- main	No	Specify which auth_id domain is sought. This can be useful when looking up a duplicated name (e.g. if there is an AD user and cluster-local user with the same name) to specify which of the identifiers is meant.	
 json	No	Print result as JSON object.	

## Positional Options

Option Name	Description
identifier	A name or a SID, optionally qualified with a domain prefix (e.g "local:name", "world:Everyone", "ldap_user:name", "ldap_group:name", or "ad:name") or an ID type (e.g. "uid:1001", "gid:2001", "auth_id:513", "SID:S-1-1-0").

# qq auth\_find\_identity

This section explains how to use the qq auth\_find\_identity command.

### Description

Find all representations of an auth\_id.

#### Usage

qq auth\_find\_identity [-h] [--auth-id AUTH\_ID] [--uid UID] [--gid GID] [--sid SID]
[--name NAME] [--domain {LOCAL, WORLD, POSIX\_USER, POSIX\_GROUP, ACTIVE\_DIRECTORY}] [--js
on] [identifier]

Flag Name	Required	Description	
 auth- id	No	Find all external representations for an internal QumuloFS identifier.	
uid	No	Find the auth_id that will be used internally when a UID is written over NFS, and any other representations that would produce that auth_id.	
gid	No	Find the auth_id that will be used internally when a GID is written over NFS, and any other representations that would produce that auth_id.	
sid	No	Find the auth_id that will be used internally when a SID is written over SMB, and any other representations that would produce that auth_id.	
name	No	Find an auth_id that is uniquely identified by the given name. Names of Active Directory users and groups will produce the auth_id that is a representation of that principal's SID. AD names may be unqualified, qualified with NetBIOS name (e.g. DOMAIN\user), or a universal principal name (e.g. user@domain.example.com). Names of LDAP users or groups will produce the auth_id that is a representation of that principal's UID or GID. LDAP names may be either login names, or distinguished names (e.g. CN=John Doe,OU=users,DC=example,DC=com). Names of cluster-local users and groups will produce the auth_id assigned to that user or group	

do- main	No	Specify which auth_id domain is sought. This can be useful when looking up a duplicated name (e.g. if there is an AD user and cluster-local user with the same name) to specify which of the identifiers is meant.
 json	No	Print result as JSON object.

## Positional Options

Option Name	Description
identifier	A name or a SID, optionally qualified with a domain prefix (e.g "local:name", "world:Everyone", "ldap_user:name", "ldap_group:name", or "ad:name") or an ID type (e.g. "uid:1001", "gid:2001", "auth_id:513", "SID:S-1-1-0").

# qq auth\_get\_access\_token

This section explains how to use the qq auth\_get\_access\_token command.

### Description

Get metadata for the specified access token

#### Usage

qq auth\_get\_access\_token [-h] id

### **Positional Options**

Option Name	Description
id	The unique ID of the access token.

# qq auth\_get\_user\_defined\_mappings

This section explains how to use the <code>qq auth\_get\_user\_defined\_mappings</code> command.

#### Description

Get the configured set of AD/LDAP static user defined mappings.

#### Usage

qq auth\_get\_user\_defined\_mappings [-h]

# qq auth\_list\_access\_tokens

This section explains how to use the qq auth\_list\_access\_tokens command.

### Description

List metadata for all access tokens

#### Usage

```
qq auth_list_access_tokens [-h] [--json] [--user USER | --self]
```

Flag Name	Required	Description
 json	No	Output JSON instead of table.
user	No	Show access tokens belonging to a specific user. Use an auth_id, SID, or name optionally qualified with a domain prefix (e.g "local:name", "ad:name", "AD\name") or an ID type (e.g. "auth_id:513", "SID:S-1-1-0"). Groups are not supported for access tokens, must be a user.
 self	No	List only access keys that target yourself.

# qq auth\_list\_group

This section explains how to use the qq auth\_list\_group command.

### Description

List a group

### Usage

```
qq auth_list_group [-h] --id ID
```

Flag Name	Required	Description
id	Yes	Name or ID of group to list

# qq auth\_list\_groups

This section explains how to use the qq auth\_list\_groups command.

### Description

List all groups

### Usage

qq auth\_list\_groups [-h]

## qq auth\_list\_privileges

This section explains how to use the qq auth\_list\_privileges command.

For more information, see Managing Role-Based Access Control (RBAC) for Users and Groups in Qumulo Core in the Qumulo Administrator Guide.

To view all existing users and groups with role-based control for your Qumulo cluster, run the qq auth\_list\_roles command.

#### Examples

To View the Privileges for an Existing Qumulo Core Role

Run the qq auth\_list\_privileges command and use grep to filter only the privileges that contain the word SMB. For example:

```
qq auth_list_privileges | grep SMB
```

#### To Create a Custom Qumulo Core Role with Multiple Privileges

For this operation, you must run the qq auth\_list\_privileges and qq auth\_create\_role commands.

1. Run the qq auth\_list\_privileges command and use grep to write only the privileges that contain the word WRITE to the privileges.txt file. For example:

```
qq auth_list_privileges | \
grep WRITE > privileges.txt
```

2. Run the qq auth\_create\_role command and specify the privileges.txt file to create a custom role. For example:

```
qq auth_create_role -r "Write-Everything" \
  -d "Can write, create, modify everything" \
  -p all-write-privileges.txt
```

#### Description

List all privileges or privileges associated with a role.

## Usage

```
qq auth_list_privileges [-h] [-r ROLE] [-v] [--json]
```

Flag Name	Required	d Description	
- r	No	List privileges associated with a role.	
- V	No	Show granted and denied privileges withrole	
json	No	Print JSON representation of the privileges.	

# qq auth\_list\_role

This section explains how to use the qq auth\_list\_role command.

### Description

List a role.

### Usage

```
qq auth_list_role [-h] -r ROLE [--json]
```

Flag Name	Required	Description
- r	Yes	Name of the role to lookup
json	No	Print JSON representation of auth role.

# qq auth\_list\_roles

This section explains how to use the qq auth\_list\_roles command.

## Description

List all of the roles.

### Usage

```
qq auth_list_roles [-h] [--json]
```

Flag Name	Required	Description
json	No	Print JSON representation of auth roles.

# qq auth\_list\_user

This section explains how to use the qq auth\_list\_user command.

### Description

List a user

### Usage

```
qq auth_list_user [-h] --id ID
```

Flag Name	Required	Description
id	Yes	Name or ID of user to lookup

# qq auth\_list\_users

This section explains how to use the qq auth\_list\_users command.

## Description

List all users

### Usage

qq auth\_list\_users [-h]

# qq auth\_mod\_group

This section explains how to use the qq auth\_mod\_group command.

### Description

Modify a group

### Usage

```
qq auth_mod_group [-h] --id ID [--name NAME] [--gid GID]
```

Flag Name	Required	Description
id	Yes	Name or ID of group to modify
name	No	Change group's name
gid	No	Change the user's NFS gid (or specify "none" to remove)

## qq auth\_mod\_user

This section explains how to use the qq auth\_mod\_user command.

### Description

Modify a user

### Usage

qq auth\_mod\_user [-h] --id ID [--name NAME] [--primary-group PRIMARY\_GROUP] [--uid U
ID] [--add-group ADD\_GROUP] [--remove-group REMOVE\_GROUP] [--home-directory HOME\_DIR
ECTORY] [-p [PASSWORD]]

Flag Name	Required	Description
id	Yes	Name or ID of user to modify
name	No	Change user's name
primary- group	No	Change the user's primary group
uid	No	Change the user's NFS uid (or specify "none" to remove)
add-group	No	Add this user to a group
remove-group	No	Remove this user from a group
home-directo- ry	No	Change the user's home directory path (or specify "none" to remove)
- p	No	Change the user password

# qq auth\_modify\_access\_token

This section explains how to use the qq auth\_modify\_access\_token command.

### Description

Modify the specified access token

#### Usage

 $\label{thm:condition} $$ qq auth_modify_access_token $$ [-h] $$ [--expiration-time EXPIRATION_TIME] $$ [--enable] $$ [--disable] $$ id $$ $$$ 

### Flags

Flag Name	Required	Description
expira- tion-time	No	The expiration time of the access token. After this time, the token will no longer be usable for authentication. For example, "Jan 20 2024", "1/20/2024", or "2024-01-20 12:00", with times interpreted in UTC timezone.
enable	No	Enable the access token.
disable	No	Disable the access token. It can no longer be used to authenticate until it is enabled.

### Positional Options

Option Name	Description	
id	The unique ID of the access token to be modified.	

## qq auth\_modify\_role

This section explains how to use the <a href="qq">qq">qq">auth\_modify\_role</a> command.

For more information, see Managing Role-Based Access Control (RBAC) for Users and Groups in Qumulo Core in the Qumulo Administrator Guide.

#### Examples

To Add a Privilege to an Existing Custom Qumulo Core Role

Run the qq auth\_modify\_role command and specify the custom role name and the privilege to add. For example:

```
qq auth_modify_role \
  -r SMB-Manager \
  -G PRIVILEGE_SMB_SHARE_READ \
```

#### Description

Modify a custom role.

### Usage

```
qq auth_modify_role [-h] -r ROLE [-d DESCRIPTION] [-p PRIVILEGES_FILE] [-G PRIVILEGE
E [PRIVILEGE ...]]
```

Flag Name	Required	Description
-r	Yes	Name of the role to modify
-d	No	New description of the role
- p	No	Overwrite the role's privileges with output from auth_list_privileges, cannot be used with -G or -R
-G	No	Privilege to add to this role (may be repeated)
-R	No	Privilege to remove from this role (may be repeated)

# qq auth\_set\_password

This section explains how to use the qq auth\_set\_password command.

### Description

Set a user's password

### Usage

```
qq auth_set_password [-h] --id ID [-p PASSWORD]
```

Flag Name	Required	Description
id	Yes	Name or ID of user to modify
- p	No	The user's new password (insecure, visible via ps)

## qq auth\_set\_user\_defined\_mappings

This section explains how to use the qq auth\_set\_user\_defined\_mappings command.

#### Description

Replace the configured set of AD/LDAP static identity mappings.

#### Usage

```
qq auth_set_user_defined_mappings [-h] (--file FILE | --stdin)
```

Flag Name	Required	Description
file	No	JSON-encoded file containing mappings.
stdin	No	Read JSON-encoded mappings from stdin

### qq auth\_unassign\_role

This section explains how to use the qq auth\_unassign\_role command.

For more information, see Managing Role-Based Access Control (RBAC) for Users and Groups in Qumulo Core in the Qumulo Administrator Guide.

#### Examples

To Remove a Trustee from an Existing Qumulo Core Role

Run the qq auth\_unassign\_role command and specify the role and trustee. For example:

```
qq auth_unassign_role \
   --role observers \
   --trustee uid:2000
```

#### Description

Unassign a user from a role

#### Usage

```
qq auth_unassign_role [-h] -r ROLE -t TRUSTEE
```

Flag Name	Required	Description
-r	Yes	Name of the role to unassign
-t	Yes	Unassign the role from this trustee. e.g. Everyone, uid:1000, gid:1001, sid:S-1-5-2-3-4, or auth_id:500

### qq capacity\_clamp\_get

This section explains how to use the qq capacity\_clamp\_get command.

#### Description

Get the capacity clamp value in bytes, which can be set via PUT API or during cluster creation. When the cluster provisions more pstores, it will take this value into account. The cluster will not provision new pstores if the usable capacity would exceed this value.

#### Usage

qq capacity\_clamp\_get [-h]

### qq capacity\_clamp\_set

This section explains how to use the qq capacity\_clamp\_set command.

#### Description

Set the capacity clamp value in bytes. This limits the capacity that will be provisioned to be no more than the clamp value. A value below the current provisioned capacity has no effect. The actual stored value will be a pstore count that produces a byte count closest to the requested bytes without going over. If the change is applied successfully, quorum will be abandoned and the change will appear in the new quorum.

#### Usage

```
qq capacity_clamp_set [-h] (--clamp CLAMP | --disable)
```

Flag Name	Required	Description
clamp	No	The capacity clamp to set as a human readable byte count (e.g. "10TB").
disable	No	Remove the capacity clamp on the cluster.

# qq capacity\_history\_files\_get

This section explains how to use the qq capacity\_history\_files\_get command.

#### Description

Get historical largest file data.

#### Usage

qq capacity\_history\_files\_get [-h] --timestamp TIMESTAMP

Flag Name	Required	Description
timestamp	Yes	Time period to retrieve, in epoch seconds.

## qq capacity\_history\_get

This section explains how to use the qq capacity\_history\_get command.

#### Description

Get capacity history data.

#### Usage

```
qq capacity_history_get [-h] --begin-time BEGIN_TIME [--end-time END_TIME] [--interv al \{\text{hourly,daily,weekly}\}\]
```

Flag Name	Required	Description
begin- time	Yes	Lower bound on history returned, in epoch seconds.
end- time	No	Upper bound on history returned, in epoch seconds. Defaults to the most recent period for which data is available.
inter- val	No	The interval at which to sample

## qq change\_password

This section explains how to use the qq change\_password command.

### Description

Change your password

#### Usage

qq change\_password [-h] [-o OLD\_PASSWORD] [-p NEW\_PASSWORD]

Flag Name	Required	Description
- 0	No	Your old password (insecure, visible via ps)
- p	No	Your new password (insecure, visible via ps)

## qq checksumming\_get\_status

This section explains how to use the qq checksumming\_get\_status command.

#### Description

Get the checksumming status of the cluster.

#### Usage

qq checksumming\_get\_status [-h]

# qq cluster\_conf

This section explains how to use the qq cluster\_conf command.

### Description

Get the cluster config

### Usage

qq cluster\_conf [-h]

### qq cluster\_create

This section explains how to use the qq cluster\_create command.

#### **A** Important

To ensure that the Qumulo Core Web UI displays the nodes in your cluster in the same order that they are racked, enter the node UUIDs in the same order when you run the qq cluster\_create command.

#### Description

Creates a Qumulo Cluster

#### Usage

```
qq cluster_create [-h] --cluster-name CLUSTER_NAME [--admin-password ADMIN_PASSWOR
D] [--blocks-per-stripe BLOCKS_PER_STRIPE] [--max-drive-failures MAX_DRIVE_FAILURE
S] [--max-node-failures MAX_NODE_FAILURES] [--accept-eula] [--reject-eula]
        [--host-instance-id HOST_INSTANCE_ID] (--node-uuids NODE_UUIDS [NODE_UUIDS ...]
| --node-ips NODE_IPS [NODE_IPS ...] | --all-unconfigured)
```

Flag Name	Required	Description
cluster-name	Yes	Cluster Name
admin-password	No	Administrator Password
blocks-per-stripe	No	Erasure coding stripe width
max-drive-failures	No	Maximum allowable drive failures
max-node-failures	No	Maximum allowable node failures
accept-eula	No	Accept the EULA
reject-eula	No	Reject the EULA
host-instance-id	No	Instance ID of node receiving this request. Cloud only.
node-uuids	No	Cluster node UUIDs

node-ips	No	Cluster node IPv4 addresses
all-unconfigured	No	Use all discoverable unconfigured nodes to make cluster

## qq cluster\_slot\_set\_config

This section explains how to use the qq cluster\_slot\_set\_config command.

#### Description

Set the attributes for the given cluster slot. Currently only led\_pattern may be set.

#### Usage

```
qq cluster_slot_set_config [-h] --slot SLOT [--locate | --no-locate]
```

Flag Name	Required	Description
slot	Yes	Slot ID
locate	No	Turn on the slot's locate LED.
no-locate	No	Turn off the slot's locate LED.

# qq cluster\_slots

This section explains how to use the qq cluster\_slots command.

### Description

Get the cluster disk slots status

### Usage

```
qq cluster_slots [-h] [--slot SLOT]
```

Flag Name	Required	Description
slot	No	Slot ID

### qq create\_object\_backed\_cluster

This section explains how to use the qq create\_object\_backed\_cluster command.

#### Description

Creates a Qumulo Object Backed Cluster

#### Usage

Flag Name	Required	Description
clus- ter-name	Yes	Cluster Name
admin- password	Yes	Administrator Password
host- instance- id	Yes	Instance ID of node receiving this request.
ob- ject- storage- uris	Yes	Object storage URIs, e.g. https://bucket.s3.region.amazonaws.com/
us- able-ca- pacity- clamp	Yes	Set usable capacity limit for the cluster, in human-readable format (e.g. 5TB).

prod- uct-type	Yes	The product type of cluster to create. Valid options for AWS clusters are: ACTIVE_WITH_STANDARD_STORAGE, ACTIVE_WITH_INTELLIGENT_STORAGE, ARCHIVE_WITH_IA_STORAGE, ARCHIVE_WITH_GIR_STORAGE. Valid options for Azure clusters are: ACTIVE_WITH_HOT_STORAGE, ARCHIVE_WITH_COLD_STORAGE.
node- ips-and- fault-do- mains	No	Cluster node ips and fault domains. Parsed as comma delimited tuples , , To create a non-fault domain aware cluster, provide None in place of the fault domain ids ,None ,None ,None
ac- cept-eu- la	Yes	Accept the EULA.
azure- key- vault- uri	No	The URI of the key vault used to access blobs on Azure.

## qq current\_activity\_get

This section explains how to use the qq current\_activity\_get command.

#### Description

Get the current sampled IOP and throughput rates

#### Usage

qq current\_activity\_get [-h] [-t {file-iops-read,file-iops-write,metadata-iops-rea
d,metadata-iops-write,file-throughput-read,file-throughput-write}]

Flag Name	Required	Description
-t	No	The specific type of throughput to get

## qq dns\_clear\_cache

This section explains how to use the qq dns\_clear\_cache command.

#### Description

Clear the local DNS cache

#### Usage

```
qq dns_clear_cache [-h] [--skip-reverse-cache | --skip-forward-cache]
```

Flag Name	Required	Description
skip-reverse- cache	No	When this flag is set, the reverse lookup cache is not cleared.
skip-forward- cache	No	When this flag is set, the forward lookup cache is not cleared.

# qq dns\_get\_lookup\_overrides

This section explains how to use the qq dns\_get\_lookup\_overrides command.

#### Description

List the configured set of DNS lookup overrides.

#### Usage

qq dns\_get\_lookup\_overrides [-h]

## qq dns\_get\_system\_config

This section explains how to use the qq dns\_get\_system\_config command.

#### Description

Get the system's DNS configuration.

#### Usage

qq dns\_get\_system\_config [-h]

### qq dns\_modify\_system\_config

This section explains how to use the qq dns\_modify\_system\_config command.

#### Description

Modify the system's DNS configuration.

#### Usage

```
qq dns_modify_system_config [-h] [--dns-servers <address-or-range> [<address-or-range> ...] | --clear-dns-servers] [--dns-search-domains <search-domain> [<search-domain> ...] | --clear-dns-search-domains]
```

Flag Name	Required	Description
dns- servers	No	List of DNS Server IP addresses. Can be a single address or multiple comma separated addresses. eg. 10.1.1.10 or 10.1.1.10,10.1.1.15
clear- dns- servers	No	Clear the DNS servers
dns- search- domains	No	List of DNS Search Domains to replace the current domains. Can be a single domain or multiple comma separated domains. eg. my.domain.com or my.domain.com,your.domain.com
clear- dns- search- domains	No	Clear the DNS search domains

# qq dns\_resolve\_hostnames

This section explains how to use the qq dns\_resolve\_hostnames command.

#### Description

Resolve hostnames to IP addresses

#### Usage

```
qq dns_resolve_hostnames [-h] --hosts HOSTS [HOSTS ...]
```

Flag Name	Required	Description
hosts	Yes	Hostnames to resolve

# qq dns\_resolve\_ips

This section explains how to use the qq dns\_resolve\_ips command.

### Description

Resolve IP addresses to hostnames

#### Usage

```
qq dns_resolve_ips [-h] --ips IPS [IPS ...]
```

Flag Name	Required	Description
ips	Yes	IP addresses to resolve

## qq dns\_set\_lookup\_overrides

This section explains how to use the qq dns\_set\_lookup\_overrides command.

#### Description

Replace the configured set of DNS lookup overrides.

#### Usage

```
qq dns_set_lookup_overrides [-h] (--file FILE | --stdin)
```

Flag Name	Required	Description
file	No	JSON-encoded file containing overrides.
stdin	No	Read JSON-encoded overrides from stdin

## qq encryption\_get\_key\_store

This section explains how to use the qq encryption\_get\_key\_store command.

#### Description

Get the active at-rest encryption configuration.

#### Usage

qq encryption\_get\_key\_store [-h]

## qq encryption\_get\_status

This section explains how to use the qq encryption\_get\_status command.

#### Description

Get the status of at-rest encryption.

#### Usage

qq encryption\_get\_status [-h]

## qq encryption\_set\_key\_store

This section explains how to use the qq encryption\_set\_key\_store command.

#### Description

Set the active at-rest encryption configuration.

#### Usage

qq encryption\_set\_key\_store [-h] {kms,local} ...

# qq floating\_ip\_allocation

This section explains how to use the qq floating\_ip\_allocation command.

#### Description

Get cluster-wide floating IP allocation

#### Usage

qq floating\_ip\_allocation [-h]

## qq fs\_acl\_explain\_chmod

This section explains how to use the qq fs\_acl\_explain\_chmod command.

#### Description

Explain how setting a POSIX mode would affect a file's ACL

#### Usage

```
qq fs_acl_explain_chmod [-h] (--path PATH | --id ID) --mode MODE [-v] [--json]
```

Flag Name	Required	Description
path	No	File or directory path
id	No	File or directory ID
mode	Yes	POSIX mode to hypothetically apply (e.g., 0744, rwxrr)
- V	No	Print more information in output
json	No	Print JSON representation of POSIX mode derivation

## qq fs\_acl\_explain\_posix\_mode

This section explains how to use the qq fs\_acl\_explain\_posix\_mode command.

#### Description

Explain the derivation of POSIX mode from a file's ACL

#### Usage

```
qq fs_acl_explain_posix_mode [-h] (--path PATH | --id ID) [--json]
```

Flag Name	Required	Description
path	No	File or directory path
id	No	File or directory ID
json	No	Print JSON representation of POSIX mode derivation

## qq fs\_acl\_explain\_rights

This section explains how to use the qq fs\_acl\_explain\_rights command.

#### Description

Explain how rights are granted to a user for a file.

#### Usage

```
qq fs_acl_explain_rights [-h] (--path PATH \mid --id ID) -u ID [ID ...] [-g [ID [ID ...]]] [--no-expand] [-v] [--json]
```

Flag Name	Required	Description
 path	No	File or directory path
id	No	File or directory ID
-u	Yes	User for whom to explain rights. e.g. Alice, uid:1000, sid:S-1-5-2-3-4, or auth_id:500. If multiple are given, they will be considered equivalent for the purpose of the explanation.
- g	No	Groups that the user should be considered a member of for the purpose of the explanation.
no- expand	No	Don't expand the given user and group IDs. This can be useful if you want to test a hypothetical (e.g 'what happens if I add/remove a user to some group?')
- V	No	Prints the credential that will be used for the explanation, after it has been expanded.
 json	No	Print JSON representation of rights explanation.

## qq fs\_copy

This section explains how to use the qq fs\_copy command.

#### Description

Server-side copy a file.

#### Usage

```
qq fs_copy [-h] [--source-snapshot SOURCE_SNAPSHOT] [--overwrite] [--quiet] [--no-at tributes] [--no-named-streams] source target
```

### Flags

Flag Name	Required	Description
source-snapshot	No	Snapshot ID to copy from
overwrite	No	Overwrite an existing target file
quiet	No	Do not show progress bar
no-attributes	No	Do not copy file attributes and ACLs in addition to data
no-named-streams	No	Do not copy named streams

### Positional Options

Option Name	Description
source	Source file absolute path
target	Target file absolute path

## qq fs\_create\_dir

This section explains how to use the qq fs\_create\_dir command.

### Description

Create a new directory

#### Usage

```
qq fs_create_dir [-h] (--path PATH | --id ID) --name NAME
```

Flag Name	Required	Description
path	No	Parent directory path
id	No	Parent directory ID
name	Yes	New directory name

## qq fs\_create\_file

This section explains how to use the qq fs\_create\_file command.

#### Description

Create a new file

#### Usage

```
qq fs_create_file [-h] (--path PATH | --id ID) --name NAME
```

Flag Name	Required	Description
path	No	Parent directory path
id	No	Parent directory ID
name	Yes	New file name

# qq fs\_create\_link

This section explains how to use the qq fs\_create\_link command.

#### Description

Create a new link

#### Usage

```
qq fs_create_link [-h] (--path PATH | --id ID) --target TARGET --name NAME
```

Flag Name	Required	Description
path	No	Parent directory path
id	No	Parent directory ID
target	Yes	Link target
name	Yes	New link name

## qq fs\_create\_symlink

This section explains how to use the qq fs\_create\_symlink command.

#### Description

Create a new symbolic link

#### Usage

qq fs\_create\_symlink [-h] (--path PATH | --id ID) --target TARGET [--target-type {F S\_FILE\_TYPE\_UNKNOWN,FS\_FILE\_TYPE\_FILE,FS\_FILE\_TYPE\_DIRECTORY}] --name NAME

Flag Name	Required	Description
 path	No	Parent directory path
id	No	Parent directory ID
tar- get	Yes	Link target (relative path recommended)
tar- get- type	No	Symlink target's type. If this is unspecified or FS_FILE_TYPE_UNKNOWN, the effect is the same as using 'ln -s' on a Unix NFS client. If this is FS_FILE_TYPE_FILE or FS_FILE_TYPE_DIRECTORY, the effect is the same as using 'mklink' or 'mklink /D' on a Windows SMB client.
 name	Yes	New symlink name

## qq fs\_create\_unix\_file

This section explains how to use the qq fs\_create\_unix\_file command.

#### Description

Create a new pipe, character device, block device or socket

#### Usage

```
qq fs_create_unix_file [-h] (--path PATH | --id ID) [--major-minor-numbers MAJOR_MIN OR_NUMBERS] --name NAME --type TYPE
```

Flag Name	Required	Description
path	No	Parent directory path
id	No	Parent directory ID
major-minor-numbers	No	Major and minor numbers
name	Yes	New file name
type	Yes	type of UNIX file to create

# qq fs\_delete

This section explains how to use the qq fs\_delete command.

### Description

Delete a file system object

### Usage

```
qq fs_delete [-h] (--path PATH | --id ID)
```

Flag Name	Required	Description
path	No	File system object path
id	No	File system object ID

# qq fs\_delete\_user\_metadata

This section explains how to use the qq fs\_delete\_user\_metadata command.

### Description

Delete the user metadata for a file by using the specified metadata key

### Usage

```
qq fs_delete_user_metadata [-h] (--path PATH | --id ID) [--s3] --key KEY
```

Flag Name	Required	Description
 path	No	File path
id	No	File ID
s3	No	In Qumulo Core, there are two types of user metadata, generic and S3. By default, qq CLI commands manipulate generic metadata. When you use thes3 flag, Qumulo Core makes user metadata visible to the S3 protocol as object metadata.
 key	Yes	Metadata key

## qq fs\_file\_get\_attr

This section explains how to use the qq fs\_file\_get\_attr command.
For more information, see How File Locks Work in Qumulo Core in the Qumulo Administrator Guide.

#### Examples

#### O Note

The following operations require Read ACL permissions for the file.

#### To Retrieve the Lock Status for a File

Run the fs\_file\_get\_attr command, specify the path to the file, and use the --retrieve-file-lock flag. For example:

```
qq fs_file_get_attr \
    --path /path-to/my-file \
    --retrieve-file-lock
```

The following is example output.

```
{
    "legal_hold": true,
    "retention_period": "2024-09-15T23:41:40Z"
}
```

### Description

Get file attributes

### Usage

```
qq fs_file_get_attr [-h] (--path PATH | --id ID) [--snapshot SNAPSHOT] [--retrieve-f
ile-lock] [--stream-id STREAM_ID | --stream-name STREAM_NAME]
```

Flag Name	Required
-----------	----------

path	No	File path
id	No	File ID
snapshot	No	Snapshot ID to read from
retrieve-file- lock	No	Retrieve the file lock for this file. Optional because it requires READ_ACL
stream-id	No	Stream ID
stream-name	No	Stream name

## qq fs\_file\_modify\_lock

This section explains how to use the qq fs\_file\_modify\_lock command.

For more information, see How File Locks Work in Qumulo Core in the Qumulo Administrator Guide.

### Examples

#### Note

The following operations require Write ACL permissions for the file and a role with the FS FILE LOCK WRITE role-based access control (RBAC) privilege.

#### To Enable Locking for a File

Run the fs\_file\_modify\_lock command, specify the path to the file, and use the --enable-legal-hold flag. For example:

```
qq fs_file_modify_lock \
   --path /path-to/my-file \
   --enable-legal-hold
```

#### To Disable Locking for a File

Run the fs\_file\_modify\_lock command, specify the path to the file, and use the --disable-legal hold flag. For example:

```
qq fs_file_modify_lock \
   --path /path-to/my-file \
   --disable-legal-hold
```

#### To Set a Retention Period for a File

Run the fs\_file\_modify\_lock command, specify the path to the file, and then specify a timestamp in the ISO 8601 UTC format followed by Z. For example:

```
qq fs_file_modify_lock \
   --path /path-to/my-file \
   --retention-period 2024-08-14T23:37:48Z
```

Alternatively, you can set the retention period in years or days. For example:

```
qq fs_file_modify_lock \
  --path /path-to/my-file \
  --days 3
```

### Description

Modify a retention period or legal hold on a file.

### Usage

```
qq fs_file_modify_lock [-h] (--path PATH | --id ID) [--enable-legal-hold | --disabl
e-legal-hold] [--retention-period RETENTION_PERIOD | --retention-days RETENTION_DAY
S | --retention-years RETENTION_YEARS]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
enable-legal- hold	No	Set a legal hold on the file.
disable-le- gal-hold	No	Unset a legal hold on the file.
retention-pe- riod	No	Set the retention period for a file lock.
retention- days	No	Set the retention period for a file lock to the specified number of days from now.
retention- years	No	Set the retention period for a file lock to the specified number of years from now.

# qq fs\_file\_samples

This section explains how to use the qq fs\_file\_samples command.

### Description

Get a number of sample files from the file system

### Usage

```
qq fs_file_samples [-h] (--path PATH | --id ID) --count COUNT [--sample-by {capacit y,data,file,named_streams}]
```

Flag Name	Required	Description
 path	No	Query root path
id	No	Query root ID
sam- ple-by	No	Weight the sampling by the value specified: capacity (total bytes used for data and metadata), data (total bytes used for data only), file (file count), named_streams (named stream count)

## qq fs\_file\_set\_attr

This section explains how to use the qq fs\_file\_set\_attr command.

### Description

Set file attributes

### Usage

```
qq fs_file_set_attr [-h] (--path PATH | --id ID) [--stream-id STREAM_ID | --stream-n
ame STREAM_NAME] [--mode MODE] [--size SIZE] [--creation-time CREATION_TIME] [--acce
ss-time ACCESS_TIME] [--modification-time MODIFICATION_TIME]
        [--change-time CHANGE_TIME] [--owner OWNER | --owner-local OWNER_LOCAL | --owner
r-sid OWNER_SID | --owner-uid OWNER_UID] [--group GROUP | --group-local GROUP_LOCAL
| --group-sid GROUP_SID | --group-gid GROUP_GID]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
stream-id	No	Stream ID
stream-name	No	Stream name
mode	No	Posix-style file mode (octal)
size	No	File size
creation-time	No	File creation time (as RFC 3339 string)
access-time	No	File access time (as RFC 3339 string)
modification-time	No	File modification time (as RFC 3339 string)
change-time	No	File change time (as RFC 3339 string)
owner	No	File owner as auth_id
owner-local	No	File owner as local user name

owner-sid	No	File owner as SID
owner-uid	No	File owner as NFS UID
	No	File group as puth id
group	No	File group as auth_id
group-local	No	File group as local group name
group-sid	No	File group as SID
group-gid	No	File group as NFS GID

## qq fs\_file\_set\_smb\_attrs

This section explains how to use the qq fs\_file\_set\_smb\_attrs command.

### Description

Change SMB extended attributes on the file

### Usage

```
qq fs_file_set_smb_attrs [-h] (--path PATH | --id ID) [--archive BOOL] [--compresse
d BOOL] [--hidden BOOL] [--not-content-indexed BOOL] [--read-only BOOL] [--system BO
OL] [--temporary BOOL] [--offline BOOL]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
archive	No	Set ARCHIVE to a boolean-like value (e.g. true, false, yes, no, 1, 0).
compressed	No	Set COMPRESSED to a boolean-like value (e.g. true, false, yes, no, 1, 0).
hidden	No	Set HIDDEN to a boolean-like value (e.g. true, false, yes, no, 1, 0).
not-content- indexed	No	Set NOT_CONTENT_INDEXED to a boolean-like value (e.g. true, false, yes, no, 1, 0).
read-only	No	Set READ_ONLY to a boolean-like value (e.g. true, false, yes, no, 1, 0).
system	No	Set SYSTEM to a boolean-like value (e.g. true, false, yes, no, 1, 0).
temporary	No	Set TEMPORARY to a boolean-like value (e.g. true, false, yes, no, 1, 0).
offline	No	Set OFFLINE to a boolean-like value (e.g. true, false, yes, no, 1, 0).

# qq fs\_get\_acl

This section explains how to use the qq fs\_get\_acl command.

### Description

Get file ACL

### Usage

```
qq fs_get_acl [-h] (--path PATH | --id ID) [--snapshot SNAPSHOT] [--json]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
snapshot	No	Snapshot ID to read from
json	No	Print raw response JSON

# qq fs\_get\_atime\_settings

This section explains how to use the qq fs\_get\_atime\_settings command.

### Description

Get access time (atime) settings.

### Usage

qq fs\_get\_atime\_settings [-h]

# qq fs\_get\_notify\_settings

This section explains how to use the qq fs\_get\_notify\_settings command.

### Description

Get FS notify settings.

### Usage

qq fs\_get\_notify\_settings [-h]

# qq fs\_get\_permissions\_settings

This section explains how to use the qq fs\_get\_permissions\_settings command.

### Description

Get permissions settings

### Usage

qq fs\_get\_permissions\_settings [-h]

# qq fs\_get\_stats

This section explains how to use the qq fs\_get\_stats command.

### Description

Get file system statistics

### Usage

qq fs\_get\_stats [-h]

# qq fs\_get\_user\_metadata

This section explains how to use the qq fs\_get\_user\_metadata command.

### Description

Retrieve a user metadata value for a file by using the specified metadata key

### Usage

```
qq fs_get_user_metadata [-h] (--path PATH | --id ID) [--s3] --key KEY [--snapshot SN APSHOT] [--hex | --base64]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
s3	No	In Qumulo Core, there are two types of user metadata, generic and S3. By default, qq CLI commands manipulate generic metadata. When you use thes3 flag, Qumulo Core makes user metadata visible to the S3 protocol as object metadata.
key	Yes	Metadata key
snap- shot	No	Snapshot ID to read user metadata from
hex	No	Print binary values as hex
 base64	No	Print binary values as base64

# qq fs\_list\_lock\_waiters\_by\_client

This section explains how to use the qq fs\_list\_lock\_waiters\_by\_client command.

### Description

List waiting lock requests for a particular client machine

### Usage

```
qq fs_list_lock_waiters_by_client [-h] --protocol {nlm} --lock-type {byte-range} [-name NAME] [--address ADDRESS]
```

Flag Name	Required	Description
protocol	Yes	The protocol whose lock waiters should be listed
lock-type	Yes	The type of lock whose waiters should be listed
name	No	Client hostname
address	No	Client IP address

# qq fs\_list\_lock\_waiters\_by\_file

This section explains how to use the qq fs\_list\_lock\_waiters\_by\_file command.

### Description

List waiting lock requests for a particular file

### Usage

```
qq fs_list_lock_waiters_by_file [-h] (--path PATH | --id ID) --protocol {nlm} --loc
k-type {byte-range} [--snapshot SNAPSHOT]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
protocol	Yes	The protocol whose lock waiters should be listed
lock-type	Yes	The type of lock whose waiters should be listed
snapshot	No	Snapshot id of the specified file.

# qq fs\_list\_locks

This section explains how to use the qq fs\_list\_locks command.

### Description

List file locks held by clients.

### Usage

```
qq fs_list_locks [-h] --protocol {nfs4,smb,nlm} --lock-type {share-mode,byte-range}
[--path PATH | --id ID | --ip IP | --hostname HOSTNAME] [--snapshot SNAPSHOT] [--no-resolve] [--json] [--sort {file,client}]
```

Flag Name	Required	Description
proto- col	Yes	The protocol whose locks should be listed
lock- type	Yes	The type of lock to list.
path	No	File path
id	No	File ID
ip	No	List all locks held by the client with this IP address.
host- name	No	List all locks held by the client with this hostname. Only available for NLM locks.
snap- shot	No	When a file is specified, list locks held on a specific snapshot.
no-re- solve	No	Don't execute additional API calls to obtain file paths and client host- names for results.
json	No	Print a raw JSON response.
sort	No	Sort results by this attribute.

# qq fs\_list\_named\_streams

This section explains how to use the qq fs\_list\_named\_streams command.

### Description

List all named streams on file or directory

### Usage

```
qq fs_list_named_streams [-h] (--path PATH | --id ID) [--snapshot SNAPSHOT]
```

Flag Name	Required	Description
path	No	File or directory path
id	No	File or directory ID
snapshot	No	Snapshot ID to read from

# qq fs\_list\_user\_metadata

This section explains how to use the qq fs\_list\_user\_metadata command.

### Description

Retrieve user metadata of the specified type for a file

### Usage

```
qq fs_list_user_metadata [-h] (--path PATH \mid --id ID) [--s3] [--json] [--snapshot SN APSHOT] [--hex \mid --base64]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
s3	No	In Qumulo Core, there are two types of user metadata, generic and S3. By default, qq CLI commands manipulate generic metadata. When you use thes3 flag, Qumulo Core makes user metadata visible to the S3 protocol as object metadata.
json	No	Output the response in json. Without this option, keys and values will only show the first 50 characters.
snap- shot	No	Snapshot ID to read user metadata from
hex	No	Print binary values as hex
 base64	No	Print binary values as base64

## qq fs\_modify\_acl

This section explains how to use the qq fs\_modify\_acl command.

### Examples

The following examples show how to run the qq fs\_modify\_acl command to work with access control lists (ACLs).

#### **A** Important

Before deploying permissions changes in a production environment, we strongly recommend performing a dry run on a test directory.

#### To Create a New ACL

Run the qq fs\_modify\_acl command and use the --path flag to specify

the path for the ACL. For the <a href="add\_entry">add\_entry</a> subcommand:

- · Use the -t flag to specify a trustee.
- · Use the -y flag to specify Allowed or Denied.
- Use the -r flag to specify the rights.

```
☑ Tip
For full control, specify - r All.
```

Use the -f flag to specify ACL flags.

#### • Note

To ensure that the ACL applies to newly created files automatically, specify "Object inherit" "Container inherit".

#### For example:

```
qq fs_modify_acl --path /my_path \
  add_entry -t "MYDOMAIN\\my_username" \
  -y Allowed \
  -r "Execute/Traverse" "Read" \
  -f "Object inherit" "Container inherit"
```

```
qq fs_modify_acl --path /my_path \
  add_entry -t "uid:5005" \
  -y Allowed \
  -r "Execute/Traverse" "Read" \
  -f "Object inherit" "Container inherit"
```

```
qq fs_modify_acl --path /my_path \
  add_entry -t "gid:5005" \
  -y Allowed \
  -r "Execute/Traverse" "Read" \
  -f "Object inherit" "Container inherit"
```

#### To Modify an Existing ACL

Run the qq fs\_modify\_acl command and use the --path flag to specify the path for the ACL. For the modify entry subcommand:

- Use the --old-trustee flag to specify the existing trustee.
- Use the --new-rights flag to specify new rights to assign to the trustee.

For example:

```
qq fs_modify_acl --path /my_path \
  modify_entry --old-trustee Everyone \
  --new-rights=Read
```

```
qq fs_modify_acl --path=/my_path \
  modify_entry --old-trustee Everyone \
  --new-rights=All
```

#### To Remove an Existing ACL or Its Elements

Run the qq fs\_modify\_acl command and use the --path flag to specify the path for the ACL.

• To remove a single trustee from an ACL, for the <a href="remove\_entry">remove\_entry</a> subcommand use the <a href="trustee">trustee</a> flag to specify the trustee to remove. For example:

```
qq fs_modify_acl --path /my_path \
  remove_entry --trustee="DOMAIN\\myusername"
```

To remove a specific position from an ACL, for the remove\_entry subcommand use the
 -p flag to specify the position number. For example:

```
qq fs_modify_acl --path /my_path \
  remove_entry -p 42
```

• To remove all ACLs, for the <a href="remove\_entry">remove\_entry</a> subcommand use the <a href="remove\_entry">-a</a> flag.

#### To Recursively Add a New ACL with Multithreading

For this operation, you must run the qq fs\_walk\_tree and qq fs\_modify\_acl commands.

#### O Note

For very large directories, we recommend running the following command in a screen session.

- 1. Ensure that the jq tool is installed on your system.
- 2. Run the qq fs\_walk\_tree command and use the --path flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to the jq tool. To modify the ACL for each path, pipe the command to xargs which in turn runs the qq fs\_set\_acl command on each path. For example:

```
qq fs_walk_tree --path /my_path | \
   jq -r '.tree_nodes[].path' | \
    xargs -d '\n' -I % -n1 -P 4 \
     qq fs_modify_acl --path '%' \
     add_entry -t "DOMAIN\my_username" \
     -y Allowed \
     -r "Read" "Execute/Traverse" \
     -f "Object inherit" "Container inherit"
```

#### To Recursively Apply a Permissions Template

For this operation, you must run the qq fs walk tree and qq fs modify acl commands.

- 1. Ensure that the jq tool is installed on your system.
- 2. Use a new or existing file with the necessary permissions to capture the ACL and save it in JSON format by using the qq fs\_get\_acl command. For example:

```
qq fs_get_acl --path /path_to_acl_source \
    --json >/history/new_permissions.json
```

3. To apply the captured ACL, run the qq fs\_walk\_tree command and use the --path flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to the jq tool. To modify the ACL for each path, pipe the command to xargs which in turn runs the qq fs\_set\_acl command on each path.

```
qq fs_walk_tree --path /my_target_path | \
   jq -r '.tree_nodes[].path' | \
   xargs -I % -n1 -P 4 \
   qq fs_set_acl --path '%' \
   --file /history/new_permissions.json >> &>/dev/null
```

#### To Recursively Modify SMB Attributes

For this operation, you must run the qq fs\_walk\_tree and qq fs\_modify\_acl commands.

Run the qq fs\_walk\_tree command and use the --path flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to the jq tool. To modify the ACL for each path, pipe the command to xargs which in turn runs the qq fs\_set\_acl command on each path.

```
qq fs_walk_tree --path /my_path | \
   jq -r '.tree_nodes[].path' | \
    xargs -I % -n1 -P 4 \
     qq fs_file_set_smb_attrs --path % \
     --hidden false
```

### Description

Modify file ACL

### Usage

```
qq fs_modify_acl [-h] (--path PATH | --id ID) [--json] {add_entry,remove_entry,modif
y_entry,set_posix_special_permissions} ...
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
json	No	Print the raw JSON response.

## qq fs\_notify

This section explains how to use the qq fs notify command.

### Description

Notify on changes to files and directories under the specified directory. To cancel the listener, send a SIGQUIT signal (press CTRL+D).

### Usage

```
qq fs_notify [-h] (--path PATH | --id ID) [--recursive]
        [--filter {child_file_added,child_dir_added,child_file_removed,child_dir_remove
d,child_file_moved_from,child_file_moved_to,child_dir_moved_from,child_dir_moved_t
o,child_btime_changed,child_mtime_changed,child_atime_changed,child_size_changed,chi
ld_extra_attrs_changed,child_acl_changed,child_owner_changed,child_group_changed,chi
ld_data_written,child_stream_added,child_stream_removed,child_stream_moved_from,child
d_stream_moved_to,child_stream_size_changed,child_stream_data_written,self_removed}
[{child_file_added,child_dir_added,child_file_removed,child_dir_removed,child_file_m
oved_from,child_file_moved_to,child_dir_moved_from,child_dir_moved_to,child_btime_ch
anged,child_mtime_changed,child_atime_changed,child_size_changed,child_attream_attrs_c
hanged,child_acl_changed,child_owner_changed,child_group_changed,child_data_writte
n,child_stream_added,child_stream_removed,child_stream_moved_from,child_stream_moved
d_to,child_stream_size_changed,child_stream_data_written,self_removed} ...]]
        [--file FILE] [--json]
```

Flag Name	Required	Description
path	No	Directory path
id	No	Directory ID
recursive	No	Listen for changes recursively.
filter	No	Specific notify types to filter to.
file	No	File to receive data
json	No	Output results as a json stream.

# qq fs\_punch\_hole

This section explains how to use the qq fs\_punch\_hole command.

### Description

Create a hole in a region of a file. Destroys all data within the hole.

### Usage

```
qq fs_punch_hole [-h] (--path PATH | --id ID) [--stream-id STREAM_ID | --stream-nam e STREAM_NAME] --offset OFFSET --size SIZE
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
stream-id	No	Stream ID
stream-name	No	Stream name
offset	Yes	Offset in bytes specifying the start of the hole to create
size	Yes	Size in bytes of the hole to create

# qq fs\_read

This section explains how to use the qq fs\_read command.

### Description

Read an object

### Usage

```
qq fs_read [-h] (--path PATH | --id ID) [--stream-id STREAM_ID | --stream-name STREA
M_NAME] [--snapshot SNAPSHOT] [--offset OFFSET] [--length LENGTH] [--file FILE] [--f
orce] [--stdout]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
stream- id	No	Stream ID
stream- name	No	Stream name
snapshot	No	Snapshot ID to read from
offset	No	Offset at which to read data. If not specified, read from the beginning of the file.
length	No	Amount of data to read. If not specified, read the entire file.
file	No	File to receive data
force	No	Overwrite an existing file
stdout	No	Output data to standard out

# qq fs\_read\_dir

This section explains how to use the qq fs\_read\_dir command.

### Examples

To List the Contents of a Directory on a Qumulo Cluster

Run the qq fs\_read\_dir command and specify the path whose contents to list. For example:

```
qq fs_read_dir --path /accounting
```

The following is example output. In this example, there are 2 files in the /accounting directory.

```
"child_count": 2,
  "files": [{
    "blocks": "0",
    "change_time": "2024-02-04T19:29:48.136708478Z",
    "child_count": 2,
    "creation_time": "2024-02-04T19:29:16.846825314Z",
    "file_number": "4",
    "group": "513",
    "id": "4",
    "mode": "0777",
    "modification time": "2024-02-04T19:29:48.136708478Z",
    "name": "receipts",
    "num_links": 2,
    "owner": "500",
    "path": "/receipts/",
    "size": "1024",
    "type": "FS FILE TYPE DIRECTORY"
    "blocks": "0",
    "change_time": "2015-02-04T19:34:17.113793299Z",
    "child count": 1,
    "creation time": "2015-02-04T19:24:12.201732558Z",
    "file_number": "3",
    "group": "513",
    "id": "3",
    "mode": "0777",
    "modification time": "2015-02-04T19:34:17.113793299Z",
    "name": "invoices",
    "num links": 2,
    "owner": "500",
    "path": "/invoices/",
    "size": "512",
    "type": "FS FILE TYPE DIRECTORY"
  }],
 "id": "2",
  "paging": {
  "next": "",
  "prev": ""
 },
  "path": "/"
}
```

### Description

Read directory

### Usage

qq fs\_read\_dir [-h] (--path PATH | --id ID) [--page-size PAGE\_SIZE] [--snapshot SNAP
SHOT] [--smb-pattern SMB\_PATTERN]

Flag Name	Required	Description
path	No	Directory path
id	No	Directory ID
page- size	No	REST API pagination size to use. This affects the number of API calls made, and the structure of the resulting JSON output, but does not affect what entries are returned. Note that the system may impose an upper limit on the page size.
snap- shot	No	Snapshot ID to read from
smb- pattern	No	SMB style match pattern.

## qq fs\_read\_dir\_aggregates

This section explains how to use the qq fs\_read\_dir\_aggregates command.

### Description

Read directory aggregation entries

### Usage

```
qq fs_read_dir_aggregates [-h] (--path PATH | --id ID) [--recursive] [--max-entries
MAX_ENTRIES] [--max-depth MAX_DEPTH]
     [--order-by {total_blocks,total_datablocks,total_named_stream_datablocks,total_m
etablocks,total_files,total_directories,total_symlinks,total_other,total_named_strea
ms}] [--snapshot SNAPSHOT]
```

Flag Name	Required	Description
path	No	Directory path
id	No	Directory ID
recursive	No	Fetch recursive aggregates
max-entries	No	Maximum number of entries to return
max-depth	No	Maximum depth to recurse whenrecursive is set
order-by	No	Specify field used for top N selection and sorting
snapshot	No	Snapshot ID to read from

## qq fs\_release\_nlm\_lock

This section explains how to use the qq fs\_release\_nlm\_lock command.

### Description

Release an arbitrary NLM byte-range lock range. This is dangerous, and should only be used after confirming that the owning process has leaked the lock, and only if there is a very good reason why the situation should not be resolved by terminating that process.

### Usage

```
qq fs_release_nlm_lock [-h] (--path PATH | --id ID) --offset OFFSET --size SIZE --ow
ner-id OWNER_ID [--force] [--snapshot SNAPSHOT]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
offset	Yes	NLM byte-range lock offset
size	Yes	NLM byte-range lock size
owner-id	Yes	Owner id
force	No	This command can cause corruption, add this flag to release lock
snapshot	No	Snapshot ID of the specified file

## qq fs\_release\_nlm\_locks\_by\_client

This section explains how to use the qq fs\_release\_nlm\_locks\_by\_client command.

### Description

Release NLM byte range locks held by client. This method releases all locks held by a particular client. This is dangerous, and should only be used after confirming that the client is dead.

### Usage

```
qq fs_release_nlm_locks_by_client [-h] [--force] [--name NAME] [--address ADDRESS]
```

Flag Name	Required	Description
force	No	This command can cause corruption, add this flag to release lock
name	No	Client hostname
address	No	Client IP address

## qq fs\_remove\_stream

This section explains how to use the qq fs\_remove\_stream command.

### Description

Remove a stream from file or directory

### Usage

```
qq fs_remove_stream [-h] (--path PATH \mid --id ID) (--stream-id STREAM_ID \mid --stream-n ame STREAM_NAME)
```

Flag Name	Required	Description
path	No	File or directory path
id	No	File or directory ID
stream-id	No	Stream id to remove
stream-name	No	Stream name to remove

# qq fs\_rename

This section explains how to use the qq fs\_rename command.

#### Description

Rename a file system object

#### Usage

```
qq fs_rename [-h] (--path PATH | --id ID) --source SOURCE --name NAME [--clobber]
```

Flag Name	Required	Description
path	No	Destination parent directory path
id	No	Destination parent directory ID
source	Yes	Source file path
name	Yes	New name in destination directory
clobber	No	Clobber destination if exists

## qq fs\_resolve\_paths

This section explains how to use the qq fs\_resolve\_paths command.

#### Description

Resolve file IDs to paths

#### Usage

```
qq fs_resolve_paths [-h] --ids [IDS [IDS ...]] [--snapshot SNAPSHOT]
```

Flag Name	Required	Description
ids	Yes	File IDs to resolve
snapshot	No	Snapshot ID to read from

## qq fs\_security\_add\_key

This section explains how to use the qq fs\_security\_add\_key command.

#### Description

Add a key to the file system key-store.

#### Usage

qq fs\_security\_add\_key [-h] --name NAME [--private-key-file PRIVATE\_KEY\_FILE] [--pub
lic-key PUBLIC\_KEY] [--verification-signature VERIFICATION\_SIGNATURE] [--comment COM
MENT] [--json]

Flag Name	Required	Description	
name	Yes	The unique name to associate with the key to add to the key store. The name must not contain only numbers.	
private- key-file	No	The ECDSA private key file for the key to add to the key store.	
public-key	No	The ECDSA public key for the key to add to the key store.	
verifica- tion-signa- ture	No	A signature generated by signing the key name with the ECDSA private key.	
comment	No	An optional comment that the system stores alongside the key to add to the key store.	
json	No	Print the output in JSON format. The default output is in a table.	

# qq fs\_security\_delete\_key

This section explains how to use the qq fs\_security\_delete\_key command.

#### Description

Delete a key from the file system key store.

#### Usage

qq fs\_security\_delete\_key [-h] -k KEY

Flag Name	Required	Description	
-k	Yes	The identifier or name of the key to delete from the key store.	

## qq fs\_security\_get\_key

This section explains how to use the qq fs\_security\_get\_key command.

#### Description

Get information for a key in the file system key store.

#### Usage

```
qq fs_security_get_key [-h] -k KEY [--json]
```

Flag Name	Required	Description	
-k	Yes	The identifier or name of the key for which to show information.	
json	No	Print the output in JSON format. By default, the output is in a table.	

### qq fs\_security\_get\_key\_replace\_challenge

This section explains how to use the qq fs\_security\_get\_key\_replace\_challenge command.

#### Description

Get a security challenge for replacing the specified key without affecting the snapshots and snapshot policies associated with it.

#### Usage

qq fs\_security\_get\_key\_replace\_challenge [-h] -k KEY

Flag Name	Required	Description	
-k	Yes	The identifier or name of the key for which to get a security challenge.	

## qq fs\_security\_get\_key\_usage

This section explains how to use the qq fs\_security\_get\_key\_usage command.

#### Description

Show information about snapshot and snapshot policy usage for a key from the file system key store.

### Usage

```
qq fs_security_get_key_usage [-h] -k KEY [--json]
```

Flag Name	Required	Description	
-k	Yes	The key identifier or name for which to show usage information.	
json	No	Print the output in JSON format. By default, the output is in a table.	

# qq fs\_security\_list\_keys

This section explains how to use the qq fs\_security\_list\_keys command.

#### Description

List information for all keys in the file system key store.

#### Usage

```
qq fs_security_list_keys [-h] [--json]
```

Flag Name	Required	Description	
json	No	Print the output in JSON format. By default, the output is in a table.	

## qq fs\_security\_modify\_key

This section explains how to use the qq fs\_security\_modify\_key command.

#### Description

Modify the name or comment of a key in the file system key store. Enable or disable a key.

#### Usage

```
qq fs_security_modify_key [-h] -k KEY [--new-name NEW_NAME] [--comment COMMENT] [--e
nable | --disable] [--json]
```

Flag Name	Required	Description	
-k	Yes	The identifier or name of the key to modify.	
new- name	No	The new name for the specified key.	
com- ment	No	The comment for the specified key.	
en- able	No	Enable the specified key. You can use an enabled key to lock snapshots. You can also associate an enabled key with policies that take snapshots. Note: The system enables keys upon creation.	
able snapshots. Existing snapsho However, you can still use a c		Disable the specified key. You cannot use a disabled key to lock new snapshots. Existing snapshots which use the disabled key remain locked. However, you can still use a disabled key to unlock the snapshots that it locked. Important: You cannot disable a key if any snapshot policy uses it.	
json	No	Print the output in JSON format. By default, the output is in a table.	

### qq fs\_security\_replace\_key

This section explains how to use the qq fs\_security\_replace\_key command.

#### Description

Replace the specified key without affecting the snapshots and snapshot policies associated with it.

#### Usage

```
qq fs_security_replace_key [-h] -k KEY [--old-private-key-file OLD_PRIVATE_KEY_FIL
E] [--replacement-private-key-file REPLACEMENT_PRIVATE_KEY_FILE] [--replacement-publ
ic-key REPLACEMENT_PUBLIC_KEY]
        [--old-key-verification-signature OLD_KEY_VERIFICATION_SIGNATURE] [--replacemen
t-key-verification-signature REPLACEMENT_KEY_VERIFICATION_SIGNATURE] [--json]
```

Flag Name	Required	Description
-k	Yes	The identifier or name of the key to replace in the key store.
old-private-key- file	No	The ECDSA private key file that corresponds to the existing public key.
replacement-private- key-file	No	The ECDSA private key file with which to replace the existing key.
replacement-public- key	No	The ECDSA public key with which to replace the existing key.
old-key-verifica- tion-signature	No	A signature that you generate when you sign the challenge with the existing ECDSA private key.
replacement-key-ver- ification-signature	No	A signature that you generate when you sign the challenge with the replacement ECDSA private key.
json	No	Print the output in JSON format. By default, the output is in a table.

# qq fs\_set\_acl

This section explains how to use the qq fs\_set\_acl command.

### Description

Set file ACL

### Usage

```
qq fs_set_acl [-h] (--path PATH | --id ID) [--file FILE]
```

Flag Name	Required	Description
 path	No	File path
id	No	File ID
 file	No	Local file containing ACL JSON with control flags, ACEs, and optionally special POSIX permissions (sticky, setgid, setuid)

## qq fs\_set\_atime\_settings

This section explains how to use the qq fs\_set\_atime\_settings command.

#### Description

Set access time (atime) settings.

#### Usage

```
qq fs_set_atime_settings [-h] [--enable | --disable] [--granularity {HOUR,DAY,WEEK}]
```

Flag Name	Required	Description
enable	No	Enable access time (atime) updates.
disable	No	Disable access time (atime) updates.
granularity	No	Specify granularity for access time (atime) updates.

## qq fs\_set\_notify\_settings

This section explains how to use the qq fs\_set\_notify\_settings command.

#### Description

Set FS notify settings

#### Usage

qq fs\_set\_notify\_settings [-h] [--recursive-mode RECURSIVE\_MODE]

Flag Name	Required	Description
recursive	- No	Notify recursive mode to set (ENABLED, DISABLED_ERROR, DISABLED_IGNORE)

## qq fs\_set\_permissions\_settings

This section explains how to use the qq fs\_set\_permissions\_settings command.

#### Description

Set permissions settings

#### Usage

qq fs\_set\_permissions\_settings [-h] mode

Option Name	Description
mode	Permissions mode to set (NATIVE or CROSS_PROTOCOL)

### qq fs\_set\_user\_metadata

This section explains how to use the qq fs\_set\_user\_metadata command.

#### Description

Set or update a user metadata value for a file by using the specified metadata key and value

#### Usage

```
qq fs_set_user_metadata [-h] (--path PATH | --id ID) [--s3] --key KEY (--value VALU
E | --hex-value HEX_VALUE | --base64-value BASE64_VALUE)
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
s3	No	In Qumulo Core, there are two types of user metadata, generic and S3. By default, qq CLI commands manipulate generic metadata. When you use thes3 flag, Qumulo Core makes user metadata visible to the S3 protocol as object metadata.
key	Yes	Metadata key
value	No	Plaintext metadata value
hex-value	No	Hex-encoded metadata value
 base64-value	No	Base64-encoded metadata value

### qq fs\_walk\_tree

This section explains how to use the qq fs walk tree command.

#### Examples

#### To Recursively Add a New ACL with Multithreading

For this operation, you must run the qq fs\_walk\_tree and qq fs\_modify\_acl commands.

#### 1 Note

For very large directories, we recommend running the following command in a screen session.

- 1. Ensure that the jq tool is installed on your system.
- 2. Run the qq fs\_walk\_tree command and use the --path flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to the jq tool. To modify the ACL for each path, pipe the command to xargs which in turn runs the qq fs set acl command on each path. For example:

```
qq fs_walk_tree --path /my_path | \
   jq -r '.tree_nodes[].path' | \
   xargs -d '\n' -I % -n1 -P 4 \
      qq fs_modify_acl --path '%' \
      add_entry -t "DOMAIN\my_username" \
      -y Allowed \
      -r "Read" "Execute/Traverse" \
      -f "Object inherit" "Container inherit"
```

#### To Recursively Apply a Permissions Template

For this operation, you must run the qq fs walk tree and qq fs modify acl commands.

- 1. Ensure that the jq tool is installed on your system.
- 2. Use a new or existing file with the necessary permissions to capture the ACL and save it in JSON format by using the qq fs\_get\_acl command. For example:

```
qq fs_get_acl --path /path_to_acl_source \
    --json >/history/new_permissions.json
```

3. To apply the captured ACL, run the qq fs\_walk\_tree command and use the --path flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to the jq tool. To modify the ACL for each path, pipe the command to xargs which in turn runs the qq fs set acl command on each path.

```
qq fs_walk_tree --path /my_target_path | \
   jq -r '.tree_nodes[].path' | \
    xargs -I % -n1 -P 4 \
    qq fs_set_acl --path '%' \
     --file /history/new_permissions.json >> &>/dev/null
```

#### To Recursively Modify SMB Attributes

For this operation, you must run the qq fs walk tree and qq fs modify acl commands.

Run the qq fs\_walk\_tree command and use the --path flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to the jq tool. To modify the ACL for each path, pipe the command to xargs which in turn runs the qq fs\_set\_acl command on each path.

```
qq fs_walk_tree --path /my_path | \
   jq -r '.tree_nodes[].path' | \
    xargs -I % -n1 -P 4 \
     qq fs_file_set_smb_attrs --path % \
     --hidden false
```

### Description

Walk file system tree

#### Usage

```
qq fs_walk_tree [-h] [--path PATH] [--snapshot SNAPSHOT] [--file-only | --directory-
only | --symlink-only] [--display-ownership | --display-all-attributes] [--output-fi
le OUTPUT_FILE] [--max-depth MAX_DEPTH]
```

Flag Name	Required	Description
path	No	Tree root path

snap- shot	No	Snapshot ID to read from	
file-on- ly	No	Only display files	
directo- ry-only	No	Only display directories	
symlink- only	No	Only display symlinks	
display- ownership	No	Display detailed owner and group information	
display- all-at- tributes	No	Display all attributes	
output- file	No	Output a file at the specified path instead of stdout	
max- depth	No	The maximum layers to traverse down the tree, starting from the path specified. For example, if the file tree is /dir/file, running the command with max-depth of 1 from root will yield / and /dir	

### qq fs\_write

This section explains how to use the qq fs\_write command.

#### Examples

To Write a File to a Directory on a Qumulo Cluster

Run the qq fs\_write command, use the --create flag and specify the source of and target locations for the file. For example:

```
qq fs_write --create \
    --file /upgrade/qinstall.qimg \
    --path /qinstall.qimg
```

The following is example output.

```
"blocks": "139355",
  "change time": "2024-02-04T00:28:50.778788345Z",
  "child count": 0,
  "creation time": "2024-02-04T00:28:50.766408341Z",
  "file number": "6981",
  "group": "2",
  "id": "6981",
  "mode": "0644",
  "modification time": "2024-02-04T00:29:32.967968707Z",
  "name": "",
  "num links": 1,
  "owner": "500",
  "path": "/qinstall.qimg",
  "size": "570798080",
  "type": "FS_FILE_TYPE_FILE"
}
```

#### Description

Write data to an object

### Usage

```
qq fs_write [-h] (--path PATH \mid --id ID) [--stream-id STREAM_ID \mid --stream-name STRE AM_NAME \mid --create] [--offset OFFSET] [--file FILE] [--stdin]
```

Flag Name	Required	Description
path	No	File path
id	No	File ID
 stream- id	No	Stream ID
stream-	No	Stream name
cre- ate	No	Create file before writing. Fails if exists or is used with stream identifiers.
off- set	No	Offset at which to write data. If not specified, the existing contents of the file will be replaced with the given contents.
file	No	File data to send
 stdin	No	Write file from stdin

## qq ftp\_get\_status

This section explains how to use the qq ftp\_get\_status command.

### Description

Get FTP server settings and status

#### Usage

qq ftp\_get\_status [-h]

### qq ftp\_modify\_settings

This section explains how to use the qq ftp\_modify\_settings command.

#### Description

Set FTP server settings

#### Usage

```
qq ftp_modify_settings [-h] [--enabled {true,false}] [--check-remote-host {true,fals
e}] [--log-operations {true,false}] [--chroot-users {true,false}] [--allow-unencrypt
ed-connections {true,false}] [--expand-wildcards {true,false}]
        [--anonymous-user-as-local-user ANONYMOUS_USER_AS_LOCAL_USER | --anonymous-user-
none | --greeting GREETING]
```

# qq get\_object\_backed\_nodes

This section explains how to use the qq get\_object\_backed\_nodes command.

#### Description

Get the object backed nodes.

#### Usage

qq get\_object\_backed\_nodes [-h]

## qq get\_object\_storage\_uris

This section explains how to use the qq get\_object\_storage\_uris command.

#### Description

Get the list of object storage uris configured on the cluster. These object storage uris store the persisted pstore data for an object-backed cluster. For a cluster that is not backed by objects, the returned list is always empty.

#### Usage

qq get\_object\_storage\_uris [-h]

## qq get\_vpn\_keys

This section explains how to use the qq get\_vpn\_keys command.

#### Description

Get VPN keys stored in the cluster.

#### Usage

qq get\_vpn\_keys [-h]

# qq halt\_cluster

This section explains how to use the qq halt\_cluster command.

### Description

Halt the cluster

### Usage

```
qq halt_cluster [-h] [--force]
```

Flag Name Required		Description
force	No	Do not prompt

# qq help

This section explains how to use the qq help command.

### Description

QQ documentation

### Usage

qq help [-h]

# qq identity\_attributes\_get

This section explains how to use the qq identity\_attributes\_get command.

#### Description

Get attributes related to the given identity.

#### Usage

qq identity\_attributes\_get [-h] identifier

Option Name	Description
identifier	A name or a SID, optionally qualified with a domain prefix (e.g "local:name", "world:Everyone", "ldap_user:name", "ldap_group:name", or "ad:name") or an ID type (e.g. "uid:1001", "gid:2001", "auth_id:513", "SID:S-1-1-0").

## qq identity\_attributes\_set

This section explains how to use the qq identity\_attributes\_set command.

#### Description

Set attributes related to the given identity.

#### Usage

qq identity\_attributes\_set [-h] --home-directory HOME\_DIRECTORY identifier

### Flags

Flag Name	Required	Required Description
home-direc	tory Yes	Yes The home directory for the identity.

Option Name	Description
identifier	A name or a SID, optionally qualified with a domain prefix (e.g "local:name", "world:Everyone", "ldap_user:name", "ldap_group:name", or "ad:name") or an ID type (e.g. "uid:1001", "gid:2001", "auth_id:513", "SID:S-1-1-0").

# qq install\_vpn\_keys

This section explains how to use the qq install\_vpn\_keys command.

#### Description

Install VPN keys.

#### Usage

qq install\_vpn\_keys [-h] directory

Option Name	Description	
directory	Directory with mqvpn-client.crt, mqvpn-client.key, and qumulo-ca.crt files.	

# qq kerberos\_delete\_keytab

This section explains how to use the qq kerberos\_delete\_keytab command.

#### Description

Delete the Kerberos keytab

#### Usage

qq kerberos\_delete\_keytab [-h]

# qq kerberos\_get\_keytab

This section explains how to use the qq kerberos\_get\_keytab command.

#### Description

Get the Kerberos keytab

#### Usage

qq kerberos\_get\_keytab [-h]

# qq kerberos\_get\_settings

This section explains how to use the qq kerberos\_get\_settings command.

#### Description

Get the Kerberos settings

#### Usage

qq kerberos\_get\_settings [-h]

## qq kerberos\_modify\_settings

This section explains how to use the qq kerberos\_modify\_settings command.

#### Description

Modify the Kerberos settings

#### Usage

qq kerberos\_modify\_settings [-h] -a USE\_ALT\_SECURITY\_IDENTITIES\_MAPPING

Flag Name	Required	Description
-a	Yes	When enabled, map kerberos-authenticated users to LDAP records via the altSecurityIdentities field

# qq kerberos\_set\_keytab

This section explains how to use the qq kerberos\_set\_keytab command.

#### Description

Set the Kerberos keytab

#### Usage

```
qq kerberos_set_keytab [-h] -k KEYTAB_FILE
```

Flag Name	Required	Description
-k	Yes	The Kerberos keytab file to set

# qq ldap\_get\_settings

This section explains how to use the qq ldap\_get\_settings command.

### Description

Get settings for LDAP interaction

#### Usage

qq ldap\_get\_settings [-h]

# qq ldap\_get\_status

This section explains how to use the qq ldap\_get\_status command.

## Description

Get LDAP client connection states

## Usage

qq ldap\_get\_status [-h]

## qq ldap\_login\_name\_to\_gid\_numbers

This section explains how to use the qq ldap\_login\_name\_to\_gid\_numbers command.

## Description

Query the LDAP server for the gid numbers for all the groups of which the given login name is a member. This returns a vector of results in the case that the given login name maps to multiple uid numbers.

## Usage

qq ldap\_login\_name\_to\_gid\_numbers [-h] --login-name LOGIN\_NAME

## qq ldap\_login\_name\_to\_uid\_numbers

This section explains how to use the qq ldap\_login\_name\_to\_uid\_numbers command.

## Description

Get the uidNumbers from a login name using the LDAP server

### Usage

qq ldap\_login\_name\_to\_uid\_numbers [-h] --login-name LOGIN\_NAME

## qq ldap\_set\_settings

This section explains how to use the qq ldap\_set\_settings command.

## Description

Set settings for LDAP interaction

### Usage

```
qq ldap_set_settings [-h] --use-ldap {true,false} --bind-uri BIND_URI --base-dn BAS
E_DN [--bind-username BIND_USERNAME] [--bind-password BIND_PASSWORD] [--encrypt-conn
ection {true,false}] [--rfc2307]
```

[--custom-group-member-attribute CUSTOM\_GROUP\_MEMBER\_ATTRIBUTE] [--custom-user-g roup-identifier-attribute CUSTOM\_USER\_GROUP\_IDENTIFIER\_ATTRIBUTE] [--custom-login-na me-attribute CUSTOM\_LOGIN\_NAME\_ATTRIBUTE]

[--custom-group-name-attribute CUSTOM\_GROUP\_NAME\_ATTRIBUTE] [--custom-user-objec t-class CUSTOM\_USER\_OBJECT\_CLASS] [--custom-group-object-class CUSTOM\_GROUP\_OBJECT\_C LASS]

[--custom-uid-number-attribute CUSTOM\_UID\_NUMBER\_ATTRIBUTE] [--custom-gid-number-attribute CUSTOM GID NUMBER ATTRIBUTE]

Flag Name	Required	Description
use-ldap	Yes	Whether or not to enable the use of the LDAP server on the cluster.
bind-uri	Yes	LDAP URI used to bind. Example: ldap://ldap-server.exam-ple.com
base-dn	Yes	Base DNs (Distinguished Names). Separate multiple DNs using semicolons. Example: dc=account,dc=example,dc=com
bind-username	No	Binding users's DN. Default is empty.
bind-password	No	Password for simple authentication against LDAP server. If not specified, will use password that is currently stored on disk.
encrypt-connec- tion	No	If true, LDAP connection must be encrypted using TLS. Default is true.

rfc2307	No	Use the standard schema defined in RFC2307. Cannot be combined with any custom schema arguments.
custom-group-mem- ber-attribute	No	The attribute on a group object which contains references to the members in that group.
custom-user- group-identifier- attribute	No	The attribute on a user that the value of the group_member_attribute on a group refers to.
custom-login- name-attribute	No	The attribute on a user that identifies their login name.
custom-group- name-attribute	No	The attribute on a group that identifies their name.
custom-user-ob- ject-class	No	The class of user objects.
custom-group-ob- ject-class	No	The class of group objects.
custom-uid-num- ber-attribute	No	The attribute on a user that identifies their uid number.
custom-gid-num- ber-attribute	No	The attribute on an object that identifies their gid number.

## qq ldap\_uid\_number\_to\_login\_name

This section explains how to use the qq ldap\_uid\_number\_to\_login\_name command.

## Description

Get login name from uidNumber using LDAP server

### Usage

qq ldap\_uid\_number\_to\_login\_name [-h] --uid-number UID\_NUMBER

## qq ldap\_update\_settings

This section explains how to use the qq ldap\_update\_settings command.

## Description

Update settings for LDAP interaction

#### Usage

```
qq ldap_update_settings [-h] [--use-ldap {true,false}] [--bind-uri BIND_URI] [--bas
e-dn BASE_DN] [--bind-username BIND_USERNAME] [--bind-password BIND_PASSWORD] [--enc
rypt-connection {true,false}] [--rfc2307]
```

[--custom-group-member-attribute CUSTOM\_GROUP\_MEMBER\_ATTRIBUTE] [--custom-user-g roup-identifier-attribute CUSTOM\_USER\_GROUP\_IDENTIFIER\_ATTRIBUTE] [--custom-login-na me-attribute CUSTOM\_LOGIN\_NAME\_ATTRIBUTE]

[--custom-group-name-attribute CUSTOM\_GROUP\_NAME\_ATTRIBUTE] [--custom-user-objec t-class CUSTOM\_USER\_OBJECT\_CLASS] [--custom-group-object-class CUSTOM\_GROUP\_OBJECT\_C LASS]

[--custom-uid-number-attribute CUSTOM\_UID\_NUMBER\_ATTRIBUTE] [--custom-gid-number-attribute CUSTOM GID NUMBER ATTRIBUTE]

Flag Name	Required	Description	
use-ldap	No	Enable or disable the use of standalone LDAP.	
bind-uri	No	LDAP URI used to bind. Example: ldap://ldap-server.ex-ample.com	
base-dn	No	Base DNs (Distinguished Names). Example: dc=ac-count,dc=example,dc=com	
bind-username	No	Binding users's DN.	
bind-password	No	Password for simple authentication against LDAP server.	
encrypt-connection	No	If true, LDAP connection must be encrypted using TLS.	
rfc2307	No	Use the standard schema defined in RFC2307. Cannot be combined with any custom schema arguments.	
custom-group-mem- ber-attribute	No	The attribute on a group object which contains references to the members in that group.	

custom-user-group- identifier-attribute	No	The attribute on a user that the value of the group_member_attribute on a group refers to.
custom-login-name- attribute	No	The attribute on a user that identifies their login name.
custom-group-name- attribute	No	The attribute on a group that identifies their name.
custom-user-object- class	No	The class of user objects.
custom-group-ob- ject-class	No	The class of group objects.
custom-uid-number- attribute	No	The attribute on a user that identifies their uid number.
custom-gid-number- attribute	No	The attribute on an object that identifies their gid number.

# qq license\_get\_status

This section explains how to use the qq license\_get\_status command.

## Description

Fetch the current license state of the cluster.

## Usage

```
qq license_get_status [-h] [--json]
```

Flag Name	Required	Description
json	No	Print JSON representation of license.

# qq login

This section explains how to use the qq login command.

## Description

Log in to qfsd to get REST credentials

## Usage

```
qq login [-h] -u USERNAME [-p PASSWORD]
```

Flag Name	Required	Description
- u	Yes	User name
- p	No	Password (insecure, visible via ps)

# qq logout

This section explains how to use the qq logout command.

## Description

Remove qfsd REST credentials

## Usage

qq logout [-h]

# qq metrics\_get

This section explains how to use the qq metrics\_get command.

## Description

Get all system metrics.

## Usage

qq metrics\_get [-h]

## qq modify\_object\_backed\_cluster\_membership

This section explains how to use the qq modify\_object\_backed\_cluster\_membership command.

## Description

Modify the membership of an object backed cluster by specifying the desired list of nodes expected to be part of the cluster after the modification. The nodes to be added, removed, or replaced are implicitly derived using the specified target membership and the current membership of the cluster.

### Usage

```
qq modify_object_backed_cluster_membership [-h] --node-ips-and-fault-domains NODE_IP
S_AND_FAULT_DOMAINS [NODE_IPS_AND_FAULT_DOMAINS ...] [--batch] [--dry-run]
```

Flag Name	Required	Description
node- ips- and- fault- domains	No	The node ips and fault domains of the new and existing nodes expected to remain in the cluster after the modification. Parsed as comma delimited tuples, "To specify a non-fault domain aware cluster, provide None in place of the fault domain ids ,None ,None ,NoneThe fault domain of an existing node cannot be changed.
 batch	No	Begin the cluster modification operation without asking for confirmation.
dry- run	No	Validate the cluster modification operation and return information about the resulting cluster. When you use this flag, Qumulo Core does not perform the cluster modification.

# qq monitoring\_conf

This section explains how to use the qq monitoring\_conf command.

## Description

Get monitoring configuration.

## Usage

qq monitoring\_conf [-h]

# qq monitoring\_status\_get

This section explains how to use the qq monitoring\_status\_get command.

## Description

Get current monitoring status.

## Usage

qq monitoring\_status\_get [-h]

# qq multitenancy\_create\_tenant

This section explains how to use the qq multitenancy\_create\_tenant command.

## Description

Create a tenant

### Usage

```
qq multitenancy_create_tenant [-h] --name NAME [--network-id [NETWORK_ID [NETWORK_I
D ...]]] [--enable-web-ui | --disable-web-ui] [--enable-rest-api | --disable-rest-ap
i] [--enable-ssh | --disable-ssh]
    [--enable-replication | --disable-replication] [--enable-nfs | --disable-nfs]
[--enable-smb | --disable-smb]
```

Flag Name	Required	Description
name	Yes	Unique name of the tenant chosen by the user.
network- id	No	List of zero or more network IDs associated with this tenant, as returned by the `network_list_networks` command. Each network ID may be assigned to at most one tenant.
enable- web-ui	No	Web UI is accessible from this tenant.
disable- web-ui	No	Web UI is not accessible from this tenant. This is the default.
enable- rest-api	No	REST API is accessible from this tenant.
disable- rest-api	No	REST API is not accessible from this tenant. This is the default.
enable- ssh	No	SSH is accessible from this tenant.
disable- ssh	No	SSH is not accessible from this tenant. This is the default.

enable- replication	No	Replication is accessible from this tenant.
disable- replication	No	Replication is not accessible from this tenant. This is the default.
enable- nfs	No	NFS is accessible from this tenant.
disable- nfs	No	NFS is not accessible from this tenant. This is the default.
enable-	No	SMB is accessible from this tenant.
disable-	No	SMB is not accessible from this tenant. This is the default.

## qq multitenancy\_delete\_tenant

This section explains how to use the qq multitenancy\_delete\_tenant command.

## Description

Delete a tenant

## Usage

```
qq multitenancy_delete_tenant [-h] --id ID [--force]
```

Flag Name	Required	Description
id	Yes	The unique ID of the tenant to delete.
force	No	Do not prompt

# qq multitenancy\_get\_tenant

This section explains how to use the qq multitenancy\_get\_tenant command.

## Description

Get a tenant

## Usage

```
qq multitenancy_get_tenant [-h] --id ID
```

Flag Name	Required	Description
id	Yes	The unique ID of the tenant to retrieve.

# qq multitenancy\_list\_tenants

This section explains how to use the qq multitenancy\_list\_tenants command.

## Description

List all tenants

## Usage

```
qq multitenancy_list_tenants [-h] [-j]
```

Flag Name	Required	Description
- j	No	Output in JSON format

## qq multitenancy\_modify\_tenant

This section explains how to use the qq multitenancy\_modify\_tenant command.

## Description

Modify a tenant

### Usage

Flag Name	Required	Description
id	Yes	The unique ID of the tenant to modify.
name	No	Unique name of the tenant chosen by the user. If not specified, the existing name will be preserved.
enable- web-ui	No	Web UI is accessible from this tenant. If neitherenable-web-ui nordisable-web-ui is specified, the existing setting will be preserved.
disable- web-ui	No	Web UI is not accessible from this tenant. If neitherenable-web-ui nordisable-web-ui is specified, the existing setting will be preserved.
enable- rest-api	No	REST API is accessible from this tenant. If neitherenable-rest-api nordisable-rest-api is specified, the existing setting will be preserved.
disable- rest-api	No	REST API is not accessible from this tenant. If neitherenable-restapi nordisable-rest-api is specified, the existing setting will be preserved.
enable- ssh	No	SSH is accessible from this tenant. If neitherenable-ssh nordis- able-ssh is specified, the existing setting will be preserved.
disable- ssh	No	SSH is not accessible from this tenant. If neitherenable-ssh nor disable-ssh is specified, the existing setting will be preserved.

enable- replication	No	Replication is accessible from this tenant. If neitherenable-replication nordisable-replication is specified, the existing setting will be preserved.
disable- replication	No	Replication is not accessible from this tenant. If neitherenable-replication nordisable-replication is specified, the existing setting will be preserved.
enable- nfs	No	NFS is accessible from this tenant. If neitherenable-nfs nordis-able-nfs is specified, the existing setting will be preserved.
disable- nfs	No	NFS is not accessible from this tenant. If neitherenable-nfs nordisable-nfs is specified, the existing setting will be preserved.
enable- smb	No	SMB is accessible from this tenant. If neitherenable-smb nordis-able-smb is specified, the existing setting will be preserved.
disable- smb	No	SMB is not accessible from this tenant. If neitherenable-smb nor disable-smb is specified, the existing setting will be preserved.
network- id	No	List of zero or more network IDs associated with this tenant, as returned by the `network_list_networks` command. Each network ID may be assigned to at most one tenant. If specified, this must contain a complete list of all network IDs to be assigned to the tenant. Any already-assigned networks not present will be unassigned and services will be disabled on those networks. If not specified, the existing networks will be preserved.

## qq multitenancy\_nfs\_delete\_settings

This section explains how to use the qq multitenancy\_nfs\_delete\_settings command.

## Description

Delete NFS settings for a tenant

### Usage

```
qq multitenancy_nfs_delete_settings [-h] --tenant-id TENANT_ID
```

Flag Name	Required	Description
tenant-id	Yes	ID of the tenant to delete settings for

## qq multitenancy\_nfs\_get\_global\_settings

This section explains how to use the qq multitenancy\_nfs\_get\_global\_settings command.

## Description

Retrieve global default NFS settings

#### Usage

qq multitenancy\_nfs\_get\_global\_settings [-h]

## qq multitenancy\_nfs\_get\_settings

This section explains how to use the qq multitenancy\_nfs\_get\_settings command.

## Description

Retrieve NFS settings for a tenant

### Usage

```
qq multitenancy_nfs_get_settings [-h] --tenant-id TENANT_ID
```

Flag Name	Required	Description
tenant-id	Yes	ID of tenant to get settings for

## qq multitenancy\_nfs\_list\_settings

This section explains how to use the qq multitenancy\_nfs\_list\_settings command.

## Description

Retrieve NFS settings for all tenant that have tenant-specific settings configured

## Usage

qq multitenancy\_nfs\_list\_settings [-h]

## qq multitenancy\_nfs\_modify\_global\_settings

This section explains how to use the qq multitenancy\_nfs\_modify\_global\_settings command.

## Description

Modify global default NFS settings

#### Usage

```
qq multitenancy_nfs_modify_global_settings [-h] [--enable-v4 | --disable-v4] [--enab
le-krb5 | --disable-krb5] [--enable-krb5p | --disable-krb5p] [--enable-krb5i | --dis
able-krb5i] [--enable-auth-sys | --disable-auth-sys]
```

Flag Name	Required	Description
enable-v4	No	Enables mounting with the NFSv4.1 protocol
disable-v4	No	Disables mounting with the NFSv4.1 protocol
enable-krb5	No	Enables mounting with KRB5 security
disable-krb5	No	Disables mounting with KRB5 security
enable-krb5p	No	Enables mounting with KRB5p security
disable-krb5p	No	Disables mounting with KRB5p security
enable-krb5i	No	Enables mounting with KRB5i security
disable-krb5i	No	Disables mounting with KRB5i security
enable-auth-sys	No	Enables mounting with AUTH_SYS security
disable-auth-sys	No	Disables mounting with AUTH_SYS security

## qq multitenancy\_nfs\_modify\_settings

This section explains how to use the qq multitenancy\_nfs\_modify\_settings command.

## Description

Modify NFS settings for a tenant

### Usage

```
qq multitenancy_nfs_modify_settings [-h] --tenant-id TENANT_ID [--enable-v4 | --disa
ble-v4] [--enable-krb5 | --disable-krb5] [--enable-krb5p | --disable-krb5p] [--enabl
e-krb5i | --disable-krb5i] [--enable-auth-sys | --disable-auth-sys]
```

Flag Name	Required	Description
tenant-id	Yes	ID of tenant to modify settings for
enable-v4	No	Enables mounting with the NFSv4.1 protocol
disable-v4	No	Disables mounting with the NFSv4.1 protocol
enable-krb5	No	Enables mounting with KRB5 security
disable-krb5	No	Disables mounting with KRB5 security
enable-krb5p	No	Enables mounting with KRB5p security
disable-krb5p	No	Disables mounting with KRB5p security
enable-krb5i	No	Enables mounting with KRB5i security
disable-krb5i	No	Disables mounting with KRB5i security
enable-auth-sys	No	Enables mounting with AUTH_SYS security
disable-auth-sys	No	Disables mounting with AUTH_SYS security

## qq multitenancy\_smb\_delete\_settings

This section explains how to use the qq multitenancy\_smb\_delete\_settings command.

## Description

Delete SMB settings for a tenant

### Usage

```
qq multitenancy_smb_delete_settings [-h] --tenant-id TENANT_ID
```

Flag Name	Required	Description
tenant-id	Yes	ID of the tenant to delete settings for

## qq multitenancy\_smb\_get\_global\_settings

This section explains how to use the qq multitenancy\_smb\_get\_global\_settings command.

## Description

Retrieve global default SMB settings

### Usage

qq multitenancy\_smb\_get\_global\_settings [-h]

## qq multitenancy\_smb\_get\_settings

This section explains how to use the qq multitenancy\_smb\_get\_settings command.

## Description

Retrieve SMB settings for a tenant

## Usage

```
qq multitenancy_smb_get_settings [-h] --tenant-id TENANT_ID
```

Flag Name	Required	Description
tenant-id	Yes	ID of tenant to get settings for

## qq multitenancy\_smb\_list\_settings

This section explains how to use the qq multitenancy\_smb\_list\_settings command.

## Description

Retrieve SMB settings for all tenant that have tenant-specific settings configured

## Usage

qq multitenancy\_smb\_list\_settings [-h]

## qq multitenancy\_smb\_modify\_global\_settings

This section explains how to use the qq multitenancy\_smb\_modify\_global\_settings command.

## Description

Modify global default SMB settings

### Usage

```
qq multitenancy_smb_modify_global_settings [-h] [-e {none,preferred,required}] [-d d
ialect_1 [dialect_2 ...]] [--hide-shares-from-unauthorized-hosts {true,false}] [--hi
de-shares-from-unauthorized-users {true,false}]
    [--snapshot-directory-mode {visible,hidden,disabled}] [--bypass-traverse-checkin
g {true,false}] [--signing-required {true,false}]
```

Flag Name	Required	Description
-e	No	Server encryption mode to set
-d	No	Specify a space-separated list of SMB dialects that clients are permitted to negotiate. To disable SMB, specify -d "". Available dialects: smb2_dialect_2_002, smb2_dialect_2_1, smb2_dialect_3_0, smb2_dialect_3_11. Alternatively, use -d ALL to allow all supported dialects.
hide- shares-from- unauthorized- hosts	No	Configure share listing to omit shares to which the requesting host isn't authorized to connect.
hide- shares-from- unauthorized- users	No	Configure share listing to omit shares to which the requesting user isn't authorized to connect. Important: Clients which don't have passwordless authentication typically list shares by using guest privileges. This flag typically hides all shares from this client type.

snapshot- directory- mode	No	When you set this flag to visible, the .snapshot directory appears at the root of shares during directory listing operations. The .snapshot directory is also accessible by name in any directory. When you set this flag to hidden, .snapshot directories do not appear in directory listings but remains accessible by name. When you set this flag to disabled, .snapshot directories are not accessible and snapshots are available only through the Restore Previous Versions dialog box on Windows.
bypass- traverse- checking	No	Enables bypass traverse checking for all users and directories. For example, a user who tries to access directory /x/y and has permissions to the /x directory but not to the /x/y directory can access the /x/y directory. A user still requires permissions to the /x directory to view its contents.
signing- required	No	If the user is not a guest, require all messages to be signed. This flag applies to all SMB shares.

## qq multitenancy\_smb\_modify\_settings

This section explains how to use the qq multitenancy\_smb\_modify\_settings command.

## Description

Modify SMB settings for a tenant

### Usage

```
qq multitenancy_smb_modify_settings [-h] --tenant-id TENANT_ID [-e {none,preferred,r
equired}] [-d dialect_1 [dialect_2 ...]] [--hide-shares-from-unauthorized-hosts {tru
e,false}] [--hide-shares-from-unauthorized-users {true,false}]
    [--snapshot-directory-mode {visible,hidden,disabled}] [--bypass-traverse-checkin
g {true,false}] [--signing-required {true,false}]
```

Flag Name	Required	Description
tenant-id	Yes	ID of tenant to modify settings for
-е	No	Server encryption mode to set
-d	No	Specify a space-separated list of SMB dialects that clients are permitted to negotiate. To disable SMB, specify -d "". Available dialects: smb2_dialect_2_002, smb2_dialect_2_1, smb2_dialect_3_0, smb2_dialect_3_11. Alternatively, use -d ALL to allow all supported dialects.
hide- shares-from- unauthorized- hosts	No	Configure share listing to omit shares to which the requesting host isn't authorized to connect.
hide- shares-from- unauthorized- users	No	Configure share listing to omit shares to which the requesting user isn't authorized to connect. Important: Clients which don't have passwordless authentication typically list shares by using guest privileges. This flag typically hides all shares from this client type.

snapshot- directory- mode	No	When you set this flag to visible, the .snapshot directory appears at the root of shares during directory listing operations. The .snapshot directory is also accessible by name in any directory. When you set this flag to hidden, .snapshot directories do not appear in directory listings but remains accessible by name. When you set this flag to disabled, .snapshot directories are not accessible and snapshots are available only through the Restore Previous Versions dialog box on Windows.
bypass- traverse- checking	No	Enables bypass traverse checking for all users and directories. For example, a user who tries to access directory /x/y and has permissions to the /x directory but not to the /x/y directory can access the /x/y directory. A user still requires permissions to the /x directory to view its contents.
signing- required	No	If the user is not a guest, require all messages to be signed. This flag applies to all SMB shares.

## qq network\_add\_network

This section explains how to use the qq network\_add\_network command.

### Description

Add network configuration

### Usage

```
qq network_add_network [-h] --name NAME --netmask <netmask-or-subnet> --ip-ranges <a
ddress-or-range> [<address-or-range> ...] [--floating-ip-ranges <address-or-range>
[<address-or-range> ...]]
    [--dns-servers <address-or-range> [<address-or-range> ...]] [--dns-search-domain
s <search-domain> [<search-domain> ...]] [--mtu MTU] [--vlan-id VLAN_ID] [--tenant-i
d TENANT_ID]
```

Flag Name	Required	Description
name	Yes	Network name
net- mask	Yes	(if STATIC) IPv4 or IPv6 Netmask or Subnet CIDR eg. 255.255.255.0 or 10.1.1.0/24
ip- ranges	Yes	(if STATIC) List of persistent IP ranges to replace the current ranges. Can be single addresses or ranges, comma separated. eg. 10.1.1.20-21 or 10.1.1.20,10.1.1.21
float- ing-ip- ranges	No	(if STATIC) List of floating IP ranges to replace the current ranges. Can be single addresses or ranges, comma separated. eg. 10.1.1.20-21 or 10.1.1.20,10.1.1.21
dns- servers	No	List of DNS Server IP addresses. Can be a single address or multiple comma separated addresses. eg. 10.1.1.10 or 10.1.1.10,10.1.1.15
dns- search- domains	No	List of DNS Search Domains to use. Can be a single domain or multiple comma separated domains. eg. my.domain.com or my.domain.com,your.domain.com

mtu	No	(if STATIC) The Maximum Transfer Unit (MTU) in bytes of a tagged STATIC network. The MTU of an untagged STATIC network needs to be specified through interface MTU.
vlan- id	No	(if STATIC) User assigned VLAN tag for network configuration. 1-4094 are valid VLAN IDs and 0 is used for untagged networks.
ten- ant-id	No	The tenant that the network will be assigned to. If only one tenant exists, the network will default to that tenant. Otherwise, not specifying the tenant will create the network unassigned.

## qq network\_delete\_network

This section explains how to use the qq network\_delete\_network command.

### Description

Delete network configuration

### Usage

```
qq network_delete_network [-h] --network-id NETWORK_ID
```

Flag Name	Required	Description	
network-id	Yes	The unique ID of the network on the interface	

# qq network\_get\_interface

This section explains how to use the qq network\_get\_interface command.

### Description

Get configuration for the specified interface

### Usage

```
qq network_get_interface [-h] [--interface-id INTERFACE_ID]
```

Flag Name	Required	Description
interface-id	No	The unique ID of the interface

## qq network\_get\_network

This section explains how to use the qq network\_get\_network command.

### Description

Get configuration for the specified network

### Usage

```
qq network_get_network [-h] --network-id NETWORK_ID
```

Flag Name	Required	Description	
network-id	Yes	The unique ID of the network on the interface	

## qq network\_list\_connections

This section explains how to use the qq network\_list\_connections command.

### Examples

To ensure the optimal performance of your cluster, its client connections must be distributed evenly.

#### To View Client Connections in JSON Format

Run the qq network\_list\_connections command to list the IP address and protocol for each client.

The following is example output.

```
[{
    "connections": [{
        "network_address": "203.0.113.0",
        "type": "CONNECTION_TYPE_SMB"
},{
        "network_address": "203.0.113.1",
        "type": "CONNECTION_TYPE_NFS"
}],
    "id": 1
},
...
]
```

#### To View the Client Connection Counts

Run the qq network\_list\_connections command and use the --counts flag to view the balance of client connections.

#### 🛈 Note

Using the --counts flag returns only the SMB and NFS connections without the client IP addresses.

The following is example output.

```
Total: SMB 70 NFS 30
Node1: SMB 17 NFS 8
Node2: SMB 17 NFS 7
Node3: SMB 18 NFS 6
Node4: SMB 18 NFS 9
```

## Description

Get the list of SMB and NFS protocol connections per node.

## Usage

```
qq network_list_connections [-h] [-c | --json]
```

Flag Name	Required	Description
- C	No	Pretty-print connection counts for the cluster and each node
json	No	Print json instead of default pretty-printed connection table

# qq network\_list\_interfaces

This section explains how to use the qq network\_list\_interfaces command.

### Description

List configurations for interfaces on the cluster

### Usage

qq network\_list\_interfaces [-h]

# qq network\_list\_networks

This section explains how to use the qq network\_list\_networks command.

### Description

List network configurations

### Usage

qq network\_list\_networks [-h]

## qq network\_mod\_interface

This section explains how to use the qq network\_mod\_interface command.

### Description

Modify interface configuration

#### Usage

qq network\_mod\_interface [-h] [--interface-id INTERFACE\_ID] [--default-gateway DEFAU
LT\_GATEWAY] [--default-gateway-ipv6 DEFAULT\_GATEWAY\_IPV6] [--bonding-mode {ACTIVE\_BA
CKUP,IEEE\_8023AD}] [--mtu MTU]

Flag Name	Required	Description
interface-id	No	The unique ID of the interface
default- gateway	No	The default IPv4 gateway address
default- gateway-ipv6	No	The default IPv6 gateway address
bonding-mode	No	Ethernet bonding mode
mtu	No	The maximum transfer unit (MTU) in bytes of the interface and any untagged STATIC network.

## qq network\_mod\_network

This section explains how to use the qq network\_mod\_network command.

### Description

Modify network configuration

#### Usage

```
qq network_mod_network [-h] --network-id NETWORK_ID [--name NAME] [--assigned-by {DH
CP,STATIC}] [--netmask <netmask-or-subnet>] [--ip-ranges <address-or-range> [<address-or-range> ...]]
      [--floating-ip-ranges <address-or-range> [<address-or-range> ...]] [--clear-floa
ting-ip-ranges] [--dns-servers <address-or-range> [<address-or-range> ...]] [--clea
r-dns-servers]
      [--dns-search-domains <search-domain> [<search-domain> ...]] [--clear-dns-searc
h-domains] [--mtu MTU] [--vlan-id VLAN_ID] [--tenant-id TENANT_ID | --clear-tenant-i
d]
```

Flag Name	Required	Description
net- work-id	Yes	The unique ID of the network on the interface
name	No	Network name
as- signed- by	No	How to assign IP address, either DHCP or STATIC
net- mask	No	(if STATIC) IPv4 or IPv6 Netmask or Subnet CIDR eg. 255.255.255.0 or 10.1.1.0/24
ip- ranges	No	(if STATIC) List of persistent IP ranges to replace the current ranges. Can be single addresses or ranges, comma separated. eg. 10.1.1.20-21 or 10.1.1.20,10.1.1.21
float- ing-ip- ranges	No	(if STATIC) List of floating IP ranges to replace the current ranges. Can be single addresses or ranges, comma separated. eg. 10.1.1.20-21 or 10.1.1.20,10.1.1.21

clear- floating- ip- ranges	No	(if STATIC) Clear the floating IP address ranges
dns- servers	No	List of DNS Server IP addresses to replace the current ranges. Can be a single address or multiple comma separated addresses. eg. 10.1.1.10 or 10.1.1.10,10.1.1.15
clear- dns- servers	No	Clear the DNS servers
dns- search- domains	No	List of DNS Search Domains to replace the current domains. Can be a single domain or multiple comma separated domains. eg. my.domain.com or my.domain.com,your.domain.com
clear- dns- search- domains	No	Clear the DNS search domains
mtu	No	(if STATIC) The Maximum Transfer Unit (MTU) in bytes of a tagged STATIC network. The MTU of an untagged STATIC network needs to be specified through interface MTU.
vlan- id	No	(if STATIC) User assigned VLAN tag for network configuration. 1-4094 are valid VLAN IDs and 0 is used for untagged networks.
ten- ant-id	No	The tenant that the network is assigned to. If only one tenant exists, this will default to that tenant.
clear- tenant- id	No	Clear the tenant from the network, making the network unassigned

# qq network\_poll

This section explains how to use the qq network\_poll command.

## Description

Poll network status

### Usage

```
qq network_poll [-h] [--node-id NODE_ID]
```

Flag Name	Required	Description
node-id	No	Node ID

# qq nfs\_add\_export

This section explains how to use the qq nfs\_add\_export command.

### Description

Add a new NFS export

### Usage

```
qq nfs_add_export [-h] --export-path EXPORT_PATH --fs-path FS_PATH [--tenant-id TENA
NT_ID] [--description DESCRIPTION] (--no-restrictions | --restrictions JSON_FILE_PAT
H) [--create-fs-path] [--fields-to-present-as-32-bit FIELD [FIELD ...]]
```

Flag Name	Required	Description
export- path	Yes	NFS Export path
fs-path	Yes	File system path
tenant-id	No	ID of the tenant to add the export to
descrip- tion	No	Description of this export
no-re- strictions	No	Specify no restrictions for this export.

restric- tions	No	Path to local file containing the restrictions in JSON format. host_restrictions is a comma separated list of IPs/ IP ranges/ host-names/ wildcarded hostnames/ and the strings KRB5@, KRB5I@, and KRB5P@ for the 3 kerberos security flavors: basic auth, Integrity, and Privacy. user_mapping can be "none" "root" "all". map_to_user may be "{ "id_type": "LOCAL_USER", "id_value": "" }" or "{ "id_type": "NFS_UID", "id_value": "" }". map_to_group may be "{ "id_type": "NFS_GID", "id_value": "". If user_mapping is not "none", then either specify map_to_user as a local user or specify both map_to_user and map_to_group as NFS user/group. ==Example JSON=: { "restrictions": [ { "read_only": true, "host_restrictions": [ "1.2.3.1", "1.100.0.0/24" ], "user_mapping": "root", "map_to_user": { "id_type": "LOCAL_USER", "id_value": "500" }, { "read_only": true, "host_restrictions": [], "user_mapping": "none" }, { "read_only": true, "host_restrictions": [], "user_mapping": "all", "map_to_user": { "id_type": "NFS_UID", "id_value": "500" }, "map_to_group": { "id_type": "NFS_UID", "id_value": "500" }, "map_to_group": { "id_type": "NFS_UID", "id_value": "501" } }]}
create-fs- path	No	Creates the specified file system path if it does not exist
fields-to- present- as-32-bit	No	Fields that should be forced to fit in 32 bits for this export, to support legacy clients and applications. FILE_IDS will hash file IDs (inode numbers), which can be observed by "stat", and is also necessary for some deprecated linux system calls (e.g. to list a directory) to work. FS_SIZE saturates the available, used, and total capacity reported to tools like "df" to 4GiB. FILE_SIZES saturates the reported size of individual files to 4GiB, and should be used with caution as it could cause application misbehavior in the handling of larger files. NONE explicitly specifies no 32 bit mapping.

## qq nfs\_delete\_export

This section explains how to use the qq nfs\_delete\_export command.

### Description

Delete an export

### Usage

```
qq nfs_delete_export [-h] (--export-id EXPORT_ID | --export-path EXPORT_PATH) [--ten ant-id TENANT_ID]
```

Flag Name	Required	Description
export- id	No	ID of export to delete
export- path	No	Path of export to delete
tenant- id	No	ID of the tenant the export is in. Only used if using theexport-path argument.

## qq nfs\_get\_export

This section explains how to use the qq nfs\_get\_export command.

### Description

Get an export

### Usage

```
qq nfs_get_export [-h] (--export-id EXPORT_ID | --export-path EXPORT_PATH) [--tenan
t-id TENANT_ID] [--json]
```

Flag Name	Required	Description
export- id	No	ID of export to modify
export- path	No	Path of export to modify
tenant- id	No	ID of the tenant to get the export from. Only used if using theexport-path argument.
json	No	Print raw response JSON.

# qq nfs\_get\_settings

This section explains how to use the qq nfs\_get\_settings command.

## Description

Retrieve current NFS server configuration.

### Usage

qq nfs\_get\_settings [-h]

# qq nfs\_list\_exports

This section explains how to use the qq nfs\_list\_exports command.

## Description

List all NFS exports

### Usage

```
qq nfs_list_exports [-h] [--json]
```

Flag Name	Required	Description
json	No	Print raw response JSON.

## qq nfs\_mod\_export

This section explains how to use the qq nfs\_mod\_export command.

### Description

Modify an export

#### Usage

Flag Name	Required	Description
export-id	No	ID of export to modify
export- path	No	Path of export to modify
tenant-id	No	ID of the tenant the export is in. Only used if using theexport-path argument.
new-ex- port-path	No	Change NFS export path
new-ten- ant-id	No	Change tenant that export is in
fs-path	No	Change file system path
descrip- tion	No	Description of this export
no-re- strictions	No	Specify no restrictions for this export.

restric- tions	No	Path to local file containing the restrictions in JSON format. host_restrictions is a comma separated list of IPs/ IP ranges/ host-names/ wildcarded hostnames/ and the strings KRB5@, KRB5I@, and KRB5P@ for the 3 kerberos security flavors: basic auth, Integrity, and Privacy. user_mapping can be "none" "root" "all". map_to_user may be "{ "id_type": "LOCAL_USER", "id_value": "" }" or "{ "id_type": "NFS_UID", "id_value": "" }". map_to_group may be "{ "id_type": "NFS_GID", "id_value": "". If user_mapping is not "none", then either specify map_to_user as a local user or specify both map_to_user and map_to_group as NFS user/group. ==Example JSON=: { "restrictions": [ { "read_only": true, "host_restrictions": [ "1.2.3.1", "1.100.0.0/24" ], "user_mapping": "root", "map_to_user": { "id_type": "LOCAL_USER", "id_value": "500" }, { "read_only": true, "host_restrictions": [ "KRB5@" ], "user_mapping": "none" }, { "read_only": true, "host_restrictions": [], "user_mapping": "all", "map_to_user": { "id_type": "NFS_UID", "id_value": "500" }, "map_to_group": { "id_type": "NFS_UID", "id_value": "501" }, ] }
create-fs- path	No	Creates the specified file system path if it does not exist
fields-to- present- as-32-bit	No	Fields that should be forced to fit in 32 bits for this export, to support legacy clients and applications. FILE_IDS will hash file IDs (inode numbers), which can be observed by "stat", and is also necessary for some deprecated linux system calls (e.g. to list a directory) to work. FS_SIZE saturates the available, used, and total capacity reported to tools like "df" to 4GiB. FILE_SIZES saturates the reported size of individual files to 4GiB, and should be used with caution as it could cause application misbehavior in the handling of larger files. NONE explicitly specifies no 32 bit mapping.

## qq nfs\_mod\_export\_host\_access

This section explains how to use the qq nfs\_mod\_export\_host\_access command.

### Description

Modify the access hosts are granted to an export

#### Usage

```
qq nfs_mod_export_host_access [-h] (--export-id EXPORT_ID | --export-path EXPORT_PAT
H) [--tenant-id TENANT_ID] [--json] {add_entry,modify_entry,remove_entry} ...
```

Flag Name	Required	Description
export- id	No	ID of export to modify
export- path	No	Path of export to modify
tenant- id	No	ID of the tenant the export is in. Only used if using theexport-path argument
json	No	Print raw response JSON

# qq nfs\_modify\_settings

This section explains how to use the qq nfs\_modify\_settings command.

### Description

Modify current NFS server configuration.

### Usage

```
qq nfs_modify_settings [-h] [--enable-v4 | --disable-v4] [--enable-krb5 | --disable-krb5] [--enable-krb5p] [--enable-krb5i | --disable-krb5i] [--enable-auth-sys | --disable-auth-sys]
```

Flag Name	Required	Description
enable-v4	No	Enables mounting with the NFSv4.1 protocol
disable-v4	No	Disables mounting with the NFSv4.1 protocol
enable-krb5	No	Enables mounting with KRB5 security
disable-krb5	No	Disables mounting with KRB5 security
enable-krb5p	No	Enables mounting with KRB5p security
disable-krb5p	No	Disables mounting with KRB5p security
enable-krb5i	No	Enables mounting with KRB5i security
disable-krb5i	No	Disables mounting with KRB5i security
enable-auth-sys	No	Enables mounting with AUTH_SYS security
disable-auth-sys	No	Disables mounting with AUTH_SYS security

# qq node\_chassis\_status\_get

This section explains how to use the qq node\_chassis\_status\_get command.

### Description

Get the status of node chassis

### Usage

```
qq node_chassis_status_get [-h] [--node NODE]
```

Flag Name	Required	Description
node	No	Node ID

# qq node\_state\_get

This section explains how to use the qq node\_state\_get command.

## Description

Get the operational state of the node

### Usage

qq node\_state\_get [-h]

## qq nodes\_list

This section explains how to use the qq nodes list command.

### Examples

To List Information about Nodes in Your Cluster

```
Run the qq nodes_list command.
```

The following is example output. This example shows a cluster with 4 nodes.

```
[{
  "id": 1,
  "label": "d0:82:77:72:01:1f",
  "model number": "Q0626",
  "node_name": "qumulo-1",
  "node status": "online",
  "uuid": "12345a6b-7c89-0d12-3456-78fe9012f345"
},{
  "id": 2,
  "label": "a0:2c:55:a3:3d:ce",
  "model number": "Q0626",
  "node_name": "qumulo-2",
  "node status": "online",
  "uuid": "abcde1f2-g3hi-j4kl-mnop-qr56stuv7wxy"
},{
  "id": 3,
  "label": "ec:fd:7d:3f:0b:e5",
  "model number": "Q0626",
  "node_name": "qumulo-3",
  "node status": "online",
  "uuid": "c3a7be37-d65b-42ec-831a-1d0e94a171de"
  "id": 4,
  "label": "c4:e9:73:89:7c:76",
  "model number": "Q0626",
  "node_name": "qumulo-4",
  "node status": "online",
  "uuid": "31b43286-2b03-4dc7-af27-a8c4c35719ab"
}]
```

### Description

List nodes

## Usage

```
qq nodes_list [-h] [--node NODE]
```

Flag Name	Required	Description
node	No	Node ID

## qq portal\_authorize\_hub

This section explains how to use the qq portal\_authorize\_hub command.

### Description

Authorize the specified hub portal to activate the relationship

### Usage

```
qq portal_authorize_hub [-h] -i ID -a SPOKE_ADDRESS [-p SPOKE_PORT] [-j]
```

Flag Name	Required	Description
-i	Yes	The identifier of the hub portal to authorize
-a	Yes	The IP address of a node in the spoke portal host cluster that proposed the relationship
- p	No	The TCP port for portal activity on the remote cluster (3713 by default)
- j	No	Pretty-print JSON

# qq portal\_create

This section explains how to use the qq portal\_create command.

### Description

Create a spoke portal and propose a hub portal relationship on another cluster

### Usage

```
qq portal_create [-h] --spoke-root SP0KE_R00T -a HUB_ADDRESS [-p HUB_P0RT] --hub-root HUB_R00T [-j]
```

Flag Name	Required	Description
spoke- root	Yes	The full path to the directory that serves as the spoke portal root directory. Qumulo Core creates this directory for you automatically. If this directory exists already, the system outputs an error.
-a	Yes	The IP address of a node in the remote cluster
- p	No	The TCP port for portal activity on the remote cluster (3713 by default)
 hub- root	Yes	Full path to the prospective directory that will serve as the hub portal root directory
- j	No	Pretty-print JSON

# qq portal\_delete\_hub

This section explains how to use the qq portal\_delete\_hub command.

### Description

Delete a hub portal

### Usage

```
qq portal_delete_hub [-h] -i ID
```

Flag Name	Required	Description
-i	Yes	Hub portal ID

# qq portal\_delete\_spoke

This section explains how to use the qq portal\_delete\_spoke command.

### Description

Delete a spoke portal

### Usage

qq portal\_delete\_spoke [-h] -i ID

Flag Name	Required	Description
-i	Yes	Spoke portal ID

# qq portal\_evict\_data

This section explains how to use the qq portal\_evict\_data command.

### Description

Free the capacity consumed by a cached file in the specified spoke portal

### Usage

```
qq portal_evict_data [-h] -i SPOKE_ID --file-id FILE_ID
```

Flag Name	Required	Description
-i	Yes	The identifier of the spoke portal from which to remove the cached file
file-id	Yes	The identifier of the file to be removed from the spoke portal cache

# qq portal\_evict\_link

This section explains how to use the qq portal\_evict\_link command.

### Description

Remove a cached link from a directory to a child file or directory

### Usage

```
qq portal_evict_link [-h] -i SPOKE_ID --dir-id DIR_ID --name NAME
```

Flag Name	Required	Description
-i	Yes	The identifier of the spoke portal from which to remove the cached link
dir-id	Yes	The identifier of the parent directory from which to remove the cached link
name	Yes	The name of the cached child file or directory to unlink

# qq portal\_evict\_tree

This section explains how to use the qq portal\_evict\_tree command.

### Description

Remove a cached directory from a spoke portal

### Usage

```
qq portal_evict_tree [-h] -i SPOKE_ID --dir-id DIR_ID
```

Flag Name	Required	Description
-i	Yes	The identifier of the spoke portal from which to remove the cached directory
dir-id	Yes	The identifier of the cached directory to remove

# qq portal\_get\_eviction\_settings

This section explains how to use the qq portal\_get\_eviction\_settings command.

### Description

Retrieve the configuration for automated removal of cached data

### Usage

qq portal\_get\_eviction\_settings [-h]

# qq portal\_get\_hub

This section explains how to use the qq portal\_get\_hub command.

### Description

Get the configuration and state for the specified hub portal

### Usage

```
qq portal_get_hub [-h] -i ID [-j]
```

Flag Name	Required	Description
-i	Yes	Hub portal ID
- j	No	Pretty-print JSON

# qq portal\_get\_spoke

This section explains how to use the qq portal\_get\_spoke command.

#### Description

Get the configuration and state for the specified spoke portal

#### Usage

```
qq portal_get_spoke [-h] -i ID [-j]
```

Flag Name	Required	Description
-i	Yes	Spoke portal ID
- j	No	Pretty-print JSON

# qq portal\_list

This section explains how to use the qq portal\_list command.

### Description

List all accepted and pending portals on the current cluster

### Usage

```
qq portal_list [-h] [-j]
```

Flag Name	Required	Description	
- j	No	Pretty-print JSON	

# qq portal\_list\_hubs

This section explains how to use the qq portal\_list\_hubs command.

#### Description

List accepted and pending hub portals on the current cluster

#### Usage

```
qq portal_list_hubs [-h] [-j]
```

Flag Name	Required	Description	
- j	No	Pretty-print JSON	

# qq portal\_list\_spokes

This section explains how to use the qq portal\_list\_spokes command.

#### Description

List accepted and pending spoke portals on the current cluster

#### Usage

```
qq portal_list_spokes [-h] [-j]
```

Flag Name	Required	Description	
- j	No	Pretty-print JSON	

# qq portal\_modify\_hub

This section explains how to use the qq portal\_modify\_hub command.

#### Description

Change the configuration for a hub portal

#### Usage

```
qq portal_modify_hub [-h] -i ID -a SPOKE_ADDRESS [-p SPOKE_PORT] [-j]
```

Flag Name	Required	Description
-i	Yes	Hub portal ID
-a	Yes	The IP address of a node in the remote cluster
- p	No	The TCP port for portal activity on the remote cluster (3713 by default)
- j	No	Pretty-print JSON

# qq portal\_modify\_spoke

This section explains how to use the qq portal\_modify\_spoke command.

#### Description

Change the configuration for a spoke portal

#### Usage

```
qq portal_modify_spoke [-h] -i ID -a HUB_ADDRESS [-p HUB_PORT] [-j]
```

Flag Name	Required	Description
-i	Yes	Spoke portal ID
-a	Yes	The IP address of a node in the remote cluster
- p	No	The TCP port for portal activity on the remote cluster (3713 by default)
- j	No	Pretty-print JSON

# qq portal\_propose\_hub

This section explains how to use the qq portal\_propose\_hub command.

#### Description

Propose a relationship from a spoke portal to a hub portal

#### Usage

```
qq portal_propose_hub [-h] --spoke-id SPOKE_ID -a HUB_ADDRESS [-p HUB_PORT] --hub-ro ot HUB_ROOT [-j]
```

Flag Name	Required	Description
spoke- id	Yes	The identifier of the spoke portal from which to propose a relationship
-a	Yes	The IP address of a node in the remote cluster
- p	No	The TCP port for portal activity on the remote cluster (3713 by default)
hub- root	Yes	Full path to the prospective directory that will serve as the hub portal root directory
- j	No	Pretty-print JSON

# qq portal\_set\_eviction\_settings

This section explains how to use the qq portal\_set\_eviction\_settings command.

#### Description

Configure the automated removal of cached data

#### Usage

qq portal\_set\_eviction\_settings [-h] -f FREE\_THRESHOLD

Flag Name	Required	Description
-f	Yes	The threshold of remaining free capacity on a cluster, as a decimal number between 0 and 1, that triggers the automated removal of cached data. For example, if you set this value to 0.05, the system begins to remove cached data from spoke portals when the cluster is 95%% full.

# qq protection\_status\_get

This section explains how to use the qq protection\_status\_get command.

#### Description

Get cluster protection status

#### Usage

qq protection\_status\_get [-h]

### qq quota\_create\_quota

This section explains how to use the qq quota\_create\_quota command.

#### Description

Create a directory quota

#### Usage

```
qq quota_create_quota [-h] [--path PATH] [--id ID] --limit LIMIT
```

Flag Name	Required	Description
 path	No	Path name
id	No	File ID
 limit	Yes	Quota limit in bytes. Both base-10 and base-2 shorthand names are accepted: GB or GiB, TB or TiB (e.g. 50GB)

# qq quota\_delete\_quota

This section explains how to use the qq quota\_delete\_quota command.

#### Description

Delete a directory quota

#### Usage

```
qq quota_delete_quota [-h] [--path PATH] [--id ID]
```

Flag Name	Required	Description
path	No	Path name
id	No	File ID

### qq quota\_get\_quota

This section explains how to use the qq quota\_get\_quota command.

#### Description

Get a directory quota

#### Usage

```
qq quota_get_quota [-h] [--path PATH] [--id ID]
```

Flag Name	Required	Description
path	No	Path name
id	No	File ID

# qq quota\_list\_quotas

This section explains how to use the qq quota\_list\_quotas command.

#### Description

List all directory quotas

#### Usage

```
qq quota_list_quotas [-h] [--page-size PAGE_SIZE]
```

Flag Name	Required	Description
page-size	No	Max quota entries to return per request

# qq quota\_update\_quota

This section explains how to use the qq quota\_update\_quota command.

#### Description

Update a directory quota

#### Usage

```
qq quota_update_quota [-h] [--path PATH] [--id ID] --limit LIMIT
```

Flag Name	Required	Description
 path	No	Path name
id	No	File ID
 limit	Yes	Quota limit in bytes. Both base-10 and base-2 shorthand names are accepted: GB or GiB, TB or TiB (e.g. 50GB)

### qq raw

This section explains how to use the qq raw command.

#### Description

Issue an HTTP request to a Qumulo REST endpoint. Content for modifying requests (i.e. PATCH, POST, and PUT) can be provided on stdin. Output is provided on stdout.

#### Usage

qq raw [-h] [--content-type {application/json,application/octet-stream}] {DELETE,GE
T,PATCH,POST,PUT} url

#### Flags

Flag Name	Required	Description
content- type	No	Content MIME type. Use application/octet-stream for binary input. (Default: application/json)

### **Positional Options**

Option Name	Description
method	HTTP method. PATCH, POST, and PUT accept input on stdin
url	REST endpoint (e.g. /v1/ad/join)

# qq reboot\_pause

This section explains how to use the qq reboot\_pause command.

### Description

Pause a cluster-wide reboot

#### Usage

qq reboot\_pause [-h]

# qq reboot\_resume

This section explains how to use the qq reboot\_resume command.

### Description

Resume a cluster-wide reboot

#### Usage

qq reboot\_resume [-h]

# qq reboot\_start

This section explains how to use the qq reboot\_start command.

### Description

Start a cluster-wide reboot

#### Usage

```
qq reboot_start [-h] [--rolling] [--num-nodes NUM_NODES_TO_REBOOT] [--force]
```

Flag Name	Required	Description
 rolling	No	Reboot nodes one set at a time, depending on the number of node failures configured in the protection system
num- nodes	No	Using therolling flag lets you specify the number of nodes to reboot at a time. The number of nodes must be greater than 0 and less than or equal to the number of node failures that your cluster permits. By default, this value is the number of permitted node failures minus 1 (1 node minimum).
 force	No	Do not prompt

# qq reboot\_status

This section explains how to use the qq reboot\_status command.

### Description

Retrieve status of reboot manager

### Usage

qq reboot\_status [-h]

# qq replace\_nodes

This section explains how to use the qq replace\_nodes command.

#### Description

Replace configured nodes by adding nodes to a Qumulo cluster.

#### Usage

qq replace\_nodes [-h] {register\_plan,add\_nodes\_and\_replace,get\_plan,cancel\_plan}  $\dots$ 

# qq replication\_abort\_object\_replication

This section explains how to use the qq replication\_abort\_object\_replication command.

#### Description

Abort any ongoing replication job for the specified object replication relationship.

#### Usage

qq replication\_abort\_object\_replication [-h] --id ID

Flag Name	Required	Description
id	Yes	Unique identifier of the object replication relationship

# qq replication\_abort\_replication

This section explains how to use the qq replication\_abort\_replication command.

#### Description

Abort ongoing replication work for the specified source replication relationship.

#### Usage

qq replication\_abort\_replication [-h] --id ID [--skip-active-policy-snapshot {true,f alse}]

Flag Name	Required	Description
id	Yes	Unique identifier of the source replication relationship
skip- active- policy- snapshot	No	If set to true and the currently replicating snapshot was created by a policy, the next replication job will use the next queued snapshot instead of retrying the current one (default: false).

### qq replication\_add\_blackout\_window

This section explains how to use the qq replication\_add\_blackout\_window command.

#### Description

Add a blackout window to the specified source replication relationship.

#### Usage

```
qq replication_add_blackout_window [-h] --id ID --start-time START_TIME --end-time E ND_TIME --days-of-week DAYS_OF_WEEK
```

Flag Name	Required	Description
id	Yes	Unique identifier of the source replication relationship.
 start- time	Yes	The 24 hour time of day start time for the blackout window (e.g. 15:30). Time is always in the timezone configured on the specified source replication relationship.
end- time	Yes	The 24 hour time of day end time for the blackout window (e.g. 18:30) on the following day if earlier than thestart-time parameter.
days- of- week	Yes	Days of the week the window applies to. Comma separated list (e.g. MON,TUE,WED,THU,FRI,SAT,SUN) or ALL.

# qq replication\_authorize

This section explains how to use the qq replication\_authorize command.

#### Description

Authorize the specified replication relationship, establishing this cluster as the target of replication.

### Usage

qq replication\_authorize [-h] --id ID [--allow-non-empty-directory] [--allow-fs-pat h-create]

Flag Name	Required	Description
id	Yes	Unique identifier of the target replication relationship
allow- non-emp- ty-direc- tory	No	Allow the replication relationship to be authorized on a target directory containing existing data. Existing data in the target directory may be deleted or overwritten. If you wish to preserve this data, consider taking a snapshot before authorizing.
allow- fs-path- create	No	Allow the target directory to be created with inherited permissions if it does not already exist

### qq replication\_create\_object\_relationship

This section explains how to use the qq replication\_create\_object\_relationship command.

#### Description

Create an object replication relationship that initiates a copy of file data to or from S3.

#### Usage

```
qq replication_create_object_relationship [-h] (--local-directory-id LOCAL_DIRECTOR
Y_ID | --local-directory-path LOCAL_DIRECTORY_PATH) --direction {COPY_TO_OBJECT,COP
Y_FROM_OBJECT} [--object-store-address OBJECT_STORE_ADDRESS] --object-folder
    OBJECT_FOLDER [--use-port USE_PORT] [--ca-certificate CA_CERTIFICATE] --bucket B
UCKET [--bucket-addressing-style {BUCKET_STYLE_PATH,BUCKET_STYLE_VIRTUAL_HOSTED}] --
region REGION --access-key-id
    ACCESS_KEY_ID [--secret-access-key SECRET_ACCESS_KEY]
```

Flag Name	Required	Description
local-di- rectory-id	No	File ID of the qumulo directory
local-di- rectory- path	No	Path of the qumulo directory
direc- tion	Yes	Whether data is to be copied to, or from, the object store.
object- store-ad- dress	No	S3-compatible server address. If omitted, Amazon S3 address s3amazonaws.com will be used.
object- folder	Yes	Folder to use in the object store bucket. A slash separator is automatically used to specify a folder. For example, a folder "example" and a file path (relative to the directory_path) "dir/file" results in key "example/dir/file". Use empty value "" or "/" to replicate with the root of the bucket.

use-port	No	HTTPS port to use when communicating with the object store (default: 443)
ca-cer- tificate	No	Path to a file containing the public certificate of the certificate authority to trust for connections to the object store, in PEM format. If not specified, the built-in trusted public CAs are used.
bucket	Yes	Bucket in the object store to use for this relationship
bucket- addressing- style	No	Addressing style for requests to the bucket. Set to BUCK-ET_STYLE_PATH for path-style addressing or BUCKET_STYLE_VIRTU-AL_HOSTED for virtual hosted-style (the default). For Amazon S3, virtual hosted-style is recommended as path-style will be deprecated. Bucket names containing dots (".") or characters that are not valid in domain names may require path-style. The object-store-address should not include the bucket name, regardless of addressing style.
region	Yes	Region the bucket is located in, e.g., us-west-2
access- key-id	Yes	Access key ID to use when communicating with the object store
secret- access-key	No	Secret access key to use when communicating with the object store

### qq replication\_create\_source\_relationship

This section explains how to use the qq replication\_create\_source\_relationship command.

#### Description

Create a new replication relationship.

#### Usage

```
qq replication_create_source_relationship [-h] (--source-id SOURCE_ID | --source-pat
h SOURCE_PATH) --target-path TARGET_PATH --target-address TARGET_ADDRESS [--target-p
ort TARGET_PORT] [--enable-replication {true, false}]
    [--set-source-directory-read-only {true, false}] [--map-local-ids-to-nfs-ids {true, false}]
```

Flag Name	Required	Description
source-id	No	File ID of the source directory
source-path	No	Path to the source directory
target-path	Yes	Path to the target directory
target-address	Yes	The target IP address
target-port	No	Network port to replicate to on the target (overriding default)

### qq replication\_delete\_blackout\_windows

This section explains how to use the qq replication\_delete\_blackout\_windows command.

#### Description

Delete blackout windows of the specified source replication relationship.

#### Usage

qq replication\_delete\_blackout\_windows [-h] --id ID

Flag Name	Required	Description
id	Yes	Unique identifier of the source replication relationship

### qq replication\_delete\_object\_relationship

This section explains how to use the qq replication\_delete\_object\_relationship command.

#### Description

Delete the specified object replication relationship, which must not be running a job.

#### Usage

qq replication\_delete\_object\_relationship [-h] --id ID

Flag Name	Required	Description
id	Yes	Unique identifier of the object replication relationship

### qq replication\_delete\_source\_relationship

This section explains how to use the qq replication\_delete\_source\_relationship command.

#### Description

Delete the specified source replication relationship.

#### Usage

```
qq replication delete source relationship [-h] --id ID [--force]
```

Flag Name	Required	Description
id	Yes	Unique identifier of the source replication relationship
force	No	Do not prompt

### qq replication\_delete\_target\_relationship

This section explains how to use the qq replication\_delete\_target\_relationship command.

#### Description

Delete the specified target replication relationship.

#### Usage

```
qq replication_delete_target_relationship [-h] --id ID [--force]
```

Flag Name	Required	Description
id	Yes	Unique identifier of the target replication relationship
force	No	Do not prompt

# qq replication\_get\_object\_relationship

This section explains how to use the qq replication\_get\_object\_relationship command.

#### Description

Get the configuration of the specified object replication relationship.

#### Usage

qq replication get object relationship [-h] --id ID

Flag Name	Required	Description
id	Yes	Unique identifier of the object replication relationship

### qq replication\_get\_object\_relationship\_status

This section explains how to use the qq replication\_get\_object\_relationship\_status command.

#### Description

Get current status of the specified object replication relationship.

#### Usage

qq replication\_get\_object\_relationship\_status [-h] --id ID

Flag Name	Required	Description
id	Yes	Unique identifier of the object replication relationship

# qq replication\_get\_source\_relationship

This section explains how to use the qq replication\_get\_source\_relationship command.

#### Description

Get information about the specified source replication relationship.

#### Usage

qq replication\_get\_source\_relationship [-h] --id ID

Flag Name	Required	Description
id	Yes	Unique identifier of the source replication relationship

### qq replication\_get\_source\_relationship\_status

This section explains how to use the qq replication\_get\_source\_relationship\_status command.

#### Description

Get current status of the specified source replication relationship.

#### Usage

qq replication\_get\_source\_relationship\_status [-h] --id ID

Flag Name	Required	Description
id	Yes	Unique identifier of the source replication relationship

### qq replication\_get\_target\_relationship\_status

This section explains how to use the qq replication\_get\_target\_relationship\_status command.

#### Description

Get current target of the specified source replication relationship.

#### Usage

qq replication\_get\_target\_relationship\_status [-h] --id ID

Flag Name	Required	Description
id	Yes	Unique identifier of the target replication relationship

## qq replication\_link\_snapshot\_policy

This section explains how to use the qq replication\_link\_snapshot\_policy command.

#### Description

Link a snapshot policy to a source replication relationship.

#### Usage

qq replication\_link\_snapshot\_policy [-h] --relationship-id RELATIONSHIP\_ID --snapsho
t-policy-id SNAPSHOT\_POLICY\_ID [-t TARGET\_EXPIRATION]

Flag Name	Required	Description
relation- ship-id	Yes	Unique identifier of the source replication relationship.
snapshot- policy-id	Yes	Identifier of the snapshot policy to link.
-t	No	Duration after which to expire snapshots on the target cluster that were replicated from this snapshot policy, in format, where is a positive integer less than 100 and is one of [months, weeks, days, hours, minutes], e.g. 5days or 1hours. 'never' indicates snapshots should never expire and 'same_as_policy' indicates snapshots should expire at the same time as the snapshot policy specifies. (default: same_as_policy)

### qq replication\_list\_object\_relationship\_statuses

This section explains how to use the qq replication\_list\_object\_relationship\_statuses command.

### Description

List the statuses for all existing object replication relationships.

#### Usage

qq replication\_list\_object\_relationship\_statuses [-h]

# qq replication\_list\_object\_relationships

This section explains how to use the qq replication\_list\_object\_relationships command.

#### Description

List all the existing object replication relationships.

#### Usage

qq replication\_list\_object\_relationships [-h]

## qq replication\_list\_queued\_snapshots

This section explains how to use the qq replication\_list\_queued\_snapshots command.

#### Description

List information for all snapshots awaiting replication by the specified source replication relationship.

#### Usage

```
qq replication_list_queued_snapshots [-h] --id ID
```

Flag Name	Required	Description
id Yes		Unique identifier of the source replication relationship.

### qq replication\_list\_source\_relationship\_statuses

This section explains how to use the qq replication\_list\_source\_relationship\_statuses command.

### Description

List statuses for all existing source replication relationships.

### Usage

qq replication\_list\_source\_relationship\_statuses [-h]

## qq replication\_list\_source\_relationships

This section explains how to use the qq replication\_list\_source\_relationships command.

#### Description

List existing source replication relationships.

#### Usage

qq replication\_list\_source\_relationships [-h]

### qq replication\_list\_target\_relationship\_statuses

This section explains how to use the qq replication\_list\_target\_relationship\_statuses command.

### Description

List statuses for all existing target replication relationships.

### Usage

qq replication\_list\_target\_relationship\_statuses [-h]

## qq replication\_make\_target\_writable

This section explains how to use the qq replication\_make\_target\_writable command.

### Description

Revert target directory to the latest recovery point.

#### Usage

```
qq replication_make_target_writable [-h] --id ID [--force]
```

Flag Name	Required	Description
id	Yes	Unique identifier of the target replication relationship
force	No	Do not prompt

### qq replication\_modify\_source\_relationship

This section explains how to use the qq replication\_modify\_source\_relationship command.

#### Description

Modify an existing source replication relationship.

#### Usage

Flag Name	Required	Description
id	Yes	Unique identifier of the source replication relationship
new- target- address	No	The target IP address
new- target- port	No	Network port to replicate to on the target
- Z	No	The timezone for the relationship's blackout windows (e.g. America/Los_Angeles or UTC). See the time_list_timezones qq command for a complete list of supported timezones.

### qq replication\_reconnect\_target\_relationship

This section explains how to use the qq replication\_reconnect\_target\_relationship command.

#### Description

Make the target directory read-only and revert any changes made to the target directory since the latest recovery point. Then reconnect the specified target replication relationship with its source directory. The revert action may take some time to complete before replication is resumed.

#### Usage

qq replication reconnect target relationship [-h] --id ID [--force]

Flag Name	Required	Description
id	Yes	Unique identifier of the target replication relationship
force	No	Do not prompt

## qq replication\_release\_queued\_snapshot

This section explains how to use the qq replication\_release\_queued\_snapshot command.

#### Description

Release a snapshot queued for replication from the queue of the specified source replication relationship.

#### Usage

 $\label{lem:continuous} \begin{tabular}{ll} $\tt qq$ replication\_release\_queued\_snapshot [-h] --relationship-id RELATIONSHIP\_ID --snap shot-id SNAPSHOT\_ID \\ \end{tabular}$ 

Flag Name	Required	Description
relationship-id	Yes	Unique identifier of the source replication relationship.
snapshot-id	Yes	Unique identifier of the snapshot to release.

# qq replication\_replicate

This section explains how to use the qq replication\_replicate command.

### Description

Replicate from the source to the target of the specified relationship.

#### Usage

```
qq replication_replicate [-h] --id ID
```

Flag Name	Required	Description
id	Yes	Unique identifier of the source replication relationship

### qq replication\_reverse\_target\_relationship

This section explains how to use the qq replication\_reverse\_target\_relationship command.

#### Description

Reverse source and target for a replication relationship.

#### Usage

qq replication\_reverse\_target\_relationship [-h] --id ID --source-address SOURCE\_ADDR ESS  $[--source-port SOURCE\_PORT]$ 

Flag Name	Required	Description
id	Yes	Unique identifier of the target replication relationship
source-address	Yes	The IP address of the current source cluster
source-port	No	Network port of the current source cluster (defaults to 3712)

### qq replication\_set\_snapshot\_policy\_replication\_mod

This section explains how to use the qq replication\_set\_snapshot\_policy\_replication\_mode command.

#### Description

Set the replication mode of the specified source replication relationship. This command is only for a relationship that has linked snapshot policies.

#### Usage

qq replication\_set\_snapshot\_policy\_replication\_mode [-h] --id ID --mode {REPLICATIO N\_SNAPSHOT\_POLICY,REPLICATION\_SNAPSHOT\_POLICY\_WITH\_CONTINUOUS}

Flag Name	Required	Description	
id	Yes	Unique identifier of the source replication relationship.	
mode	Yes	Replication mode to set.	

### qq replication\_set\_target\_relationship\_lock

This section explains how to use the qq replication\_set\_target\_relationship\_lock command.

#### Description

The key that locks policy-created snapshots for a target replication relationship. Consider the following system behavior: If you don't set a key, the system does not lock the snapshots that the specified target replication relationship creates. The system locks only policy-created snapshots, unless you configure an expiration for the snapshot policy on the target cluster. If you reverse the relationship by switching the source and target, the new target cannot use this lock key and you must set a key for the new target. However, if you revert the relationship by returning the source and target to their original assignments, the system lets you use lock key from the original source-target relationship. If a target replication relationship uses a lock key, you cannot disable or delete the key, unless you reverse the relationship. If you disable or delete a lock key while a target replication relationship is reversed and then return the source and target to their original assignments, you must set a new key.

#### Usage

qq replication\_set\_target\_relationship\_lock [-h] --relationship-id RELATIONSHIP\_ID
(-k LOCK KEY | --clear-lock-key)

Flag Name	Required	Description
relation- ship-id	Yes	The unique identifier of the target replication relationship.
-k	No	The identifier or name of the lock key to associate with the specified target replication relationship.
clear- lock-key	No	Disassociate the lock key from this target relationship

## qq replication\_start\_object\_relationship

This section explains how to use the qq replication\_start\_object\_relationship command.

#### Description

Start a new replication job for an existing object replication relationship

#### Usage

qq replication\_start\_object\_relationship [-h] --id ID

Flag Name	Required	Description
id	Yes	Unique identifier of the object replication relationship

## qq replication\_unlink\_snapshot\_policy

This section explains how to use the qq replication\_unlink\_snapshot\_policy command.

#### Description

Unlink a snapshot policy from a source replication relationship.

#### Usage

 $\label{lem:continuous} $$qq$ replication\_unlink\_snapshot\_policy [-h] --relationship-id RELATIONSHIP\_ID --snapshot\_policy-id SNAPSHOT\_POLICY\_ID$ 

Flag Name	Required	Description
relationship-id	Yes	Unique identifier of the source replication relationship.
snapshot-policy-id	Yes	Identifier of the snapshot policy to unlink.

# qq restriper\_status

This section explains how to use the qq restriper\_status command.

### Description

Get restriper status

### Usage

qq restriper\_status [-h]

## qq rotate\_encryption\_keys

This section explains how to use the qq rotate\_encryption\_keys command.

### Description

Rotate the at-rest encryption master keys.

#### Usage

```
qq rotate_encryption_keys [-h] [--key-id KEY_ID | --create-key-with-name KEY_NAME]
```

Flag Name	Required	Description
key-id	No	The unique ID of the master key for at-rest encryption.
create-key-with- name	No	The name of the key that will be created and used for at-rest encryption.

## qq s3\_abort\_upload

This section explains how to use the qq s3\_abort\_upload command.

### Description

Aborts an S3 upload in progress. You can perform this operation on user-initiated multipart uploads and system-initiated uploads that the PutObject and CopyObject API actions use.

#### Usage

```
qq s3_abort_upload [-h] --bucket BUCKET --upload-id UPLOAD_ID
```

Flag Name	Required	Description
bucket	Yes	The S3 bucket to which the upload was initiated
upload-id	Yes	The identifier of the upload to abort.

# qq s3\_add\_bucket

This section explains how to use the qq s3\_add\_bucket command.

### Description

Create an S3 bucket

#### Usage

```
qq s3_add_bucket [-h] --name NAME [--fs-path FS_PATH] [--create-fs-path] [--enable-o
bject-lock]
```

Flag Name	Required	Description
name	Yes	The name of the bucket to create
fs-path	No	The absolute path to use as the bucket root directory. The user must have permission to read the directory.
create- fs-path	No	Create the bucket root directory if it does not already exist. The user must have permission to create the bucket root directory.
enable- object- lock	No	Create the bucket with versioning and object locking enabled.

### qq s3\_bucket\_policy\_explain\_access

This section explains how to use the qq s3\_bucket\_policy\_explain\_access command. For more information, see Managing Access Policies for an S3 Bucket in a Qumulo Cluster in the Qumulo Administrator Guide.

#### Description

Details a users access as allowed by the bucket policy

### Usage

qq s3\_bucket\_policy\_explain\_access [-h] --bucket BUCKET [--auth-id AUTH\_ID] [--anony
mous] [identifier]

#### Flags

Flag Name	Required	Description
bucket	Yes	The bucket for which the access policy will be explained.
auth-id	No	Auth ID of the qumulo user
anonymous	No	An unauthenticated S3 user

#### **Positional Options**

Option Name	Description
identifier	An auth_id, SID, or name optionally qualified with a domain prefix (e.g "local:name", "ad:name", "AD\name") or an ID type (e.g. "auth_id:513", "SID:S-1-1-0"). Groups are not supported for access keys, must be a user.

## qq s3\_create\_access\_key

This section explains how to use the qq s3\_create\_access\_key command.

### Description

Create S3 access key

#### Usage

```
qq s3_create_access_key [-h] [--auth-id AUTH_ID] [--self] [identifier]
```

### Flags

Flag Name	Required	Description
auth-id	No	The auth_id of the Qumulo Core user
self	No	Create an s3 access key for the currently logged on user

### **Positional Options**

Option Name	Description		
identifier	An auth_id, SID, or a name optionally qualified by a domain prefix (for example, "local:name", "ad:name", "AD\name") or an ID type (for example, "auth_id:513", "SID:S-1-1-0"). Qumulo Core supports only users (not groups) for S3 access keys.		

# qq s3\_delete\_access\_key

This section explains how to use the qq s3\_delete\_access\_key command.

### Description

Delete an S3 access key

### Usage

```
qq s3_delete_access_key [-h] --id ID
```

Flag Name	Required	Description
id	Yes	The identifier of the access key to delete.

# qq s3\_delete\_bucket

This section explains how to use the qq s3\_delete\_bucket command.

### Description

Delete an S3 bucket

### Usage

```
qq s3_delete_bucket [-h] --name NAME [--delete-root-dir]
```

Flag Name	Required	Description
 name	Yes	The name of the S3 bucket to delete
delete- root- dir	No	If specified, the operation succeeds only if the bucket root directory is empty, and the caller has the permissions for unlinking the bucket root directory from the S3 bucket. By default, the directory to be deleted can contain objects.

### qq s3\_delete\_bucket\_policy

This section explains how to use the qq s3\_delete\_bucket\_policy command.

For more information, see Managing Access Policies for an S3 Bucket in a Qumulo Cluster in the Qumulo Administrator Guide.

#### Examples

To Delete an Access Policy for an S3 Bucket

#### **A** Important

This command removes any existing access policy restrictions.

Run the qq s3\_delete\_bucket\_policy command and use the --bucket flag to specify the name of your S3 bucket. For example:

qq s3\_delete\_bucket\_policy --bucket MyBucket

#### Description

Remove the access policy stored at **BUCKET**.

#### Usage

qq s3\_delete\_bucket\_policy [-h] --bucket BUCKET

Flag Name	Required	Description	
bucket	Yes	The target bucket for which the access policy will be removed.	

### qq s3\_get\_bucket

This section explains how to use the qq s3\_get\_bucket command.

#### Examples

To Get Configuration Information for an S3 Bucket

Run the qq s3\_get\_bucket command and use the --bucket flag to specify the name of your bucket. For example:

```
qq s3_get_bucket_policy --bucket MyBucket
```

The following is example output. All times are in the UTC time zone.

```
{
    "creation_time": "2022-12-20T19:42:26.833076147Z",
    "name": "MyBucket",
    "path": "/buckets/my-bucket"
}
```

#### Description

Retrieve details for an S3 bucket

### Usage

```
qq s3_get_bucket [-h] --name NAME
```

Flag Name	Required	Description
name	Yes	The name of the S3 bucket for which to retrieve details

### qq s3\_get\_bucket\_policy

This section explains how to use the qq s3\_get\_bucket\_policy command.

For more information, see Managing Access Policies for an S3 Bucket in a Qumulo Cluster in the Qumulo Administrator Guide.

#### Examples

To Retrieve an Access Policy for an S3 Bucket

Run the qq s3\_get\_bucket\_policy command, and use the --bucket flag to specify the name of your bucket. For example:

qq s3\_get\_bucket\_policy --bucket MyBucket

### Description

Retrieve entries of the access policy json stored at **BUCKET**.

#### Usage

qq s3\_get\_bucket\_policy [-h] [--bucket BUCKET] [--example]

Flag Name	Required	Description
bucket	No	The target bucket for which the access policy will be retrieved
example	No	Print an example Policy.

# qq s3\_get\_settings

This section explains how to use the qq s3\_get\_settings command.

### Description

Retrieve S3 server settings

### Usage

qq s3\_get\_settings [-h]

# qq s3\_list\_access\_keys

This section explains how to use the qq s3\_list\_access\_keys command.

### Description

List S3 access keys

#### Usage

```
qq s3_list_access_keys [-h] [--json] [--user USER | --self]
```

Flag Name	Required	Description
 json	No	Output JSON instead of table.
user	No	Show access keys belonging to a specific user. Use an auth_id, SID, or name optionally qualified with a domain prefix (e.g "local:name", "ad:name", "AD\name") or an ID type (e.g. "auth_id:513", "SID:S-1-1-0"). Groups are not supported for access tokens, must be a user.
 self	No	List only access keys that target yourself.

# qq s3\_list\_buckets

This section explains how to use the qq s3\_list\_buckets command.

### Description

List all S3 buckets

### Usage

```
qq s3_list_buckets [-h] [--json]
```

Flag Name	Required	Description
json	No	List S3 buckets in JSON format (not in a table)

## qq s3\_list\_uploads

This section explains how to use the qq s3\_list\_uploads command.

#### Description

List S3 uploads in progress, including user-initiated multipart uploads and system-initiated uploads that the PutObject and CopyObject API actions use.

#### Usage

```
qq s3_list_uploads [-h] --bucket BUCKET [--starts-with STARTS_WITH]
```

Flag Name	Required	Description
bucket	Yes	The S3 bucket for which to list uploads
starts-with	No	List uploads only for keys that begin with the specified string

### qq s3\_modify\_bucket

This section explains how to use the qq s3\_modify\_bucket command.

For more information, see Managing Access Policies for an S3 Bucket in a Qumulo Cluster in the Qumulo Administrator Guide.

#### O Note

By default, an S3 bucket is in the Unversioned state.

#### Examples

#### To Enable Versioning for an S3 Bucket

Run the qq s3\_modify\_bucket command, specify the bucket name, and use the --enable-versioning flag. For example:

```
qq s3_modify_bucket \
  --name MyBucket \
  --enable-versioning
```

The following is example output. All times are in the UTC time zone.

```
{
   "creation_time": "2024-05-22T21:42:11.295718303Z",
   "name": "MyBucket",
   "path": "/my-bucket",
   "versioning": "Enabled"
}
```

#### To Suspend Versioning for an S3 Bucket

Run the qq s3\_modify\_bucket command, specify the bucket name, and use the --suspend-versioning flag.

#### Description

Modify the settings of the given bucket. Use this command to update the bucket versioning state. Using this command to enable anonymous access to a bucket has been disabled, use s3\_set\_bucket\_policy instead.

### Usage

```
qq s3_modify_bucket [-h] --name NAME [--suspend-versioning | --enable-versioning]
[--enable-object-lock-without-retention | --enable-object-lock-with-retention-days R
ETENTION_DAYS | --enable-object-lock-with-retention-years RETENTION_YEARS]
```

Flag Name	Required	Description
name	Yes	The name of the bucket to be modified
suspend-version- ing	No	Suspends object versioning
enable-versioning	No	Enables object versioning
enable-object- lock-without-reten- tion	No	Enable Object Lock with no default retention period. (Requires versioning to be enabled for the specified S3 bucket.)
enable-object- lock-with-retention- days	No	Enable Object Lock with the retention period specified in days.
enable-object- lock-with-retention- years	No	Enable Object Lock with the retention period specified in years.

# qq s3\_modify\_bucket\_policy

This section explains how to use the qq s3\_modify\_bucket\_policy command.

For more information, see Managing Access Policies for an S3 Bucket in a Qumulo Cluster in the Oumulo Administrator Guide.

#### Examples

#### To Modify a Statement in an Access Policy for an S3 Bucket

Run the qq s3\_modify\_bucket\_policy command and use the --bucket flag to specify the name of the S3 bucket. For the modify\_statement subcommand:

- · Use the --index flag to specify the index of the statement to modify.
- Use the --type flag to specify the statement type.
- Use the --sid flag to specify the security identifier.
- Use the --new-principals flag to specify a comma-separated list of principals (with which to replace the existing ones), enclosed in quotation marks (").
- Use the --new-actions flag to specify a comma-separated list of S3 API actions (with which to replace the existing ones), enclosed in quotation marks ( " ).

#### For example:

```
qq s3_modify_bucket_policy --bucket AnotherBucket \
  modify_statement --index 1 \
    --type Deny \
    --sid DenyGuest \
    --new-principals "Authenticated Users" \
    --new-actions "s3:PutBucketPolicy"
```

#### To Append a Statement to an Access Policy for an S3 Bucket

Run the qq s3\_modify\_bucket\_policy command and use the --bucket flag to specify the name of the S3 bucket. For the append\_statement subcommand:

- · Use the --type flag to specify the statement type.
- Use the --sid flag to specify the security identifier.
- Use the --principals flag to specify a comma-separated list of principals, enclosed in quotation marks (").
- Use the --actions flag to specify a comma-separated list of S3 API actions, enclosed in quotation marks (").

#### For example:

```
qq s3_modify_bucket_policy --bucket MyBucket \
    append_statement --type Allow \
    --sid AllowGuest \
    --principals "local:guest,local:Mary" \
    --actions "s3:GetBucketPolicy,s3:AbortMultipartUpload"
```

#### To Delete a Statement from an Access Policy for an S3 Bucket

Run the qq s3\_modify\_bucket\_policy command and use the --bucket flag to specify the name of the S3 bucket. For the delete\_statement subcommand, use the --index flag to specify the index of the statement to delete. For example:

```
qq s3_modify_bucket_policy --bucket MyBucket \
  delete_statement --index 2
```

### Description

Modify the access policy for -bucket.

#### Usage

Flag Name	Required	Description
bucket	Yes	The name of the S3 bucket whose access policy is to be modified
allow-remove- self	No	Allow the policy set to remove the ability for this user to change the policy.

# qq s3\_modify\_settings

This section explains how to use the qq s3\_modify\_settings command.

# Description

Modify S3 server settings

### Usage

```
qq s3_modify_settings [-h] [--disable | --enable] [--base-path BASE_PATH] [--multipa
rt-upload-expiry-interval MULTIPART_UPLOAD_EXPIRY_INTERVAL] [--secure | --insecure]
```

Flag Name	Required	Description
dis- able	No	Disable S3 server
enable	No	Enable S3 server
base- path	No	The default bucket directory prefix for all S3 buckets created without an explicitly specified path. You must specify this directory as an absolute path.
multi- part-up- load-ex- piry-in- terval	No	The time period during which the system permits a multipart upload to remain unmodified. When this time period elapses, the system considers the multipart upload stale and cleans it up automatically. Specify the time period in the format (for example, 5days). Quantity must be a positive integer less than 100 and units must be one of the following: months, weeks, days, or hours. To disable automatic multipart upload cleanup, specify never for quantity and do not specify any units.
secure	No	Configure the S3 server to accept only HTTPS connections
inse- cure	No	Configure the S3 server to accept both HTTP and HTTPS connections

# qq s3\_set\_bucket\_policy

This section explains how to use the qq s3\_set\_bucket\_policy command.

For more information, see Managing Access Policies for an S3 Bucket in a Qumulo Cluster in the Qumulo Administrator Guide.

### Examples

To Configure an Access Policy for an S3 Bucket

Run the qq s3\_set\_bucket\_policy command, use the --bucket flag to specify the name of your bucket and the --file flag to specify the JSON file with the access policy. For example:

```
qq s3_set_bucket_policy --bucket MyBucket --file mypolicy.json
```

# Description

Upload the access policy JSON file that the -file flag specifies to the S3 bucket name that the -bucket flag specifies.

### Usage

```
qq s3_set_bucket_policy [-h] --bucket BUCKET --file FILE [--allow-remove-self]
```

Flag Name	Required	Description
bucket	Yes	The name of the S3 bucket whose policy is to be configured
file	Yes	The access policy file to upload. For an access policy template, use theexample flag.
allow-re- move-self	No	Allow the configured policy to remove the ability to modify itself from the current user.

# qq saml\_get\_settings

This section explains how to use the qq saml\_get\_settings command.

# Description

Get cluster SAML configuration

# Usage

qq saml\_get\_settings [-h]

# qq saml\_modify\_settings

This section explains how to use the qq saml\_modify\_settings command.

### Description

Modify cluster SAML configuration

### Usage

Flag Name	Required	Description
disable	No	Disable authentication via SAML
enable	No	Enable authentication via SAML
idp-sso- url	No	Sets the cluster's configured IDP SSO URL.
idp-cer- tificate	No	Sets the cluster's configured IDP public key with the given value in PEM format.
idp-cer- tificate- file	No	Sets the cluster's configured IDP public key from a PEM file.
idp-enti- ty-id	No	Sets the URI for the IDP this cluster trusts to authenticate users via SAML.
cluster- dns-name	No	Sets the cluster's configured DNS name (must be FQDN).
require- sso	No	If set, requires SSO for Active Directory (AD) users to be able to manage this cluster. The cluster rejects password-based authentication from AD users of the Web UI, qq CLI, and REST API. This setting does not restrict access over file protocols such as SMB.

# qq set\_cluster\_conf

This section explains how to use the qq set\_cluster\_conf command.

# Description

Set the cluster config

# Usage

```
qq set_cluster_conf [-h] --cluster-name CLUSTER_NAME
```

Flag Name	Required	Description
cluster-name	Yes	Cluster Name

# qq set\_monitoring\_conf

This section explains how to use the qq set\_monitoring\_conf command.

# Description

Update monitoring configuration.

### Usage

```
qq set_monitoring_conf [-h] [--enabled | --disabled] [--vpn-enabled | --vpn-disable
d] [--mq-host MQ_HOST] [--mq-port MQ_PORT] [--mq-proxy-host MQ_PROXY_HOST] [--mq-pro
xy-port MQ_PROXY_PORT] [--s3-proxy-host S3_PROXY_HOST]
        [--s3-proxy-port S3_PROXY_PORT] [--s3-proxy-disable-https] [--all-proxy-host HOS
T] [--all-proxy-port PORT] [--period PERIOD] [--vpn-host VPN_HOST] [--nexus-enabled
| --nexus-disabled] [--nexus-host NEXUS_HOST]
        [--nexus-port NEXUS_PORT] [--nexus-interval NEXUS_INTERVAL]
```

Flag Name	Required	Description
enabled	No	Enable monitoring service.
disabled	No	Disable monitoring service.
vpn-enabled	No	Enable support VPN.
vpn-disabled	No	Disable support VPN.
mq-host	No	Specify MQ host name or IP.
mq-port	No	Optional MQ service port.
mq-proxy-host	No	Optional MQ proxy host.
mq-proxy-port	No	Optional MQ proxy port.
s3-proxy-host	No	Optional S3 proxy host.
s3-proxy-port	No	Optional S3 proxy port.
s3-proxy-disable-https	No	Optional S3 proxy disable HTTPS.
all-proxy-host	No	Optional Set both MQ and S3 proxy host to HOST.

all-proxy-port	No	Optional Set both MQ and S3 proxy port to PORT.
period	No	Monitoring poll interval in seconds.
vpn-host	No	Support VPN host name or IP.
nexus-enabled	No	Enable Nexus monitoring.
nexus-disabled	No	Disable Nexus monitoring.
nexus-host	No	Optional nexus host.
nexus-port	No	Optional nexus port.
nexus-interval	No	Nexus poll interval in seconds.

# qq set\_node\_identify\_light

This section explains how to use the qq set\_node\_identify\_light command.

# Description

Turn node identification light on or off

### Usage

```
qq set_node_identify_light [-h] --node NODE {on,off}
```

# Flags

Flag Name	Required	Description
node	Yes	Node ID

# **Positional Options**

Option Name	Description
light_state	Should light be visible

# qq smb\_add\_share

This section explains how to use the qq smb\_add\_share command.

For more information, see Using SMB Host Restrictions in Qumulo Core in the Qumulo Administrator Guide.

#### Examples

To Create an SMB Share with Host Restrictions

#### O Note

The qq smb\_add\_share and qq smb\_mod\_share commands use the same flags.

Run the qq smb\_add\_share command and specify the path, share name, and host restriction level. In the following example, Qumulo Core grants hosts 203.0.113.42 and 203.0.113.84 full control, all hosts in 203.0.113.0/24 read-only access, and denies all other hosts.

```
qq smb_add_share --fs-path / \
    --name my-share \
    --all-access \
    --full-control-hosts 203.0.113.42 203.0.113.84 \
    --read-only-hosts 203.0.113.0/24
```

The following is example output.

```
ID: 3
Name: share
Path: /
Description:
Access Based Enumeration: False
Encryption Required: False
Default File Create Mode: 0644
Default Directory Create Mode: 0755
Permissions:
ID Trustee Type
                   Rights
1 Everyone Allowed Read, Write, Change permissions
Network Permissions:
ID Trustee
                             Type
                                    Rights
__ _____
1 203.0.113.0/24
                            Denied Write, Change permissions
2 203.0.113.0/24
                             Allowed Read
3 203.0.113.42, 203.0.113.84 Allowed Read, Write, Change permissions
```

#### Description

Add a new SMB share

### Usage

```
qq smb_add_share [-h] [--tenant-id TENANT_ID] --name NAME --fs-path FS_PATH [--descr
iption DESCRIPTION] [--access-based-enumeration-enabled {true,false}] [--create-fs-p
ath] [--default-file-create-mode DEFAULT_FILE_CREATE_MODE]
        [--default-directory-create-mode DEFAULT_DIRECTORY_CREATE_MODE] [--require-encry
ption {true,false}] [--json] [--no-access | --read-only | --all-access] [--grant-rea
d-access TRUSTEE [TRUSTEE ...]]
        [--grant-read-write-access TRUSTEE [TRUSTEE ...]] [--grant-all-access TRUSTEE [TRUSTEE ...]]
        [--deny-access TRUSTEE [TRUSTEE ...]] [--full-control-hosts IP/RANGE [IP/RANGE ...]]
        [--deny-hosts IP/RANGE [IP/RANGE ...]]
        [--deny-hosts IP/RANGE [IP/RANGE ...]] [--deny-all-hosts]
```

Flag Name	Required	Description
tenant- id	No	The ID of the tenant to which to add the share.

name	Yes	Name of share.
fs-path	Yes	File system path.
descrip- tion	No	Description of this share.
access- based-enu- meration-en- abled	No	Enable Access-Based Enumeration for this share.
create- fs-path	No	Creates the specified file system path if the path does not exist already.
default- file-create- mode	No	Change the default POSIX file create mode bits (octal) for the specified SMB share. These mode bits are applied to new files as they are created. Note: If an inheritable ACE is present in the permissions ACL, this flag has no effect.
default- directory- create-mode	No	Change the default POSIX directory create mode bits (octal) for the specified SMB share. These mode bits are applied to new directories as they are created. Note: If an inheritable ACE is present in the permissions ACL, this flag has no effect.
require- encryption	No	Require encryption for all traffic for the specified share. When set to true, clients without encryption capability cannot connect to this share.
json	No	Print the raw JSON response.
no-ac- cess	No	Grant no access.
read-on- ly	No	Grant everyone except guest read-only access.
all-ac- cess	No	Grant everyone except guest full access.
grant- read-access	No	Grant read access to the specified trustees. For example: Everyone, uid:1000, gid:1001, sid:S-1-5-2-3-4, auth_id:500

grant- read-write- access	No	Grant read-write access to these trustees.
grant- all-access	No	Grant all access to these trustees.
deny-ac- cess	No	Deny all access to these trustees.
full-con- trol-hosts	No	The host addresses or subnet ranges for which access to to this share are not limited by network permissions. Access may still be limited by share and file permissions.
read-on- ly-hosts	No	Address ranges which should be permitted read-only access at most.
deny- hosts	No	The host addresses or subnet ranges for which access to the specified share is denied, regardless of other permissions. Important: Because using this flag alone results in all hosts being denied, use the correctfull-control-hosts orread-only-hosts flags as necessary.
deny-all- hosts	No	Deny all access to this share. Important: To avoid configuration issues, do not apply this flag alongside any others.

# qq smb\_close\_file\_handle

This section explains how to use the qq smb\_close\_file\_handle command.

# Description

Force-close the specified SMB file handle

### Usage

```
qq smb_close_file_handle [-h] --location LOCATION
```

Flag Name	Required	Description
loca- tion	Yes	The location of the file handle to close as returned from smb_list_file_handles.

# qq smb\_close\_sessions

This section explains how to use the qq smb\_close\_sessions command.

# Description

Force close SMB sessions matching one or more of a set of filters.

### Usage

qq smb\_close\_sessions [-h] [--identity IDENTITY] [--location LOCATION] [--share-nam
e SHARE\_NAME] [--ip IP]

Flag Name	Required	Description
iden- tity	No	Close only the sessions that match the specified user's identity in one of the following forms: a name or a SID optionally qualified with a domain prefix (for example, "local:name", "S-1-1-0", "name", "world:Everyone", "ldap_user:name", "ad:name"), or an ID type (for example, "uid:1001", "auth_id:513", "SID:S-1-1-0").
loca- tion	No	Use the list of sessions from the smb_list_sessions command to close only the session with the specified location.
share- name	No	Close only the sessions that are connected to the share with the speci- fied case-sensitive name. Sessions connected to multiple shares will disconnect from all shares using the session.
ip	No	Close only the sessions that originate from the specified IP address.

# qq smb\_delete\_share

This section explains how to use the qq smb\_delete\_share command.

# Description

Delete a share

# Usage

```
qq smb_delete_share [-h] (--id ID | --name NAME) [--tenant-id TENANT_ID]
```

Flag Name	Required	Description
id	No	ID of share to delete.
name	No	Name of share to delete.
ten- ant-id	No	The ID of the tenant from which to delete the share. Use this flag only if you also use thename flag.

# qq smb\_get\_settings

This section explains how to use the qq smb\_get\_settings command.

# Description

Get SMB settings

# Usage

qq smb\_get\_settings [-h]

# qq smb\_list\_file\_handles

This section explains how to use the qq smb\_list\_file\_handles command.

# Description

List SMB open file handles

### Usage

```
qq smb_list_file_handles [-h] [--page-size PAGE_SIZE] [--file-number FILE_NUMBER]
[-p] [--path PATH]
```

Flag Name	Required	Description
page- size	No	Max files to return per request.
file- number	No	Limits results to the specified file, as returned from a command like fs_file_get_attr or fs_read_dir.
- p	No	Returns the primary path of the opened file.
path	No	Path to file

# qq smb\_list\_sessions

This section explains how to use the qq smb\_list\_sessions command.

# Description

List SMB open sessions

### Usage

```
qq smb_list_sessions [-h] [--page-size PAGE_SIZE] [--identity IDENTITY]
```

Flag Name	Required	Description
page- size	No	Max sessions to return per request
iden- tity	No	List only the sessions that match the specified user's identity in one of the following forms: a name or a SID optionally qualified with a domain prefix (for example, "local:name", "S-1-1-0", "name", "world:Everyone", "ldap_user:name", "ad:name"), or an ID type (for example, "uid:1001", "auth_id:513", "SID:S-1-1-0").

# qq smb\_list\_share

This section explains how to use the qq smb\_list\_share command.
For more information, see Using SMB Host Restrictions in Qumulo Core in the Qumulo Administrator Guide.

### Examples

To View Existing SMB Share Host Restrictions

Run the qq smb\_list\_share command and specify the share ID. For example:

```
qq smb_list_share --id 4
```

The following is example output.

```
ID: 4
Name: share2
Path: /
Description:
Access Based Enumeration: False
Encryption Required: False
Default File Create Mode: 0644
Default Directory Create Mode: 0755
Permissions:
ID Trustee Type
               Rights
1 Everyone Allowed Read, Write, Change permissions
Network Permissions:
ID Trustee
             Type
                    Rights
1 203.0.113.0/24 Allowed Read, Write, Change permissions
```

# Description

List a share

### Usage

```
qq smb_list_share [-h] (--id ID | --name NAME) [--tenant-id TENANT_ID] [--json]
```

Flag Name	Required	Description
id	No	ID of share to list.
name	No	Name of share to list.
tenant- id	No	ID of the tenant to get the share from. Only used if using thename argument.
json	No	Print the raw JSON response.

# qq smb\_list\_shares

This section explains how to use the qq smb\_list\_shares command.

# Description

List all SMB shares

# Usage

```
qq smb_list_shares [-h] [--json] [--populate-trustee-names]
```

Flag Name	Required	Description
json	No	Print JSON representation of shares.
populate-trustee-names	No	Populate trustee names in the response.

# qq smb\_mod\_share

This section explains how to use the qq smb\_mod\_share command.

# Examples

#### Modifying Host Restrictions

For more information, see Using SMB Host Restrictions in Qumulo Core in the Qumulo Administrator Guide.

To Modify Host Restrictions for an Existing SMB Share

#### Note

- The qq smb add share and qq smb mod share commands use the same flags.
- If you specify new host restrictions, they overwrite any existing host restrictions. You must explicitly specify which host restrictions to retain.
- · If you don't include any flags, no changes take place.

Run the qq smb\_mod\_share command and specify the path, share name, and host restriction level. In the following example, Qumulo Core grants hosts 203.0.113.0/16 and 203.0.113.0/24 full control, and denies all other hosts.

The following is example output.

```
ID: 4
Name: share2
Path: /
Description:
Access Based Enumeration: False
Encryption Required: False
Default File Create Mode: 0644
Default Directory Create Mode: 0755
Permissions:
ID Trustee Type
                 Rights
1 Everyone Allowed Read, Write, Change permissions
Network Permissions:
ID Trustee
                              Type
                                     Rights
1 203.0.113.0/16, 203.0.113.0/24 Allowed Read, Write, Change permissions
```

To Remove All Host Restrictions from an Existing SMB Share

Run the qq smb mod share command, specify the share ID, and specify full control. For example:

For more information, see Managing SMB3 Encryption in Transit in Qumulo Core in the Qumulo Administrator Guide.

```
qq smb_mod_share --id=4 \
   --full-control="*"
```

#### Configuring SMB3 Encryption

For more information, see Managing SMB3 Encryption in Transit in Qumulo Core in the Qumulo Administrator Guide.

To Configure Share-Level SMB3 Encryption

Run the qq smb\_mod\_share command, specify the share name or ID, and use the --require-encryption flag to specify true or false. For example:

```
qq smb_mod_share --name my_share \
   --require-encryption true
```

#### Description

Modify a share

### Usage

```
qq smb_mod_share [-h] (--id ID | --name NAME) [--tenant-id TENANT_ID] [--new-name NE
W_NAME] [--new-tenant-id NEW_TENANT_ID] [--fs-path FS_PATH] [--description DESCRIPTI
ON] [--access-based-enumeration-enabled {true,false}] [--create-fs-path]
        [--default-file-create-mode DEFAULT_FILE_CREATE_MODE] [--default-directory-creat
e-mode DEFAULT_DIRECTORY_CREATE_MODE] [--require-encryption {true,false}] [--json]
[--full-control-hosts IP/RANGE [IP/RANGE ...]]
        [--read-only-hosts IP/RANGE [IP/RANGE ...]] [--deny-hosts IP/RANGE [IP/RANGE
...]] [--deny-all-hosts]
```

Flag Name	Required	Description
id	No	The ID of the share to modify.

name	No	The name of the share to modify.
tenant- id	No	ID of the tenant the share is in. Only used if using thename argument.
new-name	No	Change SMB share name.
new-ten- ant-id	No	Change the tenant that the share is in.
fs-path	No	Change file system path.
descrip- tion	No	Change share description.
access- based-enu- meration-en- abled	No	Enable Access-Based Enumeration for this share.
create- fs-path	No	Creates the specified file system path if the path does not exist already.
default- file-create- mode	No	Change the default POSIX file create mode bits (octal) for the specified SMB share. These mode bits are applied to new files as they are created. Note: If an inheritable ACE is present in the permissions ACL, this flag has no effect.
default- directory- create-mode	No	Change the default POSIX directory create mode bits (octal) for the specified SMB share. These mode bits are applied to new directories as they are created. Note: If an inheritable ACE is present in the permissions ACL, this flag has no effect.
require- encryption	No	Require all traffic for this share to be encrypted. If true, clients without encryption capabilities will not be able to connect.
json	No	Print the raw JSON response.
full-con- trol-hosts	No	The host addresses or subnet ranges for which access to to this share are not limited by network permissions. Access may still be limited by share and file permissions.
read-on- ly-hosts	No	Address ranges which should be permitted read-only access at most.

deny- hosts	No	The host addresses or subnet ranges for which access to the specified share is denied, regardless of other permissions. Important: Because using this flag alone results in all hosts being denied, use the correctfull-control-hosts orread-only-hosts flags as necessary.
deny-all- hosts	No	Deny all access to this share. Important: To avoid configuration issues, do not apply this flag alongside any others.

# qq smb\_mod\_share\_permissions

This section explains how to use the qq smb\_mod\_share\_permissions command.

### Description

Modify a share's permissions

### Usage

```
qq smb_mod_share_permissions [-h] (--id ID | --name NAME) [--tenant-id TENANT_ID]
[--json] {add_entry,remove_entry,modify_entry,replace} ...
```

Flag Name	Required	Description
id	No	The ID of the share to modify.
name	No	The name of the share to modify.
ten- ant-id	No	The ID of the tenant from which to delete the share. Use this flag only if you also use thename flag.
json	No	Print the raw JSON response.

# qq smb\_modify\_settings

This section explains how to use the qq smb\_modify\_settings command.

### Examples

#### Hiding an SMB Share from Unauthorized Hosts

For more information, see Using SMB Host Restrictions in Qumulo Core in the Qumulo Administrator Guide.

#### To Hide an SMB Share from Unauthorized Hosts

Run the qq smb\_modify\_settings command and set the --hide-shares-from-unauthorized-hosts flag to true.

#### Configuring Cluster-Level SMB3 Encryption

For more information, see Managing SMB3 Encryption in Transit in Qumulo Core in the Qumulo Administrator Guide.

#### To Configure Cluster-Level SMB3 Encryption

Run the qq smb\_modify\_settings command and set the --encryption-mode flag to one of the following:

- NONE
- PREFER
- REQUIRE

#### To Disable SMB3 Negotiation to Improve Workload Performance

Run the qq smb\_modify\_settings command and specify the supported SMB dialects. For example:

```
qq smb_modify_settings \
   --supported-dialects SMB2_DIALECT_2_1
```

#### To Enable SMB3 Negotiation

Run the qq smb\_modify\_settings command and specify the supported SMB dialects. For example:

```
qq smb_modify_settings \
   --supported-dialects SMB2_DIALECT_2_1 \
   SMB2_DIALECT_3_0
```

# Description

Set SMB server settings

# Usage

```
qq smb_modify_settings [-h] [-e {none,preferred,required}] [-d dialect_1 [dialect_2
...]] [--hide-shares-from-unauthorized-hosts {true,false}] [--hide-shares-from-unaut
horized-users {true,false}]
    [--snapshot-directory-mode {visible,hidden,disabled}] [--bypass-traverse-checkin
g {true,false}] [--signing-required {true,false}]
```

Flag Name	Required	Description
-e	No	Server encryption mode to set
-d	No	Specify a space-separated list of SMB dialects that clients are permitted to negotiate. To disable SMB, specify -d "". Available dialects: smb2_dialect_2_002, smb2_dialect_2_1, smb2_dialect_3_0, smb2_dialect_3_11. Alternatively, use -d ALL to allow all supported dialects.
hide- shares-from- unauthorized- hosts	No	Configure share listing to omit shares to which the requesting host isn't authorized to connect.
hide- shares-from- unauthorized- users	No	Configure share listing to omit shares to which the requesting user isn't authorized to connect. Important: Clients which don't have passwordless authentication typically list shares by using guest privileges. This flag typically hides all shares from this client type.
snapshot- directory- mode	No	When you set this flag to visible, the .snapshot directory appears at the root of shares during directory listing operations. The .snapshot directory is also accessible by name in any directory. When you set this flag to hidden, .snapshot directories do not appear in directory listings but remains accessible by name. When you set this flag to disabled, .snapshot directories are not accessible and snapshots are available only through the Restore Previous Versions dialog box on Windows.

bypass- traverse- checking	No	Enables bypass traverse checking for all users and directories. For example, a user who tries to access directory /x/y and has permissions to the /x directory but not to the /x/y directory can access the /x/y directory. A user still requires permissions to the /x directory to view its contents.
signing- required	No	If the user is not a guest, require all messages to be signed. This flag applies to all SMB shares.

# qq snapshot\_calculate\_used\_capacity

This section explains how to use the qq snapshot\_calculate\_used\_capacity command.

# Description

Get the space used by the snapshots specified.

### Usage

qq snapshot\_calculate\_used\_capacity [-h] [-i IDS]

Flag Name	Required	Description
-i	No	Identifiers of the snapshots for which to calculate capacity usage (as a comma separated list).

# qq snapshot\_create\_policy

This section explains how to use the qq snapshot\_create\_policy command.

# Description

Create a new snapshot scheduling policy.

### Usage

qq snapshot\_create\_policy [-h] {hourly\_or\_less,daily,monthly} ...

# qq snapshot\_create\_snapshot

This section explains how to use the qq snapshot\_create\_snapshot command.

# Description

Create a new snapshot

# Usage

```
qq snapshot_create_snapshot [-h] [--source-file-id SOURCE_FILE_ID | --path PATH]
[-e EXPIRATION] [-n NAME]
```

Flag Name	Required	Description
source- file- id	No	ID of directory to snapshot
path	No	Path of directory to snapshot
-e	No	Time of snapshot expiration. An empty string indicates that the snapshot never expires. The time format follows RFC 3339, a normalized subset of ISO 8601.
-n	No	Snapshot name

# qq snapshot\_delete\_policy

This section explains how to use the qq snapshot\_delete\_policy command.

# Description

Delete a single scheduling policy

### Usage

qq snapshot\_delete\_policy [-h] -i ID

Flag Name	Required	Description
-i	Yes	Identifier of the snapshot policy to delete.

# qq snapshot\_delete\_snapshot

This section explains how to use the qq snapshot\_delete\_snapshot command.

# Description

Delete a single snapshot

### Usage

```
qq snapshot_delete_snapshot [-h] -i ID
```

Flag Name	Required	Description
-i	Yes	Snapshot ID

# qq snapshot\_diff

This section explains how to use the qq snapshot\_diff command.

# Description

List the changed files and directories between two snapshots.

### Usage

Flag Name	Required	Description
newer-snapshot	Yes	Snapshot ID of the newer snapshot
older-snapshot	Yes	Snapshot ID of the older snapshot
page-size	No	Max snapshot diff entries to return per request

# qq snapshot\_file\_diff

This section explains how to use the qq snapshot\_file\_diff command.

# Description

List changed byte ranges of a file between two snapshots.

### Usage

```
qq snapshot_file_diff [-h] --newer-snapshot NEWER_SNAPSHOT --older-snapshot OLDER_SN APSHOT (--path PATH \mid --file-id FILE_ID) [--page-size PAGE_SIZE]
```

Flag Name	Required	Description
newer-snapshot	Yes	Snapshot ID of the newer snapshot
older-snapshot	Yes	Snapshot ID of the older snapshot
path	No	Path to file
file-id	No	File ID
page-size	No	Maximum number of entries to return per request

# qq snapshot\_get\_capacity\_used\_per\_snapshot

This section explains how to use the qq snapshot\_get\_capacity\_used\_per\_snapshot command.

#### Description

Get the approximate amount of space for each snapshot that would be reclaimed if that snapshot were deleted.

#### Usage

qq snapshot\_get\_capacity\_used\_per\_snapshot [-h] [-i ID]

Flag Name	Required	Description
-i	No	If set, will return capacity usage of the snapshot with the specified id. If omitted, will return capacity usage of all snapshots.

### qq snapshot\_get\_policy

This section explains how to use the qq snapshot\_get\_policy command.

#### Description

Get a single policy

#### Usage

qq snapshot\_get\_policy [-h] -i ID

Flag Name	Required	Description
-i	Yes	Identifier of the snapshot policy to list.

### qq snapshot\_get\_policy\_status

This section explains how to use the qq snapshot\_get\_policy\_status command.

#### Description

Get a single snapshot policy status

#### Usage

qq snapshot\_get\_policy\_status [-h] -i ID

Flag Name	Required	Description
-i	Yes	Identifier of the snapshot policy.

### qq snapshot\_get\_snapshot

This section explains how to use the qq snapshot\_get\_snapshot command.

#### Description

==SUPPRESS==

#### Usage

qq snapshot\_get\_snapshot [-h] -i ID

Flag Name	Required	Description
-i	Yes	The identifier of the snapshot to list.

### qq snapshot\_get\_status

This section explains how to use the qq snapshot\_get\_status command.

#### Description

Get the information for a single snapshot.

#### Usage

qq snapshot\_get\_status [-h] -i ID

Flag Name	Required	Description
-i	Yes	The identifier of the snapshot to list.

### qq snapshot\_get\_total\_used\_capacity

This section explains how to use the qq snapshot\_get\_total\_used\_capacity command.

#### Description

Get the total space consumed by all snapshots.

#### Usage

qq snapshot\_get\_total\_used\_capacity [-h]

### qq snapshot\_get\_unlock\_challenge

This section explains how to use the qq snapshot\_get\_unlock\_challenge command.

#### Description

Get a security challenge for unlocking a snapshot.

#### Usage

qq snapshot\_get\_unlock\_challenge [-h] -i ID

Flag Name	Required	Description
-i	Yes	The identifier of the snapshot to unlock.

# qq snapshot\_list\_policies

This section explains how to use the qq snapshot\_list\_policies command.

#### Description

List all policies

#### Usage

qq snapshot\_list\_policies [-h]

### qq snapshot\_list\_policy\_statuses

This section explains how to use the qq snapshot\_list\_policy\_statuses command.

#### Description

List all snapshot policy statuses

#### Usage

qq snapshot\_list\_policy\_statuses [-h]

## qq snapshot\_list\_snapshots

This section explains how to use the qq snapshot\_list\_snapshots command.

#### Description

==SUPPRESS==

#### Usage

```
qq snapshot_list_snapshots [-h] [--exclude-in-delete | --only-in-delete]
```

Flag Name	Required	Description
exclude-in- delete	No	Exclude all snapshots in process of being deleted from the list
only-in-delete	No	Display only snapshots in process of being deleted.

### qq snapshot\_list\_statuses

This section explains how to use the qq snapshot\_list\_statuses command.

#### Description

List the information for every snapshot.

#### Usage

```
qq snapshot_list_statuses [-h] [--exclude-in-delete | --only-in-delete] [--exclude-l
ocked | --only-locked]
```

Flag Name	Required	Description
ex- clude-in- delete	No	Exclude all snapshots in process of being deleted from the list. You can use this flag together with theexclude-locked oronly-locked flag.
only- in- delete	No	Display only snapshots in process of being deleted. You can use this flag together with theexclude-locked oronly-locked flag.
ex- clude- locked	No	Exclude all locked snapshots from the list. You can use this flag together with theexclude-in-delete oronly-in-delete flag.
only- locked	No	List only locked snapshots. You can use this flag together with theex- clude-in-delete oronly-in-delete flag.

## qq snapshot\_lock\_snapshot

This section explains how to use the qq snapshot\_lock\_snapshot command.

#### Description

Lock a snapshot.

#### Usage

```
qq snapshot_lock_snapshot [-h] -i ID [-f] -k LOCK_KEY
```

Flag Name	Required	Description
-i	Yes	The identifier of the snapshot to lock.
- f	No	Do not prompt for confirmation. The default setting is "false".
-k	Yes	The identifier or name of the key in the file system key store that protects the snapshot. Important: You must specify either the name or the identifier of the key.

### qq snapshot\_modify\_policy

This section explains how to use the qq snapshot\_modify\_policy command.

#### Description

Modify an existing snapshot scheduling policy.

#### Usage

qq snapshot\_modify\_policy [-h] {modify\_non\_schedule\_fields,change\_to\_hourly\_or\_les s,change\_to\_daily,change\_to\_monthly} ...

### qq snapshot\_modify\_snapshot

This section explains how to use the qq snapshot\_modify\_snapshot command.

#### Description

Modify an existing snapshot

#### Usage

```
qq snapshot_modify_snapshot [-h] -i ID [-e EXPIRATION] [-f]
```

Flag Name	Required	Description
-i	Yes	Identifier of the snapshot to modify.
-e	No	Time of snapshot expiration. An empty string indicates that the snapshot never expires. The time format follows RFC 3339, a normalized subset of ISO 8601.
-f	No	Do not prompt for confirmation. The default setting is "false".

### qq snapshot\_unlock\_snapshot

This section explains how to use the qq snapshot\_unlock\_snapshot command.

#### Description

Unlock a snapshot.

#### Usage

```
qq snapshot_unlock_snapshot [-h] -i ID (-s SIGNATURE | -k PRIVATE_KEY_FILE)
```

Flag Name	Required	Description
-i	Yes	The identifier of the snapshot to unlock.
- S	No	The verification signature of the security challenge from the output of the qq snapshot_get_unlock_challenge command.
-k	No	The location of the private key file that locks the snapshot.

### qq ssl\_delete\_ca\_certificate

This section explains how to use the qq ssl\_delete\_ca\_certificate command.

#### Description

Delete SSL CA certificate. This certificate is used to authenticate connections to external LDAP servers.

#### Usage

qq ssl\_delete\_ca\_certificate [-h]

### qq ssl\_get\_ca\_certificate

This section explains how to use the qq ssl\_get\_ca\_certificate command.

#### Description

Get SSL CA certificate. This certificate is used to authenticate connections to external LDAP servers.

#### Usage

qq ssl\_get\_ca\_certificate [-h]

### qq ssl\_get\_ciphers

This section explains how to use the qq ssl\_get\_ciphers command.

#### Description

Get SSL cipher suites for the TLS 1.2 and 1.3 protocols.

#### Usage

qq ssl\_get\_ciphers [-h]

### qq ssl\_modify\_ca\_certificate

This section explains how to use the qq ssl\_modify\_ca\_certificate command.

#### Description

Set SSL CA certificate. This certificate is used to authenticate connections to external LDAP servers.

#### Usage

qq ssl\_modify\_ca\_certificate [-h] -c CERTIFICATE

Flag Name	Required	Description
- C	Yes	SSL CA certificate file in PEM format

### qq ssl\_modify\_certificate

This section explains how to use the qq ssl\_modify\_certificate command.

#### Description

Set the SSL certificate chain and private key for the web UI and REST servers

#### Usage

qq ssl\_modify\_certificate [-h] -c CERTIFICATE -k PRIVATE\_KEY

Flag Name	Required	Description
- C	Yes	SSL certificate chain in PEM format. Must contain entire certificate chain up to the root CA
-k	Yes	RSA private key file in PEM format

### qq ssl\_modify\_ciphers

This section explains how to use the qq ssl\_modify\_ciphers command.

#### Description

Set SSL cipher suites for the TLS 1.2 and 1.3 protocols. Note that ciphers required by Qumulo Core to function cannot be removed.

#### Usage

```
qq ssl_modify_ciphers [-h] [--tls12 TLS12] [--tls13 TLS13]
```

Flag Name	Required	Description	
tls12	No	Cipher suites used for the TLS 1.2 protocol as a colon-delimited string	
tls13	No	Cipher suites used for the TLS 1.3 protocol as a colon-delimited string.	

# qq sso\_login

This section explains how to use the qq sso\_login command.

#### Description

Perform an interactive SAML single sign-on (SSO) authentication process for the cluster.

#### Usage

qq sso\_login [-h]

### qq static\_ip\_allocation

This section explains how to use the qq static\_ip\_allocation command.

#### Description

Get cluster-wide static IP allocation

#### Usage

```
qq static_ip_allocation [-h] [--try-ranges TRY_RANGES] [--try-netmask TRY_NETMASK]
[--try-floating-ranges TRY_FLOATING_RANGES]
```

Flag Name	Required	Description
try-ranges	No	Specify ip range list to try (e.g. '1.1.1.10-12,10.20.5.0/24'
try-netmask	No	Specify netmask to apply when usingtry-range option
try-floating- ranges	No	Specify floating ip range list to try (e.g. '1.1.1.10-12,10.20.5.0/ 24'

# qq time\_get

This section explains how to use the qq time\_get command.

### Description

Get time configuration.

#### Usage

qq time\_get [-h]

### qq time\_list\_timezones

This section explains how to use the qq time\_list\_timezones command.

#### Description

List timezones supported by QC

#### Usage

qq time\_list\_timezones [-h]

### qq time\_series\_get

This section explains how to use the qq time\_series\_get command.

#### Description

Get specified time series data.

#### Usage

```
qq time_series_get [-h] [-b BEGIN_TIME] [--csv]
```

Flag N	lame	Required	Description	
- b		No	Begin time for time series intervals, in epoch seconds	
CSV		No	Format output as Comma Separated Values	

### qq time\_set

This section explains how to use the qq time\_set command.

#### Description

Set time configuration.

#### Usage

```
qq time_set [-h] [--set-use-ad] [--unset-use-ad] [--ntp-servers NTP_SERVERS]
```

Flag Name	Required	Description
set-use-ad	No	Use Active Directory controller for NTP.
unset-use-ad	No	Don't use Active Directory controller for NTP.
ntp-servers	No	Set of NTP servers specified as comma delimited list.

### qq time\_status

This section explains how to use the qq time\_status command.

### Description

Get time configuration status.

#### Usage

qq time\_status [-h]

### qq tree\_delete\_cancel

This section explains how to use the qq tree\_delete\_cancel command.

#### Description

Cancel delete job

#### Usage

```
qq tree_delete_cancel [-h] id
```

Option Name	Description
id	Directory id

### qq tree\_delete\_create

This section explains how to use the qq tree\_delete\_create command.

#### Description

Create delete job

#### Usage

```
qq tree_delete_create [-h] [--force] directory
```

#### Flags

Flag Name	Required	Description
 force	No	Bypass path confirmation. WARNING! Tree delete can be canceled with tree_delete_cancel, but already deleted items cannot be recovered.

Option Name	Description
directory	Directory id or path

### qq tree\_delete\_get

This section explains how to use the qq tree\_delete\_get command.

#### Description

Get information about one delete job

#### Usage

```
qq tree_delete_get [-h] [--json] id
```

#### Flags

Flag Name	Required	Description
json	No	Output JSON instead of table.

Option Name	Description
id	Directory id

### qq tree\_delete\_list

This section explains how to use the qq tree\_delete\_list command.

#### Description

Get information about all tree delete jobs

#### Usage

```
qq tree_delete_list [-h] [--json]
```

Flag Name	Required	Description
json	No	Output JSON instead of table.

### qq tree\_delete\_restart

This section explains how to use the qq tree\_delete\_restart command.

#### Description

Retry errored delete job

#### Usage

```
qq tree_delete_restart [-h] id
```

Option Name	Description
id	Directory id

### qq unconfigured\_nodes\_list

This section explains how to use the qq unconfigured\_nodes\_list command.

#### Description

Get the list of unconfigured nodes

#### Usage

qq unconfigured\_nodes\_list [-h] [--table]

Flag Name	Required	Description
table	No	Print output as a table, instead of JSON

### qq unconfigured\_upgrade\_config

This section explains how to use the qq unconfigured\_upgrade\_config command.

#### Description

List current upgrade prepare config for an unconfigured node

#### Usage

qq unconfigured\_upgrade\_config [-h]

### qq unconfigured\_upgrade\_config\_set

This section explains how to use the qq unconfigured\_upgrade\_config\_set command.

#### Description

Upgrade on an unconfigured node with the FS path to an upgrade image

#### Usage

```
qq unconfigured_upgrade_config_set [-h] --path PATH [--target TARGET]
```

Flag Name	Required	Description
path	Yes	FS path to upgrade image
target	No	Target: idle, prepare, arm.

### qq unconfigured\_upgrade\_status

This section explains how to use the qq unconfigured\_upgrade\_status command.

#### Description

List the current upgrade status for an unconfigured node

#### Usage

qq unconfigured\_upgrade\_status [-h] [--wait-until-prepared]

Flag Name	Required	Description
wait-until-pre- pared	No	Monitor the upgrade status until the PREPARING state is complete.

### qq upgrade\_blocked

This section explains how to use the qq upgrade\_blocked command.

#### Description

Get information on whether and for what reason an upgrade is blocked

#### Usage

qq upgrade\_blocked [-h]

### qq upgrade\_cluster

This section explains how to use the qq upgrade\_cluster command.

#### Description

Run a cluster upgrade to the image specified by the provided path

#### Usage

```
qq upgrade_cluster [-h] [--path PATH] [--no-monitor] [--rolling] [--num-nodes-to-reb
oot NO_COMMAND_NUM_NODES_TO_REBOOT] {prepare,commit} ...
```

Flag Name	Required	Description
path	No	FS path to upgrade image
no- monitor	No	Skip monitoring the upgrade
num- nodes- to-re- boot	No	Using therolling flag lets you specify the number of nodes to reboot at a time. The number of nodes must be greater than 0 and less than or equal to the number of node failures that your cluster permits. By default, this value is the number of permitted node failures minus 1 (1 node minimum).

### qq upgrade\_status

This section explains how to use the qq upgrade\_status command.

#### Description

Get the status of the upgrade system

#### Usage

```
qq upgrade_status [-h] [--raw]
```

Flag Name	Required	Description
raw	No	Skip montoring an in-flight upgrade and just return the raw status

### qq upgrade\_verify\_image

This section explains how to use the qq upgrade\_verify\_image command.

#### Description

Verify an image path for upgrade

#### Usage

```
qq upgrade_verify_image [-h] --path PATH
```

Flag Name	Required	Description
path	Yes	FS path to upgrade image

### qq version

This section explains how to use the qq version command.

#### Examples

To Show the Version of Qumulo Core Running on Your Cluster

Run the qq version command.

The following is example output.

```
{
   "build_date": "2024-02-10T19:50:58Z",
   "build_id": "123456.7.8",
   "flavor": "release",
   "revision_id": "Qumulo Core 8.0.1"
}
```

#### Description

Print version information

#### Usage

```
qq version [-h]
```

### qq web\_ui\_get\_settings

This section explains how to use the qq web\_ui\_get\_settings command.

#### Description

Get configuration options for the Web UI

#### Usage

```
qq web_ui_get_settings [-h] [--inactivity-timeout | --login-banner]
```

Flag Name	Required	Description	
inactivity-timeout	No	Gets the inactivity timeout	
login-banner	No	Gets the configuration for the login banner	

### qq web\_ui\_modify\_settings

This section explains how to use the qq web\_ui\_modify\_settings command.

#### Description

Modify configuration options for the Web UI

#### Usage

```
qq web_ui_modify_settings [-h] [--inactivity-timeout MINUTES | --disable-inactivity-timeout] [--login-banner BANNER_MARKDOWN_FILE | --disable-login-banner]
```

Flag Name	Required	Description
inactivity-timeout	No	Sets the inactivity timeout
disable-inactivity-timeout	No	Disables the inactivity timeout
login-banner	No	Sets the login banner
disable-login-banner	No	Disables the login banner

### qq who\_am\_i

This section explains how to use the qq who\_am\_i command.

### Description

Get information on the current user

#### Usage

qq who\_am\_i [-h]