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

qq ad_expand_groups

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

Description

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

Usage

```
qq ad_expand_groups [-h] -s SID
```

Flags

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

qq ad_get_advanced_settings

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

Description

Get advanced Active Directory settings

Usage

```
qq ad_get_advanced_settings [-h]
```

qq ad_gid_to_sids

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

Description

Get SIDs from GID

Usage

```
qq ad_gid_to_sids [-h] -g GID
```

Flags

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

qq ad_join

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

Description

Join an Active Directory Domain

Usage

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

Flags

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

qq ad_leave

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

Description

Leave an Active Directory Domain

Usage

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

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

qq ad_set_advanced_settings

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

Description

Modify advanced Active Directory settings

Usage

```
qq ad_set_advanced_settings [-h] [--signing {off,prefer,require}] [--sealing {off,pr
efer,require}] [--crypto {off,prefer,require}]
```

Flags

Flag Name	Required	Description
`--sign-ing`	No	Configure DCERPC signing to be off, prefer signing, or require signing. The default is to prefer signing.
`--seal-ing`	No	Configure DCERPC sealing to be off, prefer sealing, or require sealing. The default is to prefer sealing.
`--cryp-to`	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
-s	Yes	Get the GID that corresponds to this SID

qq ad_sid_to_gid

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

Description

Get GID from SID

Usage

```
qq ad_sid_to_gid [-h] -s SID
```

Flags

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

qq ad_sid_to_uid

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

Description

Get UID from SID

Usage

```
qq ad_sid_to_uid [-h] -s SID
```

Flags

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

qq ad_sid_to_username

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

Description

Get AD username from SID

Usage

```
qq ad_sid_to_username [-h] -s SID
```

Flags

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

qq ad_uid_to_sids

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

Description

Get SIDs from UID

Usage

```
qq ad_uid_to_sids [-h] -u UID
```

Flags

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

qq ad_username_to_sids

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

Description

Get SIDs from an AD username

Usage

```
qq ad_username_to_sids [-h] -u USERNAME
```

Flags

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

qq add_nodes

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

Description

Add unconfigured nodes to a Qumulo cluster

Usage

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

qq audit_get_cloudwatch_config

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

Description

Get audit CloudWatch configuration

Usage

```
qq audit_get_cloudwatch_config [-h]
```

qq audit_get_cloudwatch_status

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

Description

Get audit CloudWatch status

Usage

```
qq audit_get_cloudwatch_status [-h]
```

qq audit_get_syslog_config

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

Description

Get audit syslog server configuration

Usage

```
qq audit_get_syslog_config [-h]
```

qq audit_get_syslog_status

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

Description

Get audit syslog server status

Usage

```
qq audit_get_syslog_status [-h]
```

qq audit_set_cloudwatch_config

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

Description

Change audit CloudWatch configuration

Usage

```
qq audit_set_cloudwatch_config [-h] [--enable | --disable] [-l LOG_GROUP_NAME] [-r R
EGION]
```

Flags

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

qq audit_set_syslog_config

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

Description

Change audit syslog server configuration

Usage

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

Flags

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

qq auth_add_group

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

Description

Add a new group

Usage

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

Flags

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

qq auth_add_user

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

Description

Add a new user

Usage

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

Flags

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

qq auth_assign_role

This section explains how to use the `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
-r	Yes	Name of the role to assign
-t	Yes	Assign the role to this trustee. e.g. Everyone, uid:1000, gid:1001, sid:S-1-5-2-3-4, or auth_id:500

qq auth_clear_cache

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

Description

Clear all cached authorization information

Usage

```
qq auth_clear_cache [-h]
```

qq auth_create_access_token

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

Description

Create a long-lived access token

Usage

```
qq auth_create_access_token [-h] [--expiration-time EXPIRATION_TIME] [--file PATH] i
dentifier
```

Flags

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

Positional Options

Option Name	Description
`identifier`	An auth_id, SID, or name optionally qualified with a domain prefix (e.g "lo-cal: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
id	The unique ID of the access token to be deleted.

qq auth_delete_group

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

Description

Delete a group

Usage

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

Flags

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

qq auth_delete_role

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

Description

Delete a custom role.

Usage

```
qq auth_delete_role [-h] -r ROLE
```

Flags

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

qq auth_delete_user

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

Description

Delete a user

Usage

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

Flags

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

qq auth_expand_identity

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

Description

Find equivalent identities and full group membership.

Usage

```
qq auth_expand_identity [-h] [--auth-id AUTH_ID] [--uid UID] [--gid GID] [--sid SI
D] [--name NAME] [--domain {LOCAL,WORLD,POSIX_USER,POSIX_GROUP,ACTIVE_DIRECTORY}]
    [--json]
    [identifier]
```

Flags

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

Positional Options

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

qq auth_find_identity

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

Description

Find all representations of an auth_id.

Usage

```
qq auth_find_identity [-h] [--auth-id AUTH_ID] [--uid UID] [--gid GID] [--sid SID]
[--name NAME] [--domain {LOCAL,WORLD,POSIX_USER,POSIX_GROUP,ACTIVE_DIRECTORY}] [--js
on]
    [identifier]
```

Flags

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

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

Positional Options

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

qq auth_get_access_token

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

Description

Get metadata for the specified access token

Usage

```
qq auth_get_access_token [-h] id
```

Positional Options

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

qq auth_get_user_defined_mappings

This section explains how to use the `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
`--json`	No	Output JSON instead of table.
`--user`	No	Show access tokens belonging to a specific user. Use an auth_id, SID, or name optionally qualified with a domain prefix (e.g "local:name", "ad:name", "AD\name") or an ID type (e.g. "auth_id:513", "SID:S-1-1-0"). Groups are not supported for access tokens, must be a user.

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
--id	Yes	Name or ID of group to list

qq auth_list_groups

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

Description

List all groups

Usage

```
qq auth_list_groups [-h]
```

qq auth_list_privileges

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

- [Managing Role-Based Access Control (RBAC) for Users and Groups in Qumulo Core](#) in the 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
-r	No	List privileges associated with a role.
-v	No	Show granted and denied privileges with --role.
--json	No	Print JSON representation of the privileges.

qq auth_list_role

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

Description

List a role.

Usage

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

Flags

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

qq auth_list_roles

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

Description

List all of the roles.

Usage

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

Flags

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

qq auth_list_user

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

Description

List a user

Usage

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

Flags

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

qq auth_list_users

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

Description

List all users

Usage

```
qq auth_list_users [-h]
```

qq auth_mod_group

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

Description

Modify a group

Usage

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

Flags

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

qq auth_mod_user

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

Description

Modify a user

Usage

```
qq auth_mod_user [-h] --id ID [--name NAME] [--primary-group PRIMARY_GROUP] [--uid U
ID] [--add-group ADD_GROUP] [--remove-group REMOVE_GROUP]
    [--home-directory HOME_DIRECTORY] [-p [PASSWORD]]
```

Flags

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

qq auth_modify_access_token

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

Description

Modify the specified access token

Usage

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

Flags

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

Positional Options

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

qq auth_modify_role

This section explains how to use the `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 PRIVILEG
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
--id	Yes	Name or ID of user to modify
-p	No	The user's new password (insecure, visible via ps)

qq auth_set_user_defined_mappings

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

Description

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

Usage

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

Flags

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

qq auth_unassign_role

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

- Managing Role-Based Access Control (RBAC) for Users and Groups in Qumulo Core in the 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
--timestamp	Yes	Time period to retrieve, in epoch seconds.

qq capacity_history_get

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

Description

Get capacity history data.

Usage

```
qq capacity_history_get [-h] --begin-time BEGIN_TIME [--end-time END_TIME] [--interval {hourly,daily,weekly}]
```

Flags

Flag Name	Required	Description
`--begin-time`	Yes	Lower bound on history returned, in epoch seconds.
`--end-time`	No	Upper bound on history returned, in epoch seconds. Defaults to the most recent period for which data is available.
`--interval`	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
-o	No	Your old password (insecure, visible via ps)
-p	No	Your new password (insecure, visible via ps)

qq checksumming_get_status

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

Description

Get the checksumming status of the cluster.

Usage

```
qq checksumming_get_status [-h]
```

qq cluster_conf

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

Description

Get the cluster config

Usage

```
qq cluster_conf [-h]
```

qq cluster_create

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

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

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

qq cluster_slot_set_config

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

Description

Set the attributes for the given cluster slot. Currently only led_pattern may be set.

Usage

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

Flags

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

qq cluster_slots

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

Description

Get the cluster disk slots status

Usage

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

Flags

Flag Name	Required	Description
--slot	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-rea
d,metadata-iops-write,file-throughput-read,file-throughput-write}]
```

Flags

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

qq dns_clear_cache

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

Description

Clear the local DNS cache

Usage

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

Flags

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

qq dns_get_lookup_overrides

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

Description

List the configured set of DNS lookup overrides.

Usage

```
qq dns_get_lookup_overrides [-h]
```

qq dns_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
--hosts	Yes	Hostnames to resolve

qq dns_resolve_ips

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

Description

Resolve IP addresses to hostnames

Usage

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

Flags

Flag Name	Required	Description
--ips	Yes	IP addresses to resolve

qq dns_set_lookup_overrides

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

Description

Replace the configured set of DNS lookup overrides.

Usage

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

Flags

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

qq encryption_get_key_store

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

Description

Get the active at-rest encryption configuration.

Usage

```
qq encryption_get_key_store [-h]
```

qq encryption_get_status

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

Description

Get the status of at-rest encryption.

Usage

```
qq encryption_get_status [-h]
```

qq encryption_set_key_store

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

Description

Set the active at-rest encryption configuration.

Usage

```
qq encryption_set_key_store [-h] {kms,local} ...
```

qq floating_ip_allocation

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

Description

Get cluster-wide floating IP allocation

Usage

```
qq floating_ip_allocation [-h]
```

qq fs_acl_explain_chmod

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

Description

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

Usage

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

Flags

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

qq fs_acl_explain_posix_mode

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

Description

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

Usage

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

Flags

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

qq fs_acl_explain_rights

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

Description

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

Usage

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

Flags

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

qq fs_copy

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

Description

Server-side copy a file.

Usage

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

Flags

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

Positional Options

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

qq fs_create_dir

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

Description

Create a new directory

Usage

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

Flags

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

qq fs_create_file

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

Description

Create a new file

Usage

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

Flags

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

qq fs_create_link

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

Description

Create a new link

Usage

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

Flags

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

qq fs_create_symlink

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

Description

Create a new symbolic link

Usage

```
qq fs_create_symlink [-h] (--path PATH | --id ID) --target TARGET [--target-type {F
S_FILE_TYPE_UNKNOWN,FS_FILE_TYPE_FILE,FS_FILE_TYPE_DIRECTORY}] --name NAME
```

Flags

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

qq fs_create_unix_file

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

Description

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

Usage

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

Flags

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

qq fs_delete

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

Description

Delete a file system object

Usage

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

Flags

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

qq fs_delete_user_metadata

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

Description

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

Usage

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

Flags

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

qq fs_file_get_attr

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

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
--path	No	File path
--id	No	File ID
--snapshot	No	Snapshot ID to read from
--stream-id	No	Stream ID
--stream-name	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 {capacit
y,data,file,named_streams}]
```

Flags

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

qq fs_file_set_attr

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

Description

Set file attributes

Usage

```
qq fs_file_set_attr [-h] (--path PATH | --id ID) [--stream-id STREAM_ID | --stream-n
ame STREAM_NAME] [--mode MODE] [--size SIZE] [--creation-time CREATION_TIME]
    [--access-time ACCESS_TIME] [--modification-time MODIFICATION_TIME] [--change-ti
me CHANGE_TIME]
    [--owner OWNER | --owner-local OWNER_LOCAL | --owner-sid OWNER_SID | --owner-ui
d OWNER_UID]
    [--group GROUP | --group-local GROUP_LOCAL | --group-sid GROUP_SID | --group-gi
d GROUP_GID]
```

Flags

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

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

qq fs_file_set_smb_attrs

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

Description

Change SMB extended attributes on the file

Usage

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

Flags

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

qq fs_get_acl

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

Description

Get file ACL

Usage

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

Flags

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

qq fs_get_atime_settings

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

Description

Get access time (atime) settings.

Usage

```
qq fs_get_atime_settings [-h]
```

qq fs_get_notify_settings

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

Description

Get FS notify settings.

Usage

```
qq fs_get_notify_settings [-h]
```

qq fs_get_permissions_settings

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

Description

Get permissions settings

Usage

```
qq fs_get_permissions_settings [-h]
```

qq fs_get_stats

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

Description

Get file system statistics

Usage

```
qq fs_get_stats [-h]
```

qq fs_get_user_metadata

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

Description

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

Usage

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

Flags

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

qq fs_list_lock_waiters_by_client

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

Description

List waiting lock requests for a particular client machine

Usage

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

Flags

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

qq fs_list_lock_waiters_by_file

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

Description

List waiting lock requests for a particular file

Usage

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

Flags

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

qq fs_list_locks

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

Description

List file locks held by clients.

Usage

```
qq fs_list_locks [-h] --protocol {nlm,smb,nfs4} --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
`--proto-col`	Yes	The protocol whose locks should be listed
`--lock-type`	Yes	The type of lock to list.
`--path`	No	File path
`--id`	No	File ID
`--ip`	No	List all locks held by the client with this IP address.
`--host-name`	No	List all locks held by the client with this hostname. Only available for NLM locks.
`--snap-shot`	No	When a file is specified, list locks held on a specific snapshot.
`--no-re-solve`	No	Don't execute additional API calls to obtain file paths and client host-names for results.
`--json`	No	Print a raw JSON response.
`--sort`	No	Sort results by this attribute.

qq fs_list_named_streams

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

Description

List all named streams on file or directory

Usage

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

Flags

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

qq fs_list_user_metadata

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

Description

Retrieve user metadata of the specified type for a file

Usage

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

Flags

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

qq fs_modify_acl

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

Examples

The following examples show how to run the `qq fs_modify_acl` command to work with access control lists (ACLs).

> ⚠ **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.

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

1. Ensure that the `jq` tool is installed on your system.

2. Run the `qq fs_walk_tree` command and use the `--path` flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to the `jq` tool. To modify the ACL for each path, pipe the command to `xargs` which in turn runs the `qq fs_set_acl` command on each path. For example:

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

To Recursively Apply a Permissions Template

For this operation, you must run the `qq fs_walk_tree` and `qq fs_modify_acl` commands.

1. Ensure that the `jq` tool is installed on your system.

2. Use a new or existing file with the necessary permissions to capture the ACL and save it in JSON format by using the `qq fs_get_acl` command. For example:

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

3. To apply the captured ACL, run the `qq fs_walk_tree` command and use the `--path` flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to the `jq` tool. To modify the ACL for each path, pipe the command to `xargs` which in turn runs the `qq fs_set_acl` command on each path.

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

To Recursively Modify SMB Attributes

For this operation, you must run the `qq fs_walk_tree` and `qq fs_modify_acl` commands.

Run the `qq fs_walk_tree` command and use the `--path` flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to the `jq` tool. To modify the ACL for each path, pipe the command to `xargs` which in turn runs the `qq fs_set_acl` command on each path.

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

Description

Modify file ACL

Usage

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

Flags

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

qq fs_notify

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

Description

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

Usage

```
qq fs_notify [-h] (--path PATH | --id ID) [--recursive]
    [--filter {child_file_added,child_dir_added,child_file_removed,child_dir_remove
d,child_file_moved_from,child_file_moved_to,child_dir_moved_from,child_dir_moved_t
o,child_btime_changed,child_mtime_changed,child_atime_changed,child_size_changed,chi
ld_extra_attrs_changed,child_acl_changed,child_owner_changed,child_group_changed,chi
ld_data_written,child_stream_added,child_stream_removed,child_stream_moved_from,chil
d_stream_moved_to,child_stream_size_changed,child_stream_data_written,self_removed}
[{child_file_added,child_dir_added,child_file_removed,child_dir_removed,child_file_m
oved_from,child_file_moved_to,child_dir_moved_from,child_dir_moved_to,child_btime_ch
anged,child_mtime_changed,child_atime_changed,child_size_changed,child_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
--path	No	Directory path
--id	No	Directory ID
--recursive	No	Listen for changes recursively.
--filter	No	Specific notify types to filter to.
--file	No	File to receive data
--json	No	Output results as a json stream.

qq fs_punch_hole

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

Description

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

Usage

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

Flags

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

qq fs_read

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

Description

Read an object

Usage

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

Flags

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

qq fs_read_dir

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

Examples

To List the Contents of a Directory on a Qumulo Cluster

Run the `qq fs_read_dir` command and specify the path whose contents to list. For example:

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

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

```json
{
  "child_count": 2,
  "files": [{
    "blocks": "0",
    "change_time": "2024-02-04T19:29:48.136708478Z",
    "child_count": 2,
    "creation_time": "2024-02-04T19:29:16.846825314Z",
    "file_number": "4",
    "group": "513",
    "id": "4",
    "mode": "0777",
    "modification_time": "2024-02-04T19:29:48.136708478Z",
    "name": "receipts",
    "num_links": 2,
    "owner": "500",
    "path": "/receipts/",
    "size": "1024",
    "type": "FS_FILE_TYPE_DIRECTORY"
  },{
    "blocks": "0",
    "change_time": "2015-02-04T19:34:17.113793299Z",
    "child_count": 1,
    "creation_time": "2015-02-04T19:24:12.201732558Z",
    "file_number": "3",
    "group": "513",
    "id": "3",
    "mode": "0777",
    "modification_time": "2015-02-04T19:34:17.113793299Z",
    "name": "invoices",
    "num_links": 2,
    "owner": "500",
    "path": "/invoices/",
    "size": "512",
    "type": "FS_FILE_TYPE_DIRECTORY"
  }],
  "id": "2",
  "paging": {
  "next": "",
  "prev": ""
  },
  "path": "/"
}
```

Description

Read directory

Usage

```
qq fs_read_dir [-h] (--path PATH | --id ID) [--page-size PAGE_SIZE] [--snapshot SNAP
SHOT] [--smb-pattern SMB_PATTERN]
```

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_ENTRIE
S] [--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
--path	Yes	Directory path
--recursive	No	Fetch recursive aggregates
--max-entries	No	Maximum number of entries to return
--max-depth	No	Maximum depth to recurse when --recursive is set
--order-by	No	Specify field used for top N selection and sorting
--snapshot	No	Snapshot ID to read from

qq fs_release_nlm_lock

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

Description

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

Usage

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

Flags

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

qq fs_release_nlm_locks_by_client

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

Description

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

Usage

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

Flags

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

qq fs_remove_stream

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

Description

Remove a stream from file or directory

Usage

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

Flags

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

qq fs_rename

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

Description

Rename a file system object

Usage

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

Flags

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

qq fs_resolve_paths

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

Description

Resolve file IDs to paths

Usage

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

Flags

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

qq fs_security_add_key

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

Description

Add a key to the file system key-store.

Usage

```
qq fs_security_add_key [-h] --name NAME [--private-key-file PRIVATE_KEY_FILE] [--pub
lic-key PUBLIC_KEY] [--verification-signature VERIFICATION_SIGNATURE]
    [--comment COMMENT] [--json]
```

Flags

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

qq fs_security_delete_key

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

Description

Delete a key from the file system key store.

Usage

```
qq fs_security_delete_key [-h] -k KEY
```

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

qq fs_security_get_key_replace_challenge

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

Description

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

Usage

```
qq fs_security_get_key_replace_challenge [-h] -k KEY
```

Flags

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

qq fs_security_get_key_usage

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

Description

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

Usage

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

Flags

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

qq fs_security_list_keys

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

Description

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

Usage

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

Flags

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

qq fs_security_modify_key

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

Description

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

Usage

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

Flags

Flag Name	Required	Description
`-k`	Yes	The identifier or name of the key to modify.
`--new-name`	No	The new name for the specified key.
`--com-ment`	No	The comment for the specified key.
`--en-able`	No	Enable the specified key. You can use an enabled key to lock snapshots. You can also associate an enabled key with policies that take snapshots. Note: The system enables keys upon creation.
`--dis-able`	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.
`--json`	No	Print the output in JSON format. By default, the output is in a table.

qq fs_security_replace_key

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

Description

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

Usage

```
qq fs_security_replace_key [-h] -k KEY [--old-private-key-file OLD_PRIVATE_KEY_FIL
E] [--replacement-private-key-file REPLACEMENT_PRIVATE_KEY_FILE]
    [--replacement-public-key REPLACEMENT_PUBLIC_KEY] [--old-key-verification-signat
ure OLD_KEY_VERIFICATION_SIGNATURE]
    [--replacement-key-verification-signature REPLACEMENT_KEY_VERIFICATION_SIGNATUR
E] [--json]
```

Flags

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

qq fs_set_acl

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

Description

Set file ACL

Usage

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

Flags

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

qq fs_set_atime_settings

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

Description

Set access time (atime) settings.

Usage

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

Flags

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

qq fs_set_notify_settings

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

Description

Set FS notify settings

Usage

```
qq fs_set_notify_settings [-h] [--recursive-mode RECURSIVE_MODE]
```

Flags

Flag Name	Required	Description
--recursive-mode	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
mode	Permissions mode to set (NATIVE or CROSS_PROTOCOL)

qq fs_set_user_metadata

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

Description

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

Usage

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

Flags

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

qq fs_walk_tree

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

Examples

To Recursively Add a New ACL with Multithreading

For this operation, you must run the `qq fs_walk_tree` and `qq fs_modify_acl` commands.

> **ⓘ 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
--path	No	Tree root path

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

qq fs_write

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

Examples

To Write a File to a Directory on a Qumulo Cluster

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

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

The following is example output.

```
{
  "blocks": "139355",
  "change_time": "2024-02-04T00:28:50.778788345Z",
  "child_count": 0,
  "creation_time": "2024-02-04T00:28:50.766408341Z",
  "file_number": "6981",
  "group": "2",
  "id": "6981",
  "mode": "0644",
  "modification_time": "2024-02-04T00:29:32.967968707Z",
  "name": "",
  "num_links": 1,
  "owner": "500",
  "path": "/qinstall.qimg",
  "size": "570798080",
  "type": "FS_FILE_TYPE_FILE"
}
```

Description

Write data to an object

Usage

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

Flags

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

qq ftp_get_status

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

Description

Get FTP server settings and status

Usage

```
qq ftp_get_status [-h]
```

qq ftp_modify_settings

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

Description

Set FTP server settings

Usage

```
qq ftp_modify_settings [-h] [--enabled {true,false}] [--check-remote-host {true,fals
e}] [--log-operations {true,false}] [--chroot-users {true,false}]
    [--allow-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
--force	No	Do not prompt

qq help

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

Description

QQ documentation

Usage

```
qq help [-h]
```

qq identity_attributes_get

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

Description

Get attributes related to the given identity.

Usage

```
qq identity_attributes_get [-h] identifier
```

Positional Options

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

qq 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
`--home-directory`	Yes	The home directory for the identity.

Positional Options

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

qq 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
`directory`	Directory with mqvpn-client.crt, mqvpn-client.key, and qumulo-ca.crt files.

qq kerberos_delete_keytab

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

Description

Delete the Kerberos keytab

Usage

```
qq kerberos_delete_keytab [-h]
```

qq kerberos_get_keytab

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

Description

Get the Kerberos keytab

Usage

```
qq kerberos_get_keytab [-h]
```

qq kerberos_get_settings

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

Description

Get the Kerberos settings

Usage

```
qq kerberos_get_settings [-h]
```

qq kerberos_modify_settings

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

Description

Modify the Kerberos settings

Usage

```
qq kerberos_modify_settings [-h] -a USE_ALT_SECURITY_IDENTITIES_MAPPING
```

Flags

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

qq kerberos_set_keytab

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

Description

Set the Kerberos keytab

Usage

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

Flags

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

qq ldap_get_settings

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

Description

Get settings for LDAP interaction

Usage

```
qq ldap_get_settings [-h]
```

qq ldap_get_status

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

Description

Get LDAP client connection states

Usage

```
qq ldap_get_status [-h]
```

qq ldap_login_name_to_gid_numbers

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

Description

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

Usage

```
qq ldap_login_name_to_gid_numbers [-h] --login-name LOGIN_NAME
```

qq ldap_login_name_to_uid_numbers

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

Description

Get the uidNumbers from a login name using the LDAP server

Usage

```
qq ldap_login_name_to_uid_numbers [-h] --login-name LOGIN_NAME
```

qq ldap_set_settings

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

Description

Set settings for LDAP interaction

Usage

```
qq ldap_set_settings [-h] --use-ldap {false,true} --bind-uri BIND_URI --base-dn BAS
E_DN [--bind-username BIND_USERNAME] [--bind-password BIND_PASSWORD]
    [--encrypt-connection {false,true}] [--rfc2307] [--custom-group-member-attribut
e CUSTOM_GROUP_MEMBER_ATTRIBUTE]
    [--custom-user-group-identifier-attribute CUSTOM_USER_GROUP_IDENTIFIER_ATTRIBUT
E] [--custom-login-name-attribute CUSTOM_LOGIN_NAME_ATTRIBUTE]
    [--custom-group-name-attribute CUSTOM_GROUP_NAME_ATTRIBUTE] [--custom-user-objec
t-class CUSTOM_USER_OBJECT_CLASS]
    [--custom-group-object-class CUSTOM_GROUP_OBJECT_CLASS] [--custom-uid-number-att
ribute CUSTOM_UID_NUMBER_ATTRIBUTE]
    [--custom-gid-number-attribute CUSTOM_GID_NUMBER_ATTRIBUTE]
```

Flags

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

Flags

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

qq logout

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

Description

Remove qfsd REST credentials

Usage

```
qq logout [-h]
```

qq metrics_get

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

Description

Get all system metrics.

Usage

```
qq metrics_get [-h]
```

qq monitoring_conf

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

Description

Get monitoring configuration.

Usage

```
qq monitoring_conf [-h]
```

qq monitoring_status_get

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

Description

Get current monitoring status.

Usage

```
qq monitoring_status_get [-h]
```

qq multitenancy_create_tenant

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

Description

Create a tenant

Usage

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

Flags

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

`--enable-replication`	No	Replication is accessible from this tenant.
`--disable-replication`	No	Replication is not accessible from this tenant. This is the default.
`--enable-nfs`	No	NFS is accessible from this tenant.
`--disable-nfs`	No	NFS is not accessible from this tenant. This is the default.
`--enable-smb`	No	SMB is accessible from this tenant.
`--disable-smb`	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
--id	Yes	The unique ID of the tenant to delete.
--force	No	Do not prompt

qq multitenancy_get_tenant

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

Description

Get a tenant

Usage

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

Flags

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

qq multitenancy_list_tenants

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

Description

List all tenants

Usage

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

Flags

Flag Name	Required	Description
-j	No	Output in JSON format

qq multitenancy_modify_tenant

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

Description

Modify a tenant

Usage

```
qq multitenancy_modify_tenant [-h] --id ID [--name NAME] [--enable-web-ui | --disabl
e-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
--id	Yes	The unique ID of the tenant to modify.
--name	No	Unique name of the tenant chosen by the user. If not specified, the existing name will be preserved.
--enable-web-ui	No	Web UI is accessible from this tenant. If neither --enable-web-ui nor --disable-web-ui is specified, the existing setting will be preserved.
--disable-web-ui	No	Web UI is not accessible from this tenant. If neither --enable-web-ui nor --disable-web-ui is specified, the existing setting will be preserved.
--enable-rest-api	No	REST API is accessible from this tenant. If neither --enable-rest-api nor --disable-rest-api is specified, the existing setting will be preserved.
--disable-rest-api	No	REST API is not accessible from this tenant. If neither --enable-rest-api nor --disable-rest-api is specified, the existing setting will be preserved.
--enable-ssh	No	SSH is accessible from this tenant. If neither --enable-ssh nor --disable-ssh is specified, the existing setting will be preserved.

--disable-ssh	No	SSH is not accessible from this tenant. If neither --enable-ssh nor --disable-ssh is specified, the existing setting will be preserved.
--enable-replication	No	Replication is accessible from this tenant. If neither --enable-replication nor --disable-replication is specified, the existing setting will be preserved.
--disable-replication	No	Replication is not accessible from this tenant. If neither --enable-replication nor --disable-replication is specified, the existing setting will be preserved.
--enable-nfs	No	NFS is accessible from this tenant. If neither --enable-nfs nor --disable-nfs is specified, the existing setting will be preserved.
--disable-nfs	No	NFS is not accessible from this tenant. If neither --enable-nfs nor --disable-nfs is specified, the existing setting will be preserved.
--enable-smb	No	SMB is accessible from this tenant. If neither --enable-smb nor --disable-smb is specified, the existing setting will be preserved.
--disable-smb	No	SMB is not accessible from this tenant. If neither --enable-smb nor --disable-smb is specified, the existing setting will be preserved.
--network-id	No	List of zero or more network IDs associated with this tenant, as returned by the `network_list_networks` command. Each network ID may be assigned to at most one tenant. If specified, this must contain a complete list of all network IDs to be assigned to the tenant. Any already-assigned networks not present will be unassigned and services will be disabled on those networks. If not specified, the existing networks will be preserved.

qq multitenancy_nfs_delete_settings

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

Description

Delete NFS settings for a tenant

Usage

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

Flags

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

qq multitenancy_nfs_get_global_settings

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

Description

Retrieve global default NFS settings

Usage

```
qq multitenancy_nfs_get_global_settings [-h]
```

qq multitenancy_nfs_get_settings

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

Description

Retrieve NFS settings for a tenant

Usage

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

Flags

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

qq multitenancy_nfs_list_settings

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

Description

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

Usage

```
qq multitenancy_nfs_list_settings [-h]
```

qq multitenancy_nfs_modify_global_settings

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

Description

Modify global default NFS settings

Usage

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

Flags

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

qq multitenancy_nfs_modify_settings

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

Description

Modify NFS settings for a tenant

Usage

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

Flags

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

qq multitenancy_smb_delete_settings

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

Description

Delete SMB settings for a tenant

Usage

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

Flags

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

qq multitenancy_smb_get_global_settings

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

Description

Retrieve global default SMB settings

Usage

```
qq multitenancy_smb_get_global_settings [-h]
```

qq multitenancy_smb_get_settings

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

Description

Retrieve SMB settings for a tenant

Usage

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

Flags

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

qq multitenancy_smb_list_settings

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

Description

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

Usage

```
qq multitenancy_smb_list_settings [-h]
```

qq multitenancy_smb_modify_global_settings

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

Description

Modify global default SMB settings

Usage

```
qq multitenancy_smb_modify_global_settings [-h] [-e {none,preferred,required}] [-d d
ialect_1 [dialect_2 ...]] [--hide-shares-from-unauthorized-hosts {true,false}]
    [--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
-e	No	Server encryption mode to set
-d	No	Specify a space-separated list of SMB dialects that clients are permitted to negotiate. To disable SMB, specify -d "". Available dialects: smb2_dialect_2_002, smb2_dialect_2_1, smb2_dialect_3_0, smb2_dialect_3_11. Alternatively, use -d ALL to allow all supported dialects.
--hide-shares-from-unauthorized-hosts	No	Configure share listing to omit shares to which the requesting host isn't authorized to connect.
--hide-shares-from-unauthorized-users	No	Configure share listing to omit shares to which the requesting user isn't authorized to connect. Important: Clients which don't have passwordless authentication typically list shares by using guest privileges. This flag typically hides all shares from this client type.

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

qq multitenancy_smb_modify_settings

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

Description

Modify SMB settings for a tenant

Usage

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

Flags

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

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

qq network_add_network

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

Description

Add network configuration

Usage

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

Flags

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

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

qq network_delete_network

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

Description

Delete network configuration

Usage

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

Flags

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

qq network_get_interface

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

Description

Get configuration for the specified interface

Usage

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

Flags

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

qq network_get_network

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

Description

Get configuration for the specified network

Usage

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

Flags

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

qq network_list_connections

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

Examples

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

To View Client Connections in JSON Format

Run the `qq network_list_connections` command to list the IP address and protocol for each client.

The following is example output.

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

To View the Client Connection Counts

Run the `qq network_list_connections` command and use the `--counts` flag to view the balance of client connections.

> **ⓘ Note**
> Using the `--counts` flag returns only the SMB and NFS connections without the client IP addresses.

The following is example output.

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

Description

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

Usage

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

Flags

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

qq network_list_interfaces

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

Description

List configurations for interfaces on the cluster

Usage

```
qq network_list_interfaces [-h]
```

qq network_list_networks

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

Description

List network configurations

Usage

```
qq network_list_networks [-h]
```

qq network_mod_interface

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

Description

Modify interface configuration

Usage

```
qq network_mod_interface [-h] [--interface-id INTERFACE_ID] [--default-gateway DEFAU
LT_GATEWAY] [--default-gateway-ipv6 DEFAULT_GATEWAY_IPV6]
    [--bonding-mode {ACTIVE_BACKUP,IEEE_8023AD}] [--mtu MTU]
```

Flags

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

qq network_mod_network

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

Description

Modify network configuration

Usage

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

Flags

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

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

qq network_poll

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

Description

Poll network status

Usage

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

Flags

Flag Name	Required	Description
--node-id	No	Node ID

qq nfs_add_export

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

Description

Add a new NFS export

Usage

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

Flags

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

`--restric-tions`	No	Path to local file containing the restrictions in JSON format. host_restrictions is a comma separated list of IPs/ IP ranges/ host-names/ wildcarded hostnames/ and the strings KRB5@, KRB5I@, and KRB5P@ for the 3 kerberos security flavors: basic auth, Integri-ty, 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" } }] }
`--create-fs-path`	No	Creates the specified file system path if it does not exist
`--fields-to-present-as-32-bit`	No	Fields that should be forced to fit in 32 bits for this export, to sup-port legacy clients and applications. FILE_IDS will hash file IDs (in-ode numbers), which can be observed by "stat", and is also neces-sary for some deprecated linux system calls (e.g. to list a directory) to work. FS_SIZE saturates the available, used, and total capacity re-ported to tools like "df" to 4GiB. FILE_SIZES saturates the reported size of individual files to 4GiB, and should be used with caution as it could cause application misbehavior in the handling of larger files. NONE explicitly specifies no 32 bit mapping.

qq nfs_delete_export

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

Description

Delete an export

Usage

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

Flags

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

qq nfs_get_export

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

Description

Get an export

Usage

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

Flags

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

qq nfs_get_settings

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

Description

Retrieve current NFS server configuration.

Usage

```
qq nfs_get_settings [-h]
```

qq nfs_list_exports

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

Description

List all NFS exports

Usage

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

Flags

Flag Name	Required	Description
--json	No	Print raw response JSON.

qq nfs_mod_export

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

Description

Modify an export

Usage

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

Flags

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

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

qq nfs_mod_export_host_access

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

Description

Modify the access hosts are granted to an export

Usage

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

Flags

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

qq nfs_modify_settings

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

Description

Modify current NFS server configuration.

Usage

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

Flags

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

qq node_chassis_status_get

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

Description

Get the status of node chassis

Usage

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

Flags

Flag Name	Required	Description
--node	No	Node ID

qq node_state_get

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

Description

Get the operational state of the node

Usage

```
qq node_state_get [-h]
```

qq nodes_list

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

Examples

To List Information about Nodes in Your Cluster

Run the `qq nodes_list` command.

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

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

Description

List nodes

Usage

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

Flags

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

qq quota_delete_quota

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

Description

Delete a directory quota

Usage

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

Flags

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

qq quota_get_quota

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

Description

Get a directory quota

Usage

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

Flags

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

qq quota_list_quotas

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

Description

List all directory quotas

Usage

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

Flags

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

qq quota_update_quota

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

Description

Update a directory quota

Usage

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

Flags

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

qq raw

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

Description

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

Usage

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

Flags

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

Positional Options

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

qq reboot_pause

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

Description

Pause a cluster-wide reboot

Usage

```
qq reboot_pause [-h]
```

qq reboot_resume

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

Description

Resume a cluster-wide reboot

Usage

```
qq reboot_resume [-h]
```

qq reboot_start

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

Description

Start a cluster-wide reboot

Usage

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

Flags

Flag Name	Required	Description
`--rolling`	No	Reboot nodes one set at a time, depending on the number of node failures configured in the protection system
`--num-nodes`	No	Using 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).
`--force`	No	Do not prompt

qq reboot_status

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

Description

Retrieve status of reboot manager

Usage

```
qq reboot_status [-h]
```

qq replace_nodes

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

Description

Replace configured nodes by adding nodes to a Qumulo cluster.

Usage

```
qq replace_nodes [-h] {register_plan,add_nodes_and_replace,get_plan,cancel_plan} ...
```

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
`--id`	Yes	Unique identifier of the object replication relationship

qq replication_abort_replication

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

Description

Abort ongoing replication work for the specified source replication relationship.

Usage

```
qq replication_abort_replication [-h] --id ID [--skip-active-policy-snapshot {true,f
alse}]
```

Flags

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

qq replication_add_blackout_window

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

Description

Add a blackout window to the specified source replication relationship.

Usage

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

Flags

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

qq replication_authorize

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

Description

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

Usage

```
qq replication_authorize [-h] --id ID [--allow-non-empty-directory] [--allow-fs-path-create]
```

Flags

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

qq replication_create_object_relationship

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

Description

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

Usage

```
qq replication_create_object_relationship [-h] (--local-directory-id LOCAL_DIRECTOR
Y_ID | --local-directory-path LOCAL_DIRECTORY_PATH) --direction
    {COPY_TO_OBJECT,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}] --re
gion REGION --access-key-id ACCESS_KEY_ID
    [--secret-access-key SECRET_ACCESS_KEY]
```

Flags

Flag Name	Required	Description
`--local-di-rectory-id`	No	File ID of the qumulo directory
`--local-di-rectory-path`	No	Path of the qumulo directory
`--direc-tion`	Yes	Whether data is to be copied to, or from, the object store.
`--object-store-ad-dress`	No	S3-compatible server address. If omitted, Amazon S3 address s3..amazonaws.com will be used.

`--object-folder`	Yes	Folder to use in the object store bucket. A slash separator is auto-matically used to specify a folder. For example, a folder "example" and a file path (relative to the directory_path) "dir/file" results in key "example/dir/file". Use empty value "" or "/" to replicate with the root of the bucket.
`--use-port`	No	HTTPS port to use when communicating with the object store (de-fault: 443)
`--ca-cer-tificate`	No	Path to a file containing the public certificate of the certificate au-thority to trust for connections to the object store, in PEM format. If not specified, the built-in trusted public CAs are used.
`--bucket`	Yes	Bucket in the object store to use for this relationship
`--bucket-addressing-style`	No	Addressing style for requests to the bucket. Set to BUCK-ET_STYLE_PATH for path-style addressing or BUCKET_STYLE_VIRTU-AL_HOSTED for virtual hosted-style (the default). For Amazon S3, vir-tual hosted-style is recommended as path-style will be deprecated. Bucket names containing dots (".") or characters that are not valid in domain names may require path-style. The object-store-address should not include the bucket name, regardless of addressing style.
`--region`	Yes	Region the bucket is located in, e.g., us-west-2
`--access-key-id`	Yes	Access key ID to use when communicating with the object store
`--secret-access-key`	No	Secret access key to use when communicating with the object store

qq replication_create_source_relationship

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

Description

Create a new replication relationship.

Usage

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

Flags

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

qq replication_delete_blackout_windows

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

Description

Delete blackout windows of the specified source replication relationship.

Usage

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

Flags

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

qq replication_delete_object_relationship

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

Description

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

Usage

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

Flags

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

qq replication_delete_source_relationship

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

Description

Delete the specified source replication relationship.

Usage

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

Flags

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

qq replication_delete_target_relationship

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

Description

Delete the specified target replication relationship.

Usage

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

Flags

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

qq replication_get_object_relationship

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

Description

Get the configuration of the specified object replication relationship.

Usage

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

Flags

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

qq replication_get_object_relationship_status

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

Description

Get current status of the specified object replication relationship.

Usage

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

Flags

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

qq replication_get_source_relationship

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

Description

Get information about the specified source replication relationship.

Usage

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

Flags

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

qq replication_get_source_relationship_status

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

Description

Get current status of the specified source replication relationship.

Usage

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

Flags

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

qq replication_get_target_relationship_status

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

Description

Get current target of the specified source replication relationship.

Usage

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

Flags

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

qq replication_link_snapshot_policy

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

Description

Link a snapshot policy to a source replication relationship.

Usage

```
qq replication_link_snapshot_policy [-h] --relationship-id RELATIONSHIP_ID --snapsho
t-policy-id SNAPSHOT_POLICY_ID [-t TARGET_EXPIRATION]
```

Flags

Flag Name	Required	Description
`--relation-ship-id`	Yes	Unique identifier of the source replication relationship.
`--snapshot-policy-id`	Yes	Identifier of the snapshot policy to link.
`-t`	No	Duration after which to expire snapshots on the target cluster that were replicated from this snapshot policy, in format , where is a positive integer less than 100 and is one of [months, weeks, days, hours, minutes], e.g. 5days or 1hours. 'never' indicates snapshots should never expire and 'same_as_policy' indicates snapshots should expire at the same time as the snapshot policy specifies. (default: same_as_policy)

qq replication_list_object_relationship_statuses

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

Description

List the statuses for all existing object replication relationships.

Usage

```
qq replication_list_object_relationship_statuses [-h]
```

qq replication_list_object_relationships

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

Description

List all the existing object replication relationships.

Usage

```
qq replication_list_object_relationships [-h]
```

qq replication_list_queued_snapshots

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

Description

List information for all snapshots awaiting replication by the specified source replication relationship.

Usage

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

Flags

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

qq replication_list_source_relationship_statuses

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

Description

List statuses for all existing source replication relationships.

Usage

```
qq replication_list_source_relationship_statuses [-h]
```

qq replication_list_source_relationships

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

Description

List existing source replication relationships.

Usage

```
qq replication_list_source_relationships [-h]
```

qq replication_list_target_relationship_statuses

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

Description

List statuses for all existing target replication relationships.

Usage

```
qq replication_list_target_relationship_statuses [-h]
```

qq replication_make_target_writable

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

Description

Revert target directory to the latest recovery point.

Usage

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

Flags

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

qq replication_modify_source_relationship

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

Description

Modify an existing source replication relationship.

Usage

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

Flags

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

qq replication_reconnect_target_relationship

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

Description

Make the target directory read-only and revert any changes made to the target directory since the latest recovery point. Then reconnect the specified target replication relationship with its source directory. The revert action may take some time to complete before replication is resumed.

Usage

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

Flags

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

qq replication_release_queued_snapshot

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

Description

Release a snapshot queued for replication from the queue of the specified source replication relationship.

Usage

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

Flags

Flag Name	Required	Description
`--relationship-id`	Yes	Unique identifier of the source replication relationship.
`--snapshot-id`	Yes	Unique identifier of the snapshot to release.

qq replication_replicate

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

Description

Replicate from the source to the target of the specified relationship.

Usage

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

Flags

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

qq replication_reverse_target_relationship

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

Description

Reverse source and target for a replication relationship.

Usage

```
qq replication_reverse_target_relationship [-h] --id ID --source-address SOURCE_ADDR
ESS [--source-port SOURCE_PORT]
```

Flags

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

qq replication_set_snapshot_policy_replication_mod

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

Description

Set the replication mode of the specified source replication relationship. This command is only for a relationship that has linked snapshot policies.

Usage

```
qq replication_set_snapshot_policy_replication_mode [-h] --id ID --mode {REPLICATIO
N_SNAPSHOT_POLICY,REPLICATION_SNAPSHOT_POLICY_WITH_CONTINUOUS}
```

Flags

Flag Name	Required	Description
--id	Yes	Unique identifier of the source replication relationship.
--mode	Yes	Replication mode to set.

qq replication_set_target_relationship_lock

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

Description

The key that locks policy-created snapshots for a target replication relationship. Consider the following system behavior: If you don't set a key, the system does not lock the snapshots that the specified target replication relationship creates. The system locks only policy-created snapshots, unless you configure an expiration for the snapshot policy on the target cluster. If you reverse the relationship by switching the source and target, the new target cannot use this lock key and you must set a key for the new target. However, if you revert the relationship by returning the source and target to their original assignments, the system lets you use lock key from the original source-target relationship. If a target replication relationship uses a lock key, you cannot disable or delete the key, unless you reverse the relationship. If you disable or delete a lock key while a target replication relationship is reversed and then return the source and target to their original assignments, you must set a new key.

Usage

```
qq replication_set_target_relationship_lock [-h] --relationship-id RELATIONSHIP_ID
(-k LOCK_KEY | --clear-lock-key)
```

Flags

Flag Name	Required	Description
--relation-ship-id	Yes	The unique identifier of the target replication relationship.
-k	No	The identifier or name of the lock key to associate with the specified target replication relationship.
--clear-lock-key	No	Disassociate the lock key from this target relationship

qq replication_start_object_relationship

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

Description

Start a new replication job for an existing object replication relationship

Usage

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

Flags

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

qq replication_unlink_snapshot_policy

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

Description

Unlink a snapshot policy from a source replication relationship.

Usage

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

Flags

Flag Name	Required	Description
--relationship-id	Yes	Unique identifier of the source replication relationship.
--snapshot-policy-id	Yes	Identifier of the snapshot policy to unlink.

qq restriper_status

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

Description

Get restriper status

Usage

```
qq restriper_status [-h]
```

qq rotate_encryption_keys

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

Description

Rotate the at-rest encryption master keys.

Usage

```
qq rotate_encryption_keys [-h] [--key-id KEY_ID | --create-key-with-name KEY_NAME]
```

Flags

Flag Name	Required	Description
`--key-id`	No	The unique ID of the master key for at-rest encryption.
`--create-key-with-name`	No	The name of the key that will be created and used for at-rest encryption.

qq s3_abort_upload

This section explains how to use the `qq s3_abort_upload` command.

Description

Aborts an S3 upload in progress. You can perform this operation on user-initiated multipart uploads and system-initiated uploads that the PutObject and CopyObject API actions use.

Usage

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

Flags

Flag Name	Required	Description
--bucket	Yes	The S3 bucket to which the upload was initiated
--upload-id	Yes	The identifier of the upload to abort.

qq s3_add_bucket

This section explains how to use the `qq s3_add_bucket` command.

Description

Create an S3 bucket

Usage

```
qq s3_add_bucket [-h] --name NAME [--fs-path FS_PATH] [--create-fs-path]
```

Flags

Flag Name	Required	Description
--name	Yes	The name of the bucket to create
--fs-path	No	The absolute path to use as the bucket root directory. The user must have permission to read the directory.
--create-fs-path	No	Create the bucket root directory if it does not already exist. The user must have permission to create the bucket root directory.

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
`--bucket`	Yes	The bucket for which the access policy will be explained.
`--auth-id`	No	Auth ID of the qumulo user
`--anonymous`	No	An unauthenticated S3 user

Positional Options

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

qq s3_create_access_key

This section explains how to use the `qq s3_create_access_key` command.

Description

Create S3 access key

Usage

```
qq s3_create_access_key [-h] [--auth-id AUTH_ID] [identifier]
```

Flags

Flag Name	Required	Description
--auth-id	No	The auth_id of the Qumulo Core user

Positional Options

Option Name	Description
identifier	An auth_id, SID, or a name optionally qualified by a domain prefix (for example, "local:name", "ad:name", "AD\name") or an ID type (for example, "auth_id:513", "SID:S-1-1-0"). Qumulo Core supports only users (not groups) for S3 access keys.

qq s3_delete_access_key

This section explains how to use the `qq s3_delete_access_key` command.

Description

Delete an S3 access key

Usage

```
qq s3_delete_access_key [-h] --id ID
```

Flags

Flag Name	Required	Description
--id	Yes	The identifier of the access key to delete.

qq s3_delete_bucket

This section explains how to use the `qq s3_delete_bucket` command.

Description

Delete an S3 bucket

Usage

```
qq s3_delete_bucket [-h] --name NAME [--delete-root-dir]
```

Flags

Flag Name	Required	Description
`--name`	Yes	The name of the S3 bucket to delete
`--delete-root-dir`	No	If specified, the operation succeeds only if the bucket root directory is empty, and the caller has the permissions for unlinking the bucket root directory from the S3 bucket. By default, the directory to be deleted can contain objects.

qq s3_delete_bucket_policy

This section explains how to use the `qq s3_delete_bucket_policy` command. For more information, see:

- Managing Access Policies for an S3 Bucket in a Qumulo Cluster in the 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
`--bucket`	Yes	The target bucket for which the access policy will be removed.

qq s3_get_bucket

This section explains how to use the `qq s3_get_bucket` command.

Description

Retrieve details for an S3 bucket

Usage

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

Flags

Flag Name	Required	Description
--name	Yes	The name of the S3 bucket for which to retrieve details

qq s3_get_bucket_policy

This section explains how to use the `qq s3_get_bucket_policy` command. For more information, see:

- [Managing Access Policies for an S3 Bucket in a Qumulo Cluster](#) in the 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
--bucket	No	The target bucket for which the access policy will be retrieved
--example	No	Print an example Policy.

qq s3_get_settings

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

Description

Retrieve S3 server settings

Usage

```
qq s3_get_settings [-h]
```

qq s3_list_access_keys

This section explains how to use the `qq s3_list_access_keys` command.

Description

List S3 access keys

Usage

```
qq s3_list_access_keys [-h] [--json]
```

Flags

Flag Name	Required	Description
--json	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
--json	No	List S3 buckets in JSON format (not in a table)

qq s3_list_uploads

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

Description

List S3 uploads in progress, including user-initiated multipart uploads and system-initiated uploads that the PutObject and CopyObject API actions use.

Usage

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

Flags

Flag Name	Required	Description
`--bucket`	Yes	The S3 bucket for which to list uploads
`--starts-with`	No	List uploads only for keys that begin with the specified string

qq s3_modify_bucket

This section explains how to use the `qq s3_modify_bucket` command.
For more information, see:

- Managing Access Policies for an S3 Bucket in a Qumulo Cluster in the Azure Native Qumulo Administrator Guide

- Managing Access Policies for an S3 Bucket in a Qumulo Cluster in the Qumulo On-Premises Administrator Guide

> **ⓘ Note**
> By default, an S3 bucket is in the `Unversioned` state.

Examples

To Enable Versioning for an S3 Bucket

Run the `qq s3_modify_bucket` command, specify the bucket name, and use the `--enable-versioning` flag. For example:

```
qq s3_modify_bucket \
   --name MyBucket \
   --enable-versioning
```

The following is example output. All times are in the UTC time zone.

```
{
  "creation_time": "2024-05-22T21:42:11.295718303Z",
  "name": "MyBucket",
  "path": "/my-bucket",
  "versioning": "Enabled"
}
```

To Suspend Versioning for an S3 Bucket

Run the `qq s3_modify_bucket` command, specify the bucket name, and use the `--suspend-versioning` flag.

Description

Modify the settings of the given bucket. Use this command to update the bucket versioning state. Using this command to enable anonymous access to a bucket has been disabled, use s3_set_bucket_policy instead.

Usage

```
qq s3_modify_bucket [-h] --name NAME [--suspend-versioning | --enable-versioning]
```

Flags

Flag Name	Required	Description
--name	Yes	The name of the bucket to be modified
--suspend-versioning	No	Suspends object versioning
--enable-versioning	No	Enables object versioning

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_statem
ent,append_statement,modify_statement} ...
```

Flags

Flag Name	Required	Description
`--bucket`	Yes	The name of the S3 bucket whose access policy is to be modi-fied
`--allow-remove-self`	No	Allow the policy set to remove the ability for this user to change the policy.

qq s3_modify_settings

This section explains how to use the `qq s3_modify_settings` command.

Description

Modify S3 server settings

Usage

```
qq s3_modify_settings [-h] [--disable | --enable] [--base-path BASE_PATH] [--multipa
rt-upload-expiry-interval MULTIPART_UPLOAD_EXPIRY_INTERVAL] [--secure | --insecure]
```

Flags

Flag Name	Required	Description
`--dis-able`	No	Disable S3 server
`--enable`	No	Enable S3 server
`--base-path`	No	The default bucket directory prefix for all S3 buckets created without an explicitly specified path. You must specify this directory as an absolute path.
`--multi-part-up-load-ex-piry-in-terval`	No	The time period during which the system permits a multipart upload to remain unmodified. When this time period elapses, the system considers the multipart upload stale and cleans it up automatically. Specify the time period in the format (for example, 5days). Quantity must be a positive integer less than 100 and units must be one of the following: months, weeks, days, or hours. To disable automatic multipart upload cleanup, specify never for quantity and do not specify any units.
`--secure`	No	Configure the S3 server to accept only HTTPS connections
`--inse-cure`	No	Configure the S3 server to accept only HTTPS connections

qq s3_set_bucket_policy

This section explains how to use the `qq s3_set_bucket_policy` command.
For more information, see:

- [Managing Access Policies for an S3 Bucket in a Qumulo Cluster](#) in the 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 file that the –file flag specifies to the S3 bucket name that the –bucket flag specifies.

Usage

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

Flags

Flag Name	Required	Description
`--bucket`	Yes	The name of the S3 bucket whose policy is to be configured
`--file`	Yes	The access policy file to upload. For an access policy template, use the --example flag.
`--allow-re-move-self`	No	Allow the configured policy to remove the ability to modify itself from the current user.

qq saml_get_settings

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

Description

Get cluster SAML configuration

Usage

```
qq saml_get_settings [-h]
```

qq saml_modify_settings

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

Description

Modify cluster SAML configuration

Usage

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

Flags

Flag Name	Required	Description
`--disable`	No	Disable authentication via SAML
`--enable`	No	Enable authentication via SAML
`--idp-sso-url`	No	Sets the cluster's configured IDP SSO URL.
`--idp-certificate`	No	Sets the cluster's configured IDP public key with the given value in PEM format.
`--idp-certificate-file`	No	Sets the cluster's configured IDP public key from a PEM file.
`--idp-entity-id`	No	Sets the URI for the IDP this cluster trusts to authenticate users via SAML.
`--cluster-dns-name`	No	Sets the cluster's configured DNS name (must be FQDN).
`--require-sso`	No	If set, requires SSO for Active Directory (AD) users to be able to manage this cluster. The cluster rejects password-based authentication from AD users of the Web UI, qq CLI, and REST API. This setting does not restrict access over file protocols such as SMB.

qq set_cluster_conf

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

Description

Set the cluster config

Usage

```
qq set_cluster_conf [-h] --cluster-name CLUSTER_NAME
```

Flags

Flag Name	Required	Description
--cluster-name	Yes	Cluster Name

qq set_monitoring_conf

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

Description

Update monitoring configuration.

Usage

```
qq set_monitoring_conf [-h] [--enabled | --disabled] [--vpn-enabled | --vpn-disable
d] [--mq-host MQ_HOST] [--mq-port MQ_PORT] [--mq-proxy-host MQ_PROXY_HOST]
    [--mq-proxy-port MQ_PROXY_PORT] [--s3-proxy-host S3_PROXY_HOST] [--s3-proxy-por
t S3_PROXY_PORT] [--s3-proxy-disable-https] [--all-proxy-host HOST]
    [--all-proxy-port PORT] [--period PERIOD] [--vpn-host VPN_HOST] [--nexus-enable
d | --nexus-disabled] [--nexus-host NEXUS_HOST]
    [--nexus-port NEXUS_PORT] [--nexus-interval NEXUS_INTERVAL]
```

Flags

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

`--all-proxy-port`	No	Optional Set both MQ and S3 proxy port to PORT.
`--period`	No	Monitoring poll interval in seconds.
`--vpn-host`	No	Support VPN host name or IP.
`--nexus-enabled`	No	Enable Nexus monitoring.
`--nexus-disabled`	No	Disable Nexus monitoring.
`--nexus-host`	No	Optional nexus host.
`--nexus-port`	No	Optional nexus port.
`--nexus-interval`	No	Nexus poll interval in seconds.

qq set_node_identify_light

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

Description

Turn node identification light on or off

Usage

```
qq set_node_identify_light [-h] --node NODE {on,off}
```

Flags

Flag Name	Required	Description
--node	Yes	Node ID

Positional Options

Option Name	Description
light_state	Should light be visible

qq smb_add_share

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

- Using SMB Host Restrictions in Qumulo Core in the 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 [--descr
iption DESCRIPTION] [--access-based-enumeration-enabled {true,false}]
    [--create-fs-path] [--default-file-create-mode DEFAULT_FILE_CREATE_MODE] [--defa
ult-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 [T
RUSTEE ...]] [--deny-access TRUSTEE [TRUSTEE ...]]
    [--full-control-hosts IP/RANGE [IP/RANGE ...]] [--read-only-hosts IP/RANGE [IP/R
ANGE ...]] [--deny-hosts IP/RANGE [IP/RANGE ...]] [--deny-all-hosts]
```

Flags

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

`--name`	Yes	Name of share.
`--fs-path`	Yes	File system path.
`--descrip-tion`	No	Description of this share.
`--access-based-enu-meration-en-abled`	No	Enable Access-Based Enumeration for this share.
`--create-fs-path`	No	Creates the specified file system path if the path does not exist already.
`--default-file-create-mode`	No	Change the default POSIX file create mode bits (octal) for the specified SMB share. These mode bits are applied to new files as they are created. Note: If an inheritable ACE is present in the permissions ACL, this flag has no effect.
`--default-directory-create-mode`	No	Change the default POSIX directory create mode bits (octal) for the specified SMB share. These mode bits are applied to new directories as they are created. Note: If an inheritable ACE is present in the permissions ACL, this flag has no effect.
`--require-encryption`	No	Require encryption for all traffic for the specified share. When set to true, clients without encryption capability cannot connect to this share.
`--json`	No	Print the raw JSON response.
`--no-ac-cess`	No	Grant no access.
`--read-on-ly`	No	Grant everyone except guest read-only access.
`--all-ac-cess`	No	Grant everyone except guest full access.
`--grant-read-access`	No	Grant read access to the specified trustees. For example: Everyone, uid:1000, gid:1001, sid:S-1-5-2-3-4, auth_id:500

`--grant-read-write-access`	No	Grant read-write access to these trustees.
`--grant-all-access`	No	Grant all access to these trustees.
`--deny-access`	No	Deny all access to these trustees.
`--full-control-hosts`	No	The host addresses or subnet ranges for which access to to this share are not limited by network permissions. Access may still be limited by share and file permissions.
`--read-only-hosts`	No	Address ranges which should be permitted read-only access at most.
`--deny-hosts`	No	The host addresses or subnet ranges for which access to the specified share is denied, regardless of other permissions. Important: Because using this flag alone results in all hosts being denied, use the correct --full-control-hosts or --read-only-hosts flags as necessary.
`--deny-all-hosts`	No	Deny all access to this share. Important: To avoid configuration issues, do not apply this flag alongside any others.

qq smb_close_file_handle

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

Description

Force-close the specified SMB file handle

Usage

```
qq smb_close_file_handle [-h] --location LOCATION
```

Flags

Flag Name	Required	Description
`--location`	Yes	The location of the file handle to close as returned from smb_list_file_handles.

qq smb_close_sessions

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

Description

Force close SMB sessions matching one or more of a set of filters.

Usage

```
qq smb_close_sessions [-h] [--identity IDENTITY] [--location LOCATION] [--ip IP]
```

Flags

Flag Name	Required	Description
`--identity`	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").
`--location`	No	Use the list of sessions from the smb_list_sessions command to close only the session with the specified location.
`--ip`	No	Close only the sessions that originate from the specified IP address.

qq smb_delete_share

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

Description

Delete a share

Usage

```
qq smb_delete_share [-h] (--id ID | --name NAME) [--tenant-id TENANT_ID]
```

Flags

Flag Name	Required	Description
--id	No	ID of share to delete.
--name	No	Name of share to delete.
--tenant-id	No	The ID of the tenant from which to delete the share. Use this flag only if you also use the --name 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
`--page-size`	No	Max files to return per request.
`--file-number`	No	Limits results to the specified file, as returned from a command like fs_file_get_attr or fs_read_dir.
`-p`	No	Returns the primary path of the opened file.
`--path`	No	Path to file

qq smb_list_sessions

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

Description

List SMB open sessions

Usage

```
qq smb_list_sessions [-h] [--page-size PAGE_SIZE] [--identity IDENTITY]
```

Flags

Flag Name	Required	Description
`--page-size`	No	Max sessions to return per request
`--identity`	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
--json	No	Print JSON representation of shares.
--populate-trustee-names	No	Populate trustee names in the response.

qq smb_mod_share

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

Examples

Modifying Host Restrictions

For more information, see:

- Using SMB Host Restrictions in Qumulo Core in the 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 NE
W_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-encry
ption {true,false}] [--json]
    [--full-control-hosts IP/RANGE [IP/RANGE ...]] [--read-only-hosts IP/RANGE [IP/R
ANGE ...]] [--deny-hosts IP/RANGE [IP/RANGE ...]] [--deny-all-hosts]
```

Flags

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

`--create-fs-path`	No	Creates the specified file system path if the path does not exist already.
`--default-file-create-mode`	No	Change the default POSIX file create mode bits (octal) for the specified SMB share. These mode bits are applied to new files as they are created. Note: If an inheritable ACE is present in the permissions ACL, this flag has no effect.
`--default-directory-create-mode`	No	Change the default POSIX directory create mode bits (octal) for the specified SMB share. These mode bits are applied to new directories as they are created. Note: If an inheritable ACE is present in the permissions ACL, this flag has no effect.
`--require-encryption`	No	Require all traffic for this share to be encrypted. If true, clients without encryption capabilities will not be able to connect.
`--json`	No	Print the raw JSON response.
`--full-control-hosts`	No	The host addresses or subnet ranges for which access to to this share are not limited by network permissions. Access may still be limited by share and file permissions.
`--read-only-hosts`	No	Address ranges which should be permitted read-only access at most.
`--deny-hosts`	No	The host addresses or subnet ranges for which access to the specified share is denied, regardless of other permissions. Important: Because using this flag alone results in all hosts being denied, use the correct --full-control-hosts or --read-only-hosts flags as necessary.
`--deny-all-hosts`	No	Deny all access to this share. Important: To avoid configuration issues, do not apply this flag alongside any others.

qq smb_mod_share_permissions

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

Description

Modify a share's permissions

Usage

```
qq smb_mod_share_permissions [-h] (--id ID | --name NAME) [--tenant-id TENANT_ID]
[--json] {add_entry,remove_entry,modify_entry,replace} ...
```

Flags

Flag Name	Required	Description
--id	No	The ID of the share to modify.
--name	No	The name of the share to modify.
--tenant-id	No	The ID of the tenant from which to delete the share. Use this flag only if you also use the --name flag.
--json	No	Print the raw JSON response.

qq smb_modify_settings

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

Examples

Hiding an SMB Share from Unauthorized Hosts

For more information, see:

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

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

qq snapshot_calculate_used_capacity

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

Description

Get the space used by the snapshots specified.

Usage

```
qq snapshot_calculate_used_capacity [-h] [-i IDS]
```

Flags

Flag Name	Required	Description
-i	No	Identifiers of the snapshots for which to calculate capacity usage (as a comma separated list).

qq snapshot_create_policy

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

Description

Create a new snapshot scheduling policy.

Usage

```
qq snapshot_create_policy [-h] {hourly_or_less,daily,monthly} ...
```

qq snapshot_create_snapshot

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

Description

Create a new snapshot

Usage

```
qq snapshot_create_snapshot [-h] [--source-file-id SOURCE_FILE_ID | --path PATH]
[-e EXPIRATION] [-n NAME]
```

Flags

Flag Name	Required	Description
`--source-file-id`	No	ID of directory to snapshot
`--path`	No	Path of directory to snapshot
`-e`	No	Time of snapshot expiration. An empty string indicates that the snapshot never expires. The time format follows RFC 3339, a normalized subset of ISO 8601.
`-n`	No	Snapshot name

qq snapshot_delete_policy

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

Description

Delete a single scheduling policy

Usage

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

Flags

Flag Name	Required	Description
`-i`	Yes	Identifier of the snapshot policy to delete.

qq snapshot_delete_snapshot

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

Description

Delete a single snapshot

Usage

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

Flags

Flag Name	Required	Description
-i	Yes	Snapshot ID

qq snapshot_diff

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

Description

List the changed files and directories between two snapshots.

Usage

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

Flags

Flag Name	Required	Description
`--newer-snapshot`	Yes	Snapshot ID of the newer snapshot
`--older-snapshot`	Yes	Snapshot ID of the older snapshot
`--page-size`	No	Max snapshot diff entries to return per request

qq snapshot_file_diff

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

Description

List changed byte ranges of a file between two snapshots.

Usage

```
qq snapshot_file_diff [-h] --newer-snapshot NEWER_SNAPSHOT --older-snapshot OLDER_SN
APSHOT (--path PATH | --file-id FILE_ID) [--page-size PAGE_SIZE]
```

Flags

Flag Name	Required	Description
--newer-snapshot	Yes	Snapshot ID of the newer snapshot
--older-snapshot	Yes	Snapshot ID of the older snapshot
--path	No	Path to file
--file-id	No	File ID
--page-size	No	Maximum number of entries to return per request

qq snapshot_get_capacity_used_per_snapshot

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

Description

Get the approximate amount of space for each snapshot that would be reclaimed if that snapshot were deleted.

Usage

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

Flags

Flag Name	Required	Description
-i	No	If set, will return capacity usage of the snapshot with the specified id. If omitted, will return capacity usage of all snapshots.

qq snapshot_get_policy

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

Description

Get a single policy

Usage

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

Flags

Flag Name	Required	Description
-i	Yes	Identifier of the snapshot policy to list.

qq snapshot_get_policy_status

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

Description

Get a single snapshot policy status

Usage

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

Flags

Flag Name	Required	Description
-i	Yes	Identifier of the snapshot policy.

qq snapshot_get_snapshot

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

Description

==SUPPRESS==

Usage

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

Flags

Flag Name	Required	Description
`-i`	Yes	The identifier of the snapshot to list.

qq snapshot_get_status

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

Description

Get the information for a single snapshot.

Usage

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

Flags

Flag Name	Required	Description
-i	Yes	The identifier of the snapshot to list.

qq snapshot_get_total_used_capacity

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

Description

Get the total space consumed by all snapshots.

Usage

```
qq snapshot_get_total_used_capacity [-h]
```

qq snapshot_get_unlock_challenge

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

Description

Get a security challenge for unlocking a snapshot.

Usage

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

Flags

Flag Name	Required	Description
-i	Yes	The identifier of the snapshot to unlock.

qq snapshot_list_policies

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

Description

List all policies

Usage

```
qq snapshot_list_policies [-h]
```

qq snapshot_list_policy_statuses

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

Description

List all snapshot policy statuses

Usage

```
qq snapshot_list_policy_statuses [-h]
```

qq snapshot_list_snapshots

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

Description

==SUPPRESS==

Usage

```
qq snapshot_list_snapshots [-h] [--exclude-in-delete | --only-in-delete]
```

Flags

Flag Name	Required	Description
`--exclude-in-delete`	No	Exclude all snapshots in process of being deleted from the list
`--only-in-delete`	No	Display only snapshots in process of being deleted.

qq snapshot_list_statuses

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

Description

List the information for every snapshot.

Usage

```
qq snapshot_list_statuses [-h] [--exclude-in-delete | --only-in-delete] [--exclude-l
ocked | --only-locked]
```

Flags

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

qq snapshot_lock_snapshot

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

Description

Lock a snapshot.

Usage

```
qq snapshot_lock_snapshot [-h] -i ID [-f] -k LOCK_KEY
```

Flags

Flag Name	Required	Description
-i	Yes	The identifier of the snapshot to lock.
-f	No	Do not prompt for confirmation. The default setting is "false".
-k	Yes	The identifier or name of the key in the file system key store that protects the snapshot. Important: You must specify either the name or the identifier of the key.

qq snapshot_modify_policy

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

Description

Modify an existing snapshot scheduling policy.

Usage

```
qq snapshot_modify_policy [-h] {modify_non_schedule_fields,change_to_hourly_or_les
s,change_to_daily,change_to_monthly} ...
```

qq snapshot_modify_snapshot

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

Description

Modify an existing snapshot

Usage

```
qq snapshot_modify_snapshot [-h] -i ID [-e EXPIRATION] [-f]
```

Flags

Flag Name	Required	Description
`-i`	Yes	Identifier of the snapshot to modify.
`-e`	No	Time of snapshot expiration. An empty string indicates that the snapshot never expires. The time format follows RFC 3339, a normalized subset of ISO 8601.
`-f`	No	Do not prompt for confirmation. The default setting is "false".

qq snapshot_unlock_snapshot

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

Description

Unlock a snapshot.

Usage

```
qq snapshot_unlock_snapshot [-h] -i ID (-s SIGNATURE | -k PRIVATE_KEY_FILE)
```

Flags

Flag Name	Required	Description
`-i`	Yes	The identifier of the snapshot to unlock.
`-s`	No	The verification signature of the security challenge from the output of the qq snapshot_get_unlock_challenge command.
`-k`	No	The location of the private key file that locks the snapshot.

qq ssl_delete_ca_certificate

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

Description

Delete SSL CA certificate. This certificate is used to authenticate connections to external LDAP servers.

Usage

```
qq ssl_delete_ca_certificate [-h]
```

qq ssl_get_ca_certificate

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

Description

Get SSL CA certificate. This certificate is used to authenticate connections to external LDAP servers.

Usage

```
qq ssl_get_ca_certificate [-h]
```

qq ssl_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
-c	Yes	SSL CA certificate file in PEM format

qq ssl_modify_certificate

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

Description

Set the SSL certificate chain and private key for the web UI and REST servers

Usage

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

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
`--try-ranges`	No	Specify ip range list to try (e.g. '1.1.1.10-12,10.20.5.0/24'
`--try-netmask`	No	Specify netmask to apply when using --try-range option
`--try-floating-ranges`	No	Specify floating ip range list to try (e.g. '1.1.1.10-12,10.20.5.0/24'

qq time_get

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

Description

Get time configuration.

Usage

```
qq time_get [-h]
```

qq time_list_timezones

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

Description

List timezones supported by QC

Usage

```
qq time_list_timezones [-h]
```

qq time_series_get

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

Description

Get specified time series data.

Usage

```
qq time_series_get [-h] [-b BEGIN_TIME] [--csv]
```

Flags

Flag Name	Required	Description
-b	No	Begin time for time series intervals, in epoch seconds
--csv	No	Format output as Comma Separated Values

qq time_set

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

Description

Set time configuration.

Usage

```
qq time_set [-h] [--set-use-ad] [--unset-use-ad] [--ntp-servers NTP_SERVERS]
```

Flags

Flag Name	Required	Description
`--set-use-ad`	No	Use Active Directory controller for NTP.
`--unset-use-ad`	No	Don't use Active Directory controller for NTP.
`--ntp-servers`	No	Set of NTP servers specified as comma delimited list.

qq time_status

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

Description

Get time configuration status.

Usage

```
qq time_status [-h]
```

qq tree_delete_cancel

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

Description

Cancel delete job

Usage

```
qq tree_delete_cancel [-h] id
```

Positional Options

Option Name	Description
id	Directory id

qq tree_delete_create

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

Description

Create delete job

Usage

```
qq tree_delete_create [-h] [--force] directory
```

Flags

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

Positional Options

Option Name	Description
directory	Directory id or path

qq tree_delete_get

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

Description

Get information about one delete job

Usage

```
qq tree_delete_get [-h] [--json] id
```

Flags

Flag Name	Required	Description
`--json`	No	Output JSON instead of table.

Positional Options

Option Name	Description
`id`	Directory id

qq tree_delete_list

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

Description

Get information about all tree delete jobs

Usage

```
qq tree_delete_list [-h] [--json]
```

Flags

Flag Name	Required	Description
--json	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
`--table`	No	Print output as a table, instead of JSON

qq unconfigured_upgrade_config

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

Description

List current upgrade prepare config for an unconfigured node

Usage

```
qq unconfigured_upgrade_config [-h]
```

qq unconfigured_upgrade_config_set

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

Description

Upgrade on an unconfigured node with the FS path to an upgrade image

Usage

```
qq unconfigured_upgrade_config_set [-h] --path PATH [--target TARGET]
```

Flags

Flag Name	Required	Description
--path	Yes	FS path to upgrade image
--target	No	Target: idle, prepare, arm.

qq unconfigured_upgrade_status

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

Description

List the current upgrade status for an unconfigured node

Usage

```
qq unconfigured_upgrade_status [-h] [--wait-until-prepared]
```

Flags

Flag Name	Required	Description
`--wait-until-pre-pared`	No	Monitor the upgrade status until the PREPARING state is complete.

qq upgrade_blocked

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

Description

Get information on whether and for what reason an upgrade is blocked

Usage

```
qq upgrade_blocked [-h]
```

qq upgrade_cluster

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

Description

Run a cluster upgrade to the image specified by the provided path

Usage

```
qq upgrade_cluster [-h] [--path PATH] [--no-monitor] [--rolling] [--num-nodes-to-reb
oot NO_COMMAND_NUM_NODES_TO_REBOOT] {prepare,commit} ...
```

Flags

Flag Name	Required	Description
`--path`	No	FS path to upgrade image
`--no-monitor`	No	Skip monitoring the upgrade
`--num-nodes-to-reboot`	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).

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
--raw	No	Skip montoring an in-flight upgrade and just return the raw status

qq upgrade_verify_image

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

Description

Verify an image path for upgrade

Usage

```
qq upgrade_verify_image [-h] --path PATH
```

Flags

Flag Name	Required	Description
--path	Yes	FS path to upgrade image

qq version

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

Examples

To Show the Version of Qumulo Core Running on Your Cluster

Run the `qq version` command.

The following is example output.

```
{
  "build_date": "2024-02-10T19:50:58Z",
  "build_id": "123456.7.8",
  "flavor": "release",
  "revision_id": "Qumulo Core 8.0.1"
}
```

Description

Print version information

Usage

```
qq version [-h]
```

qq web_ui_get_settings

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

Description

Get configuration options for the Web UI

Usage

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

Flags

Flag Name	Required	Description
`--inactivity-timeout`	No	Gets the inactivity timeout
`--login-banner`	No	Gets the configuration for the login banner

qq web_ui_modify_settings

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

Description

Modify configuration options for the Web UI

Usage

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

Flags

Flag Name	Required	Description
`--inactivity-timeout`	No	Sets the inactivity timeout
`--disable-inactivity-timeout`	No	Disables the inactivity timeout
`--login-banner`	No	Sets the login banner
`--disable-login-banner`	No	Disables the login banner

qq who_am_i

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

Description

Get information on the current user

Usage

```
qq who_am_i [-h]
```