# Qumulo qq CLI Command Guide



Copyright © 2024 Qumulo, Inc.

## **Table of Contents**

#### ad

| ad_cancel                        | 14 |
|----------------------------------|----|
| ad_distinguished_name_to_account | 15 |
| ad_expand_groups                 | 16 |
| ad_get_advanced_settings         | 17 |
| ad_gid_to_sids                   | 18 |
| ad_join                          | 19 |
| ad_leave                         | 20 |
| ad_list                          | 21 |
| ad_name_to_accounts              | 22 |
| ad_poll                          | 23 |
| ad_reconfigure                   | 24 |
| ad_set_advanced_settings         | 25 |
| ad_sid_to_account                | 26 |
| ad_sid_to_gid                    | 27 |
| ad_sid_to_uid                    | 28 |
| ad_sid_to_username               | 29 |
| ad_uid_to_sids                   | 30 |
| ad_username_to_sids              | 31 |
| add                              |    |
| add_nodes                        | 32 |
| audit                            |    |
| audit_get_cloudwatch_config      | 33 |
| audit_get_cloudwatch_status      |    |
| audit_get_syslog_config          |    |
| audit_get_syslog_status          |    |
| audit_set_cloudwatch_config      |    |
| audit set sysleg config          | 70 |

### auth

| auth_add_group                 | 39 |
|--------------------------------|----|
| auth_add_user                  | 40 |
| auth_assign_role               | 41 |
| auth_clear_cache               | 42 |
| auth_create_access_token       | 43 |
| auth_create_role               | 44 |
| auth_delete_access_token       | 46 |
| auth_delete_group              | 47 |
| auth_delete_role               | 48 |
| auth_delete_user               | 49 |
| auth_expand_identity           | 50 |
| auth_find_identity             | 52 |
| auth_get_access_token          | 54 |
| auth_get_user_defined_mappings | 55 |
| auth_list_access_tokens        | 56 |
| auth_list_group                | 57 |
| auth_list_groups               | 58 |
| auth_list_privileges           | 59 |
| auth_list_role                 | 61 |
| auth_list_roles                | 62 |
| auth_list_user                 | 63 |
| auth_list_users                | 64 |
| auth_mod_group                 | 65 |
| auth_mod_user                  | 66 |
| auth_modify_access_token       | 67 |
| auth_modify_role               | 68 |
| auth_set_password              | 70 |
| auth_set_user_defined_mappings | 71 |
| auth_unassign_role             | 72 |
| capacity                       |    |
| capacity_history_files_get     | 73 |
| capacity_history_get           | 74 |
| change                         |    |
| change password                | 75 |

## checksumming

| checksumming_get_status  | 76 |
|--------------------------|----|
| cluster                  |    |
| cluster_conf             | 77 |
| cluster_create           | 78 |
| cluster_slot_set_config  | 80 |
| cluster_slots            | 81 |
| current                  |    |
| current_activity_get     | 82 |
| dns                      |    |
| dns_clear_cache          | 83 |
| dns_get_lookup_overrides | 84 |
| dns_resolve_hostnames    | 85 |
| dns_resolve_ips          | 86 |
| dns_set_lookup_overrides | 87 |
| encryption               |    |
| encryption_get_key_store | 88 |
| encryption_get_status    | 89 |
| encryption_set_key_store | 90 |
| floating                 |    |
| floating in allocation   | 01 |

### fs

| fs_acl_explain_chmod           | 92  |
|--------------------------------|-----|
| fs_acl_explain_posix_mode      | 93  |
| fs_acl_explain_rights          | 94  |
| fs_copy                        | 95  |
| fs_create_dir                  | 96  |
| fs_create_file                 | 97  |
| fs_create_link                 | 98  |
| fs_create_symlink              | 99  |
| fs_create_unix_file            | 100 |
| fs_delete                      | 101 |
| fs_delete_user_metadata        | 102 |
| fs_file_get_attr               | 103 |
| fs_file_samples                | 104 |
| fs_file_set_attr               | 105 |
| fs_file_set_smb_attrs          | 107 |
| fs_get_acl                     | 108 |
| fs_get_atime_settings          | 109 |
| fs_get_notify_settings         | 110 |
| fs_get_permissions_settings    | 111 |
| fs_get_stats                   | 112 |
| fs_get_user_metadata           | 113 |
| fs_list_lock_waiters_by_client | 114 |
| fs_list_lock_waiters_by_file   | 115 |
| fs_list_locks                  | 116 |
| fs_list_named_streams          | 117 |
| fs_list_user_metadata          | 118 |
| fs_modify_acl                  | 119 |
| fs_notify                      | 124 |
| fs_punch_hole                  | 125 |
| fs_read                        | 126 |
| fs_read_dir                    | 127 |
| fs_read_dir_aggregates         | 130 |
| fs_release_nlm_lock            | 131 |
| fs_release_nlm_locks_by_client | 132 |
| fs_remove_stream               | 133 |
| fs rename                      | 134 |

| fs_resolve_paths                      | 135 |
|---------------------------------------|-----|
| fs_security_add_key                   | 136 |
| fs_security_delete_key                | 137 |
| fs_security_get_key                   | 138 |
| fs_security_get_key_replace_challenge | 139 |
| fs_security_get_key_usage             | 140 |
| fs_security_list_keys                 | 141 |
| fs_security_modify_key                | 142 |
| fs_security_replace_key               | 143 |
| fs_set_acl                            | 144 |
| fs_set_atime_settings                 | 145 |
| fs_set_notify_settings                | 146 |
| fs_set_permissions_settings           | 147 |
| fs_set_user_metadata                  | 148 |
| fs_walk_tree                          | 149 |
| fs_write                              | 152 |
| ftp                                   |     |
| ftp_get_status                        | 154 |
| ftp_modify_settings                   | 155 |
| get                                   |     |
| get_vpn_keys                          | 156 |
| halt                                  |     |
| halt_cluster                          | 157 |
| help                                  |     |
| help                                  | 158 |
| identity                              |     |
| identity_attributes_get               | 159 |
| identity_attributes_set               |     |
| install                               |     |
| install_vpn_keys                      | 161 |

#### kerberos

| kerberos_delete_keytab         | 162 |
|--------------------------------|-----|
| kerberos_get_keytab            | 163 |
| kerberos_get_settings          | 164 |
| kerberos_modify_settings       | 165 |
| kerberos_set_keytab            | 166 |
| ldap                           |     |
| ldap_get_settings              | 167 |
| ldap_get_status                | 168 |
| ldap_login_name_to_gid_numbers | 169 |
| ldap_login_name_to_uid_numbers | 170 |
| ldap_set_settings              | 171 |
| ldap_uid_number_to_login_name  | 173 |
| ldap_update_settings           | 174 |
| login                          |     |
| login                          | 176 |
| logout                         |     |
| logout                         |     |
| logout                         |     |
| metrics                        |     |
| metrics_get                    | 178 |
| monitoring                     |     |
| monitoring_conf                | 179 |
| monitoring status get          | 180 |

## multitenancy

| multitenancy_create_tenant              | 18  |
|---|-----|
| multitenancy_delete_tenant              | 183 |
| multitenancy_get_tenant                 | 184 |
| multitenancy_list_tenants               | 185 |
| multitenancy_modify_tenant              | 186 |
| multitenancy_nfs_delete_settings        | 188 |
| multitenancy_nfs_get_global_settings    | 189 |
| multitenancy_nfs_get_settings           | 190 |
| multitenancy_nfs_list_settings          | 19  |
| multitenancy_nfs_modify_global_settings | 192 |
| multitenancy_nfs_modify_settings        | 193 |
| multitenancy_smb_delete_settings        | 194 |
| multitenancy_smb_get_global_settings    |     |
| multitenancy_smb_get_settings           | 196 |
| multitenancy_smb_list_settings          | 195 |
| multitenancy_smb_modify_global_settings | 198 |
| multitenancy_smb_modify_settings        | 200 |
| network                                 |     |
| network_add_network                     | 202 |
| network_delete_network                  | 204 |
| network_get_interface                   | 205 |
| network_get_network                     | 200 |
| network_list_connections                | 207 |
| network_list_interfaces                 | 209 |
| network_list_networks                   | 210 |
| network_mod_interface                   | 21  |
| network_mod_network                     | 212 |
| notwork noll                            | 21/ |

### nfs

| nfs_add_export             | 215 |
|----------------------------|-----|
| nfs_delete_export          | 215 |
| nfs_get_export             | 218 |
| nfs_get_settings           | 219 |
| nfs_list_exports           | 220 |
| nfs_mod_export             | 22  |
| nfs_mod_export_host_access | 223 |
| nfs_modify_settings        | 224 |
| node                       |     |
| node_chassis_status_get    | 225 |
| node_state_get             | 226 |
| nodes                      |     |
| nodes_list                 | 227 |
| protection                 |     |
| protection_status_get      | 229 |
| quota                      |     |
| quota_create_quota         | 230 |
| quota_delete_quota         | 23  |
| quota_get_quota            | 232 |
| quota_list_quotas          | 233 |
| quota_update_quota         | 234 |
| raw                        |     |
| raw                        | 235 |
| reboot                     |     |
| reboot_pause               | 236 |
| reboot_resume              | 237 |
| reboot_start               |     |
| reboot_status              | 239 |
| replace                    |     |
| replace_nodes              | 240 |

## replication

| replication_abort_object_replication             | 247  |
|--|--|
| replication_abort_replication                    | 242  |
| replication_add_blackout_window                  | 243  |
| replication_authorize                            | 244  |
| replication_create_object_relationship           | 245  |
| replication_create_source_relationship           | 247  |
| replication_delete_blackout_windows              | 248  |
| replication_delete_object_relationship           | 249  |
| replication_delete_source_relationship           | 250  |
| replication_delete_target_relationship           | 251  |
| replication_get_object_relationship              | 252  |
| replication_get_object_relationship_status       | 253  |
| replication_get_source_relationship              | 254  |
| replication_get_source_relationship_status       | 255  |
| replication_get_target_relationship_status       | 256  |
| replication_link_snapshot_policy                 | 257  |
| replication_list_object_relationship_statuses    | 258  |
| replication_list_object_relationships            | 259  |
| replication_list_queued_snapshots                | 260  |
| replication_list_source_relationship_statuses    | 261  |
| replication_list_source_relationships            | 262  |
| replication_list_target_relationship_statuses    | 263  |
| replication_make_target_writable                 | 264  |
| replication_modify_source_relationship           | 265  |
| replication_reconnect_target_relationship        | 266  |
| replication_release_queued_snapshot              | 267  |
| replication_replicate                            | 268  |
| replication_reverse_target_relationship          | 269  |
| replication_set_snapshot_policy_replication_mode | 270  |
| replication_set_target_relationship_lock         | 271  |
| replication_start_object_relationship            | 272  |
| replication_unlink_snapshot_policy               | 273  |
| restriner  |  |
|  | OF /   |
| r  | replication_abort_object_replication replication_abort_replication replication_abort_replication replication_authorize replication_create_object_relationship replication_delete_blackout_windows replication_delete_blackout_windows replication_delete_object_relationship replication_delete_object_relationship replication_delete_source_relationship replication_delete_object_relationship replication_delete_object_relationship replication_get_object_relationship replication_get_object_relationship replication_get_object_relationship_status replication_get_source_relationship_status replication_get_source_relationship_status replication_get_target_relationship_status replication_list_source_relationship_statuses replication_list_object_relationship_statuses replication_list_object_relationship_statuses replication_list_source_relationship_statuses replication_list_source_relationship_statuses replication_list_source_relationship_statuses replication_list_source_relationship_statuses replication_list_source_relationship_statuses replication_list_source_relationship_statuses replication_modify_source_relationship_statuses replication_modify_source_relationship_ replication_reconnect_target_relationship replication_reconnect_target_relationship replication_replicate replication_replicate replication_replicate replication_set_snapshot_policy_replication_mode replication_set_target_relationship_lock replication_start_object_relationship_ replication_unlink_snapshot_policy replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_snapshot_policy  replication_unlink_sn |

#### rotate

| rotate_encryption_keys          | 275 |
|---------------------------------|-----|
| 53                              |     |
| s3_abort_upload                 | 276 |
| s3_add_bucket                   | 277 |
| s3_bucket_policy_explain_access | 278 |
| s3_create_access_key            | 279 |
| s3_delete_access_key            | 280 |
| s3_delete_bucket                | 28  |
| s3_delete_bucket_policy         | 282 |
| s3_get_bucket                   | 283 |
| s3_get_bucket_policy            | 284 |
| s3_get_settings                 | 285 |
| s3_list_access_keys             | 286 |
| s3_list_buckets                 | 287 |
| s3_list_uploads                 | 288 |
| s3_modify_bucket_policy         | 289 |
| s3_modify_settings              | 29  |
| s3_set_bucket_policy            | 292 |
| saml                            |     |
| saml_get_settings               | 293 |
| saml_modify_settings            | 294 |
| set                             |     |
| set_cluster_conf                | 295 |
| set_monitoring_conf             | 296 |
| set node identify light         | 298 |

### smb

| smb_add_share                           | 299 |
|---|-----|
| smb_close_file_handle                   | 303 |
| smb_close_sessions                      | 304 |
| smb_delete_share                        | 305 |
| smb_get_settings                        | 306 |
| smb_list_file_handles                   | 307 |
| smb_list_sessions                       | 308 |
| smb_list_share                          | 309 |
| smb_list_shares                         | 311 |
| smb_mod_share                           | 312 |
| smb_mod_share_permissions               | 316 |
| smb_modify_settings                     | 317 |
| snapshot                                |     |
| snapshot_calculate_used_capacity        | 320 |
| snapshot_create_policy                  | 321 |
| snapshot_create_snapshot                | 322 |
| snapshot_delete_policy                  | 323 |
| snapshot_delete_snapshot                | 324 |
| snapshot_diff                           | 325 |
| snapshot_file_diff                      | 326 |
| snapshot_get_capacity_used_per_snapshot | 327 |
| snapshot_get_policy                     | 328 |
| snapshot_get_policy_status              | 329 |
| snapshot_get_snapshot                   | 330 |
| snapshot_get_status                     | 331 |
| snapshot_get_total_used_capacity        | 332 |
| snapshot_get_unlock_challenge           | 333 |
| snapshot_list_policies                  | 334 |
| snapshot_list_policy_statuses           | 335 |
| snapshot_list_snapshots                 | 336 |
| snapshot_list_statuses                  | 337 |
| snapshot_lock_snapshot                  | 338 |
| snapshot_modify_policy                  | 339 |
| snapshot_modify_snapshot                | 340 |
| snapshot_unlock_snapshot                | 341 |

#### ssl

| ssl_delete_ca_certificate       | 342 |
|---------------------------------|-----|
| ssl_get_ca_certificate          | 343 |
| ssl_modify_ca_certificate       | 344 |
| ssl_modify_certificate          | 345 |
| SSO                             |     |
| sso_login                       | 346 |
| static                          |     |
| static_ip_allocation            | 347 |
| time                            |     |
| time_get                        | 348 |
| time_list_timezones             | 349 |
| time_series_get                 | 350 |
| time_set                        | 351 |
| time_status                     | 352 |
| tree                            |     |
| tree_delete_cancel              | 353 |
| tree_delete_create              | 354 |
| tree_delete_get                 | 355 |
| tree_delete_list                | 356 |
| unconfigured                    |     |
| unconfigured_nodes_list         | 357 |
| unconfigured_upgrade_config     | 358 |
| unconfigured_upgrade_config_set | 359 |
| unconfigured_upgrade_status     | 360 |
| upgrade                         |     |
| upgrade_blocked                 | 361 |
| upgrade_cluster                 | 362 |
| upgrade_status                  | 363 |
| upgrade_verify_image            | 364 |
| version                         |     |
| version                         | 365 |

### web

| web_ui_get_settings    | 366 |
|------------------------|-----|
| web_ui_modify_settings | 367 |
| who                    |     |
| who am i               | 760 |

# qq ad\_cancel

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

## Description

Cancel current AD join/leave operation and clear errors

### Usage

qq ad\_cancel [-h]

# qq ad\_distinguished\_name\_to\_account

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

#### Description

Get all account info for a distinguished name

#### Usage

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

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

# qq ad\_expand\_groups

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

#### Description

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

#### Usage

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

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

# qq ad\_get\_advanced\_settings

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

#### Description

Get advanced Active Directory settings

#### Usage

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

# qq ad\_gid\_to\_sids

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

## Description

Get SIDs from GID

#### Usage

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

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

# qq ad\_join

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

### Description

Join an Active Directory Domain

#### Usage

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

| Flag Name                                   | Required | Description  |
|---|----------|--|
| -d  | Yes      | Fully-qualified name of Active Directory Domain  |
| -u  | Yes      | Domain user to perform the operation, e.g., Administrator  |
| - p   | No       | Domain password (insecure, visible via ps)   |
| domain-<br>netbios                          | No       | NetBIOS name of the domain. By default, the first part of the domain name is used.   |
| -0  | No       | Organizational Unit to join to   |
| disable-<br>search-<br>trusted-do-<br>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-<br>posix-at-<br>tributes            | No       | Use AD POSIX attributes.   |
| base-dn                                     | No       | When using LDAP POSIX extensions, query using this base DN   |

# qq ad\_leave

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

### Description

Leave an Active Directory Domain

### Usage

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

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

# qq ad\_list

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

## Description

Get Active Directory configuration and connection status

### Usage

qq ad\_list [-h]

## qq ad\_name\_to\_accounts

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

### Description

Get all account info for a sAMAccountName

#### Usage

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

| 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]
```

| Flag Name                                   | Required | Description  |
|---|----------|--|
| enable-<br>search-<br>trusted-do-<br>mains  | No       | Allows the cluster to search trusted domains for user information.   |
| disable-<br>search-<br>trusted-do-<br>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-<br>ad-posix-<br>attributes          | No       | Use AD POSIX attributes.   |
| disable-<br>ad-posix-<br>attributes         | No       | Do not use AD POSIX attributes.  |
| base-dn                                     | No       | When using AD POSIX extensions, query using this base DN   |

# qq ad\_set\_advanced\_settings

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

#### Description

Modify advanced Active Directory settings

#### Usage

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

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

# qq ad\_sid\_to\_account

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

### Description

Get all account info for a SID

#### Usage

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

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

# qq ad\_sid\_to\_gid

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

## Description

Get GID from SID

#### Usage

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

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

# qq ad\_sid\_to\_uid

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

## Description

Get UID from SID

#### Usage

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

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

# qq ad\_sid\_to\_username

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

### Description

Get AD username from SID

#### Usage

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

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

# qq ad\_uid\_to\_sids

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

## Description

Get SIDs from UID

#### Usage

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

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

# qq ad\_username\_to\_sids

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

### Description

Get SIDs from an AD username

#### Usage

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

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

## qq add\_nodes

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

#### Description

Add unconfigured nodes to a Qumulo cluster

#### Usage

```
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]
```

| Flag Name                        | Required | Description  |
|----------------------------------|----------|--|
| node-<br>uuids                   | No       | The UUIDs of the unconfigured nodes to add to the cluster. The system adds nodes to the cluster in the same order that you list them after this flag.  |
| node-ips                         | No       | The IP addresses of the unconfigured nodes to add to the cluster. The system adds nodes to the cluster in the same order that you list them after this flag.                                 |
| all-uncon-<br>figured            | No       | Add all network-connected, unconfigured nodes to the cluster. This flag does not allow specifying the order of the nodes and does not apply to cloud clusters.                               |
| target-<br>stripe-con-<br>fig    | No       | The stripe configuration to use  |
| target-<br>max-node-<br>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]
```

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

## qq audit\_set\_syslog\_config

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

#### Description

Change audit syslog server configuration

#### Usage

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

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

# qq auth\_add\_group

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

#### Description

Add a new group

#### Usage

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

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

# qq auth\_add\_user

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

#### Description

Add a new user

#### Usage

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

## qq auth\_assign\_role

This section explains how to use the 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
```

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

### Positional Options

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

## qq auth\_create\_role

This section explains how to use the qq auth\_create\_role command. For more information, see:

- Managing Role-Based Access Control (RBAC) for Users and Groups in Qumulo Core in the 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 use the qq auth\_list\_privileges and qq auth\_create\_role commands.

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

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

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

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

## Description

Create a custom role.

## Usage

```
qq auth_create_role [-h] -r ROLE [-d DESCRIPTION] [-p PRIVILEGES_FILE]
```

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

# qq auth\_delete\_access\_token

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

#### Description

Delete the specified access token

#### Usage

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

### **Positional Options**

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

# qq auth\_delete\_group

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

#### Description

Delete a group

#### Usage

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

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

# qq auth\_delete\_role

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

### Description

Delete a custom role.

#### Usage

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

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

# qq auth\_delete\_user

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

#### Description

Delete a user

#### Usage

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

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

# qq auth\_expand\_identity

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

#### Description

Find equivalent identities and full group membership.

#### Usage

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

| Flag<br>Name    | Required | Description  |  |
|-----------------|----------|--|--|
| <br>auth-<br>id | No       | The canonical identifier used internally by QumuloFS.  |  |
| uid             | No       | An NFS UID   |  |
| gid             | No       | An NFS GID   |  |
| sid             | No       | An SMB SID   |  |
| <br>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-<br>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.   |  |
| <br>json        | No       | Print result as JSON object.   |  |

## Positional Options

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

# qq auth\_find\_identity

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

#### Description

Find all representations of an auth\_id.

#### Usage

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

| Flag<br>Name    | Required | Description  |  |
|-----------------|----------|--|--|
| <br>auth-<br>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-<br>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. |
|-------------|----|--|
| <br>json    | No | Print result as JSON object.   |

## Positional Options

| Option<br>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]
```

| Flag<br>Name | Required | Description   |
|--------------|----------|---|
| <br>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
```

| 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 use the qq auth\_list\_privileges and qq auth\_create\_role commands.

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

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

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

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

#### Description

List all privileges or privileges associated with a role.

## Usage

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

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

# qq auth\_list\_role

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

### Description

List a role.

#### Usage

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

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

# qq auth\_list\_roles

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

## Description

List all of the roles.

#### Usage

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

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

# qq auth\_list\_user

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

### Description

List a user

### Usage

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

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

# qq auth\_list\_users

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

## Description

List all users

### Usage

qq auth\_list\_users [-h]

# qq auth\_mod\_group

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

#### Description

Modify a group

#### Usage

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

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

# qq auth\_mod\_user

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

#### Description

Modify a user

#### Usage

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

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

# qq auth\_modify\_access\_token

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

#### Description

Modify the specified access token

#### Usage

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

### Flags

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

### Positional Options

| Option Nar | ne 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 PRIVILEGE
E [PRIVILEGE ...]]
```

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

| -R | No | Privilege to remove from this role (may be repeated) |
|----|----|--|
|----|----|--|

# qq auth\_set\_password

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

### Description

Set a user's password

#### Usage

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

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

# qq auth\_set\_user\_defined\_mappings

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

#### Description

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

#### Usage

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

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

### qq auth\_unassign\_role

This section explains how to use the qq auth\_unassign\_role command. For more information, see:

- Managing Role-Based Access Control (RBAC) for Users and Groups in Qumulo Core in the 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
```

| Flag<br>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

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

### qq capacity\_history\_get

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

#### Description

Get capacity history data.

#### Usage

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

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

### qq change\_password

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

#### Description

Change your password

#### Usage

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

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

### qq checksumming\_get\_status

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

#### Description

Get the checksumming status of the cluster.

#### Usage

qq checksumming\_get\_status [-h]

# qq cluster\_conf

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

### Description

Get the cluster config

#### Usage

qq cluster\_conf [-h]

### qq cluster\_create

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

#### **A** Important

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

#### Description

Creates a Qumulo Cluster

#### Usage

```
qq cluster_create [-h] --cluster-name CLUSTER_NAME [--admin-password ADMIN_PASSWOR
D] [--blocks-per-stripe BLOCKS_PER_STRIPE] [--max-drive-failures MAX_DRIVE_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)
```

| Flag Name Requ     |     | 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  | EC2 Instance ID of node receiving this request. AWS only. |
| node-uuids         | No  | Cluster node UUIDs  |

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

### qq cluster\_slot\_set\_config

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

#### Description

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

#### Usage

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

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

# qq cluster\_slots

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

### Description

Get the cluster disk slots status

#### Usage

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

| Flag Name | Required | Description |
|-----------|----------|-------------|
| slot      | No       | Slot ID     |

### qq current\_activity\_get

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

#### Description

Get the current sampled IOP and throughput rates

#### Usage

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

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

### qq dns\_clear\_cache

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

#### Description

Clear the local DNS cache

#### Usage

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

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

| Flag Name | Required | Description          |
|-----------|----------|----------------------|
| hosts     | Yes      | Hostnames to resolve |

# qq dns\_resolve\_ips

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

#### Description

Resolve IP addresses to hostnames

#### Usage

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

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

### qq dns\_set\_lookup\_overrides

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

#### Description

Replace the configured set of DNS lookup overrides.

#### Usage

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

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

### qq encryption\_get\_key\_store

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

#### Description

Get the active at-rest encryption configuration.

#### Usage

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

### qq encryption\_get\_status

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

#### Description

Get the status of at-rest encryption.

#### Usage

qq encryption\_get\_status [-h]

### qq encryption\_set\_key\_store

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

#### Description

Set the active at-rest encryption configuration.

#### Usage

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

### qq floating\_ip\_allocation

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

#### Description

Get cluster-wide floating IP allocation

#### Usage

qq floating\_ip\_allocation [-h]

### qq fs\_acl\_explain\_chmod

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

#### Description

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

#### Usage

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

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

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

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

#### Description

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

#### Usage

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

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

### qq fs\_acl\_explain\_rights

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

#### Description

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

#### Usage

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

| Flag<br>Name  | Required | Description   |
|---------------|----------|---|
| <br>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-<br>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.  |
| <br>json      | No       | Print JSON representation of rights explanation.  |

### qq fs\_copy

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

#### Description

Server-side copy a file.

#### Usage

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

#### Flags

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

### **Positional Options**

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

### qq fs\_create\_dir

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

#### Description

Create a new directory

#### Usage

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

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

# qq fs\_create\_file

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

#### Description

Create a new file

#### Usage

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

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

### qq fs\_create\_link

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

#### Description

Create a new link

#### Usage

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

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

### qq fs\_create\_symlink

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

#### Description

Create a new symbolic link

#### Usage

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

| Flag<br>Name         | Required | Description   |
|----------------------|----------|---|
| <br>path             | No       | Parent directory path   |
| id                   | No       | Parent directory ID   |
| tar-<br>get          | Yes      | Link target (relative path recommended)   |
| tar-<br>get-<br>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. |
| <br>name             | Yes      | New symlink name  |

### qq fs\_create\_unix\_file

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

#### Description

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

#### Usage

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

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

# qq fs\_delete

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

#### Description

Delete a file system object

#### Usage

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

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

### qq fs\_delete\_user\_metadata

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

#### Description

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

#### Usage

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

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

| 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}]
```

| Flag<br>Name   | Required | Description   |
|----------------|----------|---|
| <br>path       | No       | Query root path   |
| id             | No       | Query root ID   |
| sam-<br>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]
```

| 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

| 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-<br>indexed | No       | Set NOT_CONTENT_INDEXED to a boolean-like value (e.g. true, false, yes, no, 1, 0). |
| read-only               | No       | Set READ_ONLY to a boolean-like value (e.g. true, false, yes, no, 1, 0).           |
| system                  | No       | Set SYSTEM to a boolean-like value (e.g. true, false, yes, no, 1, 0).              |
| temporary               | No       | Set TEMPORARY to a boolean-like value (e.g. true, false, yes, no, 1, 0).           |
| offline                 | No       | Set OFFLINE to a boolean-like value (e.g. true, false, yes, no, 1, 0).             |

# qq fs\_get\_acl

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

## Description

Get file ACL

## Usage

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

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

# qq fs\_get\_atime\_settings

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

## Description

Get access time (atime) settings.

### Usage

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

# qq fs\_get\_notify\_settings

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

## Description

Get FS notify settings.

## Usage

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

# qq fs\_get\_permissions\_settings

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

## Description

Get permissions settings

## Usage

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

# qq fs\_get\_stats

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

## Description

Get file system statistics

## Usage

qq fs\_get\_stats [-h]

## qq fs\_get\_user\_metadata

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

## Description

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

### Usage

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

| Flag<br>Name  | Required | Description  |
|---------------|----------|--|
| path          | No       | File path  |
| id            | No       | File ID  |
| 53            | No       | In Qumulo Core, there are two types of user metadata, generic and S3. By default, qq CLI commands manipulate generic metadata. When you use thes3 flag, Qumulo Core makes user metadata visible to the S3 protocol as object metadata. |
| key           | Yes      | Metadata key   |
| snap-<br>shot | No       | Snapshot ID to read user metadata from   |
| hex           | No       | Print binary values as hex   |
| <br>base64    | No       | Print binary values as base64  |

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

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

## Description

List waiting lock requests for a particular client machine

### Usage

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

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

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

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

## Description

List waiting lock requests for a particular file

### Usage

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

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

## qq fs\_list\_locks

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

## Description

List file locks held by clients.

### Usage

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

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

## qq fs\_list\_named\_streams

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

## Description

List all named streams on file or directory

## Usage

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

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

## qq fs\_list\_user\_metadata

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

## Description

Retrieve user metadata of the specified type for a file

### Usage

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

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

#### Note

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

### For example:

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

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

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

### To Modify an Existing ACL

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

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

For example:

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

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

### To Remove an Existing ACL or Its Elements

Run the qq fs modify acl command and use the --path flag to specify the path for the ACL.

• To remove a single trustee from an ACL, for the <a href="remove\_entry">remove\_entry</a> subcommand use the <a href="trustee">---</a> 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 use the qq fs\_walk\_tree and qq fs\_modify\_acl commands.

#### O Note

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

- 1. Ensure that the jq utility 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 jq. 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 use the qq fs walk tree and qq fs modify acl commands.

- 1. Ensure that the jq utility 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 <a href="qq fs\_walk\_tree">qq fs\_walk\_tree</a> command and use the <a href="--path">--path</a> flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to <a href="jq">jq</a>. To modify the ACL for each path, pipe the command to <a href="xargs">xargs</a> which in turn runs the <a href="qq fs\_set\_acl">qq fs\_set\_acl</a> 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 use 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 jq. To modify the ACL for each path, pipe the command to xargs which in turn runs the qq fs\_set\_acl command on each path.

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

## Description

Modify file ACL

## Usage

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

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

## qq fs\_notify

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

## Description

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

### Usage

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

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

## qq fs\_punch\_hole

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

## Description

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

## Usage

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

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

## qq fs\_read

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

## Description

Read an object

## Usage

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

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

## qq fs\_read\_dir

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

## Examples

To List the Contents of a Directory on a Qumulo Cluster

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

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

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

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

## Description

Read directory

## Usage

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

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

| 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 whenrecursive is set      |
| order-by    | No       | Specify field used for top N selection and sorting |
| snapshot    | No       | Snapshot ID to read from                           |

## qq fs\_release\_nlm\_lock

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

## Description

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

## Usage

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

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

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

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

## Description

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

## Usage

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

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

## qq fs\_remove\_stream

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

## Description

Remove a stream from file or directory

## Usage

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

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

# qq fs\_rename

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

## Description

Rename a file system object

## Usage

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

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

## qq fs\_resolve\_paths

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

## Description

Resolve file IDs to paths

## Usage

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

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

## qq fs\_security\_add\_key

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

## Description

Add a key to the file system key-store.

### Usage

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

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

# qq fs\_security\_delete\_key

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

## Description

Delete a key from the file system key store.

## Usage

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

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

## qq fs\_security\_get\_key

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

## Description

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

## Usage

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

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

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

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

## Description

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

### Usage

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

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

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

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

### Description

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

## Usage

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

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

# qq fs\_security\_list\_keys

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

## Description

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

## Usage

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

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

## qq fs\_security\_modify\_key

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

### Description

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

### Usage

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

| Flag<br>Name | Required | Description  |
|--------------|----------|--|
| -k           | Yes      | The identifier or name of the key to modify.   |
| new-<br>name | No       | The new name for the specified key.  |
| com-<br>ment | No       | The comment for the specified key.   |
| en-<br>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-<br>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]
```

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

# qq fs\_set\_acl

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

### Description

Set file ACL

### Usage

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

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

### qq fs\_set\_atime\_settings

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

### Description

Set access time (atime) settings.

### Usage

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

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

### qq fs\_set\_notify\_settings

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

### Description

Set FS notify settings

### Usage

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

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

### qq fs\_set\_permissions\_settings

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

### Description

Set permissions settings

#### Usage

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

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

### qq fs\_set\_user\_metadata

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

### Description

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

#### Usage

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

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

#### O Note

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

- 1. Ensure that the jq utility 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 jq. 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 use the qq fs walk tree and qq fs modify acl commands.

- 1. Ensure that the jq utility 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 <a href="qq fs\_walk\_tree">qq fs\_walk\_tree</a> command and use the <a href="--path">--path</a> flag to specify the path for the ACL. To extract the path for each item into an array, pipe the command to <a href="jq">jq</a>. To modify the ACL for each path, pipe the command to <a href="xargs">xargs</a> which in turn runs the <a href="qq fs set acl">qq fs set acl</a> 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 use 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 jq. 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]
```

| Flag Name | Required | Description    |
|-----------|----------|----------------|
| path      | No       | Tree root path |

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

### qq fs\_write

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

### Examples

To Write a File to a Directory on a Qumulo Cluster

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

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

The following is example output.

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

### Description

Write data to an object

### Usage

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

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

| Flag Name | Required | Description   |
|-----------|----------|---------------|
| force     | No       | Do not prompt |

# qq help

This section explains how to use the qq help command.

### Description

QQ documentation

### Usage

qq help [-h]

# qq identity\_attributes\_get

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

### Description

Get attributes related to the given identity.

### Usage

qq identity\_attributes\_get [-h] identifier

| Option<br>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. |

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

# qq install\_vpn\_keys

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

### Description

Install VPN keys.

### Usage

qq install\_vpn\_keys [-h] directory

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

# qq kerberos\_delete\_keytab

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

### Description

Delete the Kerberos keytab

### Usage

qq kerberos\_delete\_keytab [-h]

# qq kerberos\_get\_keytab

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

### Description

Get the Kerberos keytab

### Usage

qq kerberos\_get\_keytab [-h]

# qq kerberos\_get\_settings

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

### Description

Get the Kerberos settings

### Usage

qq kerberos\_get\_settings [-h]

### qq kerberos\_modify\_settings

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

### Description

Modify the Kerberos settings

### Usage

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

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

# qq kerberos\_set\_keytab

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

### Description

Set the Kerberos keytab

### Usage

qq kerberos\_set\_keytab [-h] -k KEYTAB\_FILE

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

# qq ldap\_get\_settings

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

### Description

Get settings for LDAP interaction

### Usage

qq ldap\_get\_settings [-h]

# qq ldap\_get\_status

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

### Description

Get LDAP client connection states

### Usage

qq ldap\_get\_status [-h]

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

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

### Description

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

#### Usage

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

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

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

### Description

Get the uidNumbers from a login name using the LDAP server

#### Usage

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

### qq ldap\_set\_settings

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

### Description

Set settings for LDAP interaction

#### Usage

```
qq ldap_set_settings [-h] --use-ldap {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-attribute CUSTOM_UID_NUMBER_ATTRIBUTE]
        [--custom-gid-number-attribute CUSTOM_GID_NUMBER_ATTRIBUTE]
```

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

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

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

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

### Description

Get login name from uidNumber using LDAP server

### Usage

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

### qq ldap\_update\_settings

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

### Description

Update settings for LDAP interaction

#### Usage

```
qq ldap_update_settings [-h] [--use-ldap {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-attribute CUSTOM_UID_NUMBER_ATTRIBUTE]
        [--custom-gid-number-attribute CUSTOM_GID_NUMBER_ATTRIBUTE]
```

| Flag Name                          | Required | Description  |
|------------------------------------|----------|--|
| use-ldap                           | No       | Enable or disable the use of standalone LDAP.  |
| bind-uri                           | No       | LDAP URI used to bind. Example: Idap://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-<br>ber-attribute | No       | The attribute on a group object which contains references to the members in that group.          |

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

| 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]
```

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

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

# qq multitenancy\_delete\_tenant

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

## Description

Delete a tenant

## Usage

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

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

# qq multitenancy\_get\_tenant

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

## Description

Get a tenant

### Usage

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

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

# qq multitenancy\_list\_tenants

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

## Description

List all tenants

## Usage

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

| Flag Name | Required | Description           |
|-----------|----------|-----------------------|
| - j       | No       | Output in JSON format |

## qq multitenancy\_modify\_tenant

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

## Description

Modify a tenant

#### Usage

```
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 ...]]]
```

| 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-<br>web-ui    | No       | Web UI is accessible from this tenant. If neitherenable-web-ui nordisable-web-ui is specified, the existing setting will be preserved.          |
| disable-<br>web-ui   | No       | Web UI is not accessible from this tenant. If neitherenable-web-ui nordisable-web-ui is specified, the existing setting will be preserved.      |
| enable-<br>rest-api  | No       | REST API is accessible from this tenant. If neitherenable-rest-api nordisable-rest-api is specified, the existing setting will be preserved.    |
| disable-<br>rest-api | No       | REST API is not accessible from this tenant. If neitherenable-restapi nordisable-rest-api is specified, the existing setting will be preserved. |
| enable-<br>ssh       | No       | SSH is accessible from this tenant. If neitherenable-ssh nordis-<br>able-ssh is specified, the existing setting will be preserved.              |

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

# qq multitenancy\_nfs\_delete\_settings

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

## Description

Delete NFS settings for a tenant

### Usage

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

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

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

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

## Description

Retrieve global default NFS settings

#### Usage

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

## qq multitenancy\_nfs\_get\_settings

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

## Description

Retrieve NFS settings for a tenant

#### Usage

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

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

# qq multitenancy\_nfs\_list\_settings

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

## Description

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

### Usage

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

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

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

### Description

Modify global default NFS settings

#### Usage

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

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

## qq 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]
```

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

# qq multitenancy\_smb\_delete\_settings

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

## Description

Delete SMB settings for a tenant

#### Usage

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

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

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

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

## Description

Retrieve global default SMB settings

#### Usage

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

## qq multitenancy\_smb\_get\_settings

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

## Description

Retrieve SMB settings for a tenant

#### Usage

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

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

# qq multitenancy\_smb\_list\_settings

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

## Description

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

### Usage

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

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

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

#### Description

Modify global default SMB settings

#### Usage

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

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

| 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-<br>shares-from-<br>unauthorized-<br>hosts    | No       | Configure share listing to omit shares to which the requesting host isn't authorized to connect.   |
| hide- No<br>shares-from-<br>unauthorized-<br>users |          | 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-<br>directory-<br>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-<br>traverse-<br>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- No required             |    | 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]
```

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

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

## qq network\_delete\_network

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

## Description

Delete network configuration

## Usage

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

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

# qq network\_get\_interface

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

## Description

Get configuration for the specified interface

## Usage

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

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

## qq network\_get\_network

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

## Description

Get configuration for the specified network

## Usage

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

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

## qq network\_list\_connections

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

## Examples

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

#### To View Client Connections in JSON Format

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

The following is example output.

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

#### To View the Client Connection Counts

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

#### A Note

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

The following is example output.

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

## Description

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

## Usage

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

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

# qq network\_list\_interfaces

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

## Description

List configurations for interfaces on the cluster

## Usage

qq network\_list\_interfaces [-h]

# qq network\_list\_networks

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

## Description

List network configurations

## Usage

qq network\_list\_networks [-h]

## qq network\_mod\_interface

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

## Description

Modify interface configuration

#### Usage

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

| Flag Name                | Required | Description  |
|--------------------------|----------|--|
| interface-id             | No       | The unique ID of the interface   |
| default-<br>gateway      | No       | The default IPv4 gateway address   |
| default-<br>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-range> ...]]
      [--clear-dns-servers]
      [--dns-search-domains <search-domain> [<search-domain> ...]] [--clear-dns-search-domains] [--mtu MTU] [--vlan-id VLAN_ID]
      [--tenant-id TENANT_ID | --clear-tenant-id]
```

| Flag<br>Name                | Required | Description  |
|-----------------------------|----------|--|
| net-<br>work-id             | Yes      | The unique ID of the network on the interface  |
| name                        | No       | Network name   |
| as-<br>signed-<br>by        | No       | How to assign IP address, either DHCP or STATIC  |
| net-<br>mask                | No       | (if STATIC) IPv4 or IPv6 Netmask or Subnet CIDR eg. 255.255.255.0 or 10.1.1.0/24   |
| ip-<br>ranges               | No       | (if STATIC) List of persistent IP ranges to replace the current ranges.<br>Can be single addresses or ranges, comma separated. eg. 10.1.1.20-21 or 10.1.1.20,10.1.1.21 |
| float-<br>ing-ip-<br>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-<br>floating-<br>ip-<br>ranges | No | (if STATIC) Clear the floating IP address ranges  |
|--------------------------------------|----|---|
| dns-<br>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-<br>dns-<br>servers            | No | Clear the DNS servers   |
| dns-<br>search-<br>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-<br>dns-<br>search-<br>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-<br>id                          | No | (if STATIC) User assigned VLAN tag for network configuration. 1-4094 are valid VLAN IDs and 0 is used for untagged networks.  |
| ten-<br>ant-id                       | No | The tenant that the network is assigned to. If only one tenant exists, this will default to that tenant.  |
| clear-<br>tenant-<br>id              | No | Clear the tenant from the network, making the network unassigned  |

# qq network\_poll

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

## Description

Poll network status

## Usage

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

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

## qq nfs\_add\_export

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

## Description

Add a new NFS export

### Usage

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

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

| restric-<br>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": "" }! fuser_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" : [ "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_UID", "id_value" : "501" } } ] } |
|-------------------------------------|----|---|
| create-fs-<br>path                  | No | Creates the specified file system path if it does not exist   |
| fields-to-<br>present-<br>as-32-bit | No | Fields that should be forced to fit in 32 bits for this export, to support legacy clients and applications. FILE_IDS will hash file IDs (inode numbers), which can be observed by "stat", and is also necessary for some deprecated linux system calls (e.g. to list a directory) to work. FS_SIZE saturates the available, used, and total capacity reported to tools like "df" to 4GiB. FILE_SIZES saturates the reported size of individual files to 4GiB, and should be used with caution as it could cause application misbehavior in the handling of larger files. NONE explicitly specifies no 32 bit mapping.   |

## qq nfs\_delete\_export

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

### Description

Delete an export

### Usage

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

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

## qq nfs\_get\_export

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

### Description

Get an export

### Usage

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

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

# qq nfs\_get\_settings

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

### Description

Retrieve current NFS server configuration.

### Usage

qq nfs\_get\_settings [-h]

# qq nfs\_list\_exports

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

### Description

List all NFS exports

### Usage

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

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

### qq nfs\_mod\_export

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

### Description

Modify an export

#### Usage

```
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 ...]]
```

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

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

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

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

### Description

Modify the access hosts are granted to an export

#### Usage

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

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

# qq nfs\_modify\_settings

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

### Description

Modify current NFS server configuration.

### Usage

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

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

# qq node\_chassis\_status\_get

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

### Description

Get the status of node chassis

### Usage

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

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

# qq node\_state\_get

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

### Description

Get the operational state of the node

### Usage

qq node\_state\_get [-h]

### qq nodes\_list

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

### Examples

To List Information about Nodes in Your Cluster

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

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

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

### Description

List nodes

### Usage

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

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

# qq protection\_status\_get

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

### Description

Get cluster protection status

### Usage

qq protection\_status\_get [-h]

### qq quota\_create\_quota

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

### Description

Create a directory quota

### Usage

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

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

# qq quota\_delete\_quota

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

### Description

Delete a directory quota

### Usage

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

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

## qq quota\_get\_quota

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

### Description

Get a directory quota

### Usage

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

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

# qq quota\_list\_quotas

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

### Description

List all directory quotas

### Usage

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

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

## qq quota\_update\_quota

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

### Description

Update a directory quota

### Usage

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

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

### qq raw

This section explains how to use the qq raw command.

### Description

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

### Usage

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

### Flags

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

### **Positional Options**

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

# qq reboot\_pause

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

### Description

Pause a cluster-wide reboot

### Usage

qq reboot\_pause [-h]

# qq reboot\_resume

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

### Description

Resume a cluster-wide reboot

### Usage

qq reboot\_resume [-h]

## qq reboot\_start

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

### Description

Start a cluster-wide reboot

### Usage

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

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

# qq reboot\_status

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

### Description

Retrieve status of reboot manager

### Usage

qq reboot\_status [-h]

# qq replace\_nodes

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

### Description

Replace configured nodes by adding nodes to a Qumulo cluster.

### Usage

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

## qq replication\_abort\_object\_replication

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

### Description

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

#### Usage

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

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

## qq replication\_abort\_replication

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

### Description

Abort ongoing replication work for the specified source replication relationship.

### Usage

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

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

## qq replication\_add\_blackout\_window

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

### Description

Add a blackout window to the specified source replication relationship.

#### Usage

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

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

## qq replication\_authorize

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

### Description

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

### Usage

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

| Flag<br>Name                            | Required | Description  |
|---|----------|--|
| id                                      | Yes      | Unique identifier of the target replication relationship   |
| allow-<br>non-emp-<br>ty-direc-<br>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-<br>fs-path-<br>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]
```

| Flag Name                     | Required | Description   |
|-------------------------------|----------|---|
| local-di-<br>rectory-id       | No       | File ID of the qumulo directory   |
| local-di-<br>rectory-<br>path | No       | Path of the qumulo directory  |
| direc-<br>tion                | Yes      | Whether data is to be copied to, or from, the object store.                               |
| object-<br>store-ad-<br>dress | No       | S3-compatible server address. If omitted, Amazon S3 address s3amazonaws.com will be used. |

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

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

## qq replication\_delete\_blackout\_windows

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

### Description

Delete blackout windows of the specified source replication relationship.

#### Usage

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

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

## qq replication\_delete\_object\_relationship

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

### Description

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

#### Usage

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

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

## qq replication\_delete\_source\_relationship

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

### Description

Delete the specified source replication relationship.

### Usage

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

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

## qq replication\_delete\_target\_relationship

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

### Description

Delete the specified target replication relationship.

#### Usage

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

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

# qq replication\_get\_object\_relationship

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

#### Description

Get the configuration of the specified object replication relationship.

#### Usage

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

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

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

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

#### Description

Get current status of the specified object replication relationship.

#### Usage

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

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

# qq replication\_get\_source\_relationship

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

#### Description

Get information about the specified source replication relationship.

#### Usage

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

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

## qq replication\_get\_source\_relationship\_status

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

#### Description

Get current status of the specified source replication relationship.

#### Usage

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

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

## qq replication\_get\_target\_relationship\_status

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

#### Description

Get current target of the specified source replication relationship.

#### Usage

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

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

## qq replication\_link\_snapshot\_policy

This section explains how to use the qq replication\_link\_snapshot\_policy command.

#### Description

Link a snapshot policy to a source replication relationship.

#### Usage

qq replication\_link\_snapshot\_policy [-h] --relationship-id RELATIONSHIP\_ID --snapsho
t-policy-id SNAPSHOT\_POLICY\_ID [-t TARGET\_EXPIRATION]

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

## qq replication\_list\_object\_relationship\_statuses

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

#### Description

List the statuses for all existing object replication relationships.

#### Usage

qq replication\_list\_object\_relationship\_statuses [-h]

# qq replication\_list\_object\_relationships

This section explains how to use the qq replication\_list\_object\_relationships command.

#### Description

List all the existing object replication relationships.

#### Usage

qq replication\_list\_object\_relationships [-h]

# qq replication\_list\_queued\_snapshots

This section explains how to use the qq replication\_list\_queued\_snapshots command.

#### Description

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

#### Usage

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

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

## qq replication\_list\_source\_relationship\_statuses

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

#### Description

List statuses for all existing source replication relationships.

#### Usage

qq replication\_list\_source\_relationship\_statuses [-h]

# qq replication\_list\_source\_relationships

This section explains how to use the qq replication\_list\_source\_relationships command.

#### Description

List existing source replication relationships.

#### Usage

qq replication\_list\_source\_relationships [-h]

## qq replication\_list\_target\_relationship\_statuses

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

#### Description

List statuses for all existing target replication relationships.

#### Usage

qq replication\_list\_target\_relationship\_statuses [-h]

# qq replication\_make\_target\_writable

This section explains how to use the qq replication\_make\_target\_writable command.

#### Description

Revert target directory to the latest recovery point.

#### Usage

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

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

## qq replication\_modify\_source\_relationship

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

#### Description

Modify an existing source replication relationship.

#### Usage

```
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,false}]
e}] [--map-local-ids-to-nfs-ids {true,false}]
```

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

### qq replication\_reconnect\_target\_relationship

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

#### Description

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

#### Usage

qq replication\_reconnect\_target\_relationship [-h] --id ID [--force]

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

## qq replication\_release\_queued\_snapshot

This section explains how to use the qq replication\_release\_queued\_snapshot command.

#### Description

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

#### Usage

 $\label{lem:continuous} \begin{tabular}{ll} $\tt qq$ replication\_release\_queued\_snapshot [-h] --relationship-id RELATIONSHIP\_ID --snap shot-id SNAPSHOT\_ID \\ \end{tabular}$ 

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

# qq replication\_replicate

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

#### Description

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

#### Usage

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

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

## qq replication\_reverse\_target\_relationship

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

#### Description

Reverse source and target for a replication relationship.

#### Usage

qq replication\_reverse\_target\_relationship [-h] --id ID --source-address SOURCE\_ADDR
ESS [--source-port SOURCE\_PORT]

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

## qq replication\_set\_snapshot\_policy\_replication\_mod

This section explains how to use the qq replication\_set\_snapshot\_policy\_replication\_mode command.

#### Description

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

#### Usage

qq replication\_set\_snapshot\_policy\_replication\_mode [-h] --id ID --mode {REPLICATIO N SNAPSHOT POLICY,REPLICATION SNAPSHOT POLICY WITH CONTINUOUS}

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

## qq replication\_set\_target\_relationship\_lock

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

#### Description

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

#### Usage

qq replication\_set\_target\_relationship\_lock [-h] --relationship-id RELATIONSHIP\_ID
(-k LOCK KEY | --clear-lock-key)

| Flag Name            | Required | Description   |  |
|----------------------|----------|---|--|
| relation-<br>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-<br>lock-key   | No       | Disassociate the lock key from this target relationship   |  |

# qq replication\_start\_object\_relationship

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

#### Description

Start a new replication job for an existing object replication relationship

#### Usage

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

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

## qq replication\_unlink\_snapshot\_policy

This section explains how to use the qq replication\_unlink\_snapshot\_policy command.

#### Description

Unlink a snapshot policy from a source replication relationship.

#### Usage

 $\label{lem:continuous} $$qq$ replication\_unlink\_snapshot\_policy [-h] --relationship-id RELATIONSHIP\_ID --snapshot\_policy-id SNAPSHOT\_POLICY\_ID$ 

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

# qq restriper\_status

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

### Description

Get restriper status

#### Usage

qq restriper\_status [-h]

# qq rotate\_encryption\_keys

This section explains how to use the qq rotate\_encryption\_keys command.

#### Description

Rotate the at-rest encryption master keys.

#### Usage

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

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

#### Usage

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

| Flag Name | Required | Description                                   |
|-----------|----------|---|
| bucket    | Yes      | The bucket in which the upload was initiated. |
| upload-id | Yes      | The upload to abort.                          |

# qq s3\_add\_bucket

This section explains how to use the qq s3\_add\_bucket command.

### Description

Create an S3 bucket

#### Usage

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

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

## qq s3\_bucket\_policy\_explain\_access

This section explains how to use the qq s3\_bucket\_policy\_explain\_access command. For more information, see:

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

#### Description

Details a users access as allowed by the bucket policy

#### Usage

qq s3\_bucket\_policy\_explain\_access [-h] --bucket BUCKET [--auth-id AUTH\_ID] [--anony
mous] [identifier]

#### Flags

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

### Positional Options

| Option<br>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       | Auth ID of the qumulo user |

### **Positional Options**

| Option<br>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\_delete\_access\_key

This section explains how to use the qq s3\_delete\_access\_key command.

#### Description

Delete an S3 access key

#### Usage

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

| Flag Name | Required | Description                            |
|-----------|----------|--|
| id        | Yes      | The ID of the access key to be deleted |

# qq s3\_delete\_bucket

This section explains how to use the qq s3\_delete\_bucket command.

#### Description

Delete an S3 bucket

#### Usage

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

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

## qq s3\_delete\_bucket\_policy

This section explains how to use the qq s3\_delete\_bucket\_policy command. For more information, see:

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

#### Examples

To Delete an Access Policy for an S3 Bucket

#### **▲** Important

This command removes any existing access policy restrictions.

Run the qq s3\_delete\_bucket\_policy command and use the --bucket flag to specify the name of your S3 bucket. For example:

qq s3\_delete\_bucket\_policy --bucket MyBucket

#### Description

Remove the access policy stored at **BUCKET**.

#### Usage

qq s3\_delete\_bucket\_policy [-h] --bucket BUCKET

| 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

Get details for an S3 bucket

#### Usage

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

| Flag Name | Required | Description                        |
|-----------|----------|------------------------------------|
| name      | Yes      | The name of the bucket to retrieve |

## qq s3\_get\_bucket\_policy

This section explains how to use the qq s3\_get\_bucket\_policy command. For more information, see:

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

#### Examples

To Retrieve an Access Policy for an S3 Bucket

Run the qq s3\_get\_bucket\_policy command, and use the --bucket flag to specify the name of your bucket. For example:

qq s3 get bucket policy --bucket MyBucket

#### Description

Retrieve entries of the access policy json stored at **BUCKET**.

#### Usage

qq s3\_get\_bucket\_policy [-h] [--bucket BUCKET] [--example]

| 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

Get S3 server settings

#### Usage

qq s3\_get\_settings [-h]

# qq s3\_list\_access\_keys

This section explains how to use the qq s3\_list\_access\_keys command.

#### Description

List S3 access keys

#### Usage

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

| 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]
```

| Flag Name | Required | Description                  |
|-----------|----------|------------------------------|
| json      | No       | Output JSON instead of table |

# qq s3\_list\_uploads

This section explains how to use the qq s3\_list\_uploads command.

## Description

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

## Usage

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

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

## qq s3\_modify\_bucket\_policy

This section explains how to use the qq s3\_modify\_bucket\_policy command. For more information, see:

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

### Examples

#### To Modify a Statement in an Access Policy for an S3 Bucket

Run the qq s3\_modify\_bucket\_policy command and use the --bucket flag to specify the name of the S3 bucket. For the modify\_statement subcommand:

- Use the --index flag to specify the index of the statement to modify.
- Use the --type flag to specify the statement type.
- Use the --sid flag to specify the security identifier.
- Use the --new-principals flag to specify a comma-separated list of principals (with which to replace the existing ones), enclosed in quotation marks (").
- Use the --new-actions flag to specify a comma-separated list of S3 API actions (with which to replace the existing ones), enclosed in quotation marks ( " ).

For example:

```
qq s3_modify_bucket_policy --bucket AnotherBucket \
    modify_statement --index 1 \
    --type Deny \
    --sid DenyGuest \
    --new-principals "Authenticated Users" \
    --new-actions "s3:PutBucketPolicy"
```

#### To Append a Statement to an Access Policy for an S3 Bucket

Run the qq s3\_modify\_bucket\_policy command and use the --bucket flag to specify the name of the S3 bucket. For the append\_statement subcommand:

- Use the --type flag to specify the statement type.
- Use the --sid flag to specify the security identifier.
- Use the --principals flag to specify a comma-separated list of principals, enclosed in quotation marks ( " ).

• Use the --actions flag to specify a comma-separated list of S3 API actions, enclosed in quotation marks ( " ).

For example:

```
qq s3_modify_bucket_policy --bucket MyBucket \
   append_statement --type Allow \
   --sid AllowGuest \
   --principals "local:guest,local:Mary" \
   --actions "s3:GetBucketPolicy,s3:AbortMultipartUpload"
```

#### To Delete a Statement from an Access Policy for an S3 Bucket

Run the qq s3\_modify\_bucket\_policy command and use the --bucket flag to specify the name of the S3 bucket. For the delete\_statement subcommand, use the --index flag to specify the index of the statement to delete. For example:

```
qq s3_modify_bucket_policy --bucket MyBucket \
  delete_statement --index 2
```

### Description

Modify the access policy for -bucket.

## Usage

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

| Flag Name             | Required | Description  |
|-----------------------|----------|--|
| bucket                | Yes      | The bucket whose policy will be modified.                                      |
| allow-remove-<br>self | No       | Allow the policy set to remove the ability for this user to change the policy. |

# qq s3\_modify\_settings

This section explains how to use the qq s3\_modify\_settings command.

## Description

Modify S3 server settings

### Usage

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

| Flag<br>Name   | Required | Description   |
|--|----------|---|
| dis-<br>able   | No       | Disable S3 server   |
| enable   | No       | Enable S3 server  |
| base-<br>path  | No       | The directory which will be the parent of all buckets created without an explicitly specified path.   |
| multi-<br>part-up-<br>load-ex-<br>piry-in-<br>terval | No       | If a multipart upload is not modified in this amount of time, it is considered stale and may be cleaned up automatically. The duration must be in the format where is a positive integer less than 100 and is one of [months, weeks, days, hours] (e.g. 5days). To disable automatic cleanup, specify 'never' for the duration. |
| secure   | No       | Configure the S3 server to only accept HTTPS connections  |
| inse-<br>cure  | No       | Configure the S3 server to only accept HTTP connections   |

## qq s3\_set\_bucket\_policy

This section explains how to use the qq s3\_set\_bucket\_policy command. For more information, see:

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

### Examples

To Configure an Access Policy for an S3 Bucket

Run the qq s3\_set\_bucket\_policy command, use the --bucket flag to specify the name of your bucket and the --file flag to specify the JSON file with the access policy. For example:

```
qq s3_set_bucket_policy --bucket MyBucket --file mypolicy.json
```

### Description

Upload the access policy json stored at -file to -bucket.

### Usage

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

| Flag Name              | Required | Description  |
|------------------------|----------|--|
| bucket                 | Yes      | The target bucket who's policy will be set.  |
| file                   | Yes      | The policy file to upload. Use s3_get_bucket_policyexample to get a policy template. |
| allow-re-<br>move-self | No       | Allow the policy set to remove the ability for this user to change the policy.       |

# qq saml\_get\_settings

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

## Description

Get cluster SAML configuration

## Usage

qq saml\_get\_settings [-h]

## qq saml\_modify\_settings

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

## Description

Modify cluster SAML configuration

### Usage

```
qq saml_modify_settings [-h] [--disable | --enable] [--idp-sso-url IDP_SSO_URL] [--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}]
```

| Flag Name                     | Required | Description   |
|-------------------------------|----------|---|
| disable                       | No       | Disable authentication via SAML   |
| enable                        | No       | Enable authentication via SAML  |
| idp-sso-<br>url               | No       | Sets the cluster's configured IDP SSO URL.  |
| idp-cer-<br>tificate          | No       | Sets the cluster's configured IDP public key with the given value in PEM format.  |
| idp-cer-<br>tificate-<br>file | No       | Sets the cluster's configured IDP public key from a PEM file.   |
| idp-enti-<br>ty-id            | No       | Sets the URI for the IDP this cluster trusts to authenticate users via SAML.  |
| cluster-<br>dns-name          | No       | Sets the cluster's configured DNS name (must be FQDN).  |
| require-<br>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 Qumulo Core Web UI, qq CLI, and REST API. This setting does not restrict access over file protocols such as SMB. |

# qq set\_cluster\_conf

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

## Description

Set the cluster config

## Usage

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

| 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]
```

| 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 [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]
```

| Flag Name     | Required | Description                                     |
|---------------|----------|---|
| tenant-<br>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-<br>tion                               | No  | Description of this share.   |
| access-<br>based-enu-<br>meration-en-<br>abled | No  | Enable Access-Based Enumeration for this share.  |
| create-<br>fs-path                             | No  | Creates the specified file system path if the path does not exist already.   |
| default-<br>file-create-<br>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-<br>directory-<br>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-<br>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-<br>cess                                 | No  | Grant no access.   |
| read-on-<br>ly                                 | No  | Grant everyone except guest read-only access.  |
| all-ac-<br>cess                                | No  | Grant everyone except guest full access.   |
| grant-<br>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-<br>read-write-<br>access | No | Grant read-write access to these trustees.  |
|---------------------------------|----|---|
| grant-<br>all-access            | No | Grant all access to these trustees.   |
| deny-ac-<br>cess                | No | Deny all access to these trustees.  |
| full-con-<br>trol-hosts         | No | The host addresses or subnet ranges for which access to to this share are not limited by network permissions. Access may still be limited by share and file permissions.  |
| read-on-<br>ly-hosts            | No | Address ranges which should be permitted read-only access at most.  |
| deny-<br>hosts                  | No | The host addresses or subnet ranges for which access to the specified share is denied, regardless of other permissions. Important: Because using this flag alone results in all hosts being denied, use the correctfull-control-hosts orread-only-hosts flags as necessary. |
| deny-all-<br>hosts              | No | Deny all access to this share. Important: To avoid configuration issues, do not apply this flag alongside any others.   |

# qq smb\_close\_file\_handle

This section explains how to use the qq smb\_close\_file\_handle command.

## Description

Force-close the specified SMB file handle

## Usage

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

| Flag<br>Name  | Required | Description  |
|---------------|----------|--|
| loca-<br>tion | Yes      | The location of the file handle to close as returned from smb_list_file_handles. |

# qq smb\_close\_sessions

This section explains how to use the qq smb\_close\_sessions command.

## Description

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

## Usage

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

| Flag<br>Name  | Required | Description   |
|---------------|----------|---|
| iden-<br>tity | No       | Close only the sessions that match the specified user's identity in one of the following forms: a name or a SID optionally qualified with a domain prefix (for example, "local:name", "S-1-1-0", "name", "world:Everyone", "ldap_user:name", "ad:name"), or an ID type (for example, "uid:1001", "auth_id:513", "SID:S-1-1-0"). |
| loca-<br>tion | 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]
```

| Flag<br>Name   | Required | Description   |
|----------------|----------|---|
| id             | No       | ID of share to delete.  |
| name           | No       | Name of share to delete.  |
| ten-<br>ant-id | No       | The ID of the tenant from which to delete the share. Use this flag only if you also use thename flag. |

# qq smb\_get\_settings

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

## Description

Get SMB settings

## Usage

qq smb\_get\_settings [-h]

# qq smb\_list\_file\_handles

This section explains how to use the qq smb\_list\_file\_handles command.

## Description

List SMB open file handles

## Usage

```
qq smb_list_file_handles [-h] [--page-size PAGE_SIZE] [--file-number FILE_NUMBER]
[-p] [--path PATH]
```

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

# qq smb\_list\_sessions

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

## Description

List SMB open sessions

## Usage

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

| Flag<br>Name  | Required | Description  |
|---------------|----------|--|
| page-<br>size | No       | Max sessions to return per request   |
| iden-<br>tity | No       | List only the sessions that match the specified user's identity in one of the following forms: a name or a SID optionally qualified with a domain prefix (for example, "local:name", "S-1-1-0", "name", "world:Everyone", "ldap_user:name", "ad:name"), or an ID type (for example, "uid:1001", "auth_id:513", "SID:S-1-1-0"). |

## qq smb\_list\_share

This section explains how to use the qq smb\_list\_share command. For more information, see:

- Using SMB Host Restrictions in Qumulo Core in the 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]
```

| Flag Name     | Required | Description  |
|---------------|----------|--|
| id            | No       | ID of share to list.   |
| name          | No       | Name of share to list.   |
| tenant-<br>id | No       | ID of the tenant to get the share from. Only used if using thename argument. |
| json          | No       | Print the raw JSON response.   |

# qq smb\_list\_shares

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

## Description

List all SMB shares

## Usage

```
qq smb_list_shares [-h] [--json] [--populate-trustee-names]
```

| Flag Name              | Required | Description                             |
|------------------------|----------|---|
| json                   | No       | Print JSON representation of shares.    |
| populate-trustee-names | No       | Populate trustee names in the response. |

## qq smb\_mod\_share

This section explains how to use the qq smb\_mod\_share command.

## Examples

### **Modifying Host Restrictions**

For more information, see:

- Using SMB Host Restrictions in Qumulo Core in the 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

#### O 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/RANGE ...]]
ANGE ...]] [--deny-hosts IP/RANGE [IP/RANGE ...]] [--deny-all-hosts]
```

| Flag Name                                      | Required | Description  |
|--|----------|--|
| id   | No       | The ID of the share to modify.   |
| name   | No       | The name of the share to modify.                                       |
| tenant-<br>id                                  | No       | ID of the tenant the share is in. Only used if using thename argument. |
| new-name                                       | No       | Change SMB share name.   |
| new-ten-<br>ant-id                             | No       | Change the tenant that the share is in.                                |
| fs-path  | No       | Change file system path.   |
| descrip-<br>tion                               | No       | Change share description.  |
| access-<br>based-enu-<br>meration-en-<br>abled | No       | Enable Access-Based Enumeration for this share.                        |

| create-<br>fs-path                    | No | Creates the specified file system path if the path does not exist already.  |
|---------------------------------------|----|---|
| default-<br>file-create-<br>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-<br>directory-<br>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-<br>encryption                | No | Require all traffic for this share to be encrypted. If true, clients without encryption capabilities will not be able to connect.   |
| json                                  | No | Print the raw JSON response.  |
| full-con-<br>trol-hosts               | No | The host addresses or subnet ranges for which access to to this share are not limited by network permissions. Access may still be limited by share and file permissions.  |
| read-on-<br>ly-hosts                  | No | Address ranges which should be permitted read-only access at most.  |
| deny-<br>hosts                        | No | The host addresses or subnet ranges for which access to the specified share is denied, regardless of other permissions. Important: Because using this flag alone results in all hosts being denied, use the correctfull-control-hosts orread-only-hosts flags as necessary. |
| deny-all-<br>hosts                    | No | Deny all access to this share. Important: To avoid configuration issues, do not apply this flag alongside any others.   |

# qq smb\_mod\_share\_permissions

This section explains how to use the qq smb\_mod\_share\_permissions command.

## Description

Modify a share's permissions

### Usage

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

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

## qq smb\_modify\_settings

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

### Examples

### Hiding an SMB Share from Unauthorized Hosts

For more information, see:

- Using SMB Host Restrictions in Qumulo Core in the 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}]
```

| Flag Name                                       | Required | Description  |
|---|----------|--|
| -е  | No       | Server encryption mode to set  |
| -d  | No       | Specify a space-separated list of SMB dialects that clients are permitted to negotiate. To disable SMB, specify -d "". Available dialects: smb2_dialect_2_002, smb2_dialect_2_1, smb2_dialect_3_0, smb2_dialect_3_11. Alternatively, use -d ALL to allow all supported dialects. |
| hide-<br>shares-from-<br>unauthorized-<br>hosts | No       | Configure share listing to omit shares to which the requesting host isn't authorized to connect.   |
| hide-<br>shares-from-<br>unauthorized-<br>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-<br>directory-<br>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-<br>traverse-<br>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- No required             |    | If the user is not a guest, require all messages to be signed. This flag applies to all SMB shares.   |

# qq snapshot\_calculate\_used\_capacity

This section explains how to use the qq snapshot\_calculate\_used\_capacity command.

## Description

Get the space used by the snapshots specified.

### Usage

qq snapshot\_calculate\_used\_capacity [-h] [-i IDS]

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

# qq snapshot\_create\_policy

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

## Description

Create a new snapshot scheduling policy.

## Usage

qq snapshot\_create\_policy [-h] {hourly\_or\_less,daily,monthly} ...

## qq snapshot\_create\_snapshot

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

## Description

Create a new snapshot

## Usage

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

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

# qq snapshot\_delete\_policy

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

## Description

Delete a single scheduling policy

## Usage

qq snapshot\_delete\_policy [-h] -i ID

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

## qq snapshot\_delete\_snapshot

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

## Description

Delete a single snapshot

#### Usage

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

| Flag Name | Required | Description |
|-----------|----------|-------------|
| -i        | Yes      | Snapshot ID |

## qq snapshot\_diff

This section explains how to use the qq snapshot\_diff command.

## Description

List the changed files and directories between two snapshots.

#### Usage

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

## qq snapshot\_file\_diff

This section explains how to use the qq snapshot\_file\_diff command.

## Description

List changed byte ranges of a file between two snapshots.

#### Usage

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

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

## qq snapshot\_get\_capacity\_used\_per\_snapshot

This section explains how to use the qq snapshot\_get\_capacity\_used\_per\_snapshot command.

#### Description

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

#### Usage

qq snapshot\_get\_capacity\_used\_per\_snapshot [-h] [-i ID]

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

## qq snapshot\_get\_policy

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

## Description

Get a single policy

#### Usage

qq snapshot\_get\_policy [-h] -i ID

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

## qq snapshot\_get\_policy\_status

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

## Description

Get a single snapshot policy status

#### Usage

qq snapshot\_get\_policy\_status [-h] -i ID

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

## qq snapshot\_get\_snapshot

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

## Description

==SUPPRESS==

#### Usage

qq snapshot\_get\_snapshot [-h] -i ID

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

## qq snapshot\_get\_status

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

## Description

Get the information for a single snapshot.

#### Usage

qq snapshot\_get\_status [-h] -i ID

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

## qq snapshot\_get\_total\_used\_capacity

This section explains how to use the qq snapshot\_get\_total\_used\_capacity command.

## Description

Get the total space consumed by all snapshots.

#### Usage

qq snapshot\_get\_total\_used\_capacity [-h]

## qq snapshot\_get\_unlock\_challenge

This section explains how to use the qq snapshot\_get\_unlock\_challenge command.

## Description

Get a security challenge for unlocking a snapshot.

#### Usage

qq snapshot\_get\_unlock\_challenge [-h] -i ID

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

# qq snapshot\_list\_policies

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

## Description

List all policies

## Usage

qq snapshot\_list\_policies [-h]

## qq snapshot\_list\_policy\_statuses

This section explains how to use the qq snapshot\_list\_policy\_statuses command.

## Description

List all snapshot policy statuses

#### Usage

qq snapshot\_list\_policy\_statuses [-h]

# qq snapshot\_list\_snapshots

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

## Description

==SUPPRESS==

#### Usage

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

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

## qq snapshot\_list\_statuses

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

## Description

List the information for every snapshot.

#### Usage

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

| Flag<br>Name               | Required | Description  |
|----------------------------|----------|--|
| ex-<br>clude-in-<br>delete | No       | Exclude all snapshots in process of being deleted from the list. You can use this flag together with theexclude-locked oronly-locked flag. |
| only-<br>in-<br>delete     | No       | Display only snapshots in process of being deleted. You can use this flag together with theexclude-locked oronly-locked flag.              |
| ex-<br>clude-<br>locked    | No       | Exclude all locked snapshots from the list. You can use this flag together with theexclude-in-delete oronly-in-delete flag.                |
| only-<br>locked            | No       | List only locked snapshots. You can use this flag together with theex-clude-in-delete oronly-in-delete flag.                               |

# qq snapshot\_lock\_snapshot

This section explains how to use the qq snapshot\_lock\_snapshot command.

## Description

Lock a snapshot.

#### Usage

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

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

## qq snapshot\_modify\_policy

This section explains how to use the qq snapshot\_modify\_policy command.

#### Description

Modify an existing snapshot scheduling policy.

#### Usage

qq snapshot\_modify\_policy [-h] {modify\_non\_schedule\_fields,change\_to\_hourly\_or\_les s,change\_to\_daily,change\_to\_monthly} ...

## qq snapshot\_modify\_snapshot

This section explains how to use the qq snapshot\_modify\_snapshot command.

## Description

Modify an existing snapshot

## Usage

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

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

## qq snapshot\_unlock\_snapshot

This section explains how to use the qq snapshot\_unlock\_snapshot command.

## Description

Unlock a snapshot.

#### Usage

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

| Flag<br>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

| 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 Qumulo Core Web UI and REST servers

#### Usage

qq ssl\_modify\_certificate [-h] -c CERTIFICATE -k PRIVATE\_KEY

| Flag<br>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]
```

| Flag Name               | Required | Description  |
|-------------------------|----------|--|
| try-ranges              | No       | Specify ip range list to try (e.g. '1.1.1.10-12,10.20.5.0/24'              |
| try-netmask             | No       | Specify netmask to apply when usingtry-range option                        |
| try-floating-<br>ranges | No       | Specify floating ip range list to try (e.g. '1.1.1.10-12,10.20.5.0/<br>24' |

# qq time\_get

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

## Description

Get time configuration.

## Usage

qq time\_get [-h]

## qq time\_list\_timezones

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

## Description

List timezones supported by QC

## Usage

qq time\_list\_timezones [-h]

## qq time\_series\_get

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

## Description

Get specified time series data.

#### Usage

```
qq time_series_get [-h] [-b BEGIN_TIME] [--csv]
```

| Flag 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]
```

| 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] id
```

## Flags

| Flag<br>Name | Required | Description  |
|--------------|----------|--|
| <br>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          |
|-------------|----------------------|
| id          | 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]
```

| 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]

| Flag Name | Required | Description                              |
|-----------|----------|--|
| table     | No       | Print output as a table, instead of JSON |

## qq unconfigured\_upgrade\_config

This section explains how to use the qq unconfigured\_upgrade\_config command.

## Description

List current upgrade prepare config for an unconfigured node

#### Usage

qq unconfigured\_upgrade\_config [-h]

## qq unconfigured\_upgrade\_config\_set

This section explains how to use the qq unconfigured\_upgrade\_config\_set command.

#### Description

Upgrade on an unconfigured node with the FS path to an upgrade image

#### Usage

```
qq unconfigured_upgrade_config_set [-h] --path PATH [--target TARGET]
```

| Flag Name | Required | Description                 |  |
|-----------|----------|-----------------------------|--|
| path      | Yes      | FS path to upgrade image    |  |
| target    | No       | Target: idle, prepare, arm. |  |

## qq unconfigured\_upgrade\_status

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

## Description

List the current upgrade status for an unconfigured node

#### Usage

```
qq unconfigured_upgrade_status [-h] [--wait-until-prepared]
```

| Flag Name                | Required | Description   |
|--------------------------|----------|---|
| wait-until-pre-<br>pared | No       | Monitor the upgrade status until the PREPARING state is complete. |

## qq upgrade\_blocked

This section explains how to use the qq upgrade\_blocked command.

## Description

Get information on whether and for what reason an upgrade is blocked

## Usage

qq upgrade\_blocked [-h]

## qq upgrade\_cluster

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

#### Description

Run a cluster upgrade to the image specified by the provided path

#### Usage

```
qq upgrade_cluster [-h] [--path PATH] [--no-monitor] [--rolling] [--num-nodes-to-reb
oot NO_COMMAND_NUM_NODES_TO_REBOOT] {prepare,commit} ...
```

| Flag<br>Name                     | Required | Description   |
|----------------------------------|----------|---|
| path                             | No       | FS path to upgrade image  |
| no-<br>monitor                   | No       | Skip monitoring the upgrade   |
| num-<br>nodes-<br>to-re-<br>boot | No       | Using therolling flag lets you specify the number of nodes to reboot at a time. The number of nodes must be greater than 0 and less than or equal to the number of node failures that your cluster permits. By default, this value is the number of permitted node failures minus 1 (1 node minimum). |

## qq upgrade\_status

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

## Description

Get the status of the upgrade system

## Usage

```
qq upgrade_status [-h] [--raw]
```

| Flag Name | Required | Description  |
|-----------|----------|--|
| raw       | No       | Skip montoring an in-flight upgrade and just return the raw status |

## qq upgrade\_verify\_image

This section explains how to use the qq upgrade\_verify\_image command.

## Description

Verify an image path for upgrade

#### Usage

```
qq upgrade_verify_image [-h] --path PATH
```

| Flag Name | Required | Description              |
|-----------|----------|--------------------------|
| path      | Yes      | FS path to upgrade image |

## qq version

This section explains how to use the qq version command.

#### Examples

To Show the Version of Qumulo Core Running on Your Cluster

Run the qq version command.

The following is example output.

```
{
   "build_date": "2024-02-10T19:50:58Z",
   "build_id": "123456.7.8",
   "flavor": "release",
   "revision_id": "Qumulo Core 8.0.1"
}
```

## Description

Print version information

## Usage

```
qq version [-h]
```

# qq web\_ui\_get\_settings

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

## Description

Get configuration options for the Qumulo Core Web UI

## Usage

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

| Flag Name          | Required | Description                                 |
|--------------------|----------|---|
| inactivity-timeout | No       | Gets the inactivity timeout                 |
| login-banner       | No       | Gets the configuration for the login banner |

## qq web\_ui\_modify\_settings

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

## Description

Modify configuration options for the Qumulo Core Web UI

#### Usage

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

| 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]