

# 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
```

## Flags

Flag Name	Required	Description
<code>-d</code>	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
```

## Flags

Flag Name	Required	Description
<code>-s</code>	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
```

## Flags

Flag Name	Required	Description
<code>-g</code>	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-dn BASE_DN]
```

## Flags

Flag Name	Required	Description
<code>-d</code>	Yes	Fully-qualified name of Active Directory Domain
<code>-u</code>	Yes	Domain user to perform the operation, e.g., Administrator
<code>-p</code>	No	Domain password (insecure, visible via ps)
<code>--domain-netbios</code>	No	NetBIOS name of the domain. By default, the first part of the domain name is used.
<code>-o</code>	No	Organizational Unit to join to
<code>--disable-search-trusted-domains</code>	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.
<code>--use-ad-posix-attributes</code>	No	Use AD POSIX attributes.
<code>--base-dn</code>	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]
```

## Flags

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
```

## Flags

Flag 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 BASE_DN]
```

## Flags

Flag Name	Required	Description
<code>--enable-search-trusted-domains</code>	No	Allows the cluster to search trusted domains for user information.
<code>--disable-search-trusted-domains</code>	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.
<code>--enable-ad-posix-attributes</code>	No	Use AD POSIX attributes.
<code>--disable-ad-posix-attributes</code>	No	Do not use AD POSIX attributes.
<code>--base-dn</code>	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,prefer,require}] [--crypto {off,prefer,require}]
```

## Flags

Flag Name	Required	Description
<code>--signing</code>	No	Configure DCERPC signing to be off, prefer signing, or require signing. The default is to prefer signing.
<code>--sealing</code>	No	Configure DCERPC sealing to be off, prefer sealing, or require sealing. The default is to prefer sealing.
<code>--crypto</code>	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
```

## Flags

Flag Name	Required	Description
<code>-s</code>	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
```

## Flags

Flag Name	Required	Description
<code>-s</code>	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
```

## Flags

Flag Name	Required	Description
<code>-s</code>	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
```

## Flags

Flag Name	Required	Description
<code>-s</code>	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
```

## Flags

Flag Name	Required	Description
<code>-u</code>	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
```

## Flags

Flag Name	Required	Description
<code>-u</code>	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

```
qq add_nodes [-h] (--node-uuids NODE_UUIDS [NODE_UUIDS ...] | --node-ips NODE_IPS [NODE_IPS ...] | --all-unconfigured)
    [--target-stripe-config BLOCKS_PER_STRIPE DATA_BLOCKS_PER_STRIPE] [--target-max-node-failures TARGET_MAX_NODE_FAILURES] [--dry-run] [--batch]
```

## Flags

Flag Name	Required	Description
<code>--node-uuids</code>	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.
<code>--node-ips</code>	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.
<code>--all-unconfigured</code>	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.
<code>--target-stripe-config</code>	No	The stripe configuration to use
<code>--target-max-node-failures</code>	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
<code>--dry-run</code>	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
<code>--batch</code>	No	Begin the node-add operation without asking for confirmation.

# 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 REGION]
```

## Flags

Flag Name	Required	Description
<code>--enable</code>	No	Enable audit log.
<code>--disable</code>	No	Disable audit log.
<code>-l</code>	No	The group name in CloudWatch Logs to send logs to.
<code>-r</code>	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-enable | --local-disable] [--server-address SERVER_ADDRESS] [--server-port SERVER_PORT]
```

## Flags

Flag Name	Required	Description
<code>--enable</code>	No	Enable audit log.
<code>--disable</code>	No	Disable audit log.
<code>--csv</code>	No	Output audit log as CSV.
<code>--json</code>	No	Output audit log as JSON.
<code>--local-enable</code>	No	Enable per-node local audit log.
<code>--local-disable</code>	No	Disable per-node local audit log.
<code>--server-address</code>	No	The IP address, hostname, or fully qualified domain name of your remote syslog server.
<code>--server-port</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--name</code>	Yes	New group's name (windows style)
<code>--gid</code>	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

```
qq auth_add_user [-h] --name NAME [--primary-group PRIMARY_GROUP] [--uid UID] [--home-directory HOME_DIRECTORY] [-p [PASSWORD]]
```

## Flags

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

# qq auth\_assign\_role

This section explains how to use the `qq auth_assign_role` command.  
For more information, see:

- [Managing Role-Based Access Control \(RBAC\) for Users and Groups in Qumulo Core](#) in the Azure Native Qumulo Administrator Guide
- [Managing Role-Based Access Control \(RBAC\) for Users and Groups in Qumulo Core](#) in the Qumulo On-Premises 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
```

## Flags

Flag Name	Required	Description
<code>-r</code>	Yes	Name of the role to assign
<code>-t</code>	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] [--expiration-time EXPIRATION_TIME] [--file PATH] i
dentifier
```

## Flags

Flag Name	Required	Description
<code>--expira- tion-time</code>	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 time-zone.
<code>--file</code>	No	File to store the access token credential. That file can be passed to the <code>--credentials-store</code> argument to authenticate using the created access token.

## Positional Options

Option Name	Description
<code>identifier</code>	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 Azure Native Qumulo Administrator Guide
- [Managing Role-Based Access Control \(RBAC\) for Users and Groups in Qumulo Core](#) in the Qumulo On-Premises 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]
```

## Flags

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
<code>id</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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
```

## Flags

Flag Name	Required	Description
<code>-r</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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 SID]
  [--name NAME] [--domain {LOCAL,WORLD,POSIX_USER,POSIX_GROUP,ACTIVE_DIRECTORY}]
  [--json]
  [identifier]
```

## Flags

Flag Name	Required	Description
<code>--auth-id</code>	No	The canonical identifier used internally by QumuloFS.
<code>--uid</code>	No	An NFS UID
<code>--gid</code>	No	An NFS GID
<code>--sid</code>	No	An SMB SID
<code>--name</code>	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 be qualified with the cluster name (e.g. cluster\user).
<code>--domain</code>	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.
<code>--json</code>	No	Print result as JSON object.

## Positional Options

Option Name	Description
<code>identifier</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--auth-id</code>	No	Find all external representations for an internal QumuloFS identifier.
<code>--uid</code>	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.
<code>--gid</code>	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.
<code>--sid</code>	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.
<code>--name</code>	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.

<code>--do-main</code>	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.
<code>--json</code>	No	Print result as JSON object.

## Positional Options

Option Name	Description
<code>identifier</code>	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
<code>id</code>	The unique ID of the access token.

# qq auth\_get\_user\_defined\_mappings

This section explains how to use the `qq auth_get_user_defined_mappings` 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]
```

## Flags

Flag Name	Required	Description
<code>--json</code>	No	Output JSON instead of table.
<code>--user</code>	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.

# 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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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 Azure Native Qumulo Administrator Guide
- [Managing Role-Based Access Control \(RBAC\) for Users and Groups in Qumulo Core](#) in the Qumulo On-Premises 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]
```

## Flags

Flag Name	Required	Description
<code>-r</code>	No	List privileges associated with a role.
<code>-v</code>	No	Show granted and denied privileges with <code>--role</code> .
<code>--json</code>	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]
```

## Flags

Flag Name	Required	Description
<code>-r</code>	Yes	Name of the role to lookup
<code>--json</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--json</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Name or ID of group to modify
<code>--name</code>	No	Change group's name
<code>--gid</code>	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_DIRECTORY] [-p [PASSWORD]]
```

## Flags

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

```
qq auth_modify_access_token [-h] [--expiration-time EXPIRATION_TIME] [--enable] [--disable] id
```

## Flags

Flag Name	Required	Description
<code>--expiration-time</code>	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 time-zone.
<code>--enable</code>	No	Enable the access token.
<code>--disable</code>	No	Disable the access token. It can no longer be used to authenticate until it is enabled.

## Positional Options

Option Name	Description
<code>id</code>	The unique ID of the access token to be modified.

# qq auth\_modify\_role

This section explains how to use the `qq auth_modify_role` command.  
For more information, see:

- [Managing Role-Based Access Control \(RBAC\) for Users and Groups in Qumulo Core](#) in the Azure Native Qumulo Administrator Guide
- [Managing Role-Based Access Control \(RBAC\) for Users and Groups in Qumulo Core](#) in the Qumulo On-Premises 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 ...]] [-R PRIVILEGE [PRIVILEGE ...]]
```

## Flags

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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Name or ID of user to modify
<code>-p</code>	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)
```

## Flags

Flag Name	Required	Description
<code>--file</code>	No	JSON-encoded file containing mappings.
<code>--stdin</code>	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 Azure Native Qumulo Administrator Guide
- [Managing Role-Based Access Control \(RBAC\) for Users and Groups in Qumulo Core](#) in the Qumulo On-Premises 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
```

## Flags

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\_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
```

## Flags

Flag Name	Required	Description
<code>--timestamp</code>	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] [--interval {hourly,daily,weekly}]
```

## Flags

Flag Name	Required	Description
<code>--begin-time</code>	Yes	Lower bound on history returned, in epoch seconds.
<code>--end-time</code>	No	Upper bound on history returned, in epoch seconds. Defaults to the most recent period for which data is available.
<code>--interval</code>	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]
```

## Flags

Flag Name	Required	Description
<code>-o</code>	No	Your old password (insecure, visible via ps)
<code>-p</code>	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.

## ⚠ 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_PASSWORD]
[--blocks-per-stripe BLOCKS_PER_STRIPE] [--max-drive-failures MAX_DRIVE_FAILURES]
[--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)
```

## Flags

Flag Name	Required	Description
<code>--cluster-name</code>	Yes	Cluster Name
<code>--admin-password</code>	No	Administrator Password
<code>--blocks-per-stripe</code>	No	Erasur coding stripe width
<code>--max-drive-failures</code>	No	Maximum allowable drive failures
<code>--max-node-failures</code>	No	Maximum allowable node failures
<code>--accept-eula</code>	No	Accept the EULA
<code>--reject-eula</code>	No	Reject the EULA
<code>--host-instance-id</code>	No	EC2 Instance ID of node receiving this request. AWS only.
<code>--node-uuids</code>	No	Cluster node UUIDs

<code>--node-ips</code>	No	Cluster node IPv4 addresses
<code>--all-unconfigured</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--slot</code>	Yes	Slot ID
<code>--locate</code>	No	Turn on the slot's locate LED.
<code>--no-locate</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--slot</code>	No	Slot ID

# 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-read,metadata-iops-write,file-throughput-read,file-throughput-write}]
```

## Flags

Flag Name	Required	Description
<code>-t</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--skip-reverse-cache</code>	No	When this flag is set, the reverse lookup cache is not cleared.
<code>--skip-forward-cache</code>	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\_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 ...]
```

## Flags

Flag Name	Required	Description
<code>--hosts</code>	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 ...]
```

## Flags

Flag Name	Required	Description
<code>--ips</code>	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)
```

## Flags

Flag Name	Required	Description
<code>--file</code>	No	JSON-encoded file containing overrides.
<code>--stdin</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File or directory path
<code>--id</code>	No	File or directory ID
<code>--mode</code>	Yes	POSIX mode to hypothetically apply (e.g., 0744, rwxr--r--)
<code>-v</code>	No	Print more information in output
<code>--json</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File or directory path
<code>--id</code>	No	File or directory ID
<code>--json</code>	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 | --id ID) -u ID [ID ...] [-g [ID [ID ...]]] [--no-expand] [-v] [--json]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File or directory path
<code>--id</code>	No	File or directory ID
<code>-u</code>	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.
<code>-g</code>	No	Groups that the user should be considered a member of for the purpose of the explanation.
<code>--no-expand</code>	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?')
<code>-v</code>	No	Prints the credential that will be used for the explanation, after it has been expanded.
<code>--json</code>	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-attributes] [--no-named-streams] source target
```

## Flags

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

## Positional Options

Option Name	Description
<code>source</code>	Source file absolute path
<code>target</code>	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
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Parent directory path
<code>--id</code>	No	Parent directory ID
<code>--name</code>	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
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Parent directory path
<code>--id</code>	No	Parent directory ID
<code>--name</code>	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
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Parent directory path
<code>--id</code>	No	Parent directory ID
<code>--target</code>	Yes	Link target
<code>--name</code>	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 {FS_FILE_TYPE_UNKNOWN,FS_FILE_TYPE_FILE,FS_FILE_TYPE_DIRECTORY}] --name NAME
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Parent directory path
<code>--id</code>	No	Parent directory ID
<code>--target</code>	Yes	Link target (relative path recommended)
<code>--target-type</code>	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.
<code>--name</code>	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
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Parent directory path
<code>--id</code>	No	Parent directory ID
<code>--major-minor-numbers</code>	No	Major and minor numbers
<code>--name</code>	Yes	New file name
<code>--type</code>	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)
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File system object path
<code>--id</code>	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
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--s3</code>	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 the <code>--s3</code> flag, Qumulo Core makes user metadata visible to the S3 protocol as object metadata.
<code>--key</code>	Yes	Metadata key

# qq fs\_file\_get\_attr

This section explains how to use the `qq fs_file_get_attr` command.

## Description

Get file attributes

## Usage

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

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--snapshot</code>	No	Snapshot ID to read from
<code>--stream-id</code>	No	Stream ID
<code>--stream-name</code>	No	Stream name



# 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 {capacity,data,file,named_streams}]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Query root path
<code>--id</code>	No	Query root ID
<code>--sample-by</code>	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-name STREAM_NAME] [--mode MODE] [--size SIZE] [--creation-time CREATION_TIME]
  [--access-time ACCESS_TIME] [--modification-time MODIFICATION_TIME] [--change-time CHANGE_TIME]
  [--owner OWNER | --owner-local OWNER_LOCAL | --owner-sid OWNER_SID | --owner-uid OWNER_UID]
  [--group GROUP | --group-local GROUP_LOCAL | --group-sid GROUP_SID | --group-gid GROUP_GID]
```

## Flags

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

<code>--owner-local</code>	No	File owner as local user name
<code>--owner-sid</code>	No	File owner as SID
<code>--owner-uid</code>	No	File owner as NFS UID
<code>--group</code>	No	File group as auth_id
<code>--group-local</code>	No	File group as local group name
<code>--group-sid</code>	No	File group as SID
<code>--group-gid</code>	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] [--compressed BOOL] [--hidden BOOL] [--not-content-indexed BOOL] [--read-only BOOL] [--system BOOL] [--temporary BOOL] [--offline BOOL]
```

## Flags

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

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--snapshot</code>	No	Snapshot ID to read from
<code>--json</code>	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 SNAPSHOT] [--hex | --base64]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--s3</code>	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 the <code>--s3</code> flag, Qumulo Core makes user metadata visible to the S3 protocol as object metadata.
<code>--key</code>	Yes	Metadata key
<code>--snapshot</code>	No	Snapshot ID to read user metadata from
<code>--hex</code>	No	Print binary values as hex
<code>--base64</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--protocol</code>	Yes	The protocol whose lock waiters should be listed
<code>--lock-type</code>	Yes	The type of lock whose waiters should be listed
<code>--name</code>	No	Client hostname
<code>--address</code>	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} --lock-type {byte-range} [--snapshot SNAPSHOT]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--protocol</code>	Yes	The protocol whose lock waiters should be listed
<code>--lock-type</code>	Yes	The type of lock whose waiters should be listed
<code>--snapshot</code>	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,nlm,smb} --lock-type {share-mode,byte-range}
[--path PATH | --id ID | --ip IP | --hostname HOSTNAME] [--snapshot SNAPSHOT]
[--no-resolve] [--json] [--sort {file,client}]
```

## Flags

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

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File or directory path
<code>--id</code>	No	File or directory ID
<code>--snapshot</code>	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 | --id ID) [--s3] [--json] [--snapshot SNAPSHOT] [--hex | --base64]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--s3</code>	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 the <code>--s3</code> flag, Qumulo Core makes user metadata visible to the S3 protocol as object metadata.
<code>--json</code>	No	Output the response in json. Without this option, keys and values will only show the first 50 characters.
<code>--snapshot</code>	No	Snapshot ID to read user metadata from
<code>--hex</code>	No	Print binary values as hex
<code>--base64</code>	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).

### ⚠ 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 `add_entry` 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.

### ℹ 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 `remove_entry` subcommand use the `--trustee` 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 `remove_entry` subcommand use the `-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.

### **i** 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,modify_entry,set_posix_special_permissions} ...
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--json</code>	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
_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_extra_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_move
d_to,child_stream_size_changed,child_stream_data_written,self_removed} ...]]
  [--file FILE] [--json]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Directory path
<code>--id</code>	No	Directory ID
<code>--recursive</code>	No	Listen for changes recursively.
<code>--filter</code>	No	Specific notify types to filter to.
<code>--file</code>	No	File to receive data
<code>--json</code>	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-name STREAM_NAME] --offset OFFSET --size SIZE
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--stream-id</code>	No	Stream ID
<code>--stream-name</code>	No	Stream name
<code>--offset</code>	Yes	Offset in bytes specifying the start of the hole to create
<code>--size</code>	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 STREAM_NAME] [--snapshot SNAPSHOT] [--offset OFFSET] [--length LENGTH] [--file FILE] [--force] [--stdout]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--stream-id</code>	No	Stream ID
<code>--stream-name</code>	No	Stream name
<code>--snapshot</code>	No	Snapshot ID to read from
<code>--offset</code>	No	Offset at which to read data. If not specified, read from the beginning of the file.
<code>--length</code>	No	Amount of data to read. If not specified, read the entire file.
<code>--file</code>	No	File to receive data
<code>--force</code>	No	Overwrite an existing file
<code>--stdout</code>	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 SNAPSHOT] [--smb-pattern SMB_PATTERN]
```

## Flags

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.
--snapshot	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 [--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]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	Yes	Directory path
<code>--recursive</code>	No	Fetch recursive aggregates
<code>--max-entries</code>	No	Maximum number of entries to return
<code>--max-depth</code>	No	Maximum depth to recurse when <code>--recursive</code> is set
<code>--order-by</code>	No	Specify field used for top N selection and sorting
<code>--snapshot</code>	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 --owner-id OWNER_ID [--force] [--snapshot SNAPSHOT]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--offset</code>	Yes	NLM byte-range lock offset
<code>--size</code>	Yes	NLM byte-range lock size
<code>--owner-id</code>	Yes	Owner id
<code>--force</code>	No	This command can cause corruption, add this flag to release lock
<code>--snapshot</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--force</code>	No	This command can cause corruption, add this flag to release lock
<code>--name</code>	No	Client hostname
<code>--address</code>	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 | --id ID) (--stream-id STREAM_ID | --stream-name STREAM_NAME)
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File or directory path
<code>--id</code>	No	File or directory ID
<code>--stream-id</code>	No	Stream id to remove
<code>--stream-name</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Destination parent directory path
<code>--id</code>	No	Destination parent directory ID
<code>--source</code>	Yes	Source file path
<code>--name</code>	Yes	New name in destination directory
<code>--clobber</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--ids</code>	Yes	File IDs to resolve
<code>--snapshot</code>	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] [--public-key PUBLIC_KEY] [--verification-signature VERIFICATION_SIGNATURE]
                        [--comment COMMENT] [--json]
```

## Flags

Flag Name	Required	Description
<code>--name</code>	Yes	The unique name to associate with the key to add to the key store. The name must not contain only numbers.
<code>--private-key-file</code>	No	The ECDSA private key file for the key to add to the key store.
<code>--public-key</code>	No	The ECDSA public key for the key to add to the key store.
<code>--verification-signature</code>	No	A signature generated by signing the key name with the ECDSA private key.
<code>--comment</code>	No	An optional comment that the system stores alongside the key to add to the key store.
<code>--json</code>	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
```

## Flags

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]
```

## Flags

Flag Name	Required	Description
<code>-k</code>	Yes	The identifier or name of the key for which to show information.
<code>--json</code>	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
```

## Flags

Flag Name	Required	Description
<code>-k</code>	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]
```

## Flags

Flag Name	Required	Description
<code>-k</code>	Yes	The key identifier or name for which to show usage information.
<code>--json</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--json</code>	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] [--enable | --disable] [--json]
```

## Flags

Flag Name	Required	Description
<code>-k</code>	Yes	The identifier or name of the key to modify.
<code>--new-name</code>	No	The new name for the specified key.
<code>--comment</code>	No	The comment for the specified key.
<code>--enable</code>	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.
<code>--disable</code>	No	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.
<code>--json</code>	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_FILE]
[--replacement-private-key-file REPLACEMENT_PRIVATE_KEY_FILE]
[--replacement-public-key REPLACEMENT_PUBLIC_KEY] [--old-key-verification-signature OLD_KEY_VERIFICATION_SIGNATURE]
[--replacement-key-verification-signature REPLACEMENT_KEY_VERIFICATION_SIGNATURE] [--json]
```

## Flags

Flag Name	Required	Description
<code>-k</code>	Yes	The identifier or name of the key to replace in the key store.
<code>--old-private-key-file</code>	No	The ECDSA private key file that corresponds to the existing public key.
<code>--replacement-private-key-file</code>	No	The ECDSA private key file with which to replace the existing key.
<code>--replacement-public-key</code>	No	The ECDSA public key with which to replace the existing key.
<code>--old-key-verification-signature</code>	No	A signature that you generate when you sign the challenge with the existing ECDSA private key.
<code>--replacement-key-verification-signature</code>	No	A signature that you generate when you sign the challenge with the replacement ECDSA private key.
<code>--json</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--file</code>	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}]
```

## Flags

Flag Name	Required	Description
<code>--enable</code>	No	Enable access time (atime) updates.
<code>--disable</code>	No	Disable access time (atime) updates.
<code>--granularity</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--recursive-mode</code>	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
```

## Positional Options

Option Name	Description
<code>mode</code>	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 VALUE | --hex-value HEX_VALUE | --base64-value BASE64_VALUE)
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--s3</code>	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 the <code>--s3</code> flag, Qumulo Core makes user metadata visible to the S3 protocol as object metadata.
<code>--key</code>	Yes	Metadata key
<code>--value</code>	No	Plaintext metadata value
<code>--hex-value</code>	No	Hex-encoded metadata value
<code>--base64-value</code>	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.

#### **i** 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-file OUTPUT_FILE] [--max-depth MAX_DEPTH]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Tree root path

<code>--snapshot</code>	No	Snapshot ID to read from
<code>--file-only</code>	No	Only display files
<code>--directory-only</code>	No	Only display directories
<code>--symlink-only</code>	No	Only display symlinks
<code>--display-ownership</code>	No	Display detailed owner and group information
<code>--display-all-attributes</code>	No	Display all attributes
<code>--output-file</code>	No	Output a file at the specified path instead of stdout
<code>--max-depth</code>	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 | --id ID) [--stream-id STREAM_ID | --stream-name STREAM_NAME | --create] [--offset OFFSET] [--file FILE] [--stdin]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	File path
<code>--id</code>	No	File ID
<code>--stream-id</code>	No	Stream ID
<code>--stream-name</code>	No	Stream name
<code>--create</code>	No	Create file before writing. Fails if exists or is used with stream identifiers.
<code>--offset</code>	No	Offset at which to write data. If not specified, the existing contents of the file will be replaced with the given contents.
<code>--file</code>	No	File data to send
<code>--stdin</code>	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,false}]
[--log-operations {true,false}] [--chroot-users {true,false}]
  [--allow-unencrypted-connections {true,false}] [--expand-wildcards {true,false}]
  [--anonymous-user-as-local-user ANONYMOUS_USER_AS_LOCAL_USER | --anonymous-user-
none | --greeting GREETING]
```

# 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]
```

## Flags

Flag Name	Required	Description
<code>--force</code>	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
```

## Positional Options

Option Name	Description
<code>identifier</code>	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	Description
<code>--home-directory</code>	Yes	The home directory for the identity.

## Positional Options

Option Name	Description
<code>identifier</code>	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
```

## Positional Options

Option Name	Description
<code>directory</code>	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_IDENTITYES_MAPPING
```

## Flags

Flag Name	Required	Description
<code>-a</code>	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
```

## Flags

Flag Name	Required	Description
<code>-k</code>	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 {false,true} --bind-uri BIND_URI --base-dn BASE_DN [--bind-username BIND_USERNAME] [--bind-password BIND_PASSWORD]
  [--encrypt-connection {false,true}] [--rfc2307] [--custom-group-member-attribute CUSTOM_GROUP_MEMBER_ATTRIBUTE]
  [--custom-user-group-identifier-attribute CUSTOM_USER_GROUP_IDENTIFIER_ATTRIBUTE] [--custom-login-name-attribute CUSTOM_LOGIN_NAME_ATTRIBUTE]
  [--custom-group-name-attribute CUSTOM_GROUP_NAME_ATTRIBUTE] [--custom-user-object-class CUSTOM_USER_OBJECT_CLASS]
  [--custom-group-object-class CUSTOM_GROUP_OBJECT_CLASS] [--custom-uid-number-attribute CUSTOM_UID_NUMBER_ATTRIBUTE]
  [--custom-gid-number-attribute CUSTOM_GID_NUMBER_ATTRIBUTE]
```

## Flags

Flag Name	Required	Description
<code>--use-ldap</code>	Yes	Whether or not to enable the use of the LDAP server on the cluster.
<code>--bind-uri</code>	Yes	LDAP URI used to bind. Example: ldap://ldap-server.example.com
<code>--base-dn</code>	Yes	Base DN (Distinguished Names). Separate multiple DN's using semicolons. Example: dc=account,dc=example,dc=com
<code>--bind-username</code>	No	Binding user's DN. Default is empty.
<code>--bind-password</code>	No	Password for simple authentication against LDAP server. If not specified, will use password that is currently stored on disk.
<code>--encrypt-connection</code>	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-member-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-object-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 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 {false,true}] [--bind-uri BIND_URI] [--base-dn BASE_DN] [--bind-username BIND_USERNAME] [--bind-password BIND_PASSWORD]
  [--encrypt-connection {false,true}] [--rfc2307] [--custom-group-member-attribute CUSTOM_GROUP_MEMBER_ATTRIBUTE]
  [--custom-user-group-identifier-attribute CUSTOM_USER_GROUP_IDENTIFIER_ATTRIBUTE] [--custom-login-name-attribute CUSTOM_LOGIN_NAME_ATTRIBUTE]
  [--custom-group-name-attribute CUSTOM_GROUP_NAME_ATTRIBUTE] [--custom-user-object-class CUSTOM_USER_OBJECT_CLASS]
  [--custom-group-object-class CUSTOM_GROUP_OBJECT_CLASS] [--custom-uid-number-attribute CUSTOM_UID_NUMBER_ATTRIBUTE]
  [--custom-gid-number-attribute CUSTOM_GID_NUMBER_ATTRIBUTE]
```

## Flags

Flag Name	Required	Description
<code>--use-ldap</code>	No	Enable or disable the use of standalone LDAP.
<code>--bind-uri</code>	No	LDAP URI used to bind. Example: ldap://ldap-server.example.com
<code>--base-dn</code>	No	Base DN's (Distinguished Names). Example: dc=account,dc=example,dc=com
<code>--bind-username</code>	No	Binding users's DN.
<code>--bind-password</code>	No	Password for simple authentication against LDAP server.
<code>--encrypt-connection</code>	No	If true, LDAP connection must be encrypted using TLS.
<code>--rfc2307</code>	No	Use the standard schema defined in RFC2307. Cannot be combined with any custom schema arguments.
<code>--custom-group-member-attribute</code>	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-object-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 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]
```

## Flags

Flag Name	Required	Description
<code>-u</code>	Yes	User name
<code>-p</code>	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 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_ID ...]]] [--enable-web-ui | --disable-web-ui] [--enable-rest-api | --disable-rest-api] [--enable-ssh | --disable-ssh] [--enable-replication | --disable-replication] [--enable-nfs | --disable-nfs] [--enable-smb | --disable-smb]
```

## Flags

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

<code>--enable-replication</code>	No	Replication is accessible from this tenant.
<code>--disable-replication</code>	No	Replication is not accessible from this tenant. This is the default.
<code>--enable-nfs</code>	No	NFS is accessible from this tenant.
<code>--disable-nfs</code>	No	NFS is not accessible from this tenant. This is the default.
<code>--enable-smb</code>	No	SMB is accessible from this tenant.
<code>--disable-smb</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	The unique ID of the tenant to delete.
<code>--force</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>-j</code>	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

```
qq multitenancy_modify_tenant [-h] --id ID [--enable-web-ui | --disable-web-ui] [--enable-rest-api | --disable-rest-api] [--enable-ssh | --disable-ssh]
    [--enable-replication | --disable-replication] [--enable-nfs | --disable-nfs]
    [--enable-smb | --disable-smb]
    [--network-id [NETWORK_ID [NETWORK_ID ...]]]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	The unique ID of the tenant to modify.
<code>--name</code>	No	Unique name of the tenant chosen by the user. If not specified, the existing name will be preserved.
<code>--enable-web-ui</code>	No	Web UI is accessible from this tenant. If neither <code>--enable-web-ui</code> nor <code>--disable-web-ui</code> is specified, the existing setting will be preserved.
<code>--disable-web-ui</code>	No	Web UI is not accessible from this tenant. If neither <code>--enable-web-ui</code> nor <code>--disable-web-ui</code> is specified, the existing setting will be preserved.
<code>--enable-rest-api</code>	No	REST API is accessible from this tenant. If neither <code>--enable-rest-api</code> nor <code>--disable-rest-api</code> is specified, the existing setting will be preserved.
<code>--disable-rest-api</code>	No	REST API is not accessible from this tenant. If neither <code>--enable-rest-api</code> nor <code>--disable-rest-api</code> is specified, the existing setting will be preserved.
<code>--enable-ssh</code>	No	SSH is accessible from this tenant. If neither <code>--enable-ssh</code> nor <code>--disable-ssh</code> is specified, the existing setting will be preserved.

<code>--disable-ssh</code>	No	SSH is not accessible from this tenant. If neither <code>--enable-ssh</code> nor <code>--disable-ssh</code> is specified, the existing setting will be preserved.
<code>--enable-replication</code>	No	Replication is accessible from this tenant. If neither <code>--enable-replication</code> nor <code>--disable-replication</code> is specified, the existing setting will be preserved.
<code>--disable-replication</code>	No	Replication is not accessible from this tenant. If neither <code>--enable-replication</code> nor <code>--disable-replication</code> is specified, the existing setting will be preserved.
<code>--enable-nfs</code>	No	NFS is accessible from this tenant. If neither <code>--enable-nfs</code> nor <code>--disable-nfs</code> is specified, the existing setting will be preserved.
<code>--disable-nfs</code>	No	NFS is not accessible from this tenant. If neither <code>--enable-nfs</code> nor <code>--disable-nfs</code> is specified, the existing setting will be preserved.
<code>--enable-smb</code>	No	SMB is accessible from this tenant. If neither <code>--enable-smb</code> nor <code>--disable-smb</code> is specified, the existing setting will be preserved.
<code>--disable-smb</code>	No	SMB is not accessible from this tenant. If neither <code>--enable-smb</code> nor <code>--disable-smb</code> is specified, the existing setting will be preserved.
<code>--network-id</code>	No	List of zero or more network IDs associated with this tenant, as returned by the <code>`network_list_networks`</code> 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
```

## Flags

Flag Name	Required	Description
<code>--tenant-id</code>	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
```

## Flags

Flag Name	Required	Description
<code>--tenant-id</code>	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] [--enable-krb5 | --disable-krb5] [--enable-krb5p | --disable-krb5p] [--enable-krb5i | --disable-krb5i] [--enable-auth-sys | --disable-auth-sys]
```

### Flags

Flag Name	Required	Description
<code>--enable-v4</code>	No	Enables mounting with the NFSv4.1 protocol
<code>--disable-v4</code>	No	Disables mounting with the NFSv4.1 protocol
<code>--enable-krb5</code>	No	Enables mounting with KRB5 security
<code>--disable-krb5</code>	No	Disables mounting with KRB5 security
<code>--enable-krb5p</code>	No	Enables mounting with KRB5p security
<code>--disable-krb5p</code>	No	Disables mounting with KRB5p security
<code>--enable-krb5i</code>	No	Enables mounting with KRB5i security
<code>--disable-krb5i</code>	No	Disables mounting with KRB5i security
<code>--enable-auth-sys</code>	No	Enables mounting with AUTH_SYS security
<code>--disable-auth-sys</code>	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 | --disable-v4] [--enable-krb5 | --disable-krb5] [--enable-krb5p | --disable-krb5p] [--enable-krb5i | --disable-krb5i] [--enable-auth-sys | --disable-auth-sys]
```

## Flags

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

## Flags

Flag Name	Required	Description
<code>--tenant-id</code>	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
```

## Flags

Flag Name	Required	Description
<code>--tenant-id</code>	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 dialect_1 [dialect_2 ...]] [--hide-shares-from-unauthorized-hosts {true,false}] [--hide-shares-from-unauthorized-users {true,false}] [--snapshot-directory-mode {visible,hidden,disabled}] [--bypass-traverse-checking {true,false}] [--signing-required {true,false}]
```

### Flags

Flag Name	Required	Description
<code>-e</code>	No	Server encryption mode to set
<code>-d</code>	No	Specify a space-separated list of SMB dialects that clients are permitted to negotiate. To disable SMB, specify <code>-d ""</code> . Available dialects: <code>smb2_dialect_2_002</code> , <code>smb2_dialect_2_1</code> , <code>smb2_dialect_3_0</code> , <code>smb2_dialect_3_11</code> . Alternatively, use <code>-d ALL</code> to allow all supported dialects.
<code>--hide-shares-from-unauthorized-hosts</code>	No	Configure share listing to omit shares to which the requesting host isn't authorized to connect.
<code>--hide-shares-from-unauthorized-users</code>	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.

<b>--snapshot-directory-mode</b>	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.
<b>--bypass-traverse-checking</b>	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.
<b>--signing-required</b>	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,required}] [-d dialect_1 [dialect_2 ...]]  
    [--hide-shares-from-unauthorized-hosts {true,false}] [--hide-shares-from-unauthorized-users {true,false}]  
    [--snapshot-directory-mode {visible,hidden,disabled}] [--bypass-traverse-checking {true,false}] [--signing-required {true,false}]
```

## Flags

Flag Name	Required	Description
<code>--tenant-id</code>	Yes	ID of tenant to modify settings for
<code>-e</code>	No	Server encryption mode to set
<code>-d</code>	No	Specify a space-separated list of SMB dialects that clients are permitted to negotiate. To disable SMB, specify <code>-d ""</code> . Available dialects: <code>smb2_dialect_2_002</code> , <code>smb2_dialect_2_1</code> , <code>smb2_dialect_3_0</code> , <code>smb2_dialect_3_11</code> . Alternatively, use <code>-d ALL</code> to allow all supported dialects.
<code>--hide-shares-from-unauthorized-hosts</code>	No	Configure share listing to omit shares to which the requesting host isn't authorized to connect.
<code>--hide-shares-from-unauthorized-users</code>	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.

<b>--snapshot-directory-mode</b>	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.
<b>--bypass-traverse-checking</b>	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.
<b>--signing-required</b>	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 <address-or-range> [<address-or-range> ...]
    [--floating-ip-ranges <address-or-range> [<address-or-range> ...]] [--dns-servers <address-or-range> [<address-or-range> ...]]
    [--dns-search-domains <search-domain> [<search-domain> ...]] [--mtu MTU] [--vlan-id VLAN_ID] [--tenant-id TENANT_ID]
```

## Flags

Flag Name	Required	Description
<code>--name</code>	Yes	Network name
<code>--net-mask</code>	Yes	(if STATIC) IPv4 or IPv6 Netmask or Subnet CIDR eg. 255.255.255.0 or 10.1.1.0/24
<code>--ip-ranges</code>	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
<code>--floating-ip-ranges</code>	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
<code>--dns-servers</code>	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
<code>--dns-search-domains</code>	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

<code>--mtu</code>	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.
<code>--vlan-id</code>	No	(if STATIC) User assigned VLAN tag for network configuration. 1-4094 are valid VLAN IDs and 0 is used for untagged networks.
<code>--tenant-id</code>	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
```

## Flags

Flag Name	Required	Description
<code>--network-id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--interface-id</code>	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
```

## Flags

Flag Name	Required	Description
<code>--network-id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>-c</code>	No	Pretty-print connection counts for the cluster and each node
<code>--json</code>	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_BACKUP,IEEE_8023AD}] [--mtu MTU]
```

## Flags

Flag Name	Required	Description
<code>--interface-id</code>	No	The unique ID of the interface
<code>--default-gateway</code>	No	The default IPv4 gateway address
<code>--default-gateway-ipv6</code>	No	The default IPv6 gateway address
<code>--bonding-mode</code>	No	Ethernet bonding mode
<code>--mtu</code>	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 {DHCP,STATIC}] [--netmask <netmask-or-subnet>]
  [--ip-ranges <address-or-range> [<address-or-range> ...]] [--floating-ip-ranges
<address-or-range> [<address-or-range> ...]]
  [--clear-floating-ip-ranges] [--dns-servers <address-or-range> [<address-or-range> ...]] [--clear-dns-servers]
  [--dns-search-domains <search-domain> [<search-domain> ...]] [--clear-dns-search-domains] [--mtu MTU] [--vlan-id VLAN_ID]
  [--tenant-id TENANT_ID | --clear-tenant-id]
```

## Flags

Flag Name	Required	Description
<code>--network-id</code>	Yes	The unique ID of the network on the interface
<code>--name</code>	No	Network name
<code>--assigned-by</code>	No	How to assign IP address, either DHCP or STATIC
<code>--netmask</code>	No	(if STATIC) IPv4 or IPv6 Netmask or Subnet CIDR eg. 255.255.255.0 or 10.1.1.0/24
<code>--ip-ranges</code>	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
<code>--floating-ip-ranges</code>	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

<code>--clear-floating-ip-ranges</code>	No	(if STATIC) Clear the floating IP address ranges
<code>--dns-servers</code>	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
<code>--clear-dns-servers</code>	No	Clear the DNS servers
<code>--dns-search-domains</code>	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
<code>--clear-dns-search-domains</code>	No	Clear the DNS search domains
<code>--mtu</code>	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.
<code>--vlan-id</code>	No	(if STATIC) User assigned VLAN tag for network configuration. 1-4094 are valid VLAN IDs and 0 is used for untagged networks.
<code>--tenant-id</code>	No	The tenant that the network is assigned to. If only one tenant exists, this will default to that tenant.
<code>--clear-tenant-id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--node-id</code>	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 TENANT_ID] [--description DESCRIPTION] (--no-restrictions | --restrictions JSON_FILE_PATH) [--create-fs-path] [--fields-to-present-as-32-bit FIELD [FIELD ...]]
```

## Flags

Flag Name	Required	Description
<code>--export-path</code>	Yes	NFS Export path
<code>--fs-path</code>	Yes	File system path
<code>--tenant-id</code>	No	ID of the tenant to add the export to
<code>--description</code>	No	Description of this export
<code>--no-restrictions</code>	No	Specify no restrictions for this export.



<b>--restrictions</b>	No	<p>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": false, "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_GID", "id_value": "501" } } ] }</p>
<b>--create-fs-path</b>	No	Creates the specified file system path if it does not exist
<b>--fields-to-present-as-32-bit</b>	No	<p>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.</p>

# 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) [--tenant-id TENANT_ID]
```

## Flags

Flag Name	Required	Description
<code>--export-id</code>	No	ID of export to delete
<code>--export-path</code>	No	Path of export to delete
<code>--tenant-id</code>	No	ID of the tenant the export is in. Only used if using the <code>--export-path</code> 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) [--tenant-id TENANT_ID] [--json]
```

## Flags

Flag Name	Required	Description
<code>--export-id</code>	No	ID of export to modify
<code>--export-path</code>	No	Path of export to modify
<code>--tenant-id</code>	No	ID of the tenant to get the export from. Only used if using the <code>--export-path</code> argument.
<code>--json</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--json</code>	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

```
qq nfs_mod_export [-h] (--export-id EXPORT_ID | --export-path EXPORT_PATH) [--tenant-id TENANT_ID] [--new-export-path NEW_EXPORT_PATH] [--new-tenant-id NEW_TENANT_ID] [--fs-path FS_PATH] [--description DESCRIPTION] [--no-restrictions | --restrictions JSON_FILE_PATH] [--create-fs-path] [--fields-to-present-as-32-bit FIELD [FIELD ...]]
```

## Flags

Flag Name	Required	Description
<code>--export-id</code>	No	ID of export to modify
<code>--export-path</code>	No	Path of export to modify
<code>--tenant-id</code>	No	ID of the tenant the export is in. Only used if using the <code>--export-path</code> argument.
<code>--new-export-path</code>	No	Change NFS export path
<code>--new-tenant-id</code>	No	Change tenant that export is in
<code>--fs-path</code>	No	Change file system path
<code>--description</code>	No	Description of this export
<code>--no-restrictions</code>	No	Specify no restrictions for this export.

<b>--restrictions</b>	No	<p>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": false, "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_GID", "id_value": "501" } } ] }</p>
<b>--create-fs-path</b>	No	Creates the specified file system path if it does not exist
<b>--fields-to-present-as-32-bit</b>	No	<p>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.</p>

# 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_PATH) [--tenant-id TENANT_ID] [--json] {add_entry,modify_entry,remove_entry} ...
```

## Flags

Flag Name	Required	Description
<code>--export-id</code>	No	ID of export to modify
<code>--export-path</code>	No	Path of export to modify
<code>--tenant-id</code>	No	ID of the tenant the export is in. Only used if using the <code>--export-path</code> argument
<code>--json</code>	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 | --disable-krb5p] [--enable-krb5i | --disable-krb5i] [--enable-auth-sys | --disable-auth-sys]
```

## Flags

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

## Flags

Flag Name	Required	Description
<code>--node</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--node</code>	No	Node ID

# 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
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Path name
<code>--id</code>	No	File ID
<code>--limit</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Path name
<code>--id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Path name
<code>--id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--page-size</code>	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
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	Path name
<code>--id</code>	No	File ID
<code>--limit</code>	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,GET,PATCH,POST,PUT} url
```

## Flags

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

## Positional Options

Option Name	Description
<code>method</code>	HTTP method. PATCH, POST, and PUT accept input on stdin
<code>url</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--rolling</code>	No	Reboot nodes one set at a time, depending on the number of node failures configured in the protection system
<code>--num-nodes</code>	No	Using the --rolling 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).
<code>--force</code>	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} ...
```

# 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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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,false}]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the source replication relationship
<code>--skip-active-policy-snapshot</code>	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 END_TIME --days-of-week DAYS_OF_WEEK
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the source replication relationship.
<code>--start-time</code>	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.
<code>--end-time</code>	Yes	The 24 hour time of day end time for the blackout window (e.g. 18:30) -- on the following day if earlier than the --start-time parameter.
<code>--days-of-week</code>	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-path-create]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the target replication relationship
<code>--allow-non-empty-directory</code>	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.
<code>--allow-fs-path-create</code>	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_DIRECTORY_ID | --local-directory-path LOCAL_DIRECTORY_PATH) --direction {COPY_TO_OBJECT,COPY_FROM_OBJECT} [--object-store-address OBJECT_STORE_ADDRESS] --object-folder OBJECT_FOLDER [--use-port USE_PORT] [--ca-certificate CA_CERTIFICATE] --bucket BUCKET [--bucket-addressing-style {BUCKET_STYLE_PATH,BUCKET_STYLE_VIRTUAL_HOSTED}] --region REGION --access-key-id ACCESS_KEY_ID [--secret-access-key SECRET_ACCESS_KEY]
```

## Flags

Flag Name	Required	Description
<code>--local-directory-id</code>	No	File ID of the qumulo directory
<code>--local-directory-path</code>	No	Path of the qumulo directory
<code>--direction</code>	Yes	Whether data is to be copied to, or from, the object store.
<code>--object-store-address</code>	No	S3-compatible server address. If omitted, Amazon S3 address <code>s3.amazonaws.com</code> will be used.

<code>--object-folder</code>	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 <code>directory_path</code> ) "dir/file" results in key "example/dir/file". Use empty value "" or "/" to replicate with the root of the bucket.
<code>--use-port</code>	No	HTTPS port to use when communicating with the object store (default: 443)
<code>--ca-certificate</code>	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.
<code>--bucket</code>	Yes	Bucket in the object store to use for this relationship
<code>--bucket-addressing-style</code>	No	Addressing style for requests to the bucket. Set to <code>BUCKET_STYLE_PATH</code> for path-style addressing or <code>BUCKET_STYLE_VIRTUAL_HOSTED</code> 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.
<code>--region</code>	Yes	Region the bucket is located in, e.g., us-west-2
<code>--access-key-id</code>	Yes	Access key ID to use when communicating with the object store
<code>--secret-access-key</code>	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-path SOURCE_PATH) --target-path TARGET_PATH --target-address TARGET_ADDRESS  
    [--target-port TARGET_PORT] [--enable-replication {true,false}] [--set-source-directory-read-only {true,false}]  
    [--map-local-ids-to-nfs-ids {true,false}]
```

## Flags

Flag Name	Required	Description
<code>--source-id</code>	No	File ID of the source directory
<code>--source-path</code>	No	Path to the source directory
<code>--target-path</code>	Yes	Path to the target directory
<code>--target-address</code>	Yes	The target IP address
<code>--target-port</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the source replication relationship
<code>--force</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the target replication relationship
<code>--force</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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
```

### Flags

Flag Name	Required	Description
<code>--id</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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
```

### Flags

Flag Name	Required	Description
<code>--id</code>	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
```

### Flags

Flag Name	Required	Description
<code>--id</code>	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 --snapshot-policy-id SNAPSHOT_POLICY_ID [-t TARGET_EXPIRATION]
```

## Flags

Flag Name	Required	Description
<code>--relationship-id</code>	Yes	Unique identifier of the source replication relationship.
<code>--snapshot-policy-id</code>	Yes	Identifier of the snapshot policy to link.
<code>-t</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the target replication relationship
<code>--force</code>	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

```
qq replication_modify_source_relationship [-h] --id ID [--new-target-address NEW_TARGET_ADDRESS] [--new-target-port NEW_TARGET_PORT] [-z TIMEZONE]
    [--enable-replication {true,false}] [--set-source-directory-read-only {true,false}] [--map-local-ids-to-nfs-ids {true,false}]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the source replication relationship
<code>--new-target-address</code>	No	The target IP address
<code>--new-target-port</code>	No	Network port to replicate to on the target
<code>-z</code>	No	The timezone for the relationship's blackout windows (e.g. America/Los_Angeles or UTC). See the <code>time_list_timezones qq</code> 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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the target replication relationship
<code>--force</code>	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

```
qq replication_release_queued_snapshot [-h] --relationship-id RELATIONSHIP_ID --snapshot-id SNAPSHOT_ID
```

## Flags

Flag Name	Required	Description
<code>--relationship-id</code>	Yes	Unique identifier of the source replication relationship.
<code>--snapshot-id</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the target replication relationship
<code>--source-address</code>	Yes	The IP address of the current source cluster
<code>--source-port</code>	No	Network port of the current source cluster (defaults to 3712)

# qq

## replication\_set\_snapshot\_policy\_replication\_mode

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 {REPLICATION_SNAPSHOT_POLICY,REPLICATION_SNAPSHOT_POLICY_WITH_CONTINUOUS}
```

### Flags

Flag Name	Required	Description
<code>--id</code>	Yes	Unique identifier of the source replication relationship.
<code>--mode</code>	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)
```

## Flags

Flag Name	Required	Description
<code>--relationship-id</code>	Yes	The unique identifier of the target replication relationship.
<code>-k</code>	No	The identifier or name of the lock key to associate with the specified target replication relationship.
<code>--clear-lock-key</code>	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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	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

```
qq replication_unlink_snapshot_policy [-h] --relationship-id RELATIONSHIP_ID --snaps  
hot-policy-id SNAPSHOT_POLICY_ID
```

## Flags

Flag Name	Required	Description
<code>--relationship-id</code>	Yes	Unique identifier of the source replication relationship.
<code>--snapshot-policy-id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--key-id</code>	No	The unique ID of the master key for at-rest encryption.
<code>--create-key-with-name</code>	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 in-progress S3 upload. This can be applied to both user initiated multi-part uploads, and system initiated uploads that are used in PutObject and CopyObject actions.

## Usage

```
qq s3_abort_upload [-h] --bucket BUCKET --upload-id UPLOAD_ID
```

## Flags

Flag Name	Required	Description
<code>--bucket</code>	Yes	The bucket in which the upload was initiated.
<code>--upload-id</code>	Yes	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]
```

## Flags

Flag Name	Required	Description
<code>--name</code>	Yes	The name of the bucket to be created
<code>--fs-path</code>	No	The absolute path to be used as the root of the bucket. The user must have permissions to read the directory.
<code>--create-fs-path</code>	No	Creates the bucket root if it does not exist. The user must have permission to create the directory.

# 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 Azure Native Qumulo Administrator Guide
- [Managing Access Policies for an S3 Bucket in a Qumulo Cluster](#) in the Qumulo On-Premises 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] [--anonymous] [identifier]
```

## Flags

Flag Name	Required	Description
<code>--bucket</code>	Yes	The bucket for which the access policy will be explained.
<code>--auth-id</code>	No	Auth ID of the qumulo user
<code>--anonymous</code>	No	An unauthenticated S3 user

## Positional Options

Option Name	Description
<code>identifier</code>	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] [identifier]
```

## Flags

Flag Name	Required	Description
<code>--auth-id</code>	No	Auth ID of the qumulo user

## Positional Options

Option Name	Description
<code>identifier</code>	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\_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
```

## Flags

Flag Name	Required	Description
<code>--id</code>	Yes	The ID of the access key to be deleted

# 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]
```

## Flags

Flag Name	Required	Description
<code>--name</code>	Yes	The name of the bucket to be deleted
<code>--delete-root-dir</code>	No	If set to true, the operation will only succeed if the bucket root directory is empty, and the caller has the necessary permissions to unlink it. Otherwise, the directory need not be empty.

# 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 Azure Native Qumulo Administrator Guide
- [Managing Access Policies for an S3 Bucket in a Qumulo Cluster](#) in the Qumulo On-Premises Administrator Guide

## Examples

### To Delete an Access Policy for an S3 Bucket

#### ⚠ 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
```

## Flags

Flag Name	Required	Description
<code>--bucket</code>	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.

## Description

Get details for an S3 bucket

## Usage

```
qq s3_get_bucket [-h] --name NAME
```

## Flags

Flag Name	Required	Description
<code>--name</code>	Yes	The name of the bucket to retrieve

# 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 Azure Native Qumulo Administrator Guide
- [Managing Access Policies for an S3 Bucket in a Qumulo Cluster](#) in the Qumulo On-Premises 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]
```

## Flags

Flag Name	Required	Description
<code>--bucket</code>	No	The target bucket for which the access policy will be retrieved
<code>--example</code>	No	Print an example Policy.

# qq s3\_get\_settings

This section explains how to use the `qq s3_get_settings` command.

## Description

Get 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]
```

## Flags

Flag Name	Required	Description
<code>--json</code>	No	Output JSON instead of table.

# 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]
```

## Flags

Flag Name	Required	Description
<code>--json</code>	No	Output JSON instead of table



# qq s3\_list\_uploads

This section explains how to use the `qq s3_list_uploads` command.

## Description

List in-progress S3 uploads. This includes user initiated multi-part uploads, and system initiated uploads that are used in PutObject and CopyObject actions.

## Usage

```
qq s3_list_uploads [-h] --bucket BUCKET [--starts-with STARTS_WITH]
```

## Flags

Flag Name	Required	Description
<code>--bucket</code>	Yes	The bucket for which uploads should be listed.
<code>--starts-with</code>	No	Only output uploads for keys that start with the given string

# 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 Azure Native Qumulo Administrator Guide
- [Managing Access Policies for an S3 Bucket in a Qumulo Cluster](#) in the Qumulo On-Premises 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

```
qq s3_modify_bucket_policy [-h] --bucket BUCKET [--allow-remove-self] {delete_statement,append_statement,modify_statement} ...
```

## Flags

Flag Name	Required	Description
<code>--bucket</code>	Yes	The bucket whose policy will be modified.
<code>--allow-remove-self</code>	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] [--multipart-upload-expiry-interval MULTIPART_UPLOAD_EXPIRY_INTERVAL] [--secure | --insecure]
```

## Flags

Flag Name	Required	Description
<code>--disable</code>	No	Disable S3 server
<code>--enable</code>	No	Enable S3 server
<code>--base-path</code>	No	The directory which will be the parent of all buckets created without an explicitly specified path.
<code>--multipart-upload-expiry-interval</code>	No	If a multipart upload is not modified in this amount of time, it is considered stale and may be cleaned up automatically. The duration must be in the format where is a positive integer less than 100 and is one of [months, weeks, days, hours] (e.g. 5days). To disable automatic cleanup, specify 'never' for the duration.
<code>--secure</code>	No	Configure the S3 server to only accept HTTPS connections
<code>--insecure</code>	No	Configure the S3 server to only accept HTTP 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 Azure Native Qumulo Administrator Guide
- [Managing Access Policies for an S3 Bucket in a Qumulo Cluster](#) in the Qumulo On-Premises 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 stored at `--file` to `--bucket`.

## Usage

```
qq s3_set_bucket_policy [-h] --bucket BUCKET --file FILE [--allow-remove-self]
```

## Flags

Flag Name	Required	Description
<code>--bucket</code>	Yes	The target bucket who's policy will be set.
<code>--file</code>	Yes	The policy file to upload. Use <code>s3_get_bucket_policy --example</code> to get a policy template.
<code>--allow-remove-self</code>	No	Allow the policy set to remove the ability for this user to change the policy.

# 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

```
qq saml_modify_settings [-h] [--disable | --enable] [--idp-sso-url IDP_SSO_URL] [--idp-certificate IDP_CERTIFICATE | --idp-certificate-file IDP_CERTIFICATE_FILE] [--idp-entity-id IDP_ENTITY_ID] [--cluster-dns-name CLUSTER_DNS_NAME] [--require-sso {true,false}]
```

## Flags

Flag Name	Required	Description
<code>--disable</code>	No	Disable authentication via SAML
<code>--enable</code>	No	Enable authentication via SAML
<code>--idp-sso-url</code>	No	Sets the cluster's configured IDP SSO URL.
<code>--idp-certificate</code>	No	Sets the cluster's configured IDP public key with the given value in PEM format.
<code>--idp-certificate-file</code>	No	Sets the cluster's configured IDP public key from a PEM file.
<code>--idp-entity-id</code>	No	Sets the URI for the IDP this cluster trusts to authenticate users via SAML.
<code>--cluster-dns-name</code>	No	Sets the cluster's configured DNS name (must be FQDN).
<code>--require-sso</code>	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 Qumulo Core 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
```

## Flags

Flag Name	Required	Description
<code>--cluster-name</code>	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-disabled] [--mq-host MQ_HOST] [--mq-port MQ_PORT] [--mq-proxy-host MQ_PROXY_HOST] [--mq-proxy-port MQ_PROXY_PORT] [--s3-proxy-host S3_PROXY_HOST] [--s3-proxy-port S3_PROXY_PORT] [--s3-proxy-disable-https] [--all-proxy-host HOST] [--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]
```

## Flags

Flag Name	Required	Description
<code>--enabled</code>	No	Enable monitoring service.
<code>--disabled</code>	No	Disable monitoring service.
<code>--vpn-enabled</code>	No	Enable support VPN.
<code>--vpn-disabled</code>	No	Disable support VPN.
<code>--mq-host</code>	No	Specify MQ host name or IP.
<code>--mq-port</code>	No	Optional MQ service port.
<code>--mq-proxy-host</code>	No	Optional MQ proxy host.
<code>--mq-proxy-port</code>	No	Optional MQ proxy port.
<code>--s3-proxy-host</code>	No	Optional S3 proxy host.
<code>--s3-proxy-port</code>	No	Optional S3 proxy port.
<code>--s3-proxy-disable-https</code>	No	Optional S3 proxy disable HTTPS.
<code>--all-proxy-host</code>	No	Optional Set both MQ and S3 proxy host to HOST.

<code>--all-proxy-port</code>	No	Optional Set both MQ and S3 proxy port to PORT.
<code>--period</code>	No	Monitoring poll interval in seconds.
<code>--vpn-host</code>	No	Support VPN host name or IP.
<code>--nexus-enabled</code>	No	Enable Nexus monitoring.
<code>--nexus-disabled</code>	No	Disable Nexus monitoring.
<code>--nexus-host</code>	No	Optional nexus host.
<code>--nexus-port</code>	No	Optional nexus port.
<code>--nexus-interval</code>	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
<code>--node</code>	Yes	Node ID

## Positional Options

Option Name	Description
<code>light_state</code>	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 Azure Native Qumulo Administrator Guide
- [Using SMB Host Restrictions in Qumulo Core](#) in the Qumulo On-Premises Administrator Guide

## Examples

### To Create an SMB Share with Host Restrictions

#### 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 [--description DESCRIPTION] [--access-based-enumeration-enabled {true,false}]
  [--create-fs-path] [--default-file-create-mode DEFAULT_FILE_CREATE_MODE] [--default-directory-create-mode DEFAULT_DIRECTORY_CREATE_MODE]
  [--require-encryption {true,false}] [--json] [--no-access | --read-only | --all-access] [--grant-read-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 ...]] [--read-only-hosts IP/RANGE [IP/RANGE ...]] [--deny-hosts IP/RANGE [IP/RANGE ...]] [--deny-all-hosts]

```

## Flags

Flag Name	Required	Description
<code>--tenant-id</code>	No	The ID of the tenant to which to add the share.

<code>--name</code>	Yes	Name of share.
<code>--fs-path</code>	Yes	File system path.
<code>--description</code>	No	Description of this share.
<code>--access-based-enumeration-enabled</code>	No	Enable Access-Based Enumeration for this share.
<code>--create-fs-path</code>	No	Creates the specified file system path if the path does not exist already.
<code>--default-file-create-mode</code>	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.
<code>--default-directory-create-mode</code>	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.
<code>--require-encryption</code>	No	Require encryption for all traffic for the specified share. When set to true, clients without encryption capability cannot connect to this share.
<code>--json</code>	No	Print the raw JSON response.
<code>--no-access</code>	No	Grant no access.
<code>--read-only</code>	No	Grant everyone except guest read-only access.
<code>--all-access</code>	No	Grant everyone except guest full access.
<code>--grant-read-access</code>	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

<code>--grant-read-write-access</code>	No	Grant read-write access to these trustees.
<code>--grant-all-access</code>	No	Grant all access to these trustees.
<code>--deny-access</code>	No	Deny all access to these trustees.
<code>--full-control-hosts</code>	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.
<code>--read-only-hosts</code>	No	Address ranges which should be permitted read-only access at most.
<code>--deny-hosts</code>	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 correct <code>--full-control-hosts</code> or <code>--read-only-hosts</code> flags as necessary.
<code>--deny-all-hosts</code>	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
```

## Flags

Flag Name	Required	Description
<code>--location</code>	Yes	The location of the file handle to close as returned from <code>smb_list_file_handles</code> .



# 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] [--ip IP]
```

## Flags

Flag Name	Required	Description
<code>--identity</code>	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").
<code>--location</code>	No	Use the list of sessions from the <code>smb_list_sessions</code> command to close only the session with the specified location.
<code>--ip</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	No	ID of share to delete.
<code>--name</code>	No	Name of share to delete.
<code>--tenant-id</code>	No	The ID of the tenant from which to delete the share. Use this flag only if you also use the <code>--name</code> 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]
```

## Flags

Flag Name	Required	Description
<code>--page-size</code>	No	Max files to return per request.
<code>--file-number</code>	No	Limits results to the specified file, as returned from a command like <code>fs_file_get_attr</code> or <code>fs_read_dir</code> .
<code>-p</code>	No	Returns the primary path of the opened file.
<code>--path</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--page-size</code>	No	Max sessions to return per request
<code>--identity</code>	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 Azure Native Qumulo Administrator Guide
- [Using SMB Host Restrictions in Qumulo Core](#) in the Qumulo On-Premises 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]
```

## Flags

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 the --name 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]
```

## Flags

Flag Name	Required	Description
<code>--json</code>	No	Print JSON representation of shares.
<code>--populate-trustee-names</code>	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 Azure Native Qumulo Administrator Guide
- [Using SMB Host Restrictions in Qumulo Core](#) in the Qumulo On-Premises 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 Azure Native Qumulo Administrator Guide
- [Managing SMB3 Encryption in Transit in Qumulo Core](#) in the Qumulo On-Premises 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 Azure Native Qumulo Administrator Guide
- [Managing SMB3 Encryption in Transit in Qumulo Core](#) in the Qumulo On-Premises 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 NEW_NAME]
  [--new-tenant-id NEW_TENANT_ID] [--fs-path FS_PATH]
  [--description DESCRIPTION] [--access-based-enumeration-enabled {true,false}]
  [--create-fs-path] [--default-file-create-mode DEFAULT_FILE_CREATE_MODE]
  [--default-directory-create-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]
```

## Flags

Flag Name	Required	Description
<code>--id</code>	No	The ID of the share to modify.
<code>--name</code>	No	The name of the share to modify.
<code>--tenant-id</code>	No	ID of the tenant the share is in. Only used if using the <code>--name</code> argument.
<code>--new-name</code>	No	Change SMB share name.
<code>--new-tenant-id</code>	No	Change the tenant that the share is in.
<code>--fs-path</code>	No	Change file system path.
<code>--description</code>	No	Change share description.
<code>--access-based-enumeration-enabled</code>	No	Enable Access-Based Enumeration for this share.

<code>--create-fs-path</code>	No	Creates the specified file system path if the path does not exist already.
<code>--default-file-create-mode</code>	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.
<code>--default-directory-create-mode</code>	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.
<code>--require-encryption</code>	No	Require all traffic for this share to be encrypted. If true, clients without encryption capabilities will not be able to connect.
<code>--json</code>	No	Print the raw JSON response.
<code>--full-control-hosts</code>	No	The host addresses or subnet ranges for which access to this share are not limited by network permissions. Access may still be limited by share and file permissions.
<code>--read-only-hosts</code>	No	Address ranges which should be permitted read-only access at most.
<code>--deny-hosts</code>	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 correct <code>--full-control-hosts</code> or <code>--read-only-hosts</code> flags as necessary.
<code>--deny-all-hosts</code>	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} ...
```

## Flags

Flag Name	Required	Description
<code>--id</code>	No	The ID of the share to modify.
<code>--name</code>	No	The name of the share to modify.
<code>--tenant-id</code>	No	The ID of the tenant from which to delete the share. Use this flag only if you also use the <code>--name</code> flag.
<code>--json</code>	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 Azure Native Qumulo Administrator Guide
- [Using SMB Host Restrictions in Qumulo Core](#) in the Qumulo On-Premises 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 Azure Native Qumulo Administrator Guide
- [Managing SMB3 Encryption in Transit in Qumulo Core](#) in the Qumulo On-Premises 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-unauthorized-users {true,false}] [--snapshot-directory-mode {visible,hidden,disabled}]
  [--bypass-traverse-checking {true,false}] [--signing-required {true,false}]
```

## Flags

Flag Name	Required	Description
<code>-e</code>	No	Server encryption mode to set
<code>-d</code>	No	Specify a space-separated list of SMB dialects that clients are permitted to negotiate. To disable SMB, specify <code>-d ""</code> . Available dialects: <code>smb2_dialect_2_002</code> , <code>smb2_dialect_2_1</code> , <code>smb2_dialect_3_0</code> , <code>smb2_dialect_3_11</code> . Alternatively, use <code>-d ALL</code> to allow all supported dialects.
<code>--hide-shares-from-unauthorized-hosts</code>	No	Configure share listing to omit shares to which the requesting host isn't authorized to connect.
<code>--hide-shares-from-unauthorized-users</code>	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.

<b>--snapshot-directory-mode</b>	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.
<b>--bypass-traverse-checking</b>	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.
<b>--signing-required</b>	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]
```

## Flags

Flag Name	Required	Description
<code>-i</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--source-file-id</code>	No	ID of directory to snapshot
<code>--path</code>	No	Path of directory to snapshot
<code>-e</code>	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.
<code>-n</code>	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
```

## Flags

Flag Name	Required	Description
<code>-i</code>	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
```

## Flags

Flag Name	Required	Description
<code>-i</code>	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

```
qq snapshot_diff [-h] --newer-snapshot NEWER_SNAPSHOT --older-snapshot OLDER_SNAPSHOT [--page-size PAGE_SIZE]
```

## Flags

Flag Name	Required	Description
<code>--newer-snapshot</code>	Yes	Snapshot ID of the newer snapshot
<code>--older-snapshot</code>	Yes	Snapshot ID of the older snapshot
<code>--page-size</code>	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_SNAPSHOT (--path PATH | --file-id FILE_ID) [--page-size PAGE_SIZE]
```

## Flags

Flag Name	Required	Description
<code>--newer-snapshot</code>	Yes	Snapshot ID of the newer snapshot
<code>--older-snapshot</code>	Yes	Snapshot ID of the older snapshot
<code>--path</code>	No	Path to file
<code>--file-id</code>	No	File ID
<code>--page-size</code>	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]
```

### Flags

Flag Name	Required	Description
<code>-i</code>	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
```

## Flags

Flag Name	Required	Description
<code>-i</code>	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
```

## Flags

Flag Name	Required	Description
<code>-i</code>	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
```

## Flags

Flag Name	Required	Description
<code>-i</code>	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
```

## Flags

Flag Name	Required	Description
<code>-i</code>	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
```

## Flags

Flag Name	Required	Description
<code>-i</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--exclude-in-delete</code>	No	Exclude all snapshots in process of being deleted from the list
<code>--only-in-delete</code>	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-locked | --only-locked]
```

## Flags

Flag Name	Required	Description
<code>--exclude-in-delete</code>	No	Exclude all snapshots in process of being deleted from the list. You can use this flag together with the <code>--exclude-locked</code> or <code>--only-locked</code> flag.
<code>--only-in-delete</code>	No	Display only snapshots in process of being deleted. You can use this flag together with the <code>--exclude-locked</code> or <code>--only-locked</code> flag.
<code>--exclude-locked</code>	No	Exclude all locked snapshots from the list. You can use this flag together with the <code>--exclude-in-delete</code> or <code>--only-in-delete</code> flag.
<code>--only-locked</code>	No	List only locked snapshots. You can use this flag together with the <code>--exclude-in-delete</code> or <code>--only-in-delete</code> 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
```

## Flags

Flag Name	Required	Description
<code>-i</code>	Yes	The identifier of the snapshot to lock.
<code>-f</code>	No	Do not prompt for confirmation. The default setting is "false".
<code>-k</code>	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]
```

## Flags

Flag Name	Required	Description
<code>-i</code>	Yes	Identifier of the snapshot to modify.
<code>-e</code>	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.
<code>-f</code>	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)
```

## Flags

Flag Name	Required	Description
<code>-i</code>	Yes	The identifier of the snapshot to unlock.
<code>-s</code>	No	The verification signature of the security challenge from the output of the <code>qq snapshot_get_unlock_challenge</code> command.
<code>-k</code>	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\_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
```

## Flags

Flag Name	Required	Description
<code>-c</code>	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 Qumulo Core Web UI and REST servers

## Usage

```
qq ssl_modify_certificate [-h] -c CERTIFICATE -k PRIVATE_KEY
```

## Flags

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 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]
```

## Flags

Flag Name	Required	Description
<code>--try-ranges</code>	No	Specify ip range list to try (e.g. '1.1.1.10-12,10.20.5.0/24')
<code>--try-netmask</code>	No	Specify netmask to apply when using --try-range option
<code>--try-floating-ranges</code>	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]
```

## Flags

Flag Name	Required	Description
<code>-b</code>	No	Begin time for time series intervals, in epoch seconds
<code>--csv</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--set-use-ad</code>	No	Use Active Directory controller for NTP.
<code>--unset-use-ad</code>	No	Don't use Active Directory controller for NTP.
<code>--ntp-servers</code>	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
```

## Positional Options

Option Name	Description
<code>id</code>	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] id
```

## Flags

Flag Name	Required	Description
<code>--force</code>	No	Bypass path confirmation. WARNING! Tree delete can be canceled with <code>tree_delete_cancel</code> , but already deleted items cannot be recovered.

## Positional Options

Option Name	Description
<code>id</code>	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
<code>--json</code>	No	Output JSON instead of table.

## Positional Options

Option Name	Description
<code>id</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--json</code>	No	Output JSON instead of table.

# 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]
```

## Flags

Flag Name	Required	Description
<code>--table</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--path</code>	Yes	FS path to upgrade image
<code>--target</code>	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]
```

## Flags

Flag Name	Required	Description
<code>--wait-until-prepared</code>	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-reboot NO_COMMAND_NUM_NODES_TO_REBOOT] {prepare,commit} ...
```

## Flags

Flag Name	Required	Description
<code>--path</code>	No	FS path to upgrade image
<code>--no-monitor</code>	No	Skip monitoring the upgrade
<code>--num-nodes-to-reboot</code>	No	Using the <code>--rolling</code> 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]
```

## Flags

Flag Name	Required	Description
<code>--raw</code>	No	Skip monitoring 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
```

## Flags

Flag Name	Required	Description
<code>--path</code>	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 Qumulo Core Web UI

## Usage

```
qq web_ui_get_settings [-h] [--inactivity-timeout | --login-banner]
```

## Flags

Flag Name	Required	Description
<code>--inactivity-timeout</code>	No	Gets the inactivity timeout
<code>--login-banner</code>	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 Qumulo Core Web UI

## Usage

```
qq web_ui_modify_settings [-h] [--inactivity-timeout MINUTES | --disable-inactivity-timeout] [--login-banner BANNER_MARKDOWN_FILE | --disable-login-banner]
```

## Flags

Flag Name	Required	Description
<code>--inactivity-timeout</code>	No	Sets the inactivity timeout
<code>--disable-inactivity-timeout</code>	No	Disables the inactivity timeout
<code>--login-banner</code>	No	Sets the login banner
<code>--disable-login-banner</code>	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]
```