Red Hat OpenStack Platform
11
Command-Line Interface Reference

Command-line clients for Red Hat OpenStack Platform

OpenStack Team
Command-line clients for Red Hat OpenStack Platform

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Abstract

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CHAPTER 1. OPENSTACK COMMAND-LINE CLIENTS

1.1. OVERVIEW

You can use the OpenStack command-line clients to run simple commands that make API calls. You can run these commands from the command line or in scripts to automate tasks. If you provide OpenStack credentials, you can run these commands on any computer.

Internally, each client command runs cURL commands that embed API requests. The OpenStack APIs are RESTful APIs that use the HTTP protocol, including methods, URIs, media types, and response codes.

These open-source Python clients run on Linux or Mac OS X systems and are easy to learn and use. Each OpenStack service has its own command-line client. On some client commands, you can specify a `debug` parameter to show the underlying API request for the command. This is a good way to become familiar with the OpenStack API calls.

The following table lists the command-line client for some of the OpenStack services.

<table>
<thead>
<tr>
<th>Service</th>
<th>Client</th>
<th>Package</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bare Metal</td>
<td>ironic</td>
<td>python-ironicclient</td>
<td>Manage and provision physical machines.</td>
</tr>
<tr>
<td>Block Storage</td>
<td>cinder</td>
<td>python-cinderclient</td>
<td>Create and manage volumes.</td>
</tr>
<tr>
<td>Compute</td>
<td>nova</td>
<td>python-novaclient</td>
<td>Create and manage images, instances, and flavors.</td>
</tr>
<tr>
<td>Director</td>
<td>tripleoclient</td>
<td>python-tripleoclient</td>
<td>Manage a director-based cloud.</td>
</tr>
<tr>
<td>Identity</td>
<td>keystone</td>
<td>python-keystoneclient</td>
<td>Create and manage users, tenants, roles, endpoints, and credentials.</td>
</tr>
<tr>
<td>Image Service</td>
<td>glance</td>
<td>python-glanceclient</td>
<td>Create and manage images.</td>
</tr>
<tr>
<td>Service</td>
<td>Client</td>
<td>Package</td>
<td>Description</td>
</tr>
<tr>
<td>-------------------------------------</td>
<td>-----------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Hardware Introspection for Bare Metal</td>
<td><strong>ironic-inspector</strong></td>
<td>openstack-ironic-inspector</td>
<td>An auxiliary service for discovering hardware properties for the Bare Metal service.</td>
</tr>
<tr>
<td>Hardware Introspection for Bare Metal</td>
<td><strong>openstack</strong></td>
<td>python-ironic-inspector-client</td>
<td>A client for the bare metal hardware introspection.</td>
</tr>
<tr>
<td>Networking</td>
<td><strong>neutron</strong></td>
<td>python-neutronclient</td>
<td>Configure networks for guest servers. This client was previously called <em>quantum</em>.</td>
</tr>
<tr>
<td>Object Storage</td>
<td><strong>swift</strong></td>
<td>python-swiftclient</td>
<td>Gather statistics, list items, update metadata, and upload, download, and delete files stored by the Object Storage service. Gain access to an Object Storage installation for ad hoc processing.</td>
</tr>
<tr>
<td>Orchestration</td>
<td><strong>heat</strong></td>
<td>python-heatclient</td>
<td>Launch stacks from templates, view details of running stacks including events and resources, and update and delete stacks.</td>
</tr>
<tr>
<td>Telemetry</td>
<td><strong>ceilometer</strong></td>
<td>python-ceilometerclient</td>
<td>Create and collect measurements across OpenStack.</td>
</tr>
</tbody>
</table>

For client installation instructions, see Section 1.2, “Install the OpenStack Command-line Clients”.

**1.2. INSTALL THE OPENSTACK COMMAND-LINE CLIENTS**

Install the prerequisite software and the Python package for each OpenStack client.
1.2.1. Install the Prerequisite Software

The following table lists the software that you need to have to run the command-line clients, and provides installation instructions as needed.

Table 1.2. Prerequisite software

<table>
<thead>
<tr>
<th>Prerequisite</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Python 2.6 or later</td>
<td>Currently, the clients do not support Python 3.</td>
</tr>
<tr>
<td>python-setuptools package</td>
<td>python-setuptools is a collection of tools to allow for building, distribution, and installation of Python packages.</td>
</tr>
</tbody>
</table>

1.2.2. Install the Clients

When following the instructions in this section, replace PROJECT with the lowercase name of the client to install, such as nova. Repeat for each client. The valid values include:

- ceilometer - Telemetry API
- cinder - Block Storage API and extensions
- glance - Image Service API
- heat - Orchestration API
- keystone - Identity service API and extensions
- neutron - Networking API
- nova - Compute API and extensions
- swift - Object Storage API

The following example shows the command for installing the nova client with yum.

```bash
# yum install python-novaclient
```

1.2.2.1. Installing from Packages

On Red Hat Enterprise Linux, use yum to install the clients:

```bash
# yum install python-PROJECTclient
```

1.2.3. Upgrade or Remove Clients

To upgrade a client, add the `--upgrade` option to the yum install command:
# yum install --upgrade python-PROJECTclient

To remove the a client, run the `yum erase` command:

# yum erase python-PROJECTclient

### 1.2.4. What’s Next

Before you can run client commands, you must create and source the `PROJECT-openrc.sh` file to set environment variables. See Section 1.4, “Set Environment Variables Using the OpenStack RC File”.

### 1.3. DISCOVER THE VERSION NUMBER FOR A CLIENT

Run the following command to discover the version number for a client:

$ `PROJECT` --version

For example, to see the version number for the `nova` client, run the following command:

$ nova --version

The version number (3.3.0 in the example) is returned.

3.3.0

### 1.4. SET ENVIRONMENT VARIABLES USING THE OPENSTACK RC FILE

To set the required environment variables for the OpenStack command-line clients, you must create an environment file called an OpenStack rc file, or `openrc.sh` file. If your OpenStack installation provides it, you can download the file from the OpenStack dashboard as an administrative user or any other user. This project-specific environment file contains the credentials that all OpenStack services use.

When you source the file, environment variables are set for your current shell. The variables enable the OpenStack client commands to communicate with the OpenStack services that run in the cloud.

**Note**

Defining environment variables using an environment file is not a common practice on Microsoft Windows. Environment variables are usually defined in the Advanced tab of the System Properties dialog box.

### 1.4.1. Download and Source the OpenStack RC File

1. Log in to the OpenStack dashboard, choose the project for which you want to download the OpenStack RC file, and click btn:[Access & Security].
2. On the API Access tab, click btn:[Download OpenStack RC File] and save the file. The filename will be of the form `PROJECT-openrc.sh` where `PROJECT` is the name of the project for which you downloaded the file.

3. Copy the `PROJECT-openrc.sh` file to the computer from which you want to run OpenStack commands.

   For example, copy the file to the computer from which you want to upload an image with a `glance` client command.

4. On any shell from which you want to run OpenStack commands, source the `PROJECT-openrc.sh` file for the respective project.

   In the following example, the `demo-openrc.sh` file is sourced for the demo project:
   ```
   $ source demo-openrc.sh
   ```

5. When you are prompted for an OpenStack password, enter the password for the user who downloaded the `PROJECT-openrc.sh` file.

### 1.4.2. Create and Source the OpenStack RC File

Alternatively, you can create the `PROJECT-openrc.sh` file from scratch, if for some reason you cannot download the file from the dashboard.

1. In a text editor, create a file named `PROJECT-openrc.sh` file and add the following authentication information:

   ```
   export OS_USERNAME=username
   export OS_PASSWORD=password
   export OS_TENANT_NAME=projectName
   export OS_AUTH_URL=https://identityHost:portNumber/v2.0
   # The following lines can be omitted
   export OS_TENANT_ID=tenantIDString
   export OS_REGION_NAME=regionName
   ```

   The following example shows the information for a project called `admin`, where the OS username is also `admin`, and the identity host is located at `controller`.

   ```
   export OS_USERNAME=admin
   export OS_PASSWORD=ADMIN_PASS
   export OS_TENANT_NAME=admin
   export OS_AUTH_URL=http://controller:35357/v2.0
   ```

2. On any shell from which you want to run OpenStack commands, source the `PROJECT-openrc.sh` file for the respective project. In this example, you source the `admin-openrc.sh` file for the `admin` project:

   ```
   $ source admin-openrc.sh
   ```
Note

You are not prompted for the password with this method. The password lives in clear text format in the `PROJECT-openrc.sh` file. Restrict the permissions on this file to avoid security problems. You can also remove the `OS_PASSWORD` variable from the file, and use the `--password` parameter with OpenStack client commands instead.

### 1.4.3. Override Environment Variable Values

When you run OpenStack client commands, you can override some environment variable settings by using the options that are listed at the end of the `help` output of the various client commands. For example, you can override the `OS_PASSWORD` setting in the `PROJECT-openrc.sh` file by specifying a password on a `keystone` command, as follows:

```
$ keystone --os-password PASSWORD service-list
```

Where `PASSWORD` is your password.
CHAPTER 2. TELEMETRY ALARMING SERVICE (AODH) COMMAND-LINE CLIENT

The aodh client is the command-line interface (CLI) for the Telemetry Alarming service (aodh) API and its extensions.

This chapter documents aodh version 0.9.0.

For help on a specific aodh command, enter:

```
$ aodh help COMMAND
```

2.1. AODH USAGE

```
```

2.2. AODH OPTIONAL ARGUMENTS

- **--version**
  show program's version number and exit

- **-v, --verbose**
  Increase verbosity of output. Can be repeated.

- **-q, --quiet**
  Suppress output except warnings and errors.

- **--log-file LOG_FILE**
  Specify a file to log output. Disabled by default.
-h, --help
    Show help message and exit.

--debug
    Show tracebacks on errors.

--os-region-name <auth-region-name>
    Authentication region name (Env: OS_REGION_NAME)

--os-interface <interface>
    Select an interface type. Valid interface types: [admin, public, internal]. (Env: OS_INTERFACE)

--aodh-api-version AODH_API_VERSION
    Defaults to env[AODH_API_VERSION] or 2.

--os-auth-type <name>, --os-auth-plugin <name>
    Authentication type to use

--aodh-endpoint <endpoint>
    Aodh endpoint (Env: AODH_ENDPOINT)

2.2.1. aodh alarm create


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Create an alarm

Optional arguments:

-h, --help
    show this help message and exit

--name <NAME>
    Name of the alarm

-t <TYPE>, --type <TYPE>
    Type of alarm, should be one of: threshold, event, composite, gnocchi_resources_threshold, gnocchi_aggregation_by_metrics_threshold, gnocchi_aggregation_by_resources_threshold.

--project-id <PROJECT_ID>
    Project to associate with alarm (configurable by admin users only)

--user-id <USER_ID>
    User to associate with alarm (configurable by admin users only)

--description <DESCRIPTION>
    Free text description of the alarm

--state <STATE>
    State of the alarm, one of: [‘ok’, ‘alarm’, ‘insufficient data’]

--severity <SEVERITY>
    Severity of the alarm, one of: [‘low’, ‘moderate’, ‘critical’]

--enabled {True|False}
    True if alarm evaluation is enabled

--alarm-action <Webhook URL>
    URL to invoke when state transitions to alarm. May be used multiple times

--ok-action <Webhook URL>
    URL to invoke when state transitions to OK. May be used multiple times

--insufficient-data-action <Webhook URL>
    URL to invoke when state transitions to insufficient data. May be used multiple times

--time-constraint <Time Constraint>
    Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in
seconds. Can be specified multiple times for multiple time constraints, format is: name= <CONSTRAINT_NAME>;start=< CRON>;duration=<SECONDS>;;[description= <DESCRIPTION>][;timezone=<IANA Timezone>]]

--repeat-actions \{True|False\}

True if actions should be repeatedly notified while alarm remains in target state

2.2.2. aodh alarm delete

usage: aodh alarm delete [-h] [---name <NAME>] [<ALARM ID or NAME>]

Delete an alarm

Positional arguments:

<ALARM ID or NAME>

ID or name of an alarm.

Optional arguments:

-h, --help

show this help message and exit

--name <NAME>

Name of the alarm

2.2.3. aodh alarm list

usage: aodh alarm list [-h] [-f \{csv,html,json,table,value,yaml\}] [-c COLUMN] [---max-width <integer>] [---print-empty] [---noindent]

[--quote \{all, minimal, none, nonnumeric\}]

[--query QUERY | --filter <KEY1=VALUE1;KEY2=VALUE2...>]

[--limit <LIMIT>] [--marker <MARKER>]

[--sort <SORT_KEY:SORT_DIR>]

List alarms

Optional arguments:

-h, --help

show this help message and exit

--query QUERY

Rich query supported by aodh, e.g. project_id!=my-id user_id=foo or user_id=bar

--filter <KEY1=VALUE1;KEY2=VALUE2...>
Filter parameters to apply on returned alarms.

```
--limit <LIMIT>
Number of resources to return (Default is server default)

--marker <MARKER>
Last item of the previous listing. Return the next results after this value, the supported marker is alarm_id.

--sort <SORT_KEY:SORT_DIR>
Sort of resource attribute, e.g. name:asc
```

### 2.2.4. aodh alarm show

```
usage: aodh alarm show [-h] [-f {html,json,shell,table,value,yaml}] [-c COLUMN] [-m-max-width <integer>] [-print-empty] [-noindent] [-prefix PREFIX] [-name <NAME>] [<ALARM ID or NAME>]
```

Show an alarm

Positional arguments:

```
<ALARM ID or NAME>
ID or name of an alarm.
```

Optional arguments:

```
-h, --help
show this help message and exit
```

```
--name <NAME>
Name of the alarm
```

### 2.2.5. aodh alarm state get

```
usage: aodh alarm state get [-h] [-f {html,json,shell,table,value,yaml}] [-c COLUMN] [-m-max-width <integer>] [-print-empty] [-noindent] [-prefix PREFIX] [-name <NAME>] [<ALARM ID or NAME>]
```

Get state of an alarm

Positional arguments:

```
<ALARM ID or NAME>
```
ID or name of an alarm.

Optional arguments:

- **-h, --help**
  
  show this help message and exit

- **--name <NAME>**
  
  Name of the alarm

### 2.2.6. aodh alarm state set

usage: aodh alarm state set [-h] [-f {html, json, shell, table, value, yaml}]
       [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent] [-prefix PREFIX]

Set state of an alarm

Positional arguments:

**<ALARM ID or NAME>**

ID or name of an alarm.

Optional arguments:

- **-h, --help**
  
  show this help message and exit

- **--name <NAME>**
  
  Name of the alarm

- **--state <STATE>**
  
  State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

### 2.2.7. aodh alarm update

usage: aodh alarm update [-h] [-f {html, json, shell, table, value, yaml}]
                        [-c COLUMN] [-max-width <integer>] [-print-empty]
                        [-noindent] [-prefix PREFIX] [-name <NAME>]
                        [-t <TYPE>] [--project-id <PROJECT_ID>]
                        [--user-id <USER_ID>] [--description <DESCRIPTION>]
                        [-state <STATE>] [-severity <SEVERITY>]
                        [-enabled {True|False}]

Red Hat OpenStack Platform 11 Command-Line Interface Reference
Update an alarm

Positional arguments:

<ALARM ID or NAME>
ID or name of an alarm.

Optional arguments:

-h, --help
show this help message and exit

--name <NAME>
Name of the alarm

-t <TYPE>, --type <TYPE>
Type of alarm, should be one of: threshold, event, composite, gnocchi_resources_threshold, gnocchi_aggregation_by_metrics_threshold, gnocchi_aggregation_by_resources_threshold.

--project-id <PROJECT_ID>
Project to associate with alarm (configurable by admin users only)

--user-id <USER_ID>
User to associate with alarm (configurable by admin users only)

--description <DESCRIPTION>
Free text description of the alarm

--state <STATE>
State of the alarm, one of: ['ok', 'alarm', 'insufficient data']
--severity <SEVERITY>
Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
True if alarm evaluation is enabled

--alarm-action <Webhook URL>
URL to invoke when state transitions to alarm. May be used multiple times

--ok-action <Webhook URL>
URL to invoke when state transitions to OK. May be used multiple times

--insufficient-data-action <Webhook URL>
URL to invoke when state transitions to insufficient data. May be used multiple times

--time-constraint <Time Constraint>
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: name=<CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>[:description=<DESCRIPTION>[:timezone=<IANA Timezone>]]

--repeat-actions {True|False}
True if actions should be repeatedly notified while alarm remains in target state

2.2.8. aodh alarm-history search

usage: aodh alarm-history search [-h] [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [-m max-width <integer>] [-p print-empty] [-n noindent] [-q quote {all, minimal, none, nonnumeric}] [-q query QUERY]

Show history for all alarms based on query

Optional arguments:

-h, --help
show this help message and exit

--query QUERY
Rich query supported by aodh, e.g. project_id!=my-id user_id=foo or user_id=bar

2.2.9. aodh alarm-history show

usage: aodh alarm-history show [-h] [-f {csv,html,json,table,value,yaml}]
Show history for an alarm

**Positional arguments:**

`alarm_id`

ID of an alarm

**Optional arguments:**

- `--help`
  
  show this help message and exit

- `--limit <LIMIT>`
  
  Number of resources to return (Default is server default)

- `--marker <MARKER>`
  
  Last item of the previous listing. Return the next results after this value, the supported marker is event_id.

- `--sort <SORT_KEY:SORT_DIR>`
  
  Sort of resource attribute. e.g. timestamp:desc

### 2.2.10. aodh capabilities list

List capabilities of alarming service

**Optional arguments:**

- `--help`
  
  show this help message and exit
CHAPTER 3. TELEMETRY DATA COLLECTION SERVICE
(CEILOMETER) COMMAND-LINE CLIENT

The ceilometer client is the command-line interface (CLI) for the Telemetry Data Collection service (ceilometer) API and its extensions.

This chapter documents ceilometer version 2.8.0.

For help on a specific ceilometer command, enter:

$ ceilometer help COMMAND

3.1. CEILOMETER USAGE

                  [--ceilometer-api-version CEIOMETER_API_VERSION] [-t <tenant-id>]
                  [--os-region-name <region-name>] [-a <auth-token>]
                  [--os-service-type <service-type>] [-e <endpoint-type>] [--os-cacert]
                  [--os-insecure <insecure>] [-os-cert-file <cert-file>]
                  [-os-key-file <key-file>] [--os-cert <cert>]
                  [-os-key <key>] [-os-project-name <project-name>]
                  [-os-project-id <project-id>]
                  [-os-project-domain-id <project-domain-id>]
                  [-os-project-domain-name <project-domain-name>]
                  [-os-user-id <user-id>]
                  [-os-user-domain-id <user-domain-id>]
                  [-os-user-domain-name <user-domain-name>]
                  [-os-endpoint <endpoint>] [--os-auth-type <auth-type>]
                  [--os-username <username>] [--os-password]
                  [--os-tenant-name <tenant-name>] [--os-token]
                  [--os-auth-url <auth-url>]
                  <subcommand> ...

Subcommands:

alarm-combination-create
Create a new alarm based on state of other alarms.

alarm-combination-update
Update an existing alarm based on state of other alarms.

alarm-create
Create a new alarm (Deprecated). Use alarm-threshold-create instead.

**alarm-delete**
Delete an alarm.

**alarm-event-create**
Create a new alarm based on events.

**alarm-event-update**
Update an existing alarm based on events.

**alarm-gnocchi-aggregation-by-metrics-threshold-create**
Create a new alarm based on computed statistics.

**alarm-gnocchi-aggregation-by-metrics-threshold-update**
Update an existing alarm based on computed statistics.

**alarm-gnocchi-aggregation-by-resources-threshold-create**
Create a new alarm based on computed statistics.

**alarm-gnocchi-aggregation-by-resources-threshold-update**
Update an existing alarm based on computed statistics.

**alarm-gnocchi-resources-threshold-create**
Create a new alarm based on computed statistics.

**alarm-gnocchi-resources-threshold-update**
Update an existing alarm based on computed statistics.

**alarm-history**
Display the change history of an alarm.

**alarm-list**
List the user's alarms.

**alarm-show**
Show an alarm.

**alarm-state-get**
Get the state of an alarm.

**alarm-state-set**
Set the state of an alarm.

**alarm-threshold-create**
Create a new alarm based on computed statistics.

**alarm-threshold-update**
Update an existing alarm based on computed statistics.

**alarm-update**
Update an existing alarm (Deprecated).

**capabilities**
Print Ceilometer capabilities.

**event-list**
List events.

**event-show**
Show a particular event.

**event-type-list**
List event types.

**meter-list**
List the user’s meters.

**query-alarm-history**
Query Alarm History.

**query-alarms**
Query Alarms.

**query-samples**
Query samples.

**resource-list**
List the resources.

**resource-show**
Show the resource.

**sample-create**
Create a sample.

**sample-create-list**
Create a sample list.

**sample-list**
List the samples (return OldSample objects if -m/--meter is set).

**sample-show**
Show a sample.
statistics
List the statistics for a meter.

trait-description-list
List trait info for an event type.

trait-list
List all traits with name <trait_name> for Event Type <event_type>.

bash-completion
Prints all of the commands and options to stdout.

help
Display help about this program or one of its subcommands.

3.2. CEILOMETER OPTIONAL ARGUMENTS

--version
show program’s version number and exit

-d, --debug
Defaults to env[CEILOMETERCLIENT_DEBUG].

-v, --verbose
Print more verbose output.

--timeout TIMEOUT
Number of seconds to wait for a response.

--ceilometer-url <CEILOMETER_URL>
DEPRECATED, use --os-endpoint instead. Defaults to env[CEILOMETER_URL].

--ceilometer-api-version CEILOMETER_API_VERSION
Defaults to env[CEILOMETER_API_VERSION] or 2.

--os-tenant-id <tenant-id>
Defaults to env[OS_TENANT_ID].

--os-region-name <region-name>
Defaults to env[OS_REGION_NAME].

--os-auth-token <auth-token>
Defaults to env[OS_AUTH_TOKEN].

--os-service-type <service-type>
Defaults to env[OS_SERVICE_TYPE].
--os-endpoint-type <endpoint-type>
    Defaults to env[OS_ENDPOINT_TYPE].

--os-cacert <cacert>
    Defaults to env[OS_CACERT].

--os-insecure <insecure>
    Defaults to env[OS_INSECURE].

--os-cert-file <cert-file>
    Defaults to env[OS_CERT_FILE].

--os-key-file <key-file>
    Defaults to env[OS_KEY_FILE].

--os-cert <cert>
    Defaults to env[OS_CERT].

--os-key <key>
    Defaults to env[OS_KEY].

--os-project-name <project-name>
    Defaults to env[OS_PROJECT_NAME].

--os-project-id <project-id>
    Defaults to env[OS_PROJECT_ID].

--os-project-domain-id <project-domain-id>
    Defaults to env[OS_PROJECT_DOMAIN_ID].

--os-project-domain-name <project-domain-name>
    Defaults to env[OS_PROJECT_DOMAIN_NAME].

--os-user-id <user-id>
    Defaults to env[OS_USER_ID].

--os-user-domain-id <user-domain-id>
    Defaults to env[OS_USER_DOMAIN_ID].

--os-user-domain-name <user-domain-name>
    Defaults to env[OS_USER_DOMAIN_NAME].

--os-endpoint <endpoint>
    Defaults to env[OS_ENDPOINT].

--os-auth-system <auth-system>
Defaults to `env[OS_AUTH_SYSTEM]`.

```
--os-username <username>
    Defaults to `env[OS_USERNAME]`.

--os-password <password>
    Defaults to `env[OS_PASSWORD]`.

--os-tenant-name <tenant-name>
    Defaults to `env[OS_TENANT_NAME]`.

--os-token <token>
    Defaults to `env[OS_TOKEN]`.

--os-auth-url <auth-url>
    Defaults to `env[OS_AUTH_URL]`.
```

### 3.2.1. ceilometer alarm-combination-create

```
usage: ceilometer alarm-combination-create --name <NAME>  
       (--project-id <ALARM_PROJECT_ID>)  
       (--user-id <ALARM_USER_ID>)  
       (--description <DESCRIPTION>)  
       (--state <STATE>)  
       (--severity <SEVERITY>)  
       (--enabled {True|False})  
       (--alarm-action <Webhook URL>)  
       (--ok-action <Webhook URL>)  
       (--insufficient-data-action <Webhook URL>)  
       (--time-constraint <Time Constraint>)  
       (--repeat-actions {True|False})  
       --alarm_ids <ALARM IDS>  
       [--operator <OPERATOR>]
```

Create a new alarm based on state of other alarms.

**Optional arguments:**

```
--name <NAME>
    Name of the alarm (must be unique per tenant). Required.

--project-id <ALARM_PROJECT_ID>
    Tenant to associate with alarm (configurable by admin users only).
```
--user-id <ALARM_USER_ID>
    User to associate with alarm (configurable by admin users only).

--description <DESCRIPTION>
    Free text description of the alarm.

--state <STATE>
    State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

--severity <SEVERITY>
    Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
    True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
    URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
    URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action <Webhook URL>
    URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

--time-constraint <Time Constraint>
    Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: name= <CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;[description= <DESCRIPTION>;[timezone=<IANA Timezone>]] Defaults to None.

--repeat-actions {True|False}
    True if actions should be repeatedly notified while alarm remains in target state.

--alarm-ids <ALARM IDS>
    List of alarm IDs. Required.

--operator <OPERATOR>
    Operator to compare with, one of: ['and', 'or'].

3.2.2. ceilometer alarm-combination-update

usage: ceilometer alarm-combination-update [--name <NAME>] [--project-id <ALARM_PROJECT_ID>]

Update an existing alarm based on state of other alarms.

**Positional arguments:**

```
<ALARM_ID>
```

ID of the alarm to update.

**Optional arguments:**

```
--name <NAME>
```

Name of the alarm (must be unique per tenant).

```
--project-id <ALARM_PROJECT_ID>
```

Tenant to associate with alarm (configurable by admin users only).

```
--user-id <ALARM_USER_ID>
```

User to associate with alarm (configurable by admin users only).

```
--description <DESCRIPTION>
```

Free text description of the alarm.

```
--state <STATE>
```

State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

```
--severity <SEVERITY>
```

Severity of the alarm, one of: ['low', 'moderate', 'critical']

```
--enabled {True|False}
```

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True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action <Webhook URL>
URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

--time-constraint <Time Constraint>
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: name=<CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>:[description=<DESCRIPTION>][time zone=<IANA Timezone>] Defaults to None.

--repeat-actions {True|False}
True if actions should be repeatedly notified while alarm remains in target state.

--remove-time-constraint <Constraint names>
Name or list of names of the time constraints to remove.

--alarm_ids <ALARM IDS>
List of alarm IDs.

--operator <OPERATOR>
Operator to compare with, one of: ['and', 'or'].

3.2.3. ceilometer alarm-delete

usage: ceilometer alarm-delete [<ALARM_ID>]
Delete an alarm.

Positional arguments:

<ALARM_ID>
ID of the alarm to delete.

3.2.4. ceilometer alarm-event-create

usage: ceilometer alarm-event-create --name <NAME> 
[--project-id <ALARM_PROJECT_ID>
[--user-id <ALARM_USER_ID>]]
Create a new alarm based on events.

Optional arguments:

--name <NAME>
Name of the alarm (must be unique per tenant). Required.

--project-id <ALARM_PROJECT_ID>
Tenant to associate with alarm (configurable by admin users only).

--user-id <ALARM_USER_ID>
User to associate with alarm (configurable by admin users only).

--description <DESCRIPTION>
Free text description of the alarm.

--state <STATE>
State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

--severity <SEVERITY>
Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action <Webhook URL>
URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.
--time-constraint <Time Constraint>
    Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of
    the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be
    specified multiple times for multiple time constraints, format is: name= <CONTRAINT_NAME>;start=<CRON>;durati
    on=<SECONDS>;<description= <DESCRIPTION>];[time zone=<IANA Timezone>]] Defaults to None.

--repeat-actions {True|False}
    True if actions should be repeatedly notified while alarm remains in target state.

--event-type <EVENT_TYPE>
    Event type for event alarm.

-q <QUERY>, --query <QUERY>
    key[op]data_type::value; list for filtering events. data_type is optional, but if supplied must be
    string, integer, float or datetime.

3.2.5. ceilometer alarm-event-update

usage: ceilometer alarm-event-update [--name <NAME>]
    [--project-id <ALARM_PROJECT_ID>]
    [--user-id <ALARM_USER_ID>]
    [--description <DESCRIPTION>]
    [--state <STATE>]
    [--severity <SEVERITY>]
    [--enabled {True|False}]
    [--alarm-action <Webhook URL>]
    [--ok-action <Webhook URL>]
    [--insufficient-data-action <Webhook URL>]
    [--time-constraint <Time Constraint>]
    [--repeat-actions {True|False}]
    [--event-type <EVENT_TYPE>]
    [-q <QUERY>]
    [<ALARM_ID>]

Update an existing alarm based on events.

Positional arguments:

<ALARM_ID>
    ID of the alarm to update.

Optional arguments:

--name <NAME>
    Name of the alarm (must be unique per tenant).

--project-id <ALARM_PROJECT_ID>
Tenant to associate with alarm (configurable by admin users only).

--user-id <ALARM_USER_ID>
User to associate with alarm (configurable by admin users only).

--description <DESCRIPTION>
Free text description of the alarm.

--state <STATE>
State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

--severity <SEVERITY>
Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action <Webhook URL>
URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

--time-constraint <Time Constraint>
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: name= <CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;[description=<DESCRIPTION>;[timezone=<IANA Timezone>]] Defaults to None.

--repeat-actions {True|False}
True if actions should be repeatedly notified while alarm remains in target state.

--event-type <EVENT_TYPE>
Event type for event alarm.

-q <QUERY>, --query <QUERY>
key[op]data_type::value; list for filtering events. data_type is optional, but if supplied must be string, integer, float or datetime.

3.2.6. ceilometer alarm-gnocchi-aggregation-by-metrics-threshold-create

usage: ceilometer alarm-gnocchi-aggregation-by-metrics-threshold-create
Create a new alarm based on computed statistics.

Optional arguments:

--name <NAME>
   Name of the alarm (must be unique per tenant). Required.

--project-id <ALARM_PROJECT_ID>
   Tenant to associate with alarm (configurable by admin users only).

--user-id <ALARM_USER_ID>
   User to associate with alarm (configurable by admin users only).

--description <DESCRIPTION>
   Free text description of the alarm.

--state <STATE>
   State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

--severity <SEVERITY>
   Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
   True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
   URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
   URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action <Webhook URL>
   URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

--time-constraint <Time Constraint>
   Time constraint for alarm evaluation.

--repeat-actions {True|False}
   True if alarm action should repeat.

--granularity <GRANULARITY>
   Granularity of alarm calculation.

--evaluation-periods <COUNT>
   Number of evaluation periods.

--aggregation-method <AGGREATION>
   Method for aggregating alarm data.

--comparison-operator <OPERATOR>
   Comparison operator for threshold.

--threshold <THRESHOLD> -m <METRICS>
   Threshold value for alarm.

-m  
   Metric to alarm on.
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is:
```
name=<CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>\[description=<DESCRIPTION>\[timez one=<IANA Timezone>\]]
``` Defaults to None.

```
--repeat-actions {True|False}
```
True if actions should be repeatedly notified while alarm remains in target state.

```
--granularity <GRANULARITY>
```
Length of each period (seconds) to evaluate over.

```
--evaluation-periods <COUNT>
```
Number of periods to evaluate over.

```
--aggregation-method <AGGREATION>
```

```
--comparison-operator <OPERATOR>
```
Operator to compare with, one of: `['lt', 'le', 'eq', 'ne', 'ge', 'gt']`.

```
--threshold <THRESHOLD>
```
Threshold to evaluate against. Required.

```
-m <METRICS>, --metrics <METRICS>
```
Metric to evaluate against. Required.

3.2.7. ceilometer alarm-gnocchi-aggregation-by-metrics-threshold-update

```
usage: ceilometer alarm-gnocchi-aggregation-by-metrics-threshold-update
       [-m <METRICS>, --metrics <METRICS>]
       [...]
```

```
[True|False]
```

```
[True|False]
```

```
[True|False]
```

```
[True|False]
```

```
[True|False]
```
Update an existing alarm based on computed statistics.

**Positional arguments:**

`<ALARM_ID>`
ID of the alarm to update.

**Optional arguments:**

--name `<NAME>`
Name of the alarm (must be unique per tenant).

--project-id `<ALARM_PROJECT_ID>`
Tenant to associate with alarm (configurable by admin users only).

--user-id `<ALARM_USER_ID>`
User to associate with alarm (configurable by admin users only).

--description `<DESCRIPTION>`
Free text description of the alarm.

--state `<STATE>`
State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

--severity `<SEVERITY>`
Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
True if alarm evaluation/actioning is enabled.

--alarm-action `<Webhook URL>`
URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action `<Webhook URL>`
URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action `<Webhook URL>`
URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

--time-constraint `<Time Constraint>`
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in
seconds. Can be specified multiple times for multiple time constraints, format is: name= <CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>[;description= <DESCRIPTION>];[timezone=<IANA Timezone>]] Defaults to None.

--repeat-actions {True|False}
True if actions should be repeatedly notified while alarm remains in target state.

--granularity <GRANULARITY>
Length of each period (seconds) to evaluate over.

--evaluation-periods <COUNT>
Number of periods to evaluate over.

--aggregation-method <AGGREATION>

--comparison-operator <OPERATOR>
Operator to compare with, one of: ['lt', 'le', 'eq', 'ne', 'ge', 'gt'].

--threshold <THRESHOLD>
Threshold to evaluate against.

-m <METRICS>, --metrics <METRICS>
Metric to evaluate against.

--remove-time-constraint <Constraint names>
Name or list of names of the time constraints to remove.

3.2.8. ceilometer alarm-gnocchi-aggregation-by-resources-threshold-create

usage: ceilometer alarm-gnocchi-aggregation-by-resources-threshold-create
--name <NAME> [--project-id <ALARM_PROJECT_ID>]
[--user-id <ALARM_USER_ID>] [--description <DESCRIPTION>]
[--state <STATE>] [--severity <SEVERITY>] [--enabled {True|False}]
[--alarm-action <Webhook URL>] [--ok-action <Webhook URL>]
[--insufficient-data-action <Webhook URL>]
[--time-constraint <Time Constraint>] [--repeat-actions {True|False}]
[--granularity <GRANULARITY>] [--evaluation-periods <COUNT>]
--aggregation-method <AGGREATION> [--comparison-operator
Create a new alarm based on computed statistics.

Optional arguments:

- **--name <NAME>**
  Name of the alarm (must be unique per tenant). Required.

- **--project-id <ALARM_PROJECT_ID>**
  Tenant to associate with alarm (configurable by admin users only).

- **--user-id <ALARM_USER_ID>**
  User to associate with alarm (configurable by admin users only).

- **--description <DESCRIPTION>**
  Free text description of the alarm.

- **--state <STATE>**
  State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

- **--severity <SEVERITY>**
  Severity of the alarm, one of: ['low', 'moderate', 'critical']

- **--enabled {True|False}**
  True if alarm evaluation/actioning is enabled.

- **--alarm-action <Webhook URL>**
  URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

- **--ok-action <Webhook URL>**
  URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

- **--insufficient-data-action <Webhook URL>**
  URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

- **--time-constraint <Time Constraint>**
  Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: name= <CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;<description= <DESCRIPTION>:[timezonename=<IANA Timezone>]] Defaults to None.

- **--repeat-actions {True|False}**
True if actions should be repeatedly notified while alarm remains in target state.

--granularity <GRANULARITY>
Length of each period (seconds) to evaluate over.

--evaluation-periods <COUNT>
Number of periods to evaluate over.

--aggregation-method <AGGREATION>

--comparison-operator <OPERATOR>
Operator to compare with, one of: ['lt', 'le', 'eq', 'ne', 'ge', 'gt'].

--threshold <THRESHOLD>
Threshold to evaluate against. Required.

-m <METRIC>, --metric <METRIC>
Metric to evaluate against. Required.

--resource-type <RESOURCE_TYPE>
Resource_type to evaluate against. Required.

--query <QUERY>
Gnocchi resources search query filter Required.

3.2.9. ceilometer alarm-gnocchi-aggregation-by-resources-threshold-update

usage: ceilometer alarm-gnocchi-aggregation-by-resources-threshold-update
    [--name <NAME>] [--project-id <ALARM_PROJECT_ID>]
    [--user-id <ALARM_USER_ID>] [--description <DESCRIPTION>]
    [--state <STATE>] [--severity <SEVERITY>] [--enabled
    {True|False}]
    [--alarm-action <Webhook URL>] [--ok-action <Webhook URL>]
    [--insufficient-data-action <Webhook URL>]
    [--time-constraint <Time Constraint>] [--repeat-actions
    {True|False}]
    [--granularity <GRANULARITY>] [--evaluation-periods <COUNT>]
    [--aggregation-method <AGGREATION>] [--comparison-operator
    <OPERATOR>]

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Update an existing alarm based on computed statistics.

Positional arguments:

<ALARM_ID>
ID of the alarm to update.

Optional arguments:

--name <NAME>
Name of the alarm (must be unique per tenant).

--project-id <ALARM_PROJECT_ID>
Tenant to associate with alarm (configurable by admin users only).

--user-id <ALARM_USER_ID>
User to associate with alarm (configurable by admin users only).

--description <DESCRIPTION>
Free text description of the alarm.

--state <STATE>
State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

--severity <SEVERITY>
Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action <Webhook URL>
URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

--time-constraint <Time Constraint>
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in

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seconds. Can be specified multiple times for multiple time constraints, format is: name= <CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>[;description= <DESCRIPTION>][;timezone=<IANA Timezone>]] Defaults to None.

--repeat-actions {True|False}
True if actions should be repeatedly notified while alarm remains in target state.

--granularity <GRANULARITY>
Length of each period (seconds) to evaluate over.

--evaluation-periods <COUNT>
Number of periods to evaluate over.

--aggregation-method <AGGREGATION>

--comparison-operator <OPERATOR>
Operator to compare with, one of: ['lt', 'le', 'eq', 'ne', 'ge', 'gt'].

--threshold <THRESHOLD>
Threshold to evaluate against.

-m <METRIC>, --metric <METRIC>
Metric to evaluate against.

--resource-type <RESOURCE_TYPE>
Resource_type to evaluate against.

--query <QUERY>
Gnocchi resources search query filter

--remove-time-constraint <Constraint names>
Name or list of names of the time constraints to remove.

3.2.10. ceilometer alarm-gnocchi-resources-threshold-create

usage: ceilometer alarm-gnocchi-resources-threshold-create --name <NAME> [--project-id <ALARM_PROJECT_ID> [--user-}
id <ALARM_USER_ID>]

description <DESCRIPTION>]

<STATE>]

severity <SEVERITY>]

enabled {True|False}]

alarm-action <Webhook URL>]

action <Webhook URL>]

insufficient-data-action <Webhook URL>]

constraint <Time Constraint>]

repeat-actions {True|False}]

granularity <GRANULARITY>]

evaluation-periods <COUNT>]

aggregation-method

<AGGREGATION>]

comparison-operator <OPERATOR>]

threshold

<THRESHOLD> -m

resource-type

<RESOURCE_TYPE>]

resource-id

<RESOURCE_ID>]

Create a new alarm based on computed statistics.

Optional arguments:

--name <NAME>

Name of the alarm (must be unique per tenant). Required.

--project-id <ALARM_PROJECT_ID>

Tenant to associate with alarm (configurable by admin users only).

--user-id <ALARM_USER_ID>
User to associate with alarm (configurable by admin users only).

--description <DESCRIPTION>
Free text description of the alarm.

--state <STATE>
State of the alarm, one of: ["ok", "alarm", "insufficient data"]

--severity <SEVERITY>
Severity of the alarm, one of: ["low", "moderate", "critical"]

--enabled {True|False}
True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action <Webhook URL>
URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

--time-constraint <Time Constraint>
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: name= <CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;[description= <DESCRIPTION>;timezone=<IANA Timezone>]] Defaults to None.

--repeat-actions {True|False}
True if actions should be repeatedly notified while alarm remains in target state.

--granularity <GRANULARITY>
Length of each period (seconds) to evaluate over.

--evaluation-periods <COUNT>
Number of periods to evaluate over.

--aggregation-method <AGGREGATION>
--comparison-operator <OPERATOR>
Operator to compare with, one of: ['lt', 'le', 'eq', 'ne', 'ge', 'gt'].

--threshold <THRESHOLD>
Threshold to evaluate against. Required.

-m <METRIC>, --metric <METRIC>
Metric to evaluate against. Required.

--resource-type <RESOURCE_TYPE>
Resource type to evaluate against. Required.

--resource-id <RESOURCE_ID>
Resource id to evaluate against Required.

3.2.11. ceilometer alarm-gnocchi-resources-threshold-update

usage: ceilometer alarm-gnocchi-resources-threshold-update [--name <NAME>]
project-id <ALARM_PROJECT_ID>] [--user-id <ALARM_USER_ID>] [--description <DESCRIPTION>] [--state <STATE>]
severity <SEVERITY>]
enabled {True|False}]
alarm-action <Webhook URL>] [--ok-action <Webhook URL>]
insufficient-data-action <Webhook URL>] [--time-constraint <Time Constraint>]
repeat-actions {True|False}]
granularity <GRANULARITY>]
evaluation-periods <COUNT>] [--aggregation-method <AGGREATION>]

Update an existing alarm based on computed statistics.

Positional arguments:

<ALARM_ID>
   ID of the alarm to update.

Optional arguments:

--name <NAME>
   Name of the alarm (must be unique per tenant).

--project-id <ALARM_PROJECT_ID>
   Tenant to associate with alarm (configurable by admin users only).

--user-id <ALARM_USER_ID>
   User to associate with alarm (configurable by admin users only).

--description <DESCRIPTION>
   Free text description of the alarm.

--state <STATE>
   State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

--severity <SEVERITY>
   Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
   True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
   URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
   URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.
--insufficient-data-action <Webhook URL>
    URL to invoke when state transitions to insufficient data. May be used multiple times.
    Defaults to None.

--time-constraint <Time Constraint>
    Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s)
    of the constraint are specified with a cron expression, whereas its duration is given in
    seconds. Can be specified multiple times for multiple time constraints, format is: name=
    <CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;[description=
    <DESCRIPTION>;[timezone=<IANA Timezone>]] Defaults to None.

--repeat-actions {True|False}
    True if actions should be repeatedly notified while alarm remains in target state.

--granularity <GRANULARITY>
    Length of each period (seconds) to evaluate over.

--evaluation-periods <COUNT>
    Number of periods to evaluate over.

--aggregation-method <AGGREATION>
    Aggregation method to use, one of: ['last', 'min', 'median', 'sum', 'std', 'first', 'mean', 'count',
    'moving-average', 'max', '1pct', '2pct', '3pct', '4pct', '5pct', '6pct', '7pct', '8pct', '9pct', '10pct',
    '11pct', '12pct', '13pct', '14pct', '15pct', '16pct', '17pct', '18pct', '19pct', '20pct', '21pct', '22pct',
    '23pct', '24pct', '25pct', '26pct', '27pct', '28pct', '29pct', '30pct', '31pct', '32pct', '33pct', '34pct',
    '35pct', '36pct', '37pct', '38pct', '39pct', '40pct', '41pct', '42pct', '43pct', '44pct', '45pct', '46pct',
    '47pct', '48pct', '49pct', '50pct', '51pct', '52pct', '53pct', '54pct', '55pct', '56pct', '57pct', '58pct',
    '59pct', '60pct', '61pct', '62pct', '63pct', '64pct', '65pct', '66pct', '67pct', '68pct', '69pct', '70pct',
    '71pct', '72pct', '73pct', '74pct', '75pct', '76pct', '77pct', '78pct', '79pct', '80pct', '81pct', '82pct',
    '83pct', '84pct', '85pct', '86pct', '87pct', '88pct', '89pct', '90pct', '91pct', '92pct', '93pct', '94pct',
    '95pct', '96pct', '97pct', '98pct', '99pct'].

--comparison-operator <OPERATOR>
    Operator to compare with, one of: ['lt', 'le', 'eq', 'ne', 'ge', 'gt'].

--threshold <THRESHOLD>
    Threshold to evaluate against.

-m <METRIC>, --metric <METRIC>
    Metric to evaluate against.

--resource-type <RESOURCE_TYPE>
    Resource_type to evaluate against.

--resource-id <RESOURCE_ID>
    Resource id to evaluate against

--remove-time-constraint <Constraint names>
    Name or list of names of the time constraints to remove.
3.2.12. ceilometer alarm-history

usage: ceilometer alarm-history [-q <QUERY>] [<ALARM_ID>]

Display the change history of an alarm.

Positional arguments:

<ALARM_ID>
   ID of the alarm for which history is shown.

Optional arguments:

-q <QUERY>, --query <QUERY>
   key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean.

3.2.13. ceilometer alarm-list

usage: ceilometer alarm-list [-q <QUERY>]

List the user's alarms.

Optional arguments:

-q <QUERY>, --query <QUERY>
   key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean.

3.2.14. ceilometer alarm-show

usage: ceilometer alarm-show [<ALARM_ID>]

Show an alarm.

Positional arguments:

<ALARM_ID>
   ID of the alarm to show.

3.2.15. ceilometer alarm-state-get

usage: ceilometer alarm-state-get [<ALARM_ID>]

Get the state of an alarm.

Positional arguments:

<ALARM_ID>
ID of the alarm state to show.

### 3.2.16. ceilometer alarm-state-set

**usage:** `ceilometer alarm-state-set --state <STATE> [<ALARM_ID>]`

Set the state of an alarm.

**Positional arguments:**

- `<ALARM_ID>`
  
  ID of the alarm state to set.

**Optional arguments:**

- `--state <STATE>`
  
  State of the alarm, one of: ['ok', 'alarm', 'insufficient data']. Required.

### 3.2.17. ceilometer alarm-threshold-create


Create a new alarm based on computed statistics.

**Optional arguments:**
--name <NAME>
Name of the alarm (must be unique per tenant). Required.

--project-id <ALARM_PROJECT_ID>
Tenant to associate with alarm (configurable by admin users only).

--user-id <ALARM_USER_ID>
User to associate with alarm (configurable by admin users only).

--description <DESCRIPTION>
Free text description of the alarm.

--state <STATE>
State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

--severity <SEVERITY>
Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action <Webhook URL>
URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

--time-constraint <Time Constraint>
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: name= <CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;[description= <DESCRIPTION>;[timezone=<IANA Timezone>]] Defaults to None.

--repeat-actions {True|False}
True if actions should be repeatedly notified while alarm remains in target state.

-m <METRIC>, --meter-name <METRIC>
Metric to evaluate against. Required.

--period <PERIOD>
Length of each period (seconds) to evaluate over.
--evaluation-periods <COUNT>
    Number of periods to evaluate over.

--statistic <STATISTIC>
    Statistic to evaluate, one of: ['max', 'min', 'avg', 'sum', 'count'].

--comparison-operator <OPERATOR>
    Operator to compare with, one of: ['lt', 'le', 'eq', 'ne', 'ge', 'gt'].

--threshold <THRESHOLD>
    Threshold to evaluate against. Required.

-q <QUERY>, --query <QUERY>
    key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean.

3.2.18. ceilometer alarm-threshold-update

usage: ceilometer alarm-threshold-update [--name <NAME>]
        [--project-id <ALARM_PROJECT_ID>]
        [--user-id <ALARM_USER_ID>]
        [--description <DESCRIPTION>]
        [--state <STATE>]
        [--severity <SEVERITY>]
        [--enabled {True|False}]
        [--alarm-action <Webhook URL>]
        [--ok-action <Webhook URL>]
        [--insufficient-data-action <Webhook URL>]
        [--time-constraint <Time Constraint>]
        [--repeat-actions {True|False}]
        [--remove-time-constraint <Constraint names>]
        [--period <PERIOD>]
        [--evaluation-periods <COUNT>]
        [--statistic <STATISTIC>]
        [--comparison-operator <OPERATOR>]
        [--threshold <THRESHOLD>]
        [-q <QUERY>]
        [<ALARM_ID>]

Update an existing alarm based on computed statistics.

Positional arguments:
ID of the alarm to update.

Optional arguments:

--name <NAME>
   Name of the alarm (must be unique per tenant).

--project-id <ALARM_PROJECT_ID>
   Tenant to associate with alarm (configurable by admin users only).

--user-id <ALARM_USER_ID>
   User to associate with alarm (configurable by admin users only).

--description <DESCRIPTION>
   Free text description of the alarm.

--state <STATE>
   State of the alarm, one of: ['ok', 'alarm', 'insufficient data']

--severity <SEVERITY>
   Severity of the alarm, one of: ['low', 'moderate', 'critical']

--enabled {True|False}
   True if alarm evaluation/actioning is enabled.

--alarm-action <Webhook URL>
   URL to invoke when state transitions to alarm. May be used multiple times. Defaults to None.

--ok-action <Webhook URL>
   URL to invoke when state transitions to OK. May be used multiple times. Defaults to None.

--insufficient-data-action <Webhook URL>
   URL to invoke when state transitions to insufficient data. May be used multiple times. Defaults to None.

--time-constraint <Time Constraint>
   Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: name= <CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;<description= <DESCRIPTION>;<timezone=<IANA Timezone>, Defaults to None.

--repeat-actions {True|False}
   True if actions should be repeatedly notified while alarm remains in target state.

--remove-time-constraint <Constraint names>
Name or list of names of the time constraints to remove.

- `m <METRIC>`, `--meter-name <METRIC>`
  Metric to evaluate against.

--period <PERIOD>
  Length of each period (seconds) to evaluate over.

--evaluation-periods <COUNT>
  Number of periods to evaluate over.

--statistic <STATISTIC>
  Statistic to evaluate, one of: ['max', 'min', 'avg', 'sum', 'count'].

--comparison-operator <OPERATOR>
  Operator to compare with, one of: ['lt', 'le', 'eq', 'ne', 'ge', 'gt'].

--threshold <THRESHOLD>
  Threshold to evaluate against.

-q <QUERY>, `--query <QUERY>`
  key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean.

3.2.19. ceilometer capabilities

```
usage: ceilometer capabilities
```

Print Ceilometer capabilities.

3.2.20. ceilometer event-list

```
usage: ceilometer event-list [-q <QUERY>] [--no-traits] [-l <NUMBER>]
```

List events.

Optional arguments:

-q <QUERY>, `--query <QUERY>`
  key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float or datetime.

--no-traits
  If specified, traits will not be printed.

-l <NUMBER>, `--limit <NUMBER>`
  Maximum number of events to return. API server limits result to <default_api_return_limit> rows if no limit provided. Option is configured in ceilometer.conf [api] group
3.2.21. ceilometer event-show

usage: ceilometer event-show <message_id>

Show a particular event.

Positional arguments:

<message_id>
The ID of the event. Should be a UUID.

3.2.22. ceilometer event-type-list

usage: ceilometer event-type-list

List event types.

3.2.23. ceilometer meter-list

usage: ceilometer meter-list [-q <QUERY>] [-l <NUMBER>] [--unique {True|False}]

List the user's meters.

Optional arguments:

-q <QUERY>, --query <QUERY>
key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean.

-l <NUMBER>, --limit <NUMBER>
Maximum number of meters to return. API server limits result to <default_api_return_limit> rows if no limit provided. Option is configured in ceilometer.conf [api] group

--unique {True|False}
Retrieves unique list of meters.

3.2.24. ceilometer query-alarm-history

usage: ceilometer query-alarm-history [-f <FILTER>] [-o <ORDERBY>] [-l <LIMIT>]

Query Alarm History.

Optional arguments:

-f <FILTER>, --filter <FILTER>
{complex_op: [[simple_op: {field_name: value}]]} The complex_op is one of: ['and', 'or'], simple_op is one of: ['=', '!=', '<', '<=', '>', '>='].
-o <ORDERBY>, --orderby <ORDERBY>
  [{field_name: direction}, {field_name: direction}] The direction is one of: ['asc', 'desc'].

-l <LIMIT>, --limit <LIMIT>
  Maximum number of alarm history items to return. API server limits result to
  <default_api_return_limit> rows if no limit provided. Option is configured in ceilometer.conf
  [api] group

3.2.25. ceilometer query-alarms

usage: ceilometer query-alarms [-f <FILTER>] [-o <ORDERBY>] [-l <LIMIT>]

Query Alarms.

Optional arguments:

-f <FILTER>, --filter <FILTER>
  {complex_op: [{simple_op: {field_name: value}}]} The complex_op is one of: ['and', 'or'],
  simple_op is one of: ['=', '!=', '<', '<=', '>', '>='].

-o <ORDERBY>, --orderby <ORDERBY>
  [{field_name: direction}, {field_name: direction}] The direction is one of: ['asc', 'desc'].

-l <LIMIT>, --limit <LIMIT>
  Maximum number of alarms to return. API server limits result to <default_api_return_limit>
  rows if no limit provided. Option is configured in ceilometer.conf [api] group

3.2.26. ceilometer query-samples

usage: ceilometer query-samples [-f <FILTER>] [-o <ORDERBY>] [-l <LIMIT>]

Query samples.

Optional arguments:

-f <FILTER>, --filter <FILTER>
  {complex_op: [{simple_op: {field_name: value}}]} The complex_op is one of: ['and', 'or'],
  simple_op is one of: ['=', '!=', '<', '<=', '>', '>='].

-o <ORDERBY>, --orderby <ORDERBY>
  [{field_name: direction}, {field_name: direction}] The direction is one of: ['asc', 'desc'].

-l <LIMIT>, --limit <LIMIT>
  Maximum number of samples to return. API server limits result to <default_api_return_limit>
  rows if no limit provided. Option is configured in ceilometer.conf [api] group

3.2.27. ceilometer resource-list
usage: ceilometer resource-list [-q <QUERY>] [-l <NUMBER>]

List the resources.

Optional arguments:

-q <QUERY>, --query <QUERY>
key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean.

-l <NUMBER>, --limit <NUMBER>
Maximum number of resources to return. API server limits result to <default_api_return_limit> rows if no limit provided. Option is configured in ceilometer.conf [api] group

3.2.28. ceilometer resource-show

usage: ceilometer resource-show <RESOURCE_ID>

Show the resource.

Positional arguments:

<RESOURCE_ID>
ID of the resource to show.

3.2.29. ceilometer sample-create


Create a sample.

Optional arguments:

--project-id <SAMPLE_PROJECT_ID>
Tenant to associate with sample (configurable by admin users only).

--user-id <SAMPLE_USER_ID>
User to associate with sample (configurable by admin users only).

```
-r <RESOURCE_ID>, --resource-id <RESOURCE_ID>
    ID of the resource. Required.

-m <METER_NAME>, --meter-name <METER_NAME>
    The meter name. Required.

--meter-type <METER_TYPE>
    The meter type. Required.

--meter-unit <METER_UNIT>
    The meter unit. Required.

--sample-volume <SAMPLE_VOLUME>
    The sample volume. Required.

--resource-metadata <RESOURCE_METADATA>
    Resource metadata. Provided value should be a set of key-value pairs e.g. {"key":"value"}.

--timestamp <TIMESTAMP>
    The sample timestamp.

--direct <DIRECT>
    Post sample to storage directly. Defaults to False.
```

### 3.2.30. ceilometer sample-create-list

```
usage: ceilometer sample-create-list [--direct <DIRECT>] <SAMPLES_LIST>

Create a sample list.

Positional arguments:

<SAMPLES_LIST>
    Json array with samples to create.

Optional arguments:

--direct <DIRECT>
    Post samples to storage directly. Defaults to False.
```

### 3.2.31. ceilometer sample-list

```
usage: ceilometer sample-list [-q <QUERY>] [-m <NAME>] [-l <NUMBER>]

List the samples (return OldSample objects if -m|--meter is set).
```
Optional arguments:

- **-q <QUERY>, --query <QUERY>**
  
  
  key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean.

- **-m <NAME>, --meter <NAME>**

  Name of meter to show samples for.

- **-l <NUMBER>, --limit <NUMBER>**

  Maximum number of samples to return. API server limits result to <default_api_return_limit> rows if no limit provided. Option is configured in ceilometer.conf [api] group

### 3.2.32. ceilometer sample-show

```
usage: ceilometer sample-show <SAMPLE_ID>
```

Show a sample.

**Positional arguments:**

- **<SAMPLE_ID>**

  ID (aka message ID) of the sample to show.

### 3.2.33. ceilometer statistics

```
usage: ceilometer statistics [-q <QUERY>] -m <NAME> [-p <PERIOD>] [-g <FIELD>] [-a <FUNC>[←<PARAM>]]
```

List the statistics for a meter.

**Optional arguments:**

- **-q <QUERY>, --query <QUERY>**

  
  
  key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean.

- **-m <NAME>, --meter <NAME>**

  Name of meter to list statistics for. Required.

- **-p <PERIOD>, --period <PERIOD>**

  Period in seconds over which to group samples.

- **-g <FIELD>, --groupby <FIELD>**

  Field for group by.

- **-a <FUNC>[←<PARAM>], --aggregate <FUNC>[←<PARAM>]**
Function for data aggregation. Available aggregates are: count, cardinality, min, max, sum, stddev, avg. Defaults to [].

3.2.34. ceilometer trait-description-list

usage: ceilometer trait-description-list -e <EVENT_TYPE>

List trait info for an event type.

Optional arguments:

-e <EVENT_TYPE>, --event_type <EVENT_TYPE>
Type of the event for which traits will be shown. Required.

3.2.35. ceilometer trait-list

usage: ceilometer trait-list -e <EVENT_TYPE> -t <TRAIT_NAME>

List all traits with name <trait_name> for Event Type <event_type>.

Optional arguments:

-e <EVENT_TYPE>, --event_type <EVENT_TYPE>
Type of the event for which traits will listed. Required.

-t <TRAIT_NAME>, --trait_name <TRAIT_NAME>
The name of the trait to list. Required.
CHAPTER 4. BLOCK STORAGE SERVICE (CINDER) COMMAND-LINE CLIENT

The cinder client is the command-line interface (CLI) for the Block Storage service (cinder) API and its extensions.

This chapter documents cinder version 2.0.1.

For help on a specific cinder command, enter:

```
$ cinder help COMMAND
```

4.1. CINDER USAGE


Subcommands:

absolute-limits
    Lists absolute limits for a user.

api-version
    Display the server API version information. (Supported by API versions 3.0 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]
attachment-create
Create an attachment for a cinder volume. (Supported by API versions 3.27 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

attachment-delete
Delete an attachment for a cinder volume. (Supported by API versions 3.27 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

attachment-list
Lists all attachments. (Supported by API versions 3.27 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

attachment-show
Show detailed information for attachment. (Supported by API versions 3.27 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

attachment-update
Update an attachment for a cinder volume. (Supported by API versions 3.27 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

availability-zone-list
Lists all availability zones.

backup-create
Creates a volume backup.

backup-delete
Removes one or more backups.

backup-export
Export backup metadata record.

backup-import
Import backup metadata record.

backup-list
Lists all backups.

backup-reset-state
Explicitly updates the backup state.

backup-restore
Restores a backup.

backup-show
Shows backup details.
backup-update
   Renames a backup. (Supported by API versions 3.9-3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

cgsnapshot-create
   Creates a cgsnapshot.

cgsnapshot-delete
   Removes one or more cgsnapshots.

cgsnapshot-list
   Lists all cgsnapshots.

cgsnapshot-show
   Shows cgsnapshot details.

cluster-disable
   Disables clustered services. (Supported by API versions 3.7-3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

cluster-enable
   Enables clustered services. (Supported by API versions 3.7-3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

cluster-list
   Lists clustered services with optional filtering. (Supported by API versions 3.7-3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

cluster-show
   Show detailed information on a clustered service. (Supported by API versions 3.7-3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

consisgroup-create
   Creates a consistency group.

consisgroup-create-from-src
   Creates a consistency group from a cgsnapshot or a source CG.

consisgroup-delete
   Removes one or more consistency groups.

consisgroup-list
   Lists all consistency groups.

consisgroup-show
   Shows details of a consistency group.

consisgroup-update
Updates a consistency group.

create
Creates a volume.

credentials
Shows user credentials returned from auth.

delete
Removes one or more volumes.

encryption-type-create
Creates encryption type for a volume type. Admin only.

encryption-type-delete
Deletes encryption type for a volume type. Admin only.

encryption-type-list
Shows encryption type details for volume types. Admin only.

encryption-type-show
Shows encryption type details for a volume type. Admin only.

encryption-type-update
Update encryption type information for a volume type (Admin Only).

endpoints
Discovers endpoints registered by authentication service.

extend
Attempts to extend size of an existing volume.

extra-specs-list
Lists current volume types and extra specs.

failover-host
Failover a replicating cinder-volume host.

force-delete
Attempts force-delete of volume, regardless of state.

freeze-host
Freeze and disable the specified cinder-volume host.

get-capabilities
Show backend volume stats and properties. Admin only.

get-pools
Show pool information for backends. Admin only.

**group-create**

Creates a group. (Supported by API versions 3.13 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-create-from-src**

Creates a group from a group snapshot or a source group. (Supported by API versions 3.14 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-delete**

Removes one or more groups. (Supported by API versions 3.13 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-list**

Lists all groups. (Supported by API versions 3.13 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-show**

Shows details of a group. (Supported by API versions 3.13 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-snapshot-create**

Creates a group snapshot. (Supported by API versions 3.14 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-snapshot-delete**

Removes one or more group snapshots. (Supported by API versions 3.14 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-snapshot-list**

Lists all group snapshots. (Supported by API versions 3.14 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-snapshot-show**

Shows group snapshot details. (Supported by API versions 3.14 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-specs-list**

Lists current group types and specs. (Supported by API versions 3.11 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-type-create**

Creates a group type. (Supported by API versions 3.11 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-type-default**
List the default group type. (Supported by API versions 3.11 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-type-delete**

Deletes group type or types. (Supported by API versions 3.11 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-type-key**

Sets or unsets group_spec for a group type. (Supported by API versions 3.11 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-type-list**

Lists available 'group types'. (Admin only will see private types) (Supported by API versions 3.11 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-type-show**

Show group type details. (Supported by API versions 3.11 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-type-update**

Updates group type name, description, and/or is_public. (Supported by API versions 3.11 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**group-update**

Updates a group. (Supported by API versions 3.13 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**image-metadata**

Sets or deletes volume image metadata.

**image-metadata-show**

Shows volume image metadata.

**list**

Lists all volumes.

**manage**

Manage an existing volume.

**manageable-list**

Lists all manageable volumes. (Supported by API versions 3.8 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**message-delete**

Removes one or more messages. (Supported by API versions 3.3 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**message-list**
Lists all messages. (Supported by API versions 3.3 -3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**message-show**
Shows message details. (Supported by API versions 3.3 -3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**metadata**
Sets or deletes volume metadata.

**metadata-show**
Shows volume metadata.

**metadata-update-all**
Updates volume metadata.

**migrate**
Migrates volume to a new host.

**qos-associate**
Associates qos specs with specified volume type.

**qos-create**
Creates a qos specs.

**qos-delete**
Deletes a specified qos specs.

**qos-disassociate**
Disassociates qos specs from specified volume type.

**qos-disassociate-all**
Disassociates qos specs from all its associations.

**qos-get-association**
Lists all associations for specified qos specs.

**qos-key**
Sets or unsets specifications for a qos spec.

**qos-list**
Lists qos specs.

**qos-show**
Shows qos specs details.
quota-class-show
    Lists quotas for a quota class.

quota-class-update
    Updates quotas for a quota class.

quota-defaults
    Lists default quotas for a tenant.

quota-delete
    Delete the quotas for a tenant.

quota-show
    Lists quotas for a tenant.

quota-update
    Updates quotas for a tenant.

quota-usage
    Lists quota usage for a tenant.

rate-limits
    Lists rate limits for a user.

readonly-mode-update
    Updates volume read-only access-mode flag.

rename
    Renames a volume.

replication-promote
    Promote a secondary volume to primary for a relationship.

replication-reenable
    Sync the secondary volume with primary for a relationship.

reset-state
    Explicitly updates the volume state in the Cinder database.

retype
    Changes the volume type for a volume.

service-disable
    Disables the service.

service-enable
    Enables the service.


**service-list**

Lists all services. Filter by host and service binary. (Supported by API versions 3.0 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**set-bootable**

Update bootable status of a volume.

**show**

Shows volume details.

**snapshot-create**

Creates a snapshot.

**snapshot-delete**

Removes one or more snapshots.

**snapshot-list**

Lists all snapshots.

**snapshot-manage**

Manage an existing snapshot.

**snapshot-manageable-list**

Lists all manageable snapshots. (Supported by API versions 3.8 - 3.latest) [hint: use '--os-volume-api-version' flag to show help message for proper version]

**snapshot-metadata**

Sets or deletes snapshot metadata.

**snapshot-metadata-show**

Shows snapshot metadata.

**snapshot-metadata-update-all**

Updates snapshot metadata.

**snapshot-rename**

Renames a snapshot.

**snapshot-reset-state**

Explicitly updates the snapshot state.

**snapshot-show**

Shows snapshot details.

**snapshot-unmanage**

Stop managing a snapshot.

**thaw-host**
Thaw and enable the specified cinder-volume host.

**transfer-accept**

Accepts a volume transfer.

**transfer-create**

Creates a volume transfer.

**transfer-delete**

Undoes a transfer.

**transfer-list**

Lists all transfers.

**transfer-show**

Shows transfer details.

**type-access-add**

Adds volume type access for the given project.

**type-access-list**

Print access information about the given volume type.

**type-access-remove**

Removes volume type access for the given project.

**type-create**

Creates a volume type.

**type-default**

List the default volume type.

**type-delete**

Deletes volume type or types.

**type-key**

Sets or unsets extra_spec for a volume type.

**type-list**

Lists available 'volume types'.

**type-show**

Show volume type details.

**type-update**

Updates volume type name, description, and/or is_public.
Stop managing a volume.

**upload-to-image**

Uploads volume to Image Service as an image.

**version-list**

List all API versions. (Supported by API versions 3.0 and 3.1 latest) [hint: use `--os-volume-api-version` flag to show help message for proper version]

**bash-completion**

Prints arguments for bash_completion.

**help**

Shows help about this program or one of its subcommands.

**list-extensions**

### 4.2. CINDER OPTIONAL ARGUMENTS

**--version**

Show program’s version number and exit.

**-d, --debug**

Show debugging output.

**--os-auth-system <auth-system>**

Defaults to `env[OS_AUTH_SYSTEM]`.

**--service-type <service-type>**

Service type. For most actions, default is volume.

**--service-name <service-name>**


**--volume-service-name <volume-service-name>**


**--os-endpoint-type <os-endpoint-type>**

Endpoint type, which is publicURL or internalURL. Default `env[OS_ENDPOINT_TYPE]` or nova `env[CINDER_ENDPOINT_TYPE]` or publicURL.

**--endpoint-type <endpoint-type>**

DEPRECATED! Use --os-endpoint-type.

**--os-volume-api-version <volume-api-ver>**
Block Storage API version. Accepts X, X.Y (where X is major and Y is minor part). Default = env[OS_VOLUME_API_VERSION].

--bypass-url <bypass-url>
Use this API endpoint instead of the Service Catalog. Defaults to env[CINDERCLIENT_BYPASS_URL].

--retries <retries>
Number of retries.

--profile HMAC_KEY
HMAC key to use for encrypting context data for performance profiling of operation. This key needs to match the one configured on the cinder api server. Without key the profiling will not be triggered even if osprofiler is enabled on server side.

--os-auth-strategy <auth-strategy>
Authentication strategy (Env: OS_AUTH_STRATEGY, default keystone). For now, any other value will disable the authentication.

--os-username <auth-user-name>
OpenStack user name. Default = env[OS_USERNAME].

--os-password <auth-password>
Password for OpenStack user. Default = env[OS_PASSWORD].

--os-tenant-name <auth-tenant-name>
Tenant name. Default = env[OS_TENANT_NAME].

--os-tenant-id <auth-tenant-id>
ID for the tenant. Default = env[OS_TENANT_ID].

--os-auth-url <auth-url>
URL for the authentication service. Default = env[OS_AUTH_URL].

--os-user-id <auth-user-id>
Authentication user ID (Env: OS_USER_ID).

--os-user-domain-id <auth-user-domain-id>
OpenStack user domain ID. Defaults to env[OS_USER_DOMAIN_ID].

--os-user-domain-name <auth-user-domain-name>
OpenStack user domain name. Defaults to env[OS_USER_DOMAIN_NAME].

--os-project-id <auth-project-id>
Another way to specify tenant ID. This option is mutually exclusive with --os-tenant-id. Defaults to env[OS_PROJECT_ID].

--os-project-name <auth-project-name>
Another way to specify tenant name. This option is mutually exclusive with --os-tenant-name. Defaults to env[OS_PROJECT_NAME].

--os-project-domain-id <auth-project-domain-id>
Defaults to env[OS_PROJECT_DOMAIN_ID].

--os-project-domain-name <auth-project-domain-name>
Defaults to env[OS_PROJECT_DOMAIN_NAME].

--os-region-name <region-name>
Region name. Default= env[OS_REGION_NAME].

--os-token <token>
Defaults to env[OS_TOKEN].

--os-url <url>
Defaults to env[OS_URL].

4.2.1. cinder absolute-limits

usage: cinder absolute-limits [<tenant_id>]

Lists absolute limits for a user.

Positional arguments:

<tenant_id>
Display information for a single tenant (Admin only).

4.2.2. cinder api-version

usage: cinder api-version

Display the server API version information.

4.2.3. cinder attachment-create


Create an attachment for a cinder volume.
Positional arguments:

<volume>
    Name or ID of volume or volumes to attach.

Optional arguments:

--instance <instance>
    UUID of Instance attaching to. Default=None.

--connect <connect>
    Make an active connection using provided connector info (True or False).

--initiator <initiator>
    iqns of the initiator attaching to. Default=None.

--ip <ip>
    ip of the system attaching to. Default=None.

--host <host>
    Name of the host attaching to. Default=None.

--platform <platform>
    Platform type. Default=x86_64.

--ostype <ostype>
    OS type. Default=linux2.

--multipath <multipath>
    OS type. Default=False.

--mountpoint <mountpoint>
    Mountpoint volume will be attached at. Default=None.

4.2.4. cinder attachment-delete

    usage: cinder attachment-delete <attachment> [<attachment> ...]

Delete an attachment for a cinder volume.

Positional arguments:

<attachment>
    ID of attachment or attachments to delete.

4.2.5. cinder attachment-list
usage: cinder attachment-list [--all-tenants [0|1]]
               [--volume-id <volume-id>] [--status
               <status>]
               [--marker <marker>] [--limit <limit>]
               [--sort <key>[::<direction>]]
               [--tenant [tenant]]

Lists all attachments.

Optional arguments:

--all-tenants [0|1]
    Shows details for all tenants. Admin only.

--volume-id <volume-id>
    Filters results by a volume ID. Default=None.

--status <status>
    Filters results by a status. Default=None.

--marker <marker>
    Begin returning attachments that appear later in attachment list than that represented by this
    id. Default=None.

--limit <limit>
    Maximum number of attachemnts to return. Default=None.

--sort <key>[::<direction>]
    Comma-separated list of sort keys and directions in the form of <key>[::<asc|desc>]. Valid
    keys: id, status, size, availability_zone, name, bootable, created_at, reference.
    Default=None.

--tenant [tenant]
    Display information from single tenant (Admin only).

4.2.6. cinder attachment-show

usage: cinder attachment-show <attachment>

Show detailed information for attachment.

Positional arguments:

<attachment>
    ID of attachment.

4.2.7. cinder attachment-update

usage: cinder attachment-update [--initiator <initiator>] [--ip <ip>]

Update an attachment for a cinder volume. This call is designed to be more of an attachment completion than anything else. It expects the value of a connector object to notify the driver that the volume is going to be connected and where it's being connected to.

Positional arguments:

<attachment>
   ID of attachment.

Optional arguments:

--initiator <initiator>
   iqnn of the initiator attaching to. Default=None.

--ip <ip>
   ip of the system attaching to. Default=None.

--host <host>
   Name of the host attaching to. Default=None.

--platform <platform>
   Platform type. Default=x86_64.

--ostype <ostype>
   OS type. Default=linux2.

--multipath <multipath>
   OS type. Default=False.

--mountpoint <mountpoint>
   Mountpoint volume will be attached at. Default=None.

4.2.8. cinder availability-zone-list

usage: cinder availability-zone-list

Lists all availability zones.

4.2.9. cinder backup-create

usage: cinder backup-create [--container <container>] [--name <name>] [--description <description>] [--
incremental]        [--force] [--snapshot-id <snapshot-id>]  
<volume>

Creates a volume backup.

**Positional arguments:**

<volume>  
Name or ID of volume to backup.

**Optional arguments:**

--container <container>  
Backup container name. Default=None.

--name <name>  
Backup name. Default=None.

--description <description>  
Backup description. Default=None.

--incremental  
Incremental backup. Default=False.

--force  
Allows or disallows backup of a volume when the volume is attached to an instance. If set to True, backs up the volume whether its status is "available" or "in-use". The backup of an "in-use" volume means your data is crash consistent. Default=False.

--snapshot-id <snapshot-id>  
ID of snapshot to backup. Default=None.

4.2.10. cinder backup-delete

usage: cinder backup-delete [--force] <backup> [<backup> ...]

Removes one or more backups.

**Positional arguments:**

<backup>  
Name or ID of backup(s) to delete.

**Optional arguments:**

--force  
Allows deleting backup of a volume when its status is other than "available" or "error". Default=False.
4.2.11. cinder backup-export

usage: cinder backup-export <backup>

Export backup metadata record.

Positional arguments:

<backup>
ID of the backup to export.

4.2.12. cinder backup-import

usage: cinder backup-import <backup_service> <backup_url>

Import backup metadata record.

Positional arguments:

<backup_service>
Backup service to use for importing the backup.

<backup_url>
Backup URL for importing the backup metadata.

4.2.13. cinder backup-list

usage: cinder backup-list [--all-tenants [<all_tenants>]] [--name <name>] [--status <status>] [--volume-id <volume-id>] [--marker <marker>] [--limit <limit>] [--sort <key>[:<direction>]]

Lists all backups.

Optional arguments:

--all-tenants [<all_tenants>]
Shows details for all tenants. Admin only.

--name <name>
Filters results by a name. Default=None.

--status <status>
Filters results by a status. Default=None.

--volume-id <volume-id>
Filters results by a volume ID. Default=None.
--marker <marker>
Begin returning backups that appear later in the backup list than that represented by this id. Default=None.

--limit <limit>
Maximum number of backups to return. Default=None.

--sort <key>[::<direction>]
Comma-separated list of sort keys and directions in the form of <key>[::<asc|desc>]. Valid keys: id, status, size, availability_zone, name, bootable, created_at, reference. Default=None.

4.2.14. cinder backup-reset-state

usage: cinder backup-reset-state [--state <state>] <backup> [<backup> ...]

Explicitly updates the backup state.

Positional arguments:

<backup>
Name or ID of the backup to modify.

Optional arguments:

--state <state>
The state to assign to the backup. Valid values are "available", "error". Default=available.

4.2.15. cinder backup-restore

usage: cinder backup-restore [--volume <volume>] [--name <name>] <backup>

Restores a backup.

Positional arguments:

<backup>
Name or ID of backup to restore.

Optional arguments:

--volume <volume>
Name or ID of existing volume to which to restore. This is mutually exclusive with --name and takes priority. Default=None.

--name <name>
Use the name for new volume creation to restore. This is mutually exclusive with --volume (or the deprecated --volume-id) and --volume (or --volume-id) takes priority. Default=None.

### 4.2.16. cinder backup-show

```
usage: cinder backup-show <backup>
```

Shows backup details.

**Positional arguments:**

- `<backup>`
  
  Name or ID of backup.

### 4.2.17. cinder backup-update

```
usage: cinder backup-update [--name [<name>]] [--description <description>]
```

Renames a backup.

**Positional arguments:**

- `<backup>`
  
  Name or ID of backup to rename.

**Optional arguments:**

- `--name [<name>]`
  
  New name for backup.

- `--description <description>`
  
  Backup description. Default=None.

### 4.2.18. cinder cgsnapshot-create

```
usage: cinder cgsnapshot-create [--name <name>] [--description <description>]
```

Creates a cgsnapshot.

**Positional arguments:**

- `<consistencygroup>`
  
  Name or ID of a consistency group.

**Optional arguments:**
--name <name>
   Cgsnapshot name. Default=None.

--description <description>
   Cgsnapshot description. Default=None.

4.2.19. cinder cgsnapshot-delete

   usage: cinder cgsnapshot-delete <cgsnapshot> [<cgsnapshot> ...]

Removes one or more cgsnapshots.

Positional arguments:

<cgsnapshot>
   Name or ID of one or more cgsnapshots to be deleted.

4.2.20. cinder cgsnapshot-list

   usage: cinder cgsnapshot-list [--all-tenants [0|1]] [--status <status>] [--consistencygroup-id <consistencygroup_id>]

Lists all cgsnapshots.

Optional arguments:

--all-tenants [0|1]
   Shows details for all tenants. Admin only.

--status <status>
   Filters results by a status. Default=None.

--consistencygroup-id <consistencygroup_id>
   Filters results by a consistency group ID. Default=None.

4.2.21. cinder cgsnapshot-show

   usage: cinder cgsnapshot-show <cgsnapshot>

Shows cgsnapshot details.

Positional arguments:

<cgsnapshot>
   Name or ID of cgsnapshot.
4.2.22. **cinder cluster-disable**

usage: cinder cluster-disable [--reason <reason>] [<!--binary-->] <cluster-name>

Disables clustered services.

**Positional arguments:**

<!--binary-->
Binary to filter by. Default: cinder-volume.

<!--cluster-name-->
Name of the clustered services to update.

**Optional arguments:**

--reason <reason>
Reason for disabling clustered service.

4.2.23. **cinder cluster-enable**

usage: cinder cluster-enable [<!--binary-->] <cluster-name>

Enables clustered services.

**Positional arguments:**

<!--binary-->
Binary to filter by. Default: cinder-volume.

<!--cluster-name-->
Name of the clustered services to update.

4.2.24. **cinder cluster-list**


Lists clustered services with optional filtering.

**Optional arguments:**

--name <name>
Filter by cluster name, without backend will list all clustered services from the same cluster. Default=None.

```
--binary <binary>
  Cluster binary. Default=None.
```

```
--is-up <True|true|False|false>
  Filter by up/dow status. Default=None.
```

```
--disabled <True|true|False|false>
  Filter by disabled status. Default=None.
```

```
--num-hosts <num-hosts>
  Filter by number of hosts in the cluster.
```

```
--num-down-hosts <num-down-hosts>
  Filter by number of hosts that are down.
```

```
--detailed
  Get detailed clustered service information (Default=False).
```

### 4.2.25. Cinder cluster-show

```
usage: cinder cluster-show [<binary>] <cluster-name>
```

Show detailed information on a clustered service.

**Positional arguments:**

```
<binary>
  Binary to filter by. Default: cinder-volume.
```

```
<cluster-name>
  Name of the clustered service to show.
```

### 4.2.26. Cinder consisgroup-create

```
usage: cinder consisgroup-create [--name <name>] [--description <description>]
  [--availability-zone <availability-zone>]
  <volume-types>
```

Creates a consistency group.

**Positional arguments:**

```
<volume-types>
```
Volume types.

Optional arguments:

--name <name>
    Name of a consistency group.

--description <description>
    Description of a consistency group. Default=None.

--availability-zone <availability-zone>
    Availability zone for volume. Default=None.

4.2.27. cinder consisgroup-create-from-src

usage: cinder consisgroup-create-from-src [--cgsnapshot <cgsnapshot>]
    [--source-cg <source-cg>]
    [--name <name>]
    [--description <description>]

Creates a consistency group from a cgsnapshot or a source CG.

Optional arguments:

--cgsnapshot <cgsnapshot>
    Name or ID of a cgsnapshot. Default=None.

--source-cg <source-cg>
    Name or ID of a source CG. Default=None.

--name <name>
    Name of a consistency group. Default=None.

--description <description>
    Description of a consistency group. Default=None.

4.2.28. cinder consisgroup-delete

usage: cinder consisgroup-delete [--force] <consistencygroup> ...

Removes one or more consistency groups.

Positional arguments:

<consistencygroup>
    Name or ID of one or more consistency groups to be deleted.
Optional arguments:

--force

Allows or disallows consistency groups to be deleted. If the consistency group is empty, it can be deleted without the force flag. If the consistency group is not empty, the force flag is required for it to be deleted.

4.2.29. cinder consisgroup-list

usage: cinder consisgroup-list [--all-tenants [<0|1>]]

Lists all consistency groups.

Optional arguments:

--all-tenants [<0|1>]

Shows details for all tenants. Admin only.

4.2.30. cinder consisgroup-show

usage: cinder consisgroup-show <consistencygroup>

Shows details of a consistency group.

Positional arguments:

<consistencygroup>

Name or ID of a consistency group.

4.2.31. cinder consisgroup-update


Updates a consistency group.

Positional arguments:

<consistencygroup>

Name or ID of a consistency group.

Optional arguments:

--name <name>

New name for consistency group. Default=None.
--description <description>
   New description for consistency group. Default=None.

--add-volumes <uuid1,uuid2,.....>
   UUID of one or more volumes to be added to the consistency group, separated by commas.
   Default=None.

--remove-volumes <uuid3,uuid4,.....>
   UUID of one or more volumes to be removed from the consistency group, separated by
   commas. Default=None.

4.2.32. cinder create

usage: cinder create [--consisgroup-id <consistencygroup-id>] 
 [--group-id <group-id>] [--snapshot-id <snapshot-id>]
 [--source-volid <source-volid>] 
 [--source-replica <source-replica>] 
 [--image-id <image-id>] [--image <image>] [--name <name>]
 [--description <description>] 
 [--volume-type <volume-type>] 
 [--availability-zone <availability-zone>] 
 [--metadata [<key=value> [<key=value> ...]]] 
 [--hint <key=value>] [--allow-multiattach] 
 [<size>]

Creates a volume.

Positional arguments:

<size>
   Size of volume, in GiBs. (Required unless snapshot-id /source-volid is specified).

Optional arguments:

--consisgroup-id <consistencygroup-id>
   ID of a consistency group where the new volume belongs to. Default=None.

--group-id <group-id>
   ID of a group where the new volume belongs to. Default=None. (Supported by API version
   3.13 and later)

--snapshot-id <snapshot-id>
   Creates volume from snapshot ID. Default=None.

--source-volid <source-volid>
   Creates volume from volume ID. Default=None.

--source-replica <source-replica>
Creates volume from replicated volume ID. Default=None.

--image-id <image-id>
Creates volume from image ID. Default=None.

--image <image>
Creates a volume from image (ID or name). Default=None.

--name <name>
Volume name. Default=None.

--description <description>
Volume description. Default=None.

--volume-type <volume-type>
Volume type. Default=None.

--availability-zone <availability-zone>
Availability zone for volume. Default=None.

--metadata [<key=value> [<key=value> ...]]
Metadata key and value pairs. Default=None.

--hint <key=value>
Scheduler hint, like in nova.

--allow-multiattach
Allow volume to be attached more than once. Default=False

4.2.33. cinder credentials

usage: cinder credentials
Shows user credentials returned from auth.

4.2.34. cinder delete

usage: cinder delete [--cascade] <volume> [<volume> ...]
Removes one or more volumes.

Positional arguments:

<volume>
Name or ID of volume or volumes to delete.

Optional arguments:
--cascade
Remove any snapshots along with volume. Default=False.

4.2.35. cinder encryption-type-create

usage: cinder encryption-type-create [--cipher <cipher>]
[---key_size <key_size>]
[---control_location]
<volume_type> <provider>

Creates encryption type for a volume type. Admin only.

Positional arguments:

<volume_type>
Name or ID of volume type.

<provider>
The class that provides encryption support. For example, LuksEncryptor.

Optional arguments:

--cipher <cipher>
The encryption algorithm or mode. For example, aes-xts-plain64. Default=None.

--key_size <key_size>
Size of encryption key, in bits. For example, 128 or 1. Default=None.

--control_location <control_location>
Notional service where encryption is performed. Valid values are “front-end” or “back-end.” For example, front-end=Nova. Default is “front-end.”

4.2.36. cinder encryption-type-delete

usage: cinder encryption-type-delete <volume_type>

Deletes encryption type for a volume type. Admin only.

Positional arguments:

<volume_type>
Name or ID of volume type.

4.2.37. cinder encryption-type-list
usage: cinder encryption-type-list

Shows encryption type details for volume types. Admin only.

4.2.38. cinder encryption-type-show

usage: cinder encryption-type-show <volume_type>

Shows encryption type details for a volume type. Admin only.

Positional arguments:

<volume_type>

Name or ID of volume type.

4.2.39. cinder encryption-type-update

usage: cinder encryption-type-update [--provider <provider>]

[--cipher [<cipher>]]

[--key-size [<key-size>]]

[--control-location <control-location>]

<volume-type>

Update encryption type information for a volume type (Admin Only).

Positional arguments:

<volume-type>

Name or ID of the volume type

Optional arguments:

--provider <provider>

Class providing encryption support (e.g. LuksEncryptor) (Optional)

--cipher [<cipher>]

Encryption algorithm/mode to use (e.g., aes-xts-plain64). Provide parameter without value to set to provider default. (Optional)

--key-size [<key-size>]

Size of the encryption key, in bits (e.g., 128, 256). Provide parameter without value to set to provider default. (Optional)

--control-location <control-location>

Notional service where encryption is performed (e.g., front-end=Nova). Values: ‘front-end’, ‘back-end’ (Optional)

4.2.40. cinder endpoints
usage: cinder endpoints

Discovers endpoints registered by authentication service.

4.2.41. cinder extend

usage: cinder extend <volume> <new_size>

Attempts to extend size of an existing volume.

Positional arguments:

<volume>
    Name or ID of volume to extend.

<new_size>
    New size of volume, in GiBs.

4.2.42. cinder extra-specs-list

usage: cinder extra-specs-list

Lists current volume types and extra specs.

4.2.43. cinder failover-host

usage: cinder failover-host [--backend_id <backend-id>] <hostname>

Failover a replicating cinder-volume host.

Positional arguments:

<hostname>
    Host name.

Optional arguments:

--backend_id <backend-id>
    ID of backend to failover to (Default=None)

4.2.44. cinder force-delete

usage: cinder force-delete <volume> [<volume> ...]

Attempts force-delete of volume, regardless of state.

Positional arguments:
Name or ID of volume or volumes to delete.

4.2.45. cinder freeze-host

usage: cinder freeze-host <hostname>

Freeze and disable the specified cinder-volume host.

Positional arguments:

<hostname>

Host name.

4.2.46. cinder get-capabilities

usage: cinder get-capabilities <host>

Show backend volume stats and properties. Admin only.

Positional arguments:

<host>

Cinder host to show backend volume stats and properties; takes the form: host@backend-name

4.2.47. cinder get-pools

usage: cinder get-pools [--detail]

Show pool information for backends. Admin only.

Optional arguments:

--detail

Show detailed information about pools.

4.2.48. cinder group-create

usage: cinder group-create [--name <name>] [--description <description>] [--availability-zone <availability-zone>] <group-type> <volume-types>

Creates a group.

Positional arguments:

<group-type>
Group type.

<volume-types>
Comma-separated list of volume types.

Optional arguments:

--name <name>
Name of a group.

--description <description>
Description of a group. Default=None.

--availability-zone <availability-zone>
Availability zone for group. Default=None.

4.2.49. cinder group-create-from-src

usage: cinder group-create-from-src [--group-snapshot <group-snapshot>]
[--source-group <source-group>]
[--name <name>]
[--description <description>]

Creates a group from a group snapshot or a source group.

Optional arguments:

--group-snapshot <group-snapshot>
Name or ID of a group snapshot. Default=None.

--source-group <source-group>
Name or ID of a source group. Default=None.

--name <name>
Name of a group. Default=None.

--description <description>
Description of a group. Default=None.

4.2.50. cinder group-delete

usage: cinder group-delete [--delete-volumes] <group> [<group> ...]

Removes one or more groups.

Positional arguments:

<group>
Name or ID of one or more groups to be deleted.

Optional arguments:

--delete-volumes
Allows or disallows groups to be deleted if they are not empty. If the group is empty, it can be deleted without the delete-volumes flag. If the group is not empty, the delete-volumes flag is required for it to be deleted. If True, all volumes in the group will also be deleted.

4.2.51. cinder group-list

usage: cinder group-list [--all-tenants [0|1]]

Lists all groups.

Optional arguments:

--all-tenants [0|1]
Shows details for all tenants. Admin only.

4.2.52. cinder group-show

usage: cinder group-show <group>

Shows details of a group.

Positional arguments:

<group>
Name or ID of a group.

4.2.53. cinder group-snapshot-create

usage: cinder group-snapshot-create [--name <name>] [--description <description>] <group>

Creates a group snapshot.

Positional arguments:

<group>
Name or ID of a group.

Optional arguments:

--name <name>
Group snapshot name. Default=None.
4.2.54. cinder group-snapshot-delete

usage: cinder group-snapshot-delete <group_snapshot> [ <group_snapshot> ... ]

Removes one or more group snapshots.

Positional arguments:

<group_snapshot>
Name or ID of one or more group snapshots to be deleted.

4.2.55. cinder group-snapshot-list

usage: cinder group-snapshot-list [--all-tenants [0|1]] [--status <status>]
[ --group-id <group_id> ]

Lists all group snapshots.

Optional arguments:

--all-tenants [0|1]
Shows details for all tenants. Admin only.

--status <status>
Filters results by a status. Default=None.

--group-id <group_id>
Filters results by a group ID. Default=None.

4.2.56. cinder group-snapshot-show

usage: cinder group-snapshot-show <group_snapshot>

Shows group snapshot details.

Positional arguments:

<group_snapshot>
Name or ID of group snapshot.

4.2.57. cinder group-specs-list

usage: cinder group-specs-list
Lists current group types and specs.

4.2.58. cinder group-type-create

usage: cinder group-type-create [--description <description>] [--is-public <is-public>] <name>

Creates a group type.

Positional arguments:

<name>
   Name of new group type.

Optional arguments:

--description <description>
   Description of new group type.

--is-public <is-public>
   Make type accessible to the public (default true).

4.2.59. cinder group-type-default

usage: cinder group-type-default

List the default group type.

4.2.60. cinder group-type-delete

usage: cinder group-type-delete <group_type> [<group_type> ...]

Deletes group type or types.

Positional arguments:

<group_type>
   Name or ID of group type or types to delete.

4.2.61. cinder group-type-key

usage: cinder group-type-key <gtype> <action> <key=value> [<key=value> ...]

Sets or unsets group_spec for a group type.

Positional arguments:
4.2.62. cinder group-type-list

Usage: cinder group-type-list

Lists available 'group types'. (Admin only will see private types)

4.2.63. cinder group-type-show

Usage: cinder group-type-show <group_type>

Show group type details.

Positional arguments:

<group_type>

Name or ID of the group type.

4.2.64. cinder group-type-update

Usage: cinder group-type-update [--name <name>] [--description <description>] [--is-public <is-public>] <id>

Updates group type name, description, and/or is_public.

Positional arguments:

{id>

ID of the group type.

Optional arguments:

--name <name>

Name of the group type.

--description <description>

Description of the group type.
--is-public <is-public>
Make type accessible to the public or not.

4.2.65. cinder group-update

usage: cinder group-update [--name <name>] [--description <description>]
       [--add-volumes <uuid1,uuid2,......>]
       [--remove-volumes <uuid3,uuid4,......>]
       <group>

Updates a group.

Positional arguments:

<group>
Name or ID of a group.

Optional arguments:

--name <name>
New name for group. Default=None.

--description <description>
New description for group. Default=None.

--add-volumes <uuid1,uuid2,......>
UUID of one or more volumes to be added to the group, separated by commas.
Default=None.

--remove-volumes <uuid3,uuid4,......>
UUID of one or more volumes to be removed from the group, separated by commas.
Default=None.

4.2.66. cinder image-metadata

usage: cinder image-metadata <volume> <action> <key=value> [<key=value> ...]

Sets or deletes volume image metadata.

Positional arguments:

<volume>
Name or ID of volume for which to update metadata.

<action>
The action. Valid values are 'set' or 'unset.'
<key=value>
Metadata key and value pair to set or unset. For unset, specify only the key.

### 4.2.67. cinder image-metadata-show

```
usage: cinder image-metadata-show <volume>
```

Shows volume image metadata.

**Positional arguments:**

`<volume>`

ID of volume.

### 4.2.68. cinder list

```
usage: cinder list [--group_id <group_id>] [--all-tenants [<0|1>]]
                   [--name <name>] [--status <status>]
                   [--bootable [<True|true|False|false>]]
                   [--migration_status <migration_status>]
                   [--metadata [<key=value> [<key=value> ...]]]
                   [--image_metadata [<key=value> [<key=value> ...]]]
                   [--marker <marker>] [--limit <limit>] [--fields <fields>]
                   [--sort <key>[::<direction>]] [--tenant [<tenant>]]
```

Lists all volumes.

**Optional arguments:**

--group_id <group_id>
Filters results by a group_id. Default=None. (Supported by API version 3.10 and later)

--all-tenants [<0|1>]
Shows details for all tenants. Admin only.

--name <name>
Filters results by a name. Default=None.

--status <status>
Filters results by a status. Default=None.

--bootable [<True|true|False|false>]
Filters results by bootable status. Default=None.

--migration_status <migration_status>
Filters results by a migration status. Default=None. Admin only.

--metadata [<key=value> [<key=value> ...]]
Filters results by a metadata key and value pair. Default=None.

`--image_metadata [<key=value> [<key=value> ...]]`
Filters results by a image metadata key and value pair. Require volume api version >=3.4. Default=None. (Supported by API version 3.4 and later)

`--marker <marker>`
Begin returning volumes that appear later in the volume list than that represented by this volume id. Default=None.

`--limit <limit>`
Maximum number of volumes to return. Default=None.

`--fields <fields>`
Comma-separated list of fields to display. Use the show command to see which fields are available. Unavailable/non-existent fields will be ignored. Default=None.

`--sort <key>[::<direction>]`
Comma-separated list of sort keys and directions in the form of `<key>[::<asc|desc>]`. Valid keys: id, status, size, availability_zone, name, bootable, created_at, reference. Default=None.

`--tenant [<tenant>]`
Display information from single tenant (Admin only).

### 4.2.69. cinder list-extensions

```
usage: cinder list-extensions
```

### 4.2.70. cinder manage

```
usage: cinder manage [--id-type <id-type>] [--name <name>]
[--description <description>]
[--volume-type <volume-type>]
[--availability-zone <availability-zone>]
[--metadata [<key=value> [<key=value> ...]]] [--bootable]
<host> <identifier>
```

Manage an existing volume.

**Positional arguments:**

`<host>`
Cinder host on which the existing volume resides; takes the form: `host@backend-name#pool`

`<identifier>`
Name or other Identifier for existing volume
Optional arguments:

--id-type <id-type>
Type of backend device identifier provided, typically source-name or source-id
(Default=source-name)

--name <name>
Volume name (Default=None)

--description <description>
Volume description (Default=None)

--volume-type <volume-type>
Volume type (Default=None)

--availability-zone <availability-zone>
Availability zone for volume (Default=None)

--metadata [<key=value> [<key=value> ...]]
Metadata key=value pairs (Default=None)

--bootable
Specifies that the newly created volume should be marked as bootable

4.2.71. cinder manageable-list

usage: cinder manageable-list [--detailed <detailed>] [--marker <marker>]
[--limit <limit>] [--offset <offset>]
[--sort <key>[:<direction>]]
<host>

Lists all manageable volumes.

Positional arguments:

<host>
Cinder host on which to list manageable volumes; takes the form: host@backend-name#pool

Optional arguments:

--detailed <detailed>
Returned detailed information (default true).

--marker <marker>
Begin returning volumes that appear later in the volume list than that represented by this volume id. Default=None.
--limit <limit>
   Maximum number of volumes to return. Default=none.

--offset <offset>
   Number of volumes to skip after marker. Default=none.

--sort <key>[::<direction>]
   Comma-separated list of sort keys and directions in the form of <key>[::<asc|desc>]. Valid

4.2.72. cinder message-delete

   usage: cinder message-delete <message> [<message> ...]

   Removes one or more messages.

   Positional arguments:

   <message>
      ID of one or more message to be deleted.

4.2.73. cinder message-list

   usage: cinder message-list [--marker <marker>] [--limit <limit>]
   [--sort <key>[::<direction>]]
   [--resource_uuid <resource_uuid>]
   [--resource_type <type>] [--event_id <id>]
   [--request_id <request_id>] [--level
   <level>]

   Lists all messages.

   Optional arguments:

   --marker <marker>
      Begin returning message that appear later in the message list than that represented by this
      id. Default=none. (Supported by API version 3.5 and later)

   --limit <limit>
      Maximum number of messages to return. Default=none. (Supported by API version 3.5 and
      later)

   --sort <key>[::<direction>]
      Comma-separated list of sort keys and directions in the form of <key>[::<asc|desc>]. Valid
      keys: id, status, size, availability_zone, name, bootable, created_at, reference.
      Default=none. (Supported by API version 3.5 and later)

   --resource_uuid <resource_uuid>
      Filters results by a resource uuid. Default=none.
4.2.74. cinder message-show

Usage: cinder message-show <message>

Shows message details.

Positional arguments:

<message>
ID of message.

4.2.75. cinder metadata

Usage: cinder metadata <volume> <action> <key=value> [<key=value> ...]

Sets or deletes volume metadata.

Positional arguments:

<volume>
Name or ID of volume for which to update metadata.

<action>
The action. Valid values are "set" or "unset."

<key=value>
Metadata key and value pair to set or unset. For unset, specify only the key(s): <key key>
(Supported by API version 3.15 and later)

4.2.76. cinder metadata-show

Usage: cinder metadata-show <volume>

Shows volume metadata.

Positional arguments:
4.2.77. cinder metadata-update-all

Usage: cinder metadata-update-all <volume> <key=value> [<key=value> ...]

Updates volume metadata.

Positional arguments:

- <volume>
  ID of volume for which to update metadata.

- <key=value>
  Metadata key and value pair or pairs to update.

4.2.78. cinder migrate

Usage: cinder migrate [--force-host-copy [<True|False>]]
               [--lock-volume [<True|False>]]
               <volume> <host>

Migrates volume to a new host.

Positional arguments:

- <volume>
  ID of volume to migrate.

- <host>
  Destination host. Takes the form: host@backend-name#pool

Optional arguments:

- --force-host-copy [<True|False>]
  Enables or disables generic host-based force-migration, which bypasses driver
  optimizations. Default=False.

- --lock-volume [<True|False>]
  Enables or disables the termination of volume migration caused by other commands. This
  option applies to the available volume. True means it locks the volume state and does not
  allow the migration to be aborted. The volume status will be in maintenance during the
  migration. False means it allows the volume migration to be aborted. The volume status is
  still in the original status. Default=False.

4.2.79. cinder qos-associate
usage: cinder qos-associate <qos_specs> <volume_type_id>

Associates qos specs with specified volume type.

**Positional arguments:**

*<qos_specs>*
  ID of QoS specifications.

*<volume_type_id>*
  ID of volume type with which to associate QoS specifications.

### 4.2.80. cinder qos-create

usage: cinder qos-create <name> <key=value> [<key=value> ...]

Creates a qos specs.

**Positional arguments:**

*<name>*
  Name of new QoS specifications.

*<key=value>*
  QoS specifications.

### 4.2.81. cinder qos-delete

usage: cinder qos-delete [--force [True|False]] <qos_specs>

Deletes a specified qos specs.

**Positional arguments:**

*<qos_specs>*
  ID of QoS specifications to delete.

**Optional arguments:**

*--force [True|False]*
  Enables or disables deletion of in-use QoS specifications. Default=False.

### 4.2.82. cinder qos-disassociate

usage: cinder qos-disassociate <qos_specs> <volume_type_id>

Disassociates qos specs from specified volume type.

**Positional arguments:**
<qos_specs>
   ID of QoS specifications.
</qos_specs>

<volume_type_id>
   ID of volume type with which to associate QoS specifications.
</volume_type_id>

4.2.83. cinder qos-disassociate-all

   usage: cinder qos-disassociate-all <qos_specs>

Disassociates qos specs from all its associations.

Positional arguments:

   <qos_specs>
   ID of QoS specifications on which to operate.
</qos_specs>

4.2.84. cinder qos-get-association

   usage: cinder qos-get-association <qos_specs>

Lists all associations for specified qos specs.

Positional arguments:

   <qos_specs>
   ID of QoS specifications.
</qos_specs>

4.2.85. cinder qos-key

   usage: cinder qos-key <qos_specs> <action> key=value [key=value ...]

Sets or unsets specifications for a qos spec.

Positional arguments:

   <qos_specs>
   ID of QoS specifications.
</qos_specs>

   <action>
   The action. Valid values are "set" or "unset."
</action>

   key=value
   Metadata key and value pair to set or unset. For unset, specify only the key.

4.2.86. cinder qos-list
usage: cinder qos-list

Lists qos specs.

4.2.87. cinder qos-show

usage: cinder qos-show <qos_specs>

Shows qos specs details.

Positional arguments:

<qos_specs>
    ID of QoS specifications to show.

4.2.88. cinder quota-class-show

usage: cinder quota-class-show <class>

Lists quotas for a quota class.

Positional arguments:

<class>
    Name of quota class for which to list quotas.

4.2.89. cinder quota-class-update

usage: cinder quota-class-update [--volumes <volumes>]
                                     [--snapshots <snapshots>]
                                     [--gigabytes <gigabytes>]
                                     [--volume-type <volume_type_name>]
                                     <class_name>

Updates quotas for a quota class.

Positional arguments:

<class_name>
    Name of quota class for which to set quotas.

Optional arguments:

--volumes <volumes>
    The new "volumes" quota value. Default=None.

--snapshots <snapshots>
    The new “snapshots” quota value. Default=None.
--gigabytes <gigabytes>
The new "gigabytes" quota value. Default=None.

--volume-type <volume_type_name>
Volume type. Default=None.

4.2.90. cinder quota-defaults

usage: cinder quota-defaults <tenant_id>

Lists default quotas for a tenant.

Positional arguments:

<tenant_id>
   ID of tenant for which to list quota defaults.

4.2.91. cinder quota-delete

usage: cinder quota-delete <tenant_id>

Delete the quotas for a tenant.

Positional arguments:

<tenant_id>
   UUID of tenant to delete the quotas for.

4.2.92. cinder quota-show

usage: cinder quota-show <tenant_id>

Lists quotas for a tenant.

Positional arguments:

<tenant_id>
   ID of tenant for which to list quotas.

4.2.93. cinder quota-update

usage: cinder quota-update [--volumes <volumes>] [--snapshots <snapshots>]
                               [--gigabytes <gigabytes>] [--backups <backups>]
                               [--backup-gigabytes <backup_gigabytes>]
                               [--consistencygroups <consistencygroups>]
                               [--groups <groups>]
                               [--volume-type <volume_type_name>]
Updates quotas for a tenant.

**Positional arguments:**

```bash
tenant_id
```

ID of tenant for which to set quotas.

**Optional arguments:**

```bash
--volumes <volumes>
```

The new "volumes" quota value. Default=None.

```bash
--snapshots <snapshots>
```

The new "snapshots" quota value. Default=None.

```bash
--gigabytes <gigabytes>
```

The new "gigabytes" quota value. Default=None.

```bash
--backups <backups>
```

The new "backups" quota value. Default=None.

```bash
--backup-gigabytes <backup_gigabytes>
```

The new "backup_gigabytes" quota value. Default=None.

```bash
--consistencygroups <consistencygroups>
```

The new "consistencygroups" quota value. Default=None.

```bash
--groups <groups>
```

The new "groups" quota value. Default=None. (Supported by API version 3.13 and later)

```bash
--volume-type <volume_type_name>
```

Volume type. Default=None.

```bash
--per-volume-gigabytes <per_volume_gigabytes>
```

Set max volume size limit. Default=None.

**4.2.94. cinder quota-usage**

```bash
usage: cinder quota-usage <tenant_id>
```

Lists quota usage for a tenant.

**Positional arguments:**
4.2.95. cinder rate-limits

usage: cinder rate-limits [<tenant_id>]

Lists rate limits for a user.

Positional arguments:

<tenant_id>

Display information for a single tenant (Admin only).

4.2.96. cinder readonly-mode-update

usage: cinder readonly-mode-update <volume> <True|true|False|false>

Updates volume read-only access-mode flag.

Positional arguments:

<volume>

ID of volume to update.

<True|true|False|false>

Enables or disables update of volume to read-only access mode.

4.2.97. cinder rename

usage: cinder rename [--description <description>] <volume> [<name>]

Renames a volume.

Positional arguments:

<volume>

Name or ID of volume to rename.

<name>

New name for volume.

Optional arguments:

--description <description>

Volume description. Default=None.

4.2.98. cinder replication-promote
usage: cinder replication-promote <volume>

Promote a secondary volume to primary for a relationship.

**Positional arguments:**

<volume>

Name or ID of the volume to promote. The volume should have the replica volume created with source- replica argument.

### 4.2.99. cinder replication-reenable

usage: cinder replication-reenable <volume>

Sync the secondary volume with primary for a relationship.

**Positional arguments:**

<volume>

Name or ID of the volume to reenable replication. The replication-status of the volume should be inactive.

### 4.2.100. cinder reset-state

usage: cinder reset-state [--state <state>] [--attach-status <attach-status>]

[-reset-migration-status]

<volume> [ <volume> ...]

Explicitly updates the volume state in the Cinder database. Note that this does not affect whether the volume is actually attached to the Nova compute host or instance and can result in an unusable volume. Being a database change only, this has no impact on the true state of the volume and may not match the actual state. This can render a volume unusable in the case of change to the 'available' state.

**Positional arguments:**

<volume>

Name or ID of volume to modify.

**Optional arguments:**

--state <state>

The state to assign to the volume. Valid values are "available", "error", "creating", "deleting", "in-use", "attaching", "detaching", "error_deleting" and "maintenance". NOTE: This command simply changes the state of the Volume in the Database with no regard to actual status, exercise caution when using. Default=None, that means the state is unchanged.

--attach-status <attach-status>
The attach status to assign to the volume in the DataBase, with no regard to the actual status. Valid values are "attached" and "detached". Default=None, that means the status is unchanged.

**--reset-migration-status**

Clears the migration status of the volume in the DataBase that indicates the volume is source or destination of volume migration, with no regard to the actual status.

### 4.2.101. cinder retype

**usage:** cinder retype [**--migration-policy** <never|on-demand>]  
<volume> <volume-type>

Changes the volume type for a volume.

**Positional arguments:**

<volume>

Name or ID of volume for which to modify type.

<volume-type>

New volume type.

**Optional arguments:**

**--migration-policy** <never|on-demand>

Migration policy during retype of volume.

### 4.2.102. cinder service-disable

**usage:** cinder service-disable [**--reason** <reason>] <hostname> <binary>

Disables the service.

**Positional arguments:**

<hostname>

Host name.

<binary>

Service binary.

**Optional arguments:**

**--reason** <reason>

Reason for disabling service.

### 4.2.103. cinder service-enable
usage: cinder service-enable <hostname> <binary>

Enables the service.

Positional arguments:

<hostname>
    Host name.

<binary>
    Service binary.

4.2.104. cinder service-list

usage: cinder service-list [--host <hostname>] [--binary <binary>]
    [--withreplication [<True|False>]]

Lists all services. Filter by host and service binary.

Optional arguments:

--host <hostname>
    Host name. Default=None.

--binary <binary>
    Service binary. Default=None.

--withreplication [<True|False>]
    Enables or disables display of Replication info for c-vol services. Default=False. (Supported by API version 3.7 and later)

4.2.105. cinder set-bootable

usage: cinder set-bootable <volume> <True|true|False|false>

Update bootable status of a volume.

Positional arguments:

<volume>
    ID of the volume to update.

<Ture|true|False|false>
    Flag to indicate whether volume is bootable.

4.2.106. cinder show

usage: cinder show <volume>
Shows volume details.

**Positional arguments:**

```<volume>```
Name or ID of volume.

### 4.2.107. cinder snapshot-create

```usage: cinder snapshot-create [--force [<True|False>]] [--name <name>] [--description <description>] [--metadata [<key=value> [<key=value> ...]]]```

Creates a snapshot.

**Positional arguments:**

```<volume>```
Name or ID of volume to snapshot.

**Optional arguments:**

```--force [<True|False>]```
Allows or disallows snapshot of a volume when the volume is attached to an instance. If set to True, ignores the current status of the volume when attempting to snapshot it rather than forcing it to be available. Default=False.

```--name <name>```
Snapshot name. Default=None.

```--description <description>```
Snapshot description. Default=None.

```--metadata [<key=value> [<key=value> ...]]```
Snapshot metadata key and value pairs. Default=None.

### 4.2.108. cinder snapshot-delete

```usage: cinder snapshot-delete [--force] <snapshot> [<snapshot> ...]```

Removes one or more snapshots.

**Positional arguments:**

```<snapshot>```
Name or ID of the snapshot(s) to delete.
Optional arguments:

--force
Allows deleting snapshot of a volume when its status is other than "available" or "error". Default=False.

4.2.109. cinder snapshot-list

usage: cinder snapshot-list [--all-tenants [<>1]] [--name <name>] [--status <status>] [--volume-id <volume-id>]
[--marker <marker>] [--limit <limit>] [--sort <key>[::<direction>]] [--tenant [<tenant>]]
[--metadata [<key=value> [<key=value> ...]]]

Lists all snapshots.

Optional arguments:

--all-tenants [<>1]
Shows details for all tenants. Admin only.

--name <name>
Filters results by a name. Default=None.

--status <status>
Filters results by a status. Default=None.

--volume-id <volume-id>
Filters results by a volume ID. Default=None.

--marker <marker>
Begin returning snapshots that appear later in the snapshot list than that represented by this id. Default=None.

--limit <limit>
Maximum number of snapshots to return. Default=None.

--sort <key>[::<direction>]
Comma-separated list of sort keys and directions in the form of <key>::<asc|desc>. Valid keys: id, status, size, availability_zone, name, bootable, created_at, reference. Default=None.

--tenant [<tenant>]
Display information from single tenant (Admin only).

--metadata [<key=value> [<key=value> ...]]
Filters results by a metadata key and value pair. Require volume api version >=3.22. Default=None. (Supported by API version 3.22 and later)

4.2.110. cinder snapshot-manage

```
usage: cinder snapshot-manage [--id-type <id-type>] [--name <name>]
    [--description <description>]
    [--metadata [<key=value> [<key=value> ...]]]
    <volume> <identifier>
```

Manage an existing snapshot.

**Positional arguments:**

- `<volume>`
  Cinder volume already exists in volume backend

- `<identifier>`
  Name or other Identifier for existing snapshot

**Optional arguments:**

- `--id-type <id-type>`
  Type of backend device identifier provided, typically source-name or source-id (Default=source-name)

- `--name <name>`
  Snapshot name (Default=None)

- `--description <description>`
  Snapshot description (Default=None)

- `--metadata [<key=value> [<key=value> ...]]`
  Metadata key=value pairs (Default=None)

4.2.111. cinder snapshot-manageable-list

```
usage: cinder snapshot-manageable-list [--detailed <detailed>]
    [--marker <marker>] [--limit <limit>]
    [--offset <offset>]
    [--sort <key>[:<direction>]]
    <host>
```

Lists all manageable snapshots.

**Positional arguments:**

- `<host>`
Cinder host on which to list manageable snapshots; takes the form: host@backend-name#pool

Optional arguments:

--detailed <detailed>
Returned detailed information (default true).

--marker <marker>
Begin returning volumes that appear later in the volume list than that represented by this volume id. Default=None.

--limit <limit>
Maximum number of volumes to return. Default=None.

--offset <offset>
Number of volumes to skip after marker. Default=None.

--sort <key>[:<direction>]
Comma-separated list of sort keys and directions in the form of <key>[:<asc|desc>]. Valid keys: size, reference. Default=None.

4.2.112. cinder snapshot-metadata

usage: cinder snapshot-metadata <snapshot> <action> <key=value>
       [<key=value> ...]

Sets or deletes snapshot metadata.

Positional arguments:

<snapshot>
ID of snapshot for which to update metadata.

<action>
The action. Valid values are "set" or "unset."

<key=value>
Metadata key and value pair to set or unset. For unset, specify only the key.

4.2.113. cinder snapshot-metadata-show

usage: cinder snapshot-metadata-show <snapshot>

Shows snapshot metadata.

Positional arguments:

<snapshot>
ID of snapshot.

### 4.2.114. cinder snapshot-metadata-update-all

**usage:**
```
cinder snapshot-metadata-update-all <snapshot> <key=value> 
                               [<key=value> ...]
```

Updates snapshot metadata.

**Positional arguments:**
- `<snapshot>`
  ID of snapshot for which to update metadata.
- `<key=value>`
  Metadata key and value pair to update.

### 4.2.115. cinder snapshot-rename

**usage:**
```
cinder snapshot-rename [--description <description>]  
                     <snapshot> [<name>]
```

Renames a snapshot.

**Positional arguments:**
- `<snapshot>`
  Name or ID of snapshot.
- `<name>`
  New name for snapshot.

**Optional arguments:**
- `--description <description>`
  Snapshot description. Default=None.

### 4.2.116. cinder snapshot-reset-state

**usage:**
```
cinder snapshot-reset-state [--state <state>]  
                          <snapshot> [<snapshot> ...]
```

Explicitly updates the snapshot state.

**Positional arguments:**
- `<snapshot>`
  Name or ID of snapshot to modify.
Optional arguments:

--state <state>

The state to assign to the snapshot. Valid values are "available", "error", "creating", "deleting", and "error_deleting". NOTE: This command simply changes the state of the Snapshot in the DataBase with no regard to actual status, exercise caution when using. Default=available.

4.2.117. cinder snapshot-show

usage: cinder snapshot-show <snapshot>

Shows snapshot details.

Positional arguments:

<snapshot>

Name or ID of snapshot.

4.2.118. cinder snapshot-unmanage

usage: cinder snapshot-unmanage <snapshot>

Stop managing a snapshot.

Positional arguments:

<snapshot>

Name or ID of the snapshot to unmanage.

4.2.119. cinder thaw-host

usage: cinder thaw-host <hostname>

Thaw and enable the specified cinder-volume host.

Positional arguments:

<hostname>

Host name.

4.2.120. cinder transfer-accept

usage: cinder transfer-accept <transfer> <auth_key>

Accepts a volume transfer.

Positional arguments:
<transfer>
  ID of transfer to accept.
</transfer>

<auth_key>
  Authentication key of transfer to accept.
</auth_key>

4.2.121. cinder transfer-create

usage: cinder transfer-create [--name <name>] <volume>

Creates a volume transfer.

Positional arguments:

<volume>
  Name or ID of volume to transfer.
</volume>

Optional arguments:

--name <name>
  Transfer name. Default=None.

4.2.122. cinder transfer-delete

usage: cinder transfer-delete <transfer>

Undoes a transfer.

Positional arguments:

<transfer>
  Name or ID of transfer to delete.
</transfer>

4.2.123. cinder transfer-list

usage: cinder transfer-list [--all-tenants [<0|1>]]

Lists all transfers.

Optional arguments:

--all-tenants [<0|1>]
  Shows details for all tenants. Admin only.

4.2.124. cinder transfer-show

usage: cinder transfer-show <transfer>
Shows transfer details.

**Positional arguments:**

<transfer>
   Name or ID of transfer to accept.

4.2.125. cinder type-access-add

```
usage: cinder type-access-add --volume-type <volume_type> --project-id <project_id>
```

Adds volume type access for the given project.

**Optional arguments:**

--volume-type <volume_type>
   Volume type name or ID to add access for the given project.

--project-id <project_id>
   Project ID to add volume type access for.

4.2.126. cinder type-access-list

```
usage: cinder type-access-list --volume-type <volume_type>
```

Print access information about the given volume type.

**Optional arguments:**

--volume-type <volume_type>
   Filter results by volume type name or ID.

4.2.127. cinder type-access-remove

```
usage: cinder type-access-remove --volume-type <volume_type> --project-id <project_id>
```

Removes volume type access for the given project.

**Optional arguments:**

--volume-type <volume_type>
   Volume type name or ID to remove access for the given project.

--project-id <project_id>
   Project ID to remove volume type access for.
4.2.128. cinder type-create

usage: cinder type-create [--description <description>] [--is-public <is-public>] <name>

Creates a volume type.

Positional arguments:

<name>
Name of new volume type.

Optional arguments:

--description <description>
Description of new volume type.

--is-public <is-public>
Make type accessible to the public (default true).

4.2.129. cinder type-default

usage: cinder type-default

List the default volume type.

4.2.130. cinder type-delete

usage: cinder type-delete <vol_type> [<vol_type> ...]

Deletes volume type or types.

Positional arguments:

<vol_type>
Name or ID of volume type or types to delete.

4.2.131. cinder type-key

usage: cinder type-key <vtype> <action> <key=value> [<key=value> ...]

Sets or unsets extra_spec for a volume type.

Positional arguments:

<vtype>
Name or ID of volume type.
4.2.132. cinder type-list

**usage:** cinder type-list

Lists available 'volume types'. (Only admin and tenant users will see private types)

4.2.133. cinder type-show

**usage:** cinder type-show <volume_type>

Show volume type details.

**Positional arguments:**

<volume_type>
Name or ID of the volume type.

4.2.134. cinder type-update

**usage:** cinder type-update [--name <name>] [--description <description>] [--is-public <is-public>] <id>

Updates volume type name, description, and/or is_public.

**Positional arguments:**

<id>
ID of the volume type.

**Optional arguments:**

--name <name>
Name of the volume type.

--description <description>
Description of the volume type.

--is-public <is-public>
Make type accessible to the public or not.

4.2.135. cinder unmanage
usage: cinder unmanage <volume>

Stop managing a volume.

Positional arguments:

<volume>
   Name or ID of the volume to unmanage.

4.2.136. cinder upload-to-image


Uploads volume to Image Service as an image.

Positional arguments:

<volume>
   Name or ID of volume to snapshot.

<image-name>
   The new image name.

Optional arguments:

--force [True|False]
   Enables or disables upload of a volume that is attached to an instance. Default=False. This option may not be supported by your cloud.

--container-format <container-format>
   Container format type. Default is bare.

--disk-format <disk-format>
   Disk format type. Default is raw.

--visibility <public|private>
   Set image visibility to either public or private. Default=private. (Supported by API version 3.1 and later)

--protected <True|False>
   Prevents image from being deleted. Default=False. (Supported by API version 3.1 and later)

4.2.137. cinder version-list
usage: cinder version-list

List all API versions.
CHAPTER 5. IMAGE SERVICE (GLANCE) COMMAND-LINE CLIENT

The glance client is the command-line interface (CLI) for the Image service (glance) API and its extensions.

This chapter documents glance version 2.6.0.

Note

The Image service property keys are documented in the Instances and Images Guide

For help on a specific glance command, enter:

$ glance help COMMAND

5.1. GLANCE USAGE


[--os-image-url OS_IMAGE_URL]
[--os-image-api-version OS_IMAGE_API_VERSION]
[--profile HMAC_KEY] [--key-file OS_KEY] [--ca-file OS_CACERT]

[--cert-file OS_CERT] [--os-region-name OS_REGION_NAME]
[--os-auth-token OS_AUTH_TOKEN]
[--os-service-type OS_SERVICE_TYPE]
[--os-endpoint-type OS_ENDPOINT_TYPE] [--insecure]
[--os-cacert <ca-certificate>] [--os-cert <certificate>]
[--os-key <key>] [--timeout <seconds>] [--os-auth-type <name>]

[--os-auth-url OS_AUTH_URL] [--os-domain-id OS_DOMAIN_ID]

[--os-domain-name OS_DOMAIN_NAME]
[--os-project-id OS_PROJECT_ID]
[--os-project-name OS_PROJECT_NAME]
[--os-project-domain-id OS_PROJECT_DOMAIN_ID]
[--os-project-domain-name OS_PROJECT_DOMAIN_NAME]
[--os-trust-id OS_TRUST_ID]
[--os-default-domain-id OS_DEFAULT_DOMAIN_ID]
[--os-default-domain-name OS_DEFAULT_DOMAIN_NAME]
[--os-user-id OS_USER_ID] [--os-username OS_USERNAME]
[--os-user-domain-id OS_USER_DOMAIN_ID]
[--os-user-domain-name OS_USER_DOMAIN_NAME]
[--os-password OS_PASSWORD]

<subcommand> ...

5.2. GLANCE OPTIONAL ARGUMENTS
--version
show program’s version number and exit

-d, --debug
Defaults to env[GLANCECLIENT_DEBUG].

-v, --verbose
Print more verbose output.

--get-schema
Ignores cached copy and forces retrieval of schema that generates portions of the help text. Ignored with API version 1.

--no-ssl-compression
DEPRECATED! This option is deprecated and not used anymore. SSL compression should be disabled by default by the system SSL library.

-f, --force
Prevent select actions from requesting user confirmation.

--os-image-url OS_IMAGE_URL
Defaults to env[OS_IMAGE_URL]. If the provided image url contains a version number and --os-image-api-version is omitted the version of the URL will be picked as the image api version to use.

--os-image-api-version OS_IMAGE_API_VERSION
Defaults to env[OS_IMAGE_API_VERSION] or 2.

--profile HMAC_KEY
HMAC key to use for encrypting context data for performance profiling of operation. This key should be the value of HMAC key configured in osprofiler middleware in glance, it is specified in paste configuration file at /etc/glance/api-paste.ini and /etc/glance/registry-paste.ini. Without key the profiling will not be triggered even if osprofiler is enabled on server side.

--key-file OS_KEY
DEPRECATED! Use --os-key.

--ca-file OS_CACERT
DEPRECATED! Use --os-cacert.

--cert-file OS_CERT
DEPRECATED! Use --os-cert.

--os-region-name OS_REGION_NAME
Defaults to env[OS_REGION_NAME].

--os-auth-token OS_AUTH_TOKEN
Defaults to \texttt{env[OS\_AUTH\_TOKEN]}.

\textbf{--os-service-type OS\_SERVICE\_TYPE}

Defaults to \texttt{env[OS\_SERVICE\_TYPE]}.

\textbf{--os-endpoint-type OS\_ENDPOINT\_TYPE}

Defaults to \texttt{env[OS\_ENDPOINT\_TYPE]}.

\textbf{--os-auth-type \textit{name}}, \textbf{--os-auth-plugin \textit{name}}

Authentication type to use

5.2.1. glance explain

usage: glance explain \textit{<MODEL>}

Describe a specific model.

**Positional arguments:**

\textit{<MODEL>}

Name of model to describe.

5.2.2. glance image-create

usage: glance image-create [\textbf{--architecture \textit{<ARCHITECTURE>}}]

[\textbf{--protected \textit{[True|False]}}] [\textbf{--name \textit{<NAME>}}]

[\textbf{--instance-uuid \textit{<INSTANCE\_UUID>}}]

[\textbf{--min-disk \textit{<MIN\_DISK>}}] [\textbf{--visibility \textit{<VISIBILITY>}}]

[\textbf{--kernel-id \textit{<KERNEL\_ID>}}]

[\textbf{--tags \textit{<TAGS> \[<TAGS> \ldots]\]}}]

[\textbf{--os-version \textit{<OS\_VERSION>}}]

[\textbf{--disk-format \textit{<DISK\_FORMAT>}}]

[\textbf{--os-distro \textit{<OS\_DISTRO>}}] [\textbf{--id \textit{<ID>}}]

[\textbf{--owner \textit{<OWNER>}}] [\textbf{--ramdisk-id \textit{<RAMDISK\_ID>}}]

[\textbf{--min-ram \textit{<MIN\_RAM>}}]

[\textbf{--container-format \textit{<CONTAINER\_FORMAT>}}]

[\textbf{--property \textit{<key=value>}}] [\textbf{--file \textit{<FILE>}}]

[\textbf{--progress}]

Create a new image.

**Optional arguments:**

\textbf{--architecture \textit{<ARCHITECTURE>}}

Operating system architecture.

\textbf{--protected \textit{[True|False]}}

If true, image will not be deletable.
--name <NAME>
    Descriptive name for the image

--instance-uuid <INSTANCE_UUID>
    Metadata which can be used to record which instance this image is associated with.
    (Informational only, does not create an instance snapshot.)

--min-disk <MIN_DISK>
    Amount of disk space (in GB) required to boot image.

--visibility <VISIBILITY>
    Scope of image accessibility Valid values: public, private, community, shared

--kernel-id <KERNEL_ID>
    ID of image stored in Glance that should be used as the kernel when booting an AMI-style
    image.

--tags <TAGS> [<TAGS> ...]
    List of strings related to the image

--os-version <OS_VERSION>
    Operating system version as specified by the distributor

--disk-format <DISK_FORMAT>
    Format of the disk Valid values: None, ami, ari, aki, vhd, vhdx, vmdk, raw, qcow2, vdi, iso,
    ploop

--os-distro <OS_DISTRO>
    Common name of operating system distribution.

--id <ID>
    An identifier for the image

--owner <OWNER>
    Owner of the image

--ramdisk-id <RAMDISK_ID>
    ID of image stored in Glance that should be used as the ramdisk when booting an AMI-style
    image.

--min-ram <MIN_RAM>
    Amount of ram (in MB) required to boot image.

--container-format <CONTAINER_FORMAT>
    Format of the container Valid values: None, ami, ari, aki, bare, ovf, ova, docker

--property <key=value>
    Arbitrary property to associate with image. May be used multiple times.
--file <FILE>
    Local file that contains disk image to be uploaded during creation. Alternatively, the image
data can be passed to the client via stdin.

--progress
    Show upload progress bar.

5.2.3. glance image-deactivate

    usage: glance image-deactivate <IMAGE_ID>

    Deactivate specified image.

    Positional arguments:

    <IMAGE_ID>
        ID of image to deactivate.

5.2.4. glance image-delete

    usage: glance image-delete <IMAGE_ID> [<IMAGE_ID> ...]

    Delete specified image.

    Positional arguments:

    <IMAGE_ID>
        ID of image(s) to delete.

5.2.5. glance image-download

    usage: glance image-download [--file <FILE>] [--progress] <IMAGE_ID>

    Download a specific image.

    Positional arguments:

    <IMAGE_ID>
        ID of image to download.

    Optional arguments:

    --file <FILE>
        Local file to save downloaded image data to. If this is not specified and there is no
        redirection the image data will not be saved.

    --progress
        Show download progress bar.
5.2.6. glance image-list

usage: glance image-list [--limit <LIMIT>] [--page-size <SIZE>]
    [--visibility <VISIBILITY>]
    [--member-status <MEMBER_STATUS>] [--owner <OWNER>]
    [--property-filter <KEY=VALUE>]
    [--checksum <CHECKSUM>] [--tag <TAG>]
    [--sort-key {name,status,container_format,disk_format,size,id,created_at,updated_at}]
    [--sort-dir {asc,desc}] [--sort <key>[:<direction>]]

List images you can access.

Optional arguments:

--limit <LIMIT>
    Maximum number of images to get.

--page-size <SIZE>
    Number of images to request in each paginated request.

--visibility <VISIBILITY>
    The visibility of the images to display.

--member-status <MEMBER_STATUS>
    The status of images to display.

--owner <OWNER>
    Display images owned by <OWNER>.

--property-filter <KEY=VALUE>
    Filter images by a user-defined image property.

--checksum <CHECKSUM>
    Displays images that match the checksum.

--tag <TAG>
    Filter images by a user-defined tag.

--sort-key

{name,status,container_format,disk_format,size,id,created_at,updated_at}
    Sort image list by specified fields. May be used multiple times.

--sort-dir {asc,desc}
    Sort image list in specified directions.

--sort <key>[:<direction>]
Comma-separated list of sort keys and directions in the form of <key>[::<asc|desc>]. Valid keys: name, status, container_format, disk_format, size, id, created_at, updated_at. OPTIONAL.

5.2.7. glance image-reactivate

Usage: glance image-reactivate <IMAGE_ID>

Reactivate specified image.

Positional arguments:

<IMAGE_ID>
  ID of image to reactivate.

5.2.8. glance image-show

Usage: glance image-show [--human-readable] [--max-column-width <integer>] <IMAGE_ID>

Describe a specific image.

Positional arguments:

<IMAGE_ID>
  ID of image to describe.

Optional arguments:

--human-readable
  Print image size in a human-friendly format.

--max-column-width <integer>
  The max column width of the printed table.

5.2.9. glance image-tag-delete

Usage: glance image-tag-delete <IMAGE_ID> <TAG_VALUE>

Delete the tag associated with the given image.

Positional arguments:

<IMAGE_ID>
  ID of the image from which to delete tag.

<TAG_VALUE>
5.2.10. glance image-tag-update

usage: glance image-tag-update <IMAGE_ID> <TAG_VALUE>

Update an image with the given tag.

Positional arguments:

<IMAGE_ID>
    Image to be updated with the given tag.

<TAG_VALUE>
    Value of the tag.

5.2.11. glance image-update


Update an existing image.

Positional arguments:

<IMAGE_ID>
    ID of image to update.

Optional arguments:

--architecture <ARCHITECTURE>
    Operating system architecture.

--protected [True|False]
    If true, image will not be deletable.
--name <NAME>
   Descriptive name for the image

--instance-uuid <INSTANCE_UUID>
   Metadata which can be used to record which instance this image is associated with.
   (Informational only, does not create an instance snapshot.)

--min-disk <MIN_DISK>
   Amount of disk space (in GB) required to boot image.

--visibility <VISIBILITY>
   Scope of image accessibility Valid values: public, private, community, shared

--kernel-id <KERNEL_ID>
   ID of image stored in Glance that should be used as the kernel when booting an AMI-style image.

--os-version <OS_VERSION>
   Operating system version as specified by the distributor

--disk-format <DISK_FORMAT>
   Format of the disk Valid values: None, ami, ari, aki, vhd, vhdx, vmdk, raw, qcow2, vdi, iso, ploop

--os-distro <OS_DISTRO>
   Common name of operating system distribution.

--owner <OWNER>
   Owner of the image

--ramdisk-id <RAMDISK_ID>
   ID of image stored in Glance that should be used as the ramdisk when booting an AMI-style image.

--min-ram <MIN_RAM>
   Amount of ram (in MB) required to boot image.

--container-format <CONTAINER_FORMAT>
   Format of the container Valid values: None, ami, ari, aki, bare, ovf, ova, docker

--property <key=value>
   Arbitrary property to associate with image. May be used multiple times.

--remove-property
   key Name of arbitrary property to remove from the image.

5.2.12. glance image-upload
   


Upload data for a specific image.

Positional arguments:

<IMAGE_ID>
ID of image to upload data to.

Optional arguments:

--file <FILE>
Local file that contains disk image to be uploaded. Alternatively, images can be passed to the client via stdin.

--size <IMAGE_SIZE>
Size in bytes of image to be uploaded. Default is to get size from provided data object but this is supported in case where size cannot be inferred.

--progress
Show upload progress bar.

5.2.13. glance location-add

usage: glance location-add --url <URL> [--metadata <STRING>] <IMAGE_ID>

Add a location (and related metadata) to an image.

Positional arguments:

<IMAGE_ID>
ID of image to which the location is to be added.

Optional arguments:

--url <URL>
URL of location to add.

--metadata <STRING>
Metadata associated with the location. Must be a valid JSON object (default: {})

5.2.14. glance location-delete

usage: glance location-delete --url <URL> <IMAGE_ID>

Remove locations (and related metadata) from an image.
Positional arguments:

<IMAGE_ID>
ID of image whose locations are to be removed.

Optional arguments:

--url <URL>
URL of location to remove. May be used multiple times.

5.2.15. glance location-update

usage: glance location-update --url <URL> [--metadata <STRING>]
<IMAGE_ID>

Update metadata of an image's location.

Positional arguments:

<IMAGE_ID>
ID of image whose location is to be updated.

Optional arguments:

--url <URL>
URL of location to update.

--metadata <STRING>
Metadata associated with the location. Must be a valid JSON object (default: {})

5.2.16. glance md-namespace-create

usage: glance md-namespace-create [--schema <SCHEMA>]
[--created-at <CREATED_AT>]
[--resource-type-associations <RESOURCE_TYPE_ASSOCIATIONS> ...]
[--protected [True|False]] [--self]
<NAMESPACE>

Create a new metadata definitions namespace.

Positional arguments:

<NAMESPACE>
Name of the namespace.

Optional arguments:
--schema <SCHEMA>

--created-at <CREATED_AT>
Date and time of namespace creation.

--resource-type-associations <RESOURCE_TYPE_ASSOCIATIONS> ...

--protected [True|False]
If true, namespace will not be deletable.

--self <SELF>

--display-name <DISPLAY_NAME>
The user friendly name for the namespace. Used by UI if available.

--owner <OWNER>
Owner of the namespace.

--visibility <VISIBILITY>
Scope of namespace accessibility. Valid values: public, private

--updated-at <UPDATED_AT>
Date and time of the last namespace modification.

--description <DESCRIPTION>
Provides a user friendly description of the namespace.

5.2.17. glance md-namespace-delete

usage: glance md-namespace-delete <NAMESPACE>
Delete specified metadata definitions namespace with its contents.

Positional arguments:

<NAMESPACE>
Name of namespace to delete.

5.2.18. glance md-namespace-import

usage: glance md-namespace-import [--file <FILEPATH>]
Import a metadata definitions namespace from file or standard input.

Optional arguments:
--file <FILEPATH>
   Path to file with namespace schema to import. Alternatively, namespaces schema can be
   passed to the client via stdin.

5.2.19. glance md-namespace-list

   usage: glance md-namespace-list [--resource-types <RESOURCE_TYPES>]
          [--visibility <VISIBILITY>]
          [--page-size <SIZE>]

   List metadata definitions namespaces.

   Optional arguments:

   --resource-types <RESOURCE_TYPES>
      Resource type to filter namespaces.

   --visibility <VISIBILITY>
      Visibility parameter to filter namespaces.

   --page-size <SIZE>
      Number of namespaces to request in each paginated request.

5.2.20. glance md-namespace-objects-delete

   usage: glance md-namespace-objects-delete <NAMESPACE>

   Delete all metadata definitions objects inside a specific namespace.

   Positional arguments:

   <NAMESPACE>
      Name of namespace.

5.2.21. glance md-namespace-properties-delete

   usage: glance md-namespace-properties-delete <NAMESPACE>

   Delete all metadata definitions property inside a specific namespace.

   Positional arguments:

   <NAMESPACE>
      Name of namespace.

5.2.22. glance md-namespace-resource-type-list

   usage: glance md-namespace-resource-type-list <NAMESPACE>
List resource types associated to specific namespace.

**Positional arguments:**

```<NAMESPACE>```
Name of namespace.

---

### 5.2.23. glance md-namespace-show

```usage: glance md-namespace-show [--resource-type <RESOURCE_TYPE>] [--max-column-width <integer>] <NAMESPACE>```

Describe a specific metadata definitions namespace. Lists also the namespace properties, objects and resource type associations.

**Positional arguments:**

```<NAMESPACE>```
Name of namespace to describe.

**Optional arguments:**

```--resource-type <RESOURCE_TYPE>```
Applies prefix of given resource type associated to a namespace to all properties of a namespace.

```--max-column-width <integer>```
The max column width of the printed table.

---

### 5.2.24. glance md-namespace-tags-delete

```usage: glance md-namespace-tags-delete <NAMESPACE>```

Delete all metadata definitions tags inside a specific namespace.

**Positional arguments:**

```<NAMESPACE>```
Name of namespace.

---

### 5.2.25. glance md-namespace-update

Update an existing metadata definitions namespace.

**Positional arguments:**

```bash
<NAMESPACE>
```

Name of namespace to update.

**Optional arguments:**

```bash
--created-at <CREATED_AT>
```

Date and time of namespace creation.

```bash
--protected [True|False]
```

If true, namespace will not be deletable.

```bash
--namespace <NAMESPACE>
```

The unique namespace text.

```bash
--self <SELF>
```

```bash
--display-name <DISPLAY_NAME>
```

The user friendly name for the namespace. Used by UI if available.

```bash
--owner <OWNER>
```

Owner of the namespace.

```bash
--visibility <VISIBILITY>
```

Scope of namespace accessibility. Valid values: public, private

```bash
--updated-at <UPDATED_AT>
```

Date and time of the last namespace modification.

```bash
--description <DESCRIPTION>
```

Provides a user friendly description of the namespace.

### 5.2.26. glance md-object-create

Create a new metadata definitions object inside a namespace.

**Positional arguments:**

```bash
usage: glance md-object-create --name <NAME> --schema <SCHEMA> <NAMESPACE>
```
Optional arguments:

- `-name <NAME>`
  Internal name of an object.

- `-schema <SCHEMA>`
  Valid JSON schema of an object.

5.2.27. glance md-object-delete

Usage: glance md-object-delete <NAMESPACE> <OBJECT>

Delete a specific metadata definitions object inside a namespace.

Positional arguments:

- `<NAMESPACE>`
  Name of namespace the object belongs.

- `<OBJECT>`
  Name of an object.

5.2.28. glance md-object-list

Usage: glance md-object-list <NAMESPACE>

List metadata definitions objects inside a specific namespace.

Positional arguments:

- `<NAMESPACE>`
  Name of namespace.

5.2.29. glance md-object-property-show

Usage: glance md-object-property-show [--max-column-width <integer>] <NAMESPACE> <OBJECT> <PROPERTY>

Describe a specific metadata definitions property inside an object.

Positional arguments:

- `<NAMESPACE>`
  Name of namespace the object belongs.
5.2.30. glance md-object-show

usage: glance md-object-show [--max-column-width <integer>]

<NAMESPACE> <OBJECT>

Describe a specific metadata definitions object inside a namespace.

Positional arguments:

<NAMESPACE>
  Name of namespace the object belongs.

<Object>
  Name of an object.

Optional arguments:

--max-column-width <integer>
  The max column width of the printed table.

5.2.31. glance md-object-update

usage: glance md-object-update [--name <NAME>] [--schema <SCHEMA>]

<NAMESPACE> <OBJECT>

Update metadata definitions object inside a namespace.

Positional arguments:

<NAMESPACE>
  Name of namespace the object belongs.

<Object>
  Name of an object.

Optional arguments:
5.2.32. glance md-property-create

usage: glance md-property-create --name <NAME> --title <TITLE> --schema <SCHEMA> <NAMESPACE>

Create a new metadata definitions property inside a namespace.

Positional arguments:

<NAMESPACE>
    Name of namespace the property will belong.

Optional arguments:

--name <NAME>
    Internal name of a property.

--title <TITLE>
    Property name displayed to the user.

--schema <SCHEMA>
    Valid JSON schema of a property.

5.2.33. glance md-property-delete

usage: glance md-property-delete <NAMESPACE> <PROPERTY>

Delete a specific metadata definitions property inside a namespace.

Positional arguments:

<NAMESPACE>
    Name of namespace the property belongs.

<PROPERTY>
    Name of a property.

5.2.34. glance md-property-list

usage: glance md-property-list <NAMESPACE>
List metadata definitions properties inside a specific namespace.

**Positional arguments:**

```<NAMESPACE>```

Name of namespace.

### 5.2.35. glance md-property-show

```usage: glance md-property-show [--max-column-width <integer>]```

```<NAMESPACE> <PROPERTY>```

Describe a specific metadata definitions property inside a namespace.

**Positional arguments:**

```<NAMESPACE>```

Name of namespace the property belongs.

```<PROPERTY>```

Name of a property.

**Optional arguments:**

```--max-column-width <integer>```

The max column width of the printed table.

### 5.2.36. glance md-property-update

```usage: glance md-property-update [--name <NAME>] [--title <TITLE>]```

```[--schema <SCHEMA>]```

```<NAMESPACE> <PROPERTY>```

Update metadata definitions property inside a namespace.

**Positional arguments:**

```<NAMESPACE>```

Name of namespace the property belongs.

```<PROPERTY>```

Name of a property.

**Optional arguments:**

```--name <NAME>```

New name of a property.

```--title <TITLE>```
Property name displayed to the user.

--schema <SCHEMA>

Valid JSON schema of a property.

5.2.37. glance md-resource-type-associate

usage: glance md-resource-type-associate [--updated-at <UPDATED_AT>]
[--name <NAME>]
[--properties-target <PROPERTIES_TARGET>]
[--prefix <PREFIX>]
[--created-at <CREATED_AT>]
<NAMESPACE>

Associate resource type with a metadata definitions namespace.

Positional arguments:

<NAMESPACE>

Name of namespace.

Optional arguments:

--updated-at <UPDATED_AT>

Date and time of the last resource type association modification.

--name <NAME>

Resource type names should be aligned with Heat resource types whenever possible.

--properties-target <PROPERTIES_TARGET>

Some resource types allow more than one key / value pair per instance. For example, Cinder allows user and image metadata on volumes. Only the image properties metadata is evaluated by Nova (scheduling or drivers). This property allows a namespace target to remove the ambiguity.

--prefix <PREFIX>

Specifies the prefix to use for the given resource type. Any properties in the namespace should be prefixed with this prefix when being applied to the specified resource type. Must include prefix separator (e.g. a colon :).

--created-at <CREATED_AT>

Date and time of resource type association.

5.2.38. glance md-resource-type-deassociate

usage: glance md-resource-type-deassociate <NAMESPACE> <RESOURCE_TYPE>

Deassociate resource type with a metadata definitions namespace.
Positional arguments:

<NAMESPACE>
   Name of namespace.

<RESOURCE_TYPE>
   Name of resource type.

5.2.39. glance md-resource-type-list

usage: glance md-resource-type-list

List available resource type names.

5.2.40. glance md-tag-create

usage: glance md-tag-create --name <NAME> <NAMESPACE>

Add a new metadata definitions tag inside a namespace.

Positional arguments:

<NAMESPACE>
   Name of the namespace the tag will belong to.

Optional arguments:

   --name <NAME>
      The name of the new tag to add.

5.2.41. glance md-tag-create-multiple

usage: glance md-tag-create-multiple --names <NAMES> [--delim <DELIM>] <NAMESPACE>

Create new metadata definitions tags inside a namespace.

Positional arguments:

<NAMESPACE>
   Name of the namespace the tags will belong to.

Optional arguments:

   --names <NAMES>
      A comma separated list of tag names.

   --delim <DELIM>
The delimiter used to separate the names (if none is provided then the default is a comma).

5.2.42. glance md-tag-delete

usage: glance md-tag-delete <NAMESPACE> <TAG>

Delete a specific metadata definitions tag inside a namespace.

Positional arguments:

<NAMESPACE>
Name of the namespace to which the tag belongs.

<TAG>
Name of the tag.

5.2.43. glance md-tag-list

usage: glance md-tag-list <NAMESPACE>

List metadata definitions tags inside a specific namespace.

Positional arguments:

<NAMESPACE>
Name of namespace.

5.2.44. glance md-tag-show

usage: glance md-tag-show <NAMESPACE> <TAG>

Describe a specific metadata definitions tag inside a namespace.

Positional arguments:

<NAMESPACE>
Name of the namespace to which the tag belongs.

<TAG>
Name of the tag.

5.2.45. glance md-tag-update

usage: glance md-tag-update --name <NAME> <NAMESPACE> <TAG>

Rename a metadata definitions tag inside a namespace.

Positional arguments:
<NAMESPACE>
Name of the namespace to which the tag belongs.

<TAG>
Name of the old tag.

Optional arguments:

- -name <NAME>
  New name of the new tag.

5.2.46. glance member-create

usage: glance member-create <IMAGE_ID> <MEMBER_ID>

Create member for a given image.

Positional arguments:

<IMAGE_ID>
  Image with which to create member.

<MEMBER_ID>
  Tenant to add as member.

5.2.47. glance member-delete

usage: glance member-delete <IMAGE_ID> <MEMBER_ID>

Delete image member.

Positional arguments:

<IMAGE_ID>
  Image from which to remove member.

<MEMBER_ID>
  Tenant to remove as member.

5.2.48. glance member-list

usage: glance member-list --image-id <IMAGE_ID>

Describe sharing permissions by image.

Optional arguments:

- -image-id <IMAGE_ID>
5.2.49. glance member-update

usage: glance member-update <IMAGE_ID> <MEMBER_ID> <MEMBER_STATUS>

Update the status of a member for a given image.

Positional arguments:

<IMAGE_ID>
   Image from which to update member.

<MEMBER_ID>
   Tenant to update.

<MEMBER_STATUS>
   Updated status of member. Valid Values: accepted, rejected, pending

5.2.50. glance task-create

usage: glance task-create [--type <TYPE>] [--input <STRING>]

Create a new task.

Optional arguments:

--type <TYPE>
   Type of Task. Please refer to Glance schema or documentation to see which tasks are supported.

--input <STRING>
   Parameters of the task to be launched

5.2.51. glance task-list

usage: glance task-list [--sort-key {id,type,status}] [--sort-dir {asc,desc}] [--page-size <SIZE>] [--type <TYPE>] [--status <STATUS>]

List tasks you can access.

Optional arguments:

--sort-key {id,type,status}
   Sort task list by specified field.

--sort-dir {asc,desc}
Sort task list in specified direction.

```
--page-size <SIZE>
    Number of tasks to request in each paginated request.

--type <TYPE>
    Filter tasks to those that have this type.

--status <STATUS>
    Filter tasks to those that have this status.
```

5.2.52. glance task-show

```
usage: glance task-show <TASK_ID>

Describe a specific task.

Positional arguments:

<TASK_ID>
    ID of task to describe.
```
CHAPTER 6. A TIME SERIES STORAGE AND RESOURCES INDEX SERVICE (GNOCCHI) COMMAND-LINE CLIENT

The gnocchi client is the command-line interface (CLI) for the A time series storage and resources index service (gnocchi) API and its extensions.

This chapter documents gnocchi version 3.1.1.

For help on a specific gnocchi command, enter:

```bash
$ gnocchi help COMMAND
```

6.1. GNOCCHI USAGE

```bash
              [--gnocchi-api-version GNOCCHI_API_VERSION] [--insecure]
              [--os-cacert <ca-certificate>] [--os-cert <certificate>]
              [--os-key <key>] [--timeout <seconds>] [--os-auth-type <name>]
              [--user <gnocchi user>] [--endpoint <gnocchi endpoint>]
```

6.2. GNOCCHI OPTIONAL ARGUMENTS

--version
    show program's version number and exit

-v, --verbose
    Increase verbosity of output. Can be repeated.

-q, --quiet
    Suppress output except warnings and errors.

--log-file LOG_FILE
    Specify a file to log output. Disabled by default.

-h, --help
    Show help message and exit.

--debug
    Show tracebacks on errors.

--gnocchi-api-version GNOCCHI_API_VERSION
    Defaults to env[GNOCCHI_API_VERSION] or 1.
--os-auth-type <name>, --os-auth-plugin <name>
Authentication type to use

6.2.1. gnocchi archive-policy create

usage: gnocchi archive-policy create [-h]
        [-f {html, json, shell, table, value, yaml}]
        [-c COLUMN] [-max-width <integer>]
        [--print-empty] [--noindent]
        [--prefix PREFIX] -d <DEFINITION>
        [-b BACK_WINDOW] [-m AGGREGATION_METHODS] name

Create an archive policy

Positional arguments:

name
name of the archive policy

Optional arguments:

-h, --help
show this help message and exit

-d <DEFINITION>, --definition <DEFINITION>
two attributes (separated by ',') of an archive policy definition with its name and value
separated with a '::'

-b BACK_WINDOW, --back-window BACK_WINDOW
back window of the archive policy

-m AGGREGATION_METHODS, --aggregation-method AGGREGATION_METHODS
aggregation method of the archive policy

6.2.2. gnocchi archive-policy delete

usage: gnocchi archive-policy delete [-h] name

Delete an archive policy

Positional arguments:

name
Name of the archive policy
Optional arguments:

-h, --help
    show this help message and exit

6.2.3. gnocchi archive-policy list

usage: gnocchi archive-policy list [-h] [-f {csv,html,json,table,value,yaml}]
       [-c COLUMN] [--max-width <integer>]
       [--print-empty] [--noindent]
       [--quote {all,minimal,none,nonnumeric}]

List archive policies

Optional arguments:

-h, --help
    show this help message and exit

6.2.4. gnocchi archive-policy show

usage: gnocchi archive-policy show [-h]
       [-f {html, json, shell, table, value, yaml}]
       [-c COLUMN] [--max-width <integer>]
       [--print-empty] [--noindent]
       [--prefix PREFIX]

name

Show an archive policy

Positional arguments:

name
    Name of the archive policy

Optional arguments:

-h, --help
    show this help message and exit

6.2.5. gnocchi archive-policy update

usage: gnocchi archive-policy update [-h]
       [-f {html, json, shell, table, value, yaml}]
       [-c COLUMN] [--max-width <integer>]
       [--print-empty] [--noindent]
       [--prefix PREFIX]
Update an archive policy

**Positional arguments:**

- **name**
  
  name of the archive policy

**Optional arguments:**

- **-h, --help**
  
  show this help message and exit

- **-d <DEFINITION>, --definition <DEFINITION>**
  
  two attributes (separated by ',',) of an archive policy definition with its name and value separated with a '\':'

6.2.6. gnocchi archive-policy-rule create

Create an archive policy rule

**Positional arguments:**

- **name**
  
  Rule name

**Optional arguments:**

- **-h, --help**
  
  show this help message and exit

- **-a ARCHIVE_POLICY_NAME, --archive-policy-name ARCHIVE_POLICY_NAME**
  
  Archive policy name
-m METRIC_PATTERN, --metric-pattern METRIC_PATTERN
  Wildcard of metric name to match

6.2.7. gnocchi archive-policy-rule delete

  usage: gnocchi archive-policy-rule delete [-h] name

  Delete an archive policy rule

  Positional arguments:

  name
    Name of the archive policy rule

  Optional arguments:

  -h, --help
    show this help message and exit

6.2.8. gnocchi archive-policy-rule list

  usage: gnocchi archive-policy-rule list [-h]
           [-f {csv,html,json,table,value,yaml}]
           [-c COLUMN] [---max-width]
           [-print-empty] [-noindent]
           [-quote {all, minimal, none, nonnumeric}]

  List archive policy rules

  Optional arguments:

  -h, --help
    show this help message and exit

6.2.9. gnocchi archive-policy-rule show

  usage: gnocchi archive-policy-rule show [-h]
           [-f {html, json, shell, table, value, yaml}]
           [-c COLUMN] [---max-width]
           [-print-empty] [-noindent]
           [-prefix PREFIX]
           name

  Show an archive policy rule
Positional arguments:

```
name
```
Name of the archive policy rule

Optional arguments:

```
-h, --help
```
show this help message and exit

### 6.2.10. gnocchi benchmark measures add

```
usage: gnocchi benchmark measures add [-h] [--resource-id RESOURCE_ID] 
{html, json, shell, table, value, yaml} [-c COLUMN] [--max-width <integer>] 
[--print-empty] [--noindent] 
[--prefix PREFIX] [--workers WORKERS] 
[--count COUNT] [--batch BATCH] 
[--timestamp-start TIMESTAMP_START] 
[--timestamp-end TIMESTAMP_END] 
[--wait]
```

Do benchmark testing of adding measurements

**Positional arguments:**

```
metric
```
ID or name of the metric

Optional arguments:

```
-h, --help
```
show this help message and exit

```
--resource-id RESOURCE_ID, -r RESOURCE_ID
```
ID of the resource

```
--workers WORKERS, -w WORKERS
```
Number of workers to use

```
--count COUNT, -n COUNT
```
Number of total measures to send

```
--batch BATCH, -b BATCH
```
Number of measures to send in each batch
--timestamp-start TIMESTAMP_START, -s TIMESTAMP_START
  First timestamp to use

--timestamp-end TIMESTAMP_END, -e TIMESTAMP_END
  Last timestamp to use

--wait
  Wait for all measures to be processed

6.2.11. gnocchi benchmark measures show

usage: gnocchi benchmark measures show [-h]
  [-f {html, json, shell, value, table, yaml}]
  [-c COLUMN] [-max-width <integer>]
  [-print-empty] [-noindent]
  [-prefix PREFIX]
  [-resource-id RESOURCE_ID]
  [--aggregation AGGREGATION]
  [--start START] [--stop STOP]
  [--granularity GRANULARITY]
  [--refresh]
  [--resample RESAMPLE]
  [--workers WORKERS] --count metric

Do benchmark testing of measurements show

Positional arguments:

metric
  ID or name of the metric

Optional arguments:

-h, --help
  show this help message and exit

--resource-id RESOURCE_ID, -r RESOURCE_ID
  ID of the resource

--aggregation AGGREGATION
  aggregation to retrieve

--start START
  beginning of the period

152
--stop STOP
end of the period

--granularity GRANULARITY
granularity to retrieve

--refresh
force aggregation of all known measures

--resample RESAMPLE
granularity to resample time-series to (in seconds)

--workers WORKERS, -w WORKERS
Number of workers to use

--count COUNT, -n COUNT
Number of total measures to send

6.2.12. gnocchi benchmark metric create

Do benchmark testing of metric creation

Optional arguments:

-h, --help
show this help message and exit

--resource-id RESOURCE_ID, -r RESOURCE_ID
ID of the resource

--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME
name of the archive policy

--workers WORKERS, -w WORKERS
Number of workers to use
6.2.13. gnocchi benchmark metric show

Usage: gnocchi benchmark metric show [-h] [--resource-id RESOURCE_ID]
[-f {html, json, shell, table, value, yaml}]
[-c COLUMN] [--max-width <integer>]
[--print-empty] [--noindent]
[--prefix PREFIX] [--workers WORKERS]
--count COUNT metric [metric ...]

Do benchmark testing of metric show

Positional arguments:

metric
ID or name of the metrics

Optional arguments:

-h, --help
show this help message and exit

--resource-id RESOURCE_ID, -r RESOURCE_ID
ID of the resource

--workers WORKERS, -w WORKERS
Number of workers to use

--count COUNT, -n COUNT
Number of metrics to get

6.2.14. gnocchi capabilities list

Usage: gnocchi capabilities list [-h] [-f {html, json, shell, table, value, yaml}]
[-c COLUMN] [--max-width <integer>]
[--print-empty] [--noindent]
[--prefix PREFIX]

List capabilities
Optional arguments:

- **-h, --help**
  show this help message and exit

6.2.15. gnocchi measures add

usage: gnocchi measures add [-h] [--resource-id RESOURCE_ID] -m MEASURE

Add measurements to a metric

**Positional arguments:**

**metric**

ID or name of the metric

Optional arguments:

- **-h, --help**
  show this help message and exit

  **--resource-id RESOURCE_ID, -r RESOURCE_ID**

  ID of the resource

  **-m MEASURE, --measure MEASURE**

  timestamp and value of a measure separated with a '@'

6.2.16. gnocchi measures aggregation

usage: gnocchi measures aggregation [-h] [-f {csv,html,json,table,value,yaml}]

Get measurements of aggregated metrics

  [-c COLUMN] [-max-width <integer>]

  [-print-empty] [-noindent]

  [-quote {all,minimal,none,nonnumeric}] -m

  METRIC [METRIC ...]

  [-aggregation AGGREGATION]

  [-reaggregation REAGGREGATION]

  [-start START] [-stop STOP]

  [-granularity GRANULARITY]

  [-needed-overlap NEEDED_OVERLAP]

  [-query QUERY]

  [-resource-type RESOURCE_TYPE]

  [-groupby GROUPBY] [-refresh]

  [-resample RESAMPLE] [-fill FILL]
Optional arguments:

-h, --help
    show this help message and exit

-m METRIC [METRIC ...], --metric METRIC [METRIC ...]
    metrics IDs or metric name

--aggregation AGGREGATION
    granularity aggregation function to retrieve

--reaggregation REAGGREGATION
    groupby aggregation function to retrieve

--start START
    beginning of the period

--stop STOP
    end of the period

--granularity GRANULARITY
    granularity to retrieve

--needed-overlap NEEDED_OVERLAP
    percent of datapoints in each metrics required

--query QUERY
    A query to filter resource. The syntax is a combination of attribute, operator and value. For example: id=90d58eea-70d7-4294-a49a-170dcdf44c3c would filter resource with a certain id. More complex queries can be built, e.g.: not (flavor_id="1" and memory>=24). Use "" to force data to be interpreted as string. Supported operators are: not, and, ∧, or, ∨, >=, <=, !=, >, <, =, ==, eq, ne, lt, gt, ge, le, in, like, ≠, ≥, ≤, like, in.

--resource-type RESOURCE_TYPE
    Resource type to query

--groupby GROUPBY
    Attribute to use to group resources

--refresh
    force aggregation of all known measures

--resample RESAMPLE
    granularity to resample time-series to (in seconds)

--fill FILL
    Value to use when backfilling timestamps with missing values in a subset of series. Value should be a float or 'null'.
6.2.17. gnocchi measures batch-metrics

usage: gnocchi measures batch-metrics [-h] file

Positional arguments:

file
  File containing measurements to batch or - for stdin (see Gnocchi REST API docs for the format)

Optional arguments:

-h, --help
  show this help message and exit

6.2.18. gnocchi measures batch-resources-metrics

usage: gnocchi measures batch-resources-metrics [-h] [--create-metrics] file

Positional arguments:

file
  File containing measurements to batch or - for stdin (see Gnocchi REST API docs for the format)

Optional arguments:

-h, --help
  show this help message and exit

--create-metrics
  Create unknown metrics

6.2.19. gnocchi measures show


Get measurements of a metric
Positional arguments:

metric
    ID or name of the metric

Optional arguments:

-h, --help
    show this help message and exit

--resource-id RESOURCE_ID, -r RESOURCE_ID
    ID of the resource

--aggregation AGGREGATION
    aggregation to retrieve

--start START
    beginning of the period

--stop STOP
    end of the period

--granularity GRANULARITY
    granularity to retrieve

--refresh
    force aggregation of all known measures

--resample RESAMPLE
    granularity to resample time-series to (in seconds)

6.2.20. gnocchi metric create


Create a metric

Positional arguments:

METRIC_NAME
    Name of the metric
Optional arguments:

-h, --help
    show this help message and exit

--resource-id RESOURCE_ID, -r RESOURCE_ID
    ID of the resource

--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME
    name of the archive policy

--unit UNIT, -u UNIT
    unit of the metric

6.2.21. gnocchi metric delete

usage: gnocchi metric delete [-h] [--resource-id RESOURCE_ID] metric [metric ...]

Delete a metric

Positional arguments:

metric
    IDs or names of the metric

Optional arguments:

-h, --help
    show this help message and exit

--resource-id RESOURCE_ID, -r RESOURCE_ID
    ID of the resource

6.2.22. gnocchi metric list


List metrics

Optional arguments:

-h, --help
show this help message and exit

--limit <LIMIT>
Number of metrics to return (Default is server default)

--marker <MARKER>
Last item of the previous listing. Return the next results after this value

--sort <SORT>
Sort of metric attribute (example: user_id:desc-nullslast

6.2.23. gnocchi metric show


Show a metric

**Positional arguments:**

**metric**
ID or name of the metric

**Optional arguments:**

-h, --help
show this help message and exit

--resource-id RESOURCE_ID, -r RESOURCE_ID
ID of the resource

6.2.24. gnocchi resource batch delete


Delete a batch of resources based on attribute values

**Positional arguments:**
query

A query to filter resource. The syntax is a combination of attribute, operator and value. For example: id=90d58eea-70d7-4294-a49a-170dcdf44c3c would filter resource with a certain id. More complex queries can be built, e.g.: not (flavor_id!="1" and memory>=24). Use "" to force data to be interpreted as string. Supported operators are: not, and, or, ∧, ∨, ≥, ≤, !=, >, <, =, ==, eq, ne, lt, gt, ge, le, in, like, ≠, ≥, ≤, like, in.

Optional arguments:

- `-h, --help`
  show this help message and exit

- `--type RESOURCE_TYPE, -t RESOURCE_TYPE`
  Type of resource

6.2.25. gnocchi resource create

usage: gnocchi resource create [-h] [-f {html, json, shell, table, value, yaml}]
       [-c COLUMN] [---max-width <integer>] [---print-empty] [---noindent] [---prefix PREFIX]
       [---type RESOURCE_TYPE] [-a ATTRIBUTE] [-m ADD_METRIC] [-n CREATE_METRIC]
       resource_id

Create a resource

Positional arguments:

resource_id
  ID of the resource

Optional arguments:

- `-h, --help`
  show this help message and exit

- `--type RESOURCE_TYPE, -t RESOURCE_TYPE`
  Type of resource

- `-a ATTRIBUTE, --attribute ATTRIBUTE`
  name and value of an attribute separated with a ':'

- `-m ADD_METRIC, --add-metric ADD_METRIC`
  name:id of a metric to add

- `-n CREATE_METRIC, --create-metric CREATE_METRIC`
  name:archive_policy_name of a metric to create
6.2.26. gnocchi resource delete

usage: gnocchi resource delete [-h] resource_id

Delete a resource

Positional arguments:

resource_id
   ID of the resource

Optional arguments:

-h, --help
   show this help message and exit

6.2.27. gnocchi resource history

usage: gnocchi resource history [-h] [-f {csv,html,json,table,value,yaml}]
   [-c COLUMN] [--max-width <integer>] [-print-empty] [--noindent]
   [--quote {all, minimal, none, nonnumeric}] [-d details] [-l LIMIT]
   [-m MARKER] [-s SORT] [-t RESOURCE_TYPE]
   resource_id

Show the history of a resource

Positional arguments:

resource_id
   ID of a resource

Optional arguments:

-h, --help
   show this help message and exit

--details
   Show all attributes of generic resources

--limit <LIMIT>
   Number of resources to return (Default is server default)

--marker <MARKER>
   Last item of the previous listing. Return the next results after this value
6.2.28. gnocchi resource list


List resources

Optional arguments:

-h, --help
  show this help message and exit

--details
  Show all attributes of generic resources

--history
  Show history of the resources

--limit <LIMIT>
  Number of resources to return (Default is server default)

--marker <MARKER>
  Last item of the previous listing. Return the next results after this value

--sort <SORT>
  Sort of resource attribute (example: user_id:desc-nullslast

--type RESOURCE_TYPE, -t RESOURCE_TYPE
  Type of resource

6.2.29. gnocchi resource show

usage: gnocchi resource show [-h] [-f {html,json,shell,table,value,yaml}]
  [-c COLUMN] [-max-width <integer>]
  [-print-empty] [-noindent] [-prefix
Show a resource

Positional arguments:

resource_id
ID of a resource

Optional arguments:

-h, --help
show this help message and exit

--type RESOURCE_TYPE, -t RESOURCE_TYPE
Type of resource

6.2.30. gnocchi resource update

usage: gnocchi resource update [-h] [-f {html,json,shell,table,value,yaml}] [-c COLUMN] [-m ADD_METERIC] [-n CREATE_METERIC] [-d DELETE_METERIC] resource_id

Update a resource

Positional arguments:

resource_id
ID of the resource

Optional arguments:

-h, --help
show this help message and exit

--type RESOURCE_TYPE, -t RESOURCE_TYPE
Type of resource

-a ATTRIBUTE, --attribute ATTRIBUTE
name and value of an attribute separated with a ':'

-m ADD_METERIC, --add-metric ADD_METERIC
CHAPTER 6. A TIME SERIES STORAGE AND RESOURCES INDEX SERVICE (GNOCCHI) COMMAND-LINE CLIENT

6.2.31. gnocchi resource-type create


Create a resource type

Positional arguments:

name
  name of the resource type

Optional arguments:

-h, --help
  show this help message and exit

-a ATTRIBUTE, --attribute ATTRIBUTE
  attribute definition, attribute_name:attribute_type:attribute_is_required:attribute_type_option_name=attribute_type_option_value:... For example: display_name:string:true:max_length=255

6.2.32. gnocchi resource-type delete

Usage: gnocchi resource-type delete [-h] name

Delete a resource type

Positional arguments:

name
  name of the resource type

Optional arguments:

-h, --help
show this help message and exit

6.2.33. gnocchi resource-type list

usage: gnocchi resource-type list [-h] [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [--max-width <integer>] [--print-empty] [--noindent] [--quote {all,minimal,none,nonnumeric}]

List resource types

Optional arguments:

-h, --help
    show this help message and exit

6.2.34. gnocchi resource-type show


Show a resource type

Positional arguments:

name
    name of the resource type

Optional arguments:

-h, --help
    show this help message and exit

6.2.35. gnocchi resource-type update

Positional arguments:

name

name of the resource type

Optional arguments:

-h, --help

show this help message and exit

-a ATTRIBUTE, --attribute ATTRIBUTE

attribute definition, attribute_name:attribute_type:attribute_is_required:attribute_type_option_name=attribute_type_option_value:... For example: display_name:string:true:max_length=255

-r REMOVE_ATTRIBUTE, --remove-attribute REMOVE_ATTRIBUTE

attribute name

6.2.36. gnocchi status


Show the status of measurements processing

Optional arguments:

-h, --help

show this help message and exit
CHAPTER 7. ORCHESTRATION SERVICE (HEAT) COMMAND-LINE CLIENT

Warning

The heat CLI is deprecated in favor of python-openstackclient.

The heat client is the command-line interface (CLI) for the Orchestration service (heat) API and its extensions.

This chapter documents heat version 1.8.0.

For help on a specific heat command, enter:

$ heat help COMMAND

7.1. HEAT USAGE

            [--os-no-client-auth] [--heat-url HEAT_URL]
            [--heat-api-version HEAT_API_VERSION] [--include-password]
            [-k]
            [--os-cert OS_CERT] [--cert-file OS_CERT] [--os-key
OS_KEY]
            [--key-file OS_KEY] [--os-cacert <ca-certificate-file>]
            [--ca-file OS_CACERT] [--os-username OS_USERNAME]
            [--os-user-id OS_USER_ID] [--os-user-domain-id
OS_USER_DOMAIN_ID]
            [--os-user-domain-name OS_USER_DOMAIN_NAME]
            [--os-project-id OS_PROJECT_ID]
            [--os-project-name OS_PROJECT_NAME]
            [--os-project-domain-id OS_PROJECT_DOMAIN_ID]
            [--os-project-domain-name OS_PROJECT_DOMAIN_NAME]
            [--os-password OS_PASSWORD] [--os-tenant-id OS_TENANT_ID]
            [--os-tenant-name OS_TENANT_NAME] [--os-auth-url
OS_AUTH_URL]
            [--os-region-name OS_REGION_NAME] [--os-auth-token
OS_AUTH_TOKEN]
            [--os-service-type OS_SERVICE_TYPE]
            [--os-endpoint-type OS_ENDPOINT_TYPE] [--profile HMAC_KEY]
            <subcommand> ...

Subcommands:

action-check
Check that stack resources are in expected states.

action-resume
Resume the stack.
**action-suspend**
Suspend the stack.

**build-info**
Retrieve build information.

**config-create**
Create a software configuration.

**config-delete**
Delete the software configuration(s).

**config-list**
List software configs.

**config-show**
View details of a software configuration.

**deployment-create**
Create a software deployment.

**deployment-delete**
Delete the software deployment(s).

**deployment-list**
List software deployments.

**deployment-metadata-show**
Get deployment configuration metadata for the specified server.

**deployment-output-show**
Show a specific deployment output.

**deployment-show**
Show the details of a software deployment.

**event**
DEPRECATED!

**event-list**
List events for a stack.

**event-show**
Describe the event.

**hook-clear**
Clear hooks on a given stack.
hook-poll
  List resources with pending hook for a stack.

output-list
  Show available outputs.

output-show
  Show a specific stack output.

resource-list
  Show list of resources belonging to a stack.

resource-mark-unhealthy
  Set resource's health.

resource-metadata
  List resource metadata.

resource-show
  Describe the resource.

resource-signal
  Send a signal to a resource.

resource-template
  DEPRECATED!

resource-type-list
  List the available resource types.

resource-type-show
  Show the resource type.

resource-type-template
  Generate a template based on a resource type.

service-list
  List the Heat engines.

snapshot-delete
  Delete a snapshot of a stack.

snapshot-list
  List the snapshots of a stack.

snapshot-show
  Show a snapshot of a stack.
stack-abandon
Abandon the stack.

stack-adopt
Adopt a stack.

stack-cancel-update
Cancel currently running update of the stack.

stack-create
Create the stack.

stack-delete
Delete the stack(s).

stack-list
List the user’s stacks.

stack-preview
Preview the stack.

stack-restore
Restore a snapshot of a stack.

stack-show
Describe the stack.

stack-snapshot
Make a snapshot of a stack.

stack-update
Update the stack.

template-function-list
List the available functions.

template-show
Get the template for the specified stack.

template-validate
Validate a template with parameters.

template-version-list
List the available template versions.

bash-completion
Prints all of the commands and options to stdout.
help
Display help about this program or one of its subcommands.

7.2. HEAT OPTIONAL ARGUMENTS

--version
Shows the client version and exits.

-d, --debug
Defaults to env[HEATCLIENT_DEBUG].

-v, --verbose
Print more verbose output.

--api-timeout API_TIMEOUT
Number of seconds to wait for an API response, defaults to system socket timeout

--os-no-client-auth
Do not contact keystone for a token. Defaults to env[OS_NO_CLIENT_AUTH].

--heat-url HEAT_URL
Defaults to env[HEAT_URL].

--heat-api-version HEAT_API_VERSION
Defaults to env[HEAT_API_VERSION] or 1.

--include-password
Send os-username and os-password to heat.

-k, --insecure
Explicitly allow heatclient to perform “insecure SSL” (https) requests. The server’s certificate will not be verified against any certificate authorities. This option should be used with caution.

--os-cert OS_CERT
Path of certificate file to use in SSL connection. This file can optionally be prepended with the private key.

--cert-file OS_CERT
DEPRECATED! Use --os-cert.

--os-key OS_KEY
Path of client key to use in SSL connection. This option is not necessary if your key is prepended to your cert file.

--key-file OS_KEY
DEPRECATED! Use --os-key.
--os-cacert <ca-certificate-file>
Path of CA TLS certificate(s) used to verify the remote server’s certificate. Without this option glance looks for the default system CA certificates.

--ca-file OS_CACERT
DEPRECATED! Use --os-cacert.

--os-username OS_USERNAME
Defaults to env[OS_USERNAME].

--os-user-id OS_USER_ID
Defaults to env[OS_USER_ID].

--os-user-domain-id OS_USER_DOMAIN_ID
Defaults to env[OS_USER_DOMAIN_ID].

--os-user-domain-name OS_USER_DOMAIN_NAME
Defaults to env[OS_USER_DOMAIN_NAME].

--os-project-id OS_PROJECT_ID
Another way to specify tenant ID. This option is mutually exclusive with --os-tenant-id. Defaults to env[OS_PROJECT_ID].

--os-project-name OS_PROJECT_NAME
Another way to specify tenant name. This option is mutually exclusive with --os-tenant-name. Defaults to env[OS_PROJECT_NAME].

--os-project-domain-id OS_PROJECT_DOMAIN_ID
Defaults to env[OS_PROJECT_DOMAIN_ID].

--os-project-domain-name OS_PROJECT_DOMAIN_NAME
Defaults to env[OS_PROJECT_DOMAIN_NAME].

--os-password OS_PASSWORD
Defaults to env[OS_PASSWORD].

--os-tenant-id OS_TENANT_ID
Defaults to env[OS_TENANT_ID].

--os-tenant-name OS_TENANT_NAME
Defaults to env[OS_TENANT_NAME].

--os-auth-url OS_AUTH_URL
Defaults to env[OS_AUTH_URL].

--os-region-name OS_REGION_NAME
Defaults to env[OS_REGION_NAME].
--os-auth-token OS_AUTH_TOKEN
    Defaults to env[OS_AUTH_TOKEN].

--os-service-type OS_SERVICE_TYPE
    Defaults to env[OS_SERVICE_TYPE].

--os-endpoint-type OS_ENDPOINT_TYPE
    Defaults to env[OS_ENDPOINT_TYPE].

--profile HMAC_KEY
    HMAC key to use for encrypting context data for performance profiling of operation. This
    key should be the value of HMAC key configured in osprofiler middleware in heat, it is
    specified in the paste configuration (/etc/heat/api-paste.ini). Without the key, profiling will not
    be triggered even if osprofiler is enabled on server side.

7.2.1. heat action-check

    usage: heat action-check <NAME or ID>

    Check that stack resources are in expected states.

    Positional arguments:

    <NAME or ID>
        Name or ID of stack to check.

7.2.2. heat action-resume

    usage: heat action-resume <NAME or ID>

    Resume the stack.

    Positional arguments:

    <NAME or ID>
        Name or ID of stack to resume.

7.2.3. heat action-suspend

    usage: heat action-suspend <NAME or ID>

    Suspend the stack.

    Positional arguments:

    <NAME or ID>
        Name or ID of stack to suspend.
7.2.4. heat build-info

usage: heat build-info

Retrieve build information.

7.2.5. heat config-create

usage: heat config-create [-f <FILE or URL>] [-c <FILE or URL>] [-g <GROUP_NAME>] <CONFIG_NAME>

Create a software configuration.

Positional arguments:

<CONFIG_NAME>

Name of the configuration to create.

Optional arguments:

-f <FILE or URL>, --definition-file <FILE or URL>
Path to JSON/YAML containing map defining <inputs>, <outputs>, and <options>.

-c <FILE or URL>, --config-file <FILE or URL>
Path to configuration script/data.

-g <GROUP_NAME>, --group <GROUP_NAME>
Group name of configuration tool expected by the config.

7.2.6. heat config-delete

usage: heat config-delete <ID> [<ID> ...]

Delete the software configuration(s).

Positional arguments:

<ID>
ID of the configuration(s) to delete.

7.2.7. heat config-list

usage: heat config-list [-l <LIMIT>] [-m <ID>]

List software configs.

Optional arguments:
-l <LIMIT>, --limit <LIMIT>
  Limit the number of configs returned.

-m <ID>, --marker <ID>
  Return configs that appear after the given config ID.

7.2.8. heat config-show

usage: heat config-show [-c] <ID>

View details of a software configuration.

Positional arguments:

<ID>
  ID of the config.

Optional arguments:

-c, --config-only
  Only display the value of the <config> property.

7.2.9. heat deployment-create

usage: heat deployment-create [-i <KEY=VALUE>] [-a <ACTION>] [-c <CONFIG>] -s <SERVER> [-t <TRANSPORT>]
  [--container <CONTAINER_NAME>] [--timeout <TIMEOUT>] <DEPLOY_NAME>

Create a software deployment.

Positional arguments:

<DEPLOY_NAME>
  Name of the derived config associated with this deployment. This is used to apply a sort order to the list of configurations currently deployed to the server.

Optional arguments:

-i <KEY=VALUE>, --input-value <KEY=VALUE>
  Input value to set on the deployment. This can be specified multiple times.

-a <ACTION>, --action <ACTION>
  Name of action for this deployment. Can be a custom action, or one of: CREATE, UPDATE, DELETE, SUSPEND, RESUME

-c <CONFIG>, --config <CONFIG>
ID of the configuration to deploy.

-s <SERVER>, --server <SERVER>
ID of the server being deployed to.

-t <TRANSPORT>, --signal-transport <TRANSPORT>
How the server should signal to heat with the deployment output values. TEMP_URL_SIGNAL will create a Swift TempURL to be signaled via HTTP PUT. NO_SIGNAL will result in the resource going to the COMPLETE state without waiting for any signal.

--container <CONTAINER_NAME>
Optional name of container to store TEMP_URL_SIGNAL objects in. If not specified a container will be created with a name derived from the DEPLOY_NAME

--timeout <TIMEOUT>
Deployment timeout in minutes.

7.2.10. heat deployment-delete

usage: heat deployment-delete <ID> [ [<ID> ...]
Delete the software deployment(s).

Positional arguments:

<ID>
ID of the deployment(s) to delete.

7.2.11. heat deployment-list

usage: heat deployment-list [-s <SERVER>]
List software deployments.

Optional arguments:

-s <SERVER>, --server <SERVER>
ID of the server to fetch deployments for.

7.2.12. heat deployment-metadata-show

usage: heat deployment-metadata-show <ID>
Get deployment configuration metadata for the specified server.

Positional arguments:

<ID>
7.2.13. heat deployment-output-show

```
usage: heat deployment-output-show [-a] [-F <FORMAT>] <ID> [<OUTPUT NAME>]
```

Show a specific deployment output.

**Positional arguments:**

- `<ID>`
  - ID deployment to show the output for.

- `<OUTPUT NAME>`
  - Name of an output to display.

**Optional arguments:**

- `-a`, `--all`
  - Display all deployment outputs.

- `-F <FORMAT>`, `--format <FORMAT>`
  - The output value format, one of: raw, json

7.2.14. heat deployment-show

```
usage: heat deployment-show <ID>
```

Show the details of a software deployment.

**Positional arguments:**

- `<ID>`
  - ID of the deployment.

7.2.15. heat event-list

```
usage: heat event-list [-r <RESOURCE>] [-f <KEY1=VALUE1;KEY2=VALUE2...] [-l <LIMIT>] [-m <ID>] [-n <DEPTH>] [-F <FORMAT>]
```

List events for a stack.

**Positional arguments:**

- `<NAME or ID>`
Name or ID of stack to show the events for.

Optional arguments:

- **-r** `<RESOURCE>`, **--resource** `<RESOURCE>`
  Name of the resource to filter events by.

- **-f** `<KEY1=VALUE1;KEY2=VALUE2...>`, **--filters** `<KEY1=VALUE1;KEY2=VALUE2...>`
  Filter parameters to apply on returned events. This can be specified multiple times, or once with parameters separated by a semicolon.

- **-l** `<LIMIT>`, **--limit** `<LIMIT>`
  Limit the number of events returned.

- **-m** `<ID>`, **--marker** `<ID>`
  Only return events that appear after the given event ID.

- **-n** `<DEPTH>`, **--nested-depth** `<DEPTH>`
  Depth of nested stacks from which to display events. Note this cannot be specified with --resource.

- **-F** `<FORMAT>`, **--format** `<FORMAT>`
  The output value format, one of: log, table

### 7.2.16. heat event-show

**usage:** heat event-show `<NAME or ID>` `<RESOURCE>` `<EVENT>`

Describe the event.

Positional arguments:

- `<NAME or ID>`
  Name or ID of stack to show the events for.

- `<RESOURCE>`
  Name of the resource the event belongs to.

- `<EVENT>`
  ID of event to display details for.

### 7.2.17. heat hook-clear

**usage:** heat hook-clear [--pre-create] [--pre-update] [--pre-delete] `<NAME or ID>` `<RESOURCE>` [ `<RESOURCE>` ... ]

Clear hooks on a given stack.

Positional arguments:
<NAME or ID>
Name or ID of the stack these resources belong to.

<RESOURCE>
Resource names with hooks to clear. Resources in nested stacks can be set using slash as a separator: nested_stack/another/my_resource. You can use wildcards to match multiple stacks or resources: nested_stack/an*/*_resource

Optional arguments:

--pre-create
Clear the pre-create hooks (optional)

--pre-update
Clear the pre-update hooks (optional)

--pre-delete
Clear the pre-delete hooks (optional)

7.2.18. heat hook-poll

usage: heat hook-poll [-n <DEPTH>] <NAME or ID>
List resources with pending hook for a stack.

Positional arguments:

<NAME or ID>
Name or ID of stack to show the pending hooks for.

Optional arguments:

-n <DEPTH>, --nested-depth <DEPTH>
Depth of nested stacks from which to display hooks.

7.2.19. heat output-list

usage: heat output-list <NAME or ID>
Show available outputs.

Positional arguments:

<NAME or ID>
Name or ID of stack to query.

7.2.20. heat output-show
usage: heat output-show [-F <FORMAT>] [-a] [--with-detail] [NAME or ID] [OUTPUT NAME]

Show a specific stack output.

Positional arguments:

<NAME or ID>
Name or ID of stack to query.

<OUTPUT NAME>
Name of an output to display.

Optional arguments:

-F <FORMAT>, --format <FORMAT>
The output value format, one of: json, raw.

-a, --all
Display all stack outputs.

--with-detail
Enable detail information presented, like key and description.

7.2.21. heat resource-list

usage: heat resource-list [-n <DEPTH>] [--with-detail] [-f <KEY=VALUE>] [NAME or ID]

Show list of resources belonging to a stack.

Positional arguments:

<NAME or ID>
Name or ID of stack to show the resources for.

Optional arguments:

-n <DEPTH>, --nested-depth <DEPTH>
Depth of nested stacks from which to display resources.

--with-detail
Enable detail information presented for each resource in resources list.

-f <KEY=VALUE>, --filter <KEY=VALUE>
Filter parameters to apply on returned resources based on their name, status, type, action, id and physical_resource_id. This can be specified multiple times.

7.2.22. heat resource-mark-unhealthy
7.2.22. heat resource-mark-unhealthy

usage: heat resource-mark-unhealthy [--reset] <NAME or ID> <RESOURCE> 
[reason]

Set resource's health.

Positional arguments:

<NAME or ID>
   Name or ID of stack the resource belongs to.

<RESOURCE>
   Name or physical ID of the resource.

reason
   Reason for state change.

Optional arguments:

--reset
   Set the resource as healthy.

7.2.23. heat resource-metadata

usage: heat resource-metadata <NAME or ID> <RESOURCE>

List resource metadata.

Positional arguments:

<NAME or ID>
   Name or ID of stack to show the resource metadata for.

<RESOURCE>
   Name of the resource to show the metadata for.

7.2.24. heat resource-show

usage: heat resource-show [-a <ATTRIBUTE>] <NAME or ID> <RESOURCE>

Describe the resource.

Positional arguments:

<NAME or ID>
   Name or ID of stack to show the resource for.

<RESOURCE>
Name of the resource to show the details for.

Optional arguments:

- `a <ATTRIBUTE>`, `--with-attr <ATTRIBUTE>`
  Attribute to show, it can be specified multiple times.

### 7.2.25. heat resource-signal

```
usage: heat resource-signal [-D <DATA>] [-f <FILE>] <NAME or ID> <RESOURCE>
```

Send a signal to a resource.

**Positional arguments:**

- `<NAME or ID>`
  Name or ID of stack the resource belongs to.

- `<RESOURCE>`
  Name of the resource to signal.

**Optional arguments:**

- `-D <DATA>`, `--data <DATA>`
  JSON Data to send to the signal handler.

- `-f <FILE>`, `--data-file <FILE>`
  File containing JSON data to send to the signal handler.

### 7.2.26. heat resource-type-list

```
usage: heat resource-type-list [-f <KEY1=VALUE1;KEY2=VALUE2...>]
```

List the available resource types.

**Optional arguments:**

- `-f <KEY1=VALUE1;KEY2=VALUE2...>`, `--filters <KEY1=VALUE1;KEY2=VALUE2...>`
  Filter parameters to apply on returned resource types. This can be specified multiple times, or once with parameters separated by a semicolon. It can be any of name, version and support_status.

### 7.2.27. heat resource-type-show

```
usage: heat resource-type-show <RESOURCE_TYPE>
```

Show the resource type.
Positional arguments:

<RESOURCE_TYPE>
   Resource type to get the details for.

7.2.28. heat resource-type-template

    usage: heat resource-type-template [-t <TEMPLATE_TYPE>] [-F <FORMAT>] <RESOURCE_TYPE>

Generate a template based on a resource type.

Positional arguments:

<RESOURCE_TYPE>
   Resource type to generate a template for.

Optional arguments:

-t <TEMPLATE_TYPE>, --template-type <TEMPLATE_TYPE>
   Template type to generate, hot or cfn.

-F <FORMAT>, --format <FORMAT>
   The template output format, one of: yaml, json.

7.2.29. heat service-list

    usage: heat service-list

List the Heat engines.

7.2.30. heat snapshot-delete

    usage: heat snapshot-delete <NAME or ID> <SNAPSHOT>

Delete a snapshot of a stack.

Positional arguments:

<NAME or ID>
   Name or ID of the stack containing the snapshot.

<SNAPSHOT>
   The ID of the snapshot to delete.

7.2.31. heat snapshot-list
usage: heat snapshot-list <NAME or ID>

List the snapshots of a stack.

Positional arguments:

<NAME or ID>
   Name or ID of the stack containing the snapshots.

7.2.32. heat snapshot-show

usage: heat snapshot-show <NAME or ID> <SNAPSHOT>

Show a snapshot of a stack.

Positional arguments:

<NAME or ID>
   Name or ID of the stack containing the snapshot.

<SNAPSHOT>
   The ID of the snapshot to show.

7.2.33. heat stack-abandon

usage: heat stack-abandon [-O <FILE>] <NAME or ID>

Abandon the stack. This will delete the record of the stack from Heat, but will not delete any of the underlying resources. Prints an adoptable JSON representation of the stack to stdout or a file on success.

Positional arguments:

<NAME or ID>
   Name or ID of stack to abandon.

Optional arguments:

-0 <FILE>, --output-file <FILE>
   file to output abandon result. If the option is specified, the result will be output into <FILE>.

7.2.34. heat stack-adopt

usage: heat stack-adopt [-e <FILE or URL>] [-c <TIMEOUT>] [-t <TIMEOUT>]
   [-a <FILE or URL>] [-r]
   [-P KEY1=VALUE1;KEY2=VALUE2...>]
   <STACK_NAME>
Adopt a stack.

**Positional arguments:**

<STACK_NAME>

Name of the stack to adopt.

**Optional arguments:**

-e <FILE or URL>, --environment-file <FILE or URL>

Path to the environment, it can be specified multiple times.

-c <TIMEOUT>, --create-timeout <TIMEOUT>

Stack creation timeout in minutes. DEPRECATED use --timeout instead.

-t <TIMEOUT>, --timeout <TIMEOUT>

Stack creation timeout in minutes.

-a <FILE or URL>, --adopt-file <FILE or URL>

Path to adopt stack data file.

-r, --enable-rollback

Enable rollback on create/update failure.

-P <KEY1=VALUE1;KEY2=VALUE2…>, --parameters <KEY1=VALUE1;KEY2=VALUE2…>

Parameter values used to create the stack. This can be specified multiple times, or once with parameters separated by a semicolon.

### 7.2.35. heat stack-cancel-update

**usage:** heat stack-cancel-update <NAME or ID>

Cancel currently running update of the stack.

**Positional arguments:**

<NAME or ID>

Name or ID of stack to cancel update for.

### 7.2.36. heat stack-create

**usage:** heat stack-create [-f <FILE>] [-e <FILE or URL>]

[--pre-create <RESOURCE>] [-u <URL>] [-o <URL>]

[-c <TIMEOUT>] [-t <TIMEOUT>] [-r]

[-P <KEY1=VALUE1;KEY2=VALUE2...>] [-Pf <KEY=FILE>]

[--poll [SECONDS]] [--tags <TAG1,TAG2>]

<STACK_NAME>
Create the stack.

**Positional arguments:**

```
<STACK_NAME>
```

Name of the stack to create.

**Optional arguments:**

```
-f <FILE>, --template-file <FILE>
```

Path to the template.

```
-e <FILE or URL>, --environment-file <FILE or URL>
```

Path to the environment, it can be specified multiple times.

```
--pre-create <RESOURCE>
```

Name of a resource to set a pre-create hook to. Resources in nested stacks can be set using slash as a separator: nested_stack/another/my_resource. You can use wildcards to match multiple stacks or resources: nested_stack/an*/*_resource. This can be specified multiple times.

```
-u <URL>, --template-url <URL>
```

URL of template.

```
-o <URL>, --template-object <URL>
```

URL to retrieve template object (e.g. from swift).

```
-c <TIMEOUT>, --create-timeout <TIMEOUT>
```

Stack creation timeout in minutes. DEPRECATED use --timeout instead.

```
-t <TIMEOUT>, --timeout <TIMEOUT>
```

Stack creation timeout in minutes.

```
-r, --enable-rollback
```

Enable rollback on create/update failure.

```
-P <KEY1=VALUE1;KEY2=VALUE2…>, --parameters <KEY1=VALUE1;KEY2=VALUE2…>
```

Parameter values used to create the stack. This can be specified multiple times, or once with parameters separated by a semicolon.

```
-Pf <KEY=FILE>, --parameter-file <KEY=FILE>
```

Parameter values from file used to create the stack. This can be specified multiple times. Parameter value would be the content of the file

```
--poll [SECONDS]
```

Poll and report events until stack completes. Optional poll interval in seconds can be provided as argument, default 5.

```
--tags <TAG1,TAG2>
```

A list of tags to associate with the stack.

7.2.37. heat stack-delete

usage: heat stack-delete [-y] <NAME or ID> [<NAME or ID> ...]

Delete the stack(s).

Positional arguments:

<NAME or ID>

Name or ID of stack(s) to delete.

Optional arguments:

-y, --yes

Skip yes/no prompt (assume yes).

7.2.38. heat stack-list

usage: heat stack-list [-s] [-n] [-a] [-f <KEY1=VALUE1;KEY2=VALUE2...>] [-t <TAG1,TAG2...>] [--tags-any]

[-m <ID>] [-k <KEY1;KEY2...>] [-d [asc|desc]] [-g] [-o]

List the user's stacks.

Optional arguments:

-s, --show-deleted

Include soft-deleted stacks in the stack listing.

-n, --show-nested

Include nested stacks in the stack listing.

-a, --show-hidden

Include hidden stacks in the stack listing.

-f <KEY1=VALUE1;KEY2=VALUE2...>, --filters <KEY1=VALUE1;KEY2=VALUE2...>

Filter parameters to apply on returned stacks. This can be specified multiple times, or once with parameters separated by a semicolon.

-t <TAG1,TAG2...>, --tags <TAG1,TAG2...>

Show stacks containing these tags. If multiple tags are passed, they will be combined using the AND boolean expression.
--tags-any <TAG1,TAG2…>
Show stacks containing these tags, if multiple tags are passed, they will be combined using the OR boolean expression.

--not-tags <TAG1,TAG2…>
Show stacks not containing these tags, if multiple tags are passed, they will be combined using the AND boolean expression.

--not-tags-any <TAG1,TAG2…>
Show stacks not containing these tags, if multiple tags are passed, they will be combined using the OR boolean expression.

-l <LIMIT>, --limit <LIMIT>
Limit the number of stacks returned.

-m <ID>, --marker <ID>
Only return stacks that appear after the given stack ID.

-k <KEY1;KEY2…>, --sort-keys <KEY1;KEY2…>
List of keys for sorting the returned stacks. This can be specified multiple times or once with keys separated by semicolons. Valid sorting keys include "stack_name", "stack_status", "creation_time" and "updated_time".

-d [asc|desc], --sort-dir [asc|desc]
Sorting direction (either "asc" or "desc") for the sorting keys.

-g, --global-tenant
Display stacks from all tenants. Operation only authorized for users who match the policy in heat's policy.json.

-o, --show-owner
Display stack owner information. This is automatically enabled when using --global-tenant.

7.2.39. heat stack-preview

Usage: heat stack-preview [-f <FILE>] [-e <FILE or URL>] [-u <URL>] [-o <URL>] [-t <TIMEOUT>] [-r] [-P <KEY1=VALUE1;KEY2=VALUE2…>] [-Pf <KEY=FILE>]

Preview the stack.

Positional arguments:

<STACK_NAME>
Name of the stack to preview.
Optional arguments:

- `f <FILE>, --template-file <FILE>`
  Path to the template.

- `e <FILE or URL>, --environment-file <FILE or URL>`
  Path to the environment, it can be specified multiple times.

- `u <URL>, --template-url <URL>`
  URL of template.

- `o <URL>, --template-object <URL>`
  URL to retrieve template object (e.g. from swift)

- `t <TIMEOUT>, --timeout <TIMEOUT>`
  Stack creation timeout in minutes. This is only used during validation in preview.

- `r, --enable-rollback`
  Enable rollback on failure. This option is not used during preview and exists only for symmetry with stack-create.

- `-P <KEY1=VALUE1;KEY2=VALUE2…>, --parameters <KEY1=VALUE1;KEY2=VALUE2…>`
  Parameter values used to preview the stack. This can be specified multiple times, or once with parameters separated by semicolon.

- `-Pf <KEY=FILE>, --parameter-file <KEY=FILE>`
  Parameter values from file used to create the stack. This can be specified multiple times.
  Parameter value would be the content of the file

- `--tags <TAG1,TAG2>`
  A list of tags to associate with the stack.

7.2.40. heat stack-restore

usage: heat stack-restore <NAME or ID> <SNAPSHOT>

Restore a snapshot of a stack.

Positional arguments:

<NAME or ID>
  Name or ID of the stack containing the snapshot.

<SNAPSHOT>
  The ID of the snapshot to restore.

7.2.41. heat stack-show
usage: heat stack-show [--no-resolve-outputs] <NAME or ID>

Describe the stack.

Positional arguments:

<NAME or ID>
   Name or ID of stack to describe.

Optional arguments:

--no-resolve-outputs
   Do not resolve outputs of the stack.

7.2.42. heat stack-snapshot

usage: heat stack-snapshot [-n <NAME>] <NAME or ID>

Make a snapshot of a stack.

Positional arguments:

<NAME or ID>
   Name or ID of stack to snapshot.

Optional arguments:

-n <NAME>, --name <NAME>
   If specified, the name given to the snapshot.

7.2.43. heat stack-update

usage: heat stack-update [-f <FILE>] [-e <FILE or URL>]
   [-p <FILE>]
   [-t <TIMEOUT>] [-r] [-rollback <VALUE>] [-y] [-n]
   [-P KEY1=VALUE1;KEY2=VALUE2...] [-Pf]
   [-x] [-c <PARAMETER>] [-tags <TAG1,TAG2>]
   <NAME or ID>

Update the stack.

Positional arguments:

<NAME or ID>
   Name or ID of stack to update.

Optional arguments:
-f <FILE>, --template-file <FILE>
  Path to the template.

-e <FILE or URL>, --environment-file <FILE or URL>
  Path to the environment, it can be specified multiple times.

--pre-update <RESOURCE>
  Name of a resource to set a pre-update hook to. Resources in nested stacks can be set
  using slash as a separator: nested_stack/another/my_resource. You can use wildcards to
  match multiple stacks or resources: nested_stack/an*/*_resource. This can be specified
  multiple times

-u <URL>, --template-url <URL>
  URL of template.

-o <URL>, --template-object <URL>
  URL to retrieve template object (e.g. from swift).

-t <TIMEOUT>, --timeout <TIMEOUT>
  Stack update timeout in minutes.

-r, --enable-rollback
  DEPRECATED! Use --rollback argument instead. Enable rollback on stack update failure.
  NOTE: default behavior is now to use the rollback value of existing stack.

--rollback <VALUE>
  Set rollback on update failure. Values ('1', 't', 'true', 'on', 'y', 'yes') set rollback to enabled.
  Values ('0', 'f', 'false', 'off', 'n', 'no') set rollback to disabled. Default is to use the value of
  existing stack to be updated.

-y, --dry-run
  Do not actually perform the stack update, but show what would be changed

-n, --show-nested
  Show nested stacks when performing --dry-run

-P <KEY1=VALUE1;KEY2=VALUE2…>, --parameters <KEY1=VALUE1;KEY2=VALUE2…>
  Parameter values used to create the stack. This can be specified multiple times, or once
  with parameters separated by a semicolon.

-Pf <KEY=FILE>, --parameter-file <KEY=FILE>
  Parameter values from file used to create the stack. This can be specified multiple times.
  Parameter value would be the content of the file

-x, --existing
  Re-use the template, parameters and environment of the current stack. If the template
  argument is omitted then the existing template is used. If no --environment-file is specified
  then the existing environment is used. Parameters specified in --parameters will patch over
  the existing values in the current stack. Parameters omitted will keep the existing values.
-c <PARAMETER>, --clear-parameter <PARAMETER>
Remove the parameters from the set of parameters of current stack for the stack-update.
The default value in the template will be used. This can be specified multiple times.

--tags <TAG1,TAG2>
An updated list of tags to associate with the stack.

7.2.44. heat template-function-list

usage: heat template-function-list <TEMPLATE_VERSION>
List the available functions.

Positional arguments:

<TEMPLATE_VERSION>
Template version to get the functions for.

7.2.45. heat template-show

usage: heat template-show <NAME or ID>
Get the template for the specified stack.

Positional arguments:

<NAME or ID>
Name or ID of stack to get the template for.

7.2.46. heat template-validate

usage: heat template-validate [-u <URL>] [-f <FILE>] [-e <FILE or URL>]
[-o <URL>] [-n] [-P <KEY1=VALUE1;KEY2=VALUE2...>]
[-I <ERR1,ERR2...>]
Validate a template with parameters.

Optional arguments:

-u <URL>, --template-url <URL>
URL of template.

-f <FILE>, --template-file <FILE>
Path to the template.

-e <FILE or URL>, --environment-file <FILE or URL>
Path to the environment, it can be specified multiple times.

-o <URL>, --template-object <URL>
URL to retrieve template object (e.g. from swift).

-n, --show-nested
Resolve parameters from nested templates as well.

-P <KEY1=VALUE1;KEY2=VALUE2…>, --parameters <KEY1=VALUE1;KEY2=VALUE2…>
Parameter values for the template. This can be specified multiple times, or once with parameters separated by a semicolon.

-I <ERR1,ERR2…>, --ignore-errors <ERR1,ERR2…>
List of heat errors to ignore.

7.2.47. heat template-version-list

usage: heat template-version-list

List the available template versions.
CHAPTER 8. BARE METAL SERVICE (IRONIC) COMMAND-LINE CLIENT

The ironic client is the command-line interface (CLI) for the Bare Metal service (ironic) API and its extensions.

This chapter documents ironic version 1.11.1.

For help on a specific ironic command, enter:

```
$ ironic help COMMAND
```

8.1. IRONIC USAGE

```
usage: ironic [--insecure] [--os-cacert <ca-certificate>]
             [--os-cert <certificate>] [--os-key <key>] [--timeout <seconds>]
             [--key-file OS_KEY] [--ca-file OS_CACERT]
             [--os-username OS_USERNAME] [--os-password OS_PASSWORD]
             [--os-tenant-id OS_TENANT_ID] [--os-tenant-name OS_TENANT_NAME]
             [--os-auth-url OS_AUTH_URL] [--os-region-name OS_REGION_NAME]
             [--os-auth-token OS_AUTH_TOKEN] [--ironic-url IRONIC_URL]
             [--ironic-api-version IRONIC_API_VERSION]
             [--os-service-type OS_SERVICE_TYPE] [--os-endpoint IRONIC_URL]
             [--os-endpoint-type OS_ENDPOINT_TYPE]
             [--os-user-domain-id OS_USER_DOMAIN_ID]
             [--os-user-domain-name OS_USER_DOMAIN_NAME]
             [--os-project-id OS_PROJECT_ID]
             [--os-project-name OS_PROJECT_NAME]
             [--os-project-domain-id OS_PROJECT_DOMAIN_ID]
             [--os-project-domain-name OS_PROJECT_DOMAIN_NAME]
             [--max-retries MAX_RETRIES] [--retry-interval RETRY_INTERVAL]
<subcommand> ...
```

Subcommands:

**chassis-create**
Create a new chassis.

**chassis-delete**
Delete a chassis.

**chassis-list**
List the chassis.
**chassis-node-list**
List the nodes contained in a chassis.

**chassis-show**
Show detailed information about a chassis.

**chassis-update**
Update information about a chassis.

**node-create**
Register a new node with the Ironic service.

**node-delete**
Unregister node(s) from the Ironic service.

**node-get-boot-device**
Get the current boot device for a node.

**node-get-console**
Get the connection information for a node's console, if enabled.

**node-get-supported-boot-devices**
Get the supported boot devices for a node.

**node-get-vendor-passthru-methods**
Get the vendor passthru methods for a node.

**node-inject-nmi**
Inject NMI to a node.

**node-list**
List the nodes which are registered with the Ironic service.

**node-port-list**
List the ports associated with a node.

**node-set-boot-device**
Set the boot device for a node.

**node-set-console-mode**
Enable or disable serial console access for a node.

**node-set-maintenance**
Enable or disable maintenance mode for a node.

**node-set-power-state**
Power a node on or off or reboot.
node-set-provision-state
   Initiate a provisioning state change for a node.

node-set-target-raid-config
   Set target RAID config on a node.

node-show
   Show detailed information about a node.

node-show-states
   Show information about the node's states.

node-update
   Update information about a registered node.

node-validate
   Validate a node's driver interfaces.

node-vendor-passthru
   Call a vendor-passthru extension for a node.

node-vif-attach
   Attach VIF to a given node.

node-vif-detach
   Detach VIF from a given node.

node-vif-list
   List VIFs for a given node.

port-create
   Create a new port.

port-delete
   Delete a port.

port-list
   List the ports.

port-show
   Show detailed information about a port.

port-update
   Update information about a port.

portgroup-create
   Create a new portgroup.
portgroup-delete
   Delete a portgroup.

portgroup-list
   List the portgroups.

portgroup-port-list
   List the ports associated with a portgroup.

portgroup-show
   Show detailed information about a portgroup.

portgroup-update
   Update information about a portgroup.

driver-get-vendor-passthru-methods
   Get the vendor passthru methods for a driver.

driver-list
   List the enabled drivers.

driver-properties
   Get properties of a driver.

driver-raid-logical-disk-properties
   Get RAID logical disk properties for a driver.

driver-show
   Show information about a driver.

driver-vendor-passthru
   Call a vendor-passthru extension for a driver.

create
   Create baremetal resources (chassis, nodes, port groups and ports).

bash-completion
   Prints all of the commands and options for bash-completion.

help
   Display help about this program or one of its subcommands.

8.2. IRONIC OPTIONAL ARGUMENTS

--version
   show program's version number and exit
--debug
    Defaults to env[IRONICCLIENT_DEBUG]

--json
    Print JSON response without formatting.

-v, --verbose
    Print more verbose output

--cert-file OS_CERT
    DEPRECATED! Use --os-cert.

--key-file OS_KEY
    DEPRECATED! Use --os-key.

--ca-file OS_CACERT
    DEPRECATED! Use --os-cacert.

--os-username OS_USERNAME
    Defaults to env[OS_USERNAME]

--os-password OS_PASSWORD
    Defaults to env[OS_PASSWORD]

--os-tenant-id OS_TENANT_ID
    Defaults to env[OS_TENANT_ID]

--os-tenant-name OS_TENANT_NAME
    Defaults to env[OS_TENANT_NAME]

--os-auth-url OS_AUTH_URL
    Defaults to env[OS_AUTH_URL]

--os-region-name OS_REGION_NAME
    Defaults to env[OS_REGION_NAME]

--os-auth-token OS_AUTH_TOKEN
    Defaults to env[OS_AUTH_TOKEN]

--ironic-url IRONIC_URL
    Defaults to env[IRONIC_URL]

--ironic-api-version IRONIC_API_VERSION
    Accepts 1.x (where “x” is microversion) or “latest”, Defaults to
    env[IRONIC_API_VERSION] or 1

--os-service-type OS_SERVICE_TYPE
Defaults to `env[OS_SERVICE_TYPE]` or "baremetal"

```plaintext
--os-endpoint IRONIC_URL
Specify an endpoint to use instead of retrieving one from the service catalog (via authentication). Defaults to `env[OS_SERVICE_ENDPOINT]`.

--os-endpoint-type OS_ENDPOINT_TYPE
Defaults to `env[OS_ENDPOINT_TYPE]` or "publicURL"

--os-user-domain-id OS_USER_DOMAIN_ID
Defaults to `env[OS_USER_DOMAIN_ID]`.

--os-user-domain-name OS_USER_DOMAIN_NAME
Defaults to `env[OS_USER_DOMAIN_NAME]`.

--os-project-id OS_PROJECT_ID
Another way to specify tenant ID. This option is mutually exclusive with --os-tenant-id. Defaults to `env[OS_PROJECT_ID]`.

--os-project-name OS_PROJECT_NAME
Another way to specify tenant name. This option is mutually exclusive with --os-tenant-name. Defaults to `env[OS_PROJECT_NAME]`.

--os-project-domain-id OS_PROJECT_DOMAIN_ID
Defaults to `env[OS_PROJECT_DOMAIN_ID]`.

--os-project-domain-name OS_PROJECT_DOMAIN_NAME
Defaults to `env[OS_PROJECT_DOMAIN_NAME]`.

--max-retries MAX_RETRIES
Maximum number of retries in case of conflict error (HTTP 409). Defaults to `env[IRONIC_MAX_RETRIES]` or 5. Use 0 to disable retrying.

--retry-interval RETRY_INTERVAL
Amount of time (in seconds) between retries in case of conflict error (HTTP 409). Defaults to `env[IRONIC_RETRY_INTERVAL]` or 2.
```

8.2.1. ironic chassis-create

```
usage: ironic chassis-create [-d <description>] [-e <key=value>] [-u <uuid>]
```

Create a new chassis.

**Optional arguments:**

```
-d <description>, --description <description>
Description of the chassis.
```
- e <key=value>, --extra <key=value>
    Record arbitrary key/value metadata. Can be specified multiple times.

- u <uuid>, --uuid <uuid>
    UUID of the chassis.

**8.2.2. ironic chassis-delete**

```
usage: ironic chassis-delete <chassis> [ <chassis> ... ]
```

Delete a chassis.

**Positional arguments:**

- `<chassis>`
  
  UUID of the chassis.

**8.2.3. ironic chassis-list**

```
usage: ironic chassis-list [ --detail ] [ --limit <limit> ] [ --marker <chassis> ] [ --sort-key <field> ] [ --sort-dir <direction> ] [ --fields <field> [ <field> ... ] ]
```

List the chassis.

**Optional arguments:**

- `--detail`
  
  Show detailed information about the chassis.

- `--limit <limit>`
  
  Maximum number of chassis to return per request, 0 for no limit. Default is the maximum number used by the Ironic API Service.

- `--marker <chassis>`
  
  Chassis UUID (for example, of the last chassis in the list from a previous request). Returns the list of chassis after this UUID.

- `--sort-key <field>`
  
  Chassis field that will be used for sorting.

- `--sort-dir <direction>`
  
  Sort direction: "asc" (the default) or "desc".

- `--fields <field> [ <field> ... ]`
  
  One or more chassis fields. Only these fields will be fetched from the server. Can not be used when "--detail" is specified.
8.2.4. ironic chassis-node-list


List the nodes contained in a chassis.

Positional arguments:

<!--chassis>
    UUID of the chassis.

Optional arguments:

--detail
    Show detailed information about the nodes.

--limit <limit>
    Maximum number of nodes to return per request, 0 for no limit. Default is the maximum number used by the Ironic API Service.

--marker <node>
    Node UUID (for example, of the last node in the list from a previous request). Returns the list of nodes after this UUID.

--sort-key <field>
    Node field that will be used for sorting.

--sort-dir <direction>
    Sort direction: "asc" (the default) or "desc".

--fields <field> [<field> ...]
    One or more node fields. Only these fields will be fetched from the server. Can not be used when '--detail' is specified.

--maintenance <boolean>
    List nodes in maintenance mode: 'true' or 'false'.

--associated <boolean>
    List nodes by instance association: 'true' or 'false'.

--provision-state <provision-state>
    List nodes in specified provision state.
8.2.5. ironic chassis-show

usage: ironic chassis-show [--fields <field> [<field> ...]] <chassis>

Show detailed information about a chassis.

Positional arguments:

<chassis>
    UUID of the chassis.

Optional arguments:

--fields <field> [<field> ...
    One or more chassis fields. Only these fields will be fetched from the server.

8.2.6. ironic chassis-update

usage: ironic chassis-update <chassis> <op> <path=value> [<path=value> ...

Update information about a chassis.

Positional arguments:

<chassis>
    UUID of the chassis.

<op>
    Operation: 'add', 'replace', or 'remove'.

<path=value>
    Attribute to add, replace, or remove. Can be specified multiple times. For 'remove', only <path> is necessary.

8.2.7. ironic create

usage: ironic create <file> [<file> ...]

Create baremetal resources (chassis, nodes, port groups and ports). The resources may be described in one or more JSON or YAML files. If any file cannot be validated, no resources are created. An attempt is made to create all the resources; those that could not be created are skipped (with a corresponding error message).

Positional arguments:

<file>
    File (.yaml or .json) containing descriptions of the resources to create. Can be specified multiple times.
8.2.8. ironic driver-get-vendor-passthru-methods

usage: ironic driver-get-vendor-passthru-methods <driver>

Get the vendor passthru methods for a driver.

Positional arguments:

<driver>

Name of the driver.

8.2.9. ironic driver-list

usage: ironic driver-list

List the enabled drivers.

8.2.10. ironic driver-properties

usage: ironic driver-properties [--wrap <integer>] <driver>

Get properties of a driver.

Positional arguments:

<driver>

Name of the driver.

Optional arguments:

--wrap <integer>

Wrap the output to a specified length. Positive number can realize wrap functionality. 0 is default for disabled.

8.2.11. ironic driver-raid-logical-disk-properties

usage: ironic driver-raid-logical-disk-properties [--wrap <integer>] <driver>

Get RAID logical disk properties for a driver.

Positional arguments:

<driver>

Name of the driver.

Optional arguments:

--wrap <integer>
8.2.12. ironic driver-show

usage: ironic driver-show <driver>

Show information about a driver.

Positional arguments:

<driver>
    Name of the driver.

8.2.13. ironic driver-vendor-passthru


Call a vendor-passthru extension for a driver.

Positional arguments:

<driver>
    Name of the driver.

<method>
    Vendor-passthru method to be called.

<arg=value>
    Argument to be passed to the vendor-passthru method. Can be specified multiple times.

Optional arguments:

--http-method <http-method>
    The HTTP method to use in the request. Valid HTTP methods are: POST, PUT, GET, DELETE, PATCH. Defaults to 'POST'.

8.2.14. ironic node-create


Register a new node with the Ironic service.
Optional arguments:

- **c**, **--chassis**  `<chassis>`
  UUID of the chassis that this node belongs to.

- **i**, **--driver-info**  `<key=value>`
  Key/value pair used by the driver, such as out-of-band management credentials. Can be specified multiple times.

- **p**, **--properties**  `<key=value>`
  Key/value pair describing the physical characteristics of the node. This is exported to Nova and used by the scheduler. Can be specified multiple times.

- **e**, **--extra**  `<key=value>`
  Record arbitrary key/value metadata. Can be specified multiple times.

- **u**, **--uuid**  `<uuid>`
  Unique UUID for the node.

- **n**, **--name**  `<name>`
  Unique name for the node.

- **--network-interface**  `<network_interface>`
  Network interface used for switching node to cleaning/provisioning networks.

- **--resource-class**  `<resource_class>`
  Resource class for classifying or grouping nodes. Used, for example, to classify nodes in Nova's placement engine.

Required arguments:

- **d**, **--driver**  `<driver>`
  Driver used to control the node.

8.2.15. ironic node-delete

```
usage: ironic node-delete <node> [ <node> ... ]
```

Unregister node(s) from the Ironic service. Returns errors for any nodes that could not be unregistered.

Positional arguments:

- **<node>**
  Name or UUID of the node.

8.2.16. ironic node-get-boot-device
usage: ironic node-get-boot-device <node>
Get the current boot device for a node.

Positional arguments:

<node>
Name or UUID of the node.

8.2.17. ironic node-get-console

usage: ironic node-get-console <node>
Get the connection information for a node's console, if enabled.

Positional arguments:

<node>
Name or UUID of the node.

8.2.18. ironic node-get-supported-boot-devices

usage: ironic node-get-supported-boot-devices <node>
Get the supported boot devices for a node.

Positional arguments:

<node>
Name or UUID of the node.

8.2.19. ironic node-get-vendor-passthru-methods

usage: ironic node-get-vendor-passthru-methods <node>
Get the vendor passthru methods for a node.

Positional arguments:

<node>
Name or UUID of the node.

8.2.20. ironic node-inject-nmi

usage: ironic node-inject-nmi <node>
Inject NMI to a node.

Positional arguments:
8.2.21. ironic node-list

A node

Name or UUID of the node.

usage: ironic node-list [--limit <limit>] [--marker <node>]
[--sort-key <field>] [--sort-dir <direction>]
[--maintenance <boolean>] [--associated
<boolean>]
[--provision-state <provision-state>]
[--driver <driver>] [--detail]
[--fields <field> [<field> ...]]
[--resource-class <resource class>]

List the nodes which are registered with the Ironic service.

Optional arguments:

--limit <limit>
Maximum number of nodes to return per request, 0 for no limit. Default is the maximum number used by the Ironic API Service.

--marker <node>
Node UUID (for example, of the last node in the list from a previous request). Returns the list of nodes after this UUID.

--sort-key <field>
Node field that will be used for sorting.

--sort-dir <direction>
Sort direction: "asc" (the default) or "desc".

--maintenance <boolean>
List nodes in maintenance mode: 'true' or 'false'.

--associated <boolean>
List nodes by instance association: ‘true' or ‘false'.

--provision-state <provision-state>
List nodes in specified provision state.

--driver <driver>
List nodes using specified driver.

--detail
Show detailed information about the nodes.

--fields <field> [<field> ...]
One or more node fields. Only these fields will be fetched from the server. Can not be used when '--detail' is specified.

--resource-class <resource class>
List nodes using specified resource class.

8.2.22. ironic node-port-list

```
usage: ironic node-port-list [--detail] [--limit <limit>] [--marker <port>]
                               [--sort-key <field>] [--sort-dir <direction>]
                               [--fields <field> [<field> ...]]
<node>
```

List the ports associated with a node.

**Positional arguments:**

<node>
Name or UUID of the node.

**Optional arguments:**

--detail
Show detailed information about the ports.

--limit <limit>
Maximum number of ports to return per request, 0 for no limit. Default is the maximum number used by the Ironic API Service.

--marker <port>
Port UUID (for example, of the last port in the list from a previous request). Returns the list of ports after this UUID.

--sort-key <field>
Port field that will be used for sorting.

--sort-dir <direction>
Sort direction: "asc" (the default) or "desc".

--fields <field> [<field> ...]
One or more port fields. Only these fields will be fetched from the server. Can not be used when '--detail' is specified.

8.2.23. ironic node-set-boot-device

```
usage: ironic node-set-boot-device [--persistent] <node> <boot-device>
```
Set the boot device for a node.

**Positional arguments:**

*<node>*

Name or UUID of the node.

*<boot-device>*

One of pxe, disk, cdrom, bios, safe.

**Optional arguments:**

*--persistent*

Make changes persistent for all future boots.

### 8.2.24. ironic node-set-console-mode

**usage:** ironic node-set-console-mode <node> <enabled>

Enable or disable serial console access for a node.

**Positional arguments:**

*<node>*

Name or UUID of the node.

*<enabled>*

Enable or disable console access for a node: 'true' or 'false'.

### 8.2.25. ironic node-set-maintenance

**usage:** ironic node-set-maintenance [--reason <reason>] <node> <maintenance-mode>

Enable or disable maintenance mode for a node.

**Positional arguments:**

*<node>*

Name or UUID of the node.

*<maintenance-mode>*

'true' or 'false'; 'on' or 'off'.

**Optional arguments:**

*--reason <reason>*

Reason for setting maintenance mode to 'true' or 'on'; not valid when setting to 'false' or 'off'.

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8.2.26. ironic node-set-power-state

usage: ironic node-set-power-state [--soft] [--power-timeout <power-timeout>] <node> <power-state>

Power a node on or off or reboot.

Positional arguments:

<node>
    Name or UUID of the node.

<power-state>
    'on', 'off', or 'reboot'.

Optional arguments:

--soft
    Gracefully change the power state. Only valid for 'off' and 'reboot' power states.

--power-timeout <power-timeout>
    Timeout (in seconds, positive integer) to wait for the target power state before erroring out.

8.2.27. ironic node-set-provision-state

usage: ironic node-set-provision-state [--config-drive <config-drive>] [--clean-steps <clean-steps>] [--wait [WAIT_TIMEOUT]] <node> <provision-state>

Initiate a provisioning state change for a node.

Positional arguments:

<node>
    Name or UUID of the node.

<provision-state>
    Supported states: deleted, provide, clean, manage, active, rebuild, inspect, abort, adopt.

Optional arguments:

--config-drive <config-drive>
    A gzipped, base64-encoded configuration drive string OR the path to the configuration drive file OR the path to a directory containing the config drive files. In case it's a directory, a config drive will be generated from it. This argument is only valid when setting provision-state to 'active'.

--clean-steps <clean-steps>
The clean steps in JSON format. May be the path to a file containing the clean steps; OR '-', with the clean steps being read from standard input; OR a string. The value should be a list of clean-step dictionaries; each dictionary should have keys 'interface' and 'step', and optional key 'args'. This argument must be specified (and is only valid) when setting provision-state to 'clean'.

--wait [WAIT_TIMEOUT]
Wait for a node to reach the expected state. Not supported for 'abort'. Optionally takes a timeout in seconds. The default value is 0, meaning no timeout. Fails if the node reaches an unexpected stable state, a failure state or a state with last_error set.

8.2.28. ironic node-set-target-raid-config

usage: ironic node-set-target-raid-config <node> <target-raid-config>
Set target RAID config on a node.

Positional arguments:

<node>
Name or UUID of the node.

<target-raid-config>
A file containing JSON data of the desired RAID configuration. Use '-' to read the contents from standard input. It also accepts the valid json string as input if file/standard input are not used for providing input. The input can be an empty dictionary too which unsets the node.target_raid_config on the node.

8.2.29. ironic node-show

usage: ironic node-show [--instance] [--fields <field> [<field> ...]] <id>
Show detailed information about a node.

Positional arguments:

<id>
Name or UUID of the node (or instance UUID if --instance is specified).

Optional arguments:

--instance <id>
is an instance UUID.

--fields <field> [<field> ...]
One or more node fields. Only these fields will be fetched from the server.

8.2.30. ironic node-show-states
usage: ironic node-show-states <node>

Show information about the node’s states.

Positional arguments:

<node>
    Name or UUID of the node.

8.2.31. ironic node-update

usage: ironic node-update <node> <op> <path=value> [<path=value> ...]

Update information about a registered node.

Positional arguments:

<node>
    Name or UUID of the node.

<op>
    Operation: 'add', 'replace', or 'remove'.

<path=value>
    Attribute to add, replace, or remove. Can be specified multiple times. For 'remove', only
    <path> is necessary. For nested attributes, separate the components with slashes, eg
    'driver_info/deploy_kernel=uuid'.

8.2.32. ironic node-validate

usage: ironic node-validate <node>

Validate a node’s driver interfaces.

Positional arguments:

<node>
    Name or UUID of the node.

8.2.33. ironic node-vendor-passthru

usage: ironic node-vendor-passthru [--http-method <http-method>]
    <node> <method>
    [<arg=value> [<arg=value> ...]]

Call a vendor-passthru extension for a node.

Positional arguments:
**8.2.34. ironic node-vif-attach**

**Usage:**
```
ironic node-vif-attach [--vif-info <key=value>] <node> <vif-id>
```

Attach VIF to a given node.

**Positional arguments:**

- `<node>`
  Name or UUID of the node.

- `<vif-id>`
  Name or UUID of the VIF to attach to node.

**Optional arguments:**

- `--vif-info <key=value>`
  Record arbitrary key/value metadata. Can be specified multiple times. The mandatory 'id' parameter cannot be specified as a key.

**8.2.35. ironic node-vif-detach**

**Usage:**
```
ironic node-vif-detach <node> <vif-id>
```

Detach VIF from a given node.

**Positional arguments:**

- `<node>`
  Name or UUID of the node.

- `<vif-id>`
  Name or UUID of the VIF to detach from node.
8.2.36. ironic node-vif-list

usage: ironic node-vif-list <node>

List VIFs for a given node.

Positional arguments:

 <node>
  Name or UUID of the node.

8.2.37. ironic port-create

usage: ironic port-create -a <address> -n <node> [-l <key=value>] [-p <portgroup>] [-e <key=value>] [-u <uuid>]

Create a new port.

Optional arguments:

 -l <key=value>, --local-link-connection <key=value>
  Key/value metadata describing Local link connection information. Valid keys are switch_info, switch_id, port_id. Can be specified multiple times.

 --portgroup <portgroup>
  UUID of the portgroup that this port belongs to.

 --pxe-enabled <boolean>
  Indicates whether this Port should be used when PXE booting this Node.

 -e <key=value>, --extra <key=value>
  Record arbitrary key/value metadata. Can be specified multiple times.

 -u <uuid>, --uuid <uuid>
  UUID of the port.

Required arguments:

 -a <address>, --address <address>
  MAC address for this port.

 -n <node>, --node <node>, --node_uuid <node>
  UUID of the node that this port belongs to.

8.2.38. ironic port-delete
usage: ironic port-delete <port> [<port> ...]

Delete a port.

Positional arguments:

<port>
   UUID of the port.

8.2.39. ironic port-list

usage: ironic port-list [--detail] [--address <mac-address>] [--limit <limit>]
       [--marker <port>] [--sort-key <field>]
       [--sort-dir <direction>]
       [--fields <field> [<field> ...]]

List the ports.

Optional arguments:

--detail
   Show detailed information about ports.

--address <mac-address>
   Only show information for the port with this MAC address.

--limit <limit>
   Maximum number of ports to return per request, 0 for no limit. Default is the maximum number used by the Ironic API Service.

--marker <port>
   Port UUID (for example, of the last port in the list from a previous request). Returns the list of ports after this UUID.

--sort-key <field>
   Port field that will be used for sorting.

--sort-dir <direction>
   Sort direction: "asc" (the default) or "desc".

--fields <field> [<field> ...]
   One or more port fields. Only these fields will be fetched from the server. Can not be used when '--detail' is specified.

8.2.40. ironic port-show

usage: ironic port-show [--address] [--fields <field> [<field> ...]]
       <id>
Show detailed information about a port.

Positional arguments:

<id>
    UUID of the port (or MAC address if --address is specified).

Optional arguments:

--address <id>
    is the MAC address (instead of the UUID) of the port.

--fields <field> [field> ...]
    One or more port fields. Only these fields will be fetched from the server.

8.2.41. ironic port-update

usage: ironic port-update <port> <op> <path=value> [path=value] ...

Update information about a port.

Positional arguments:

<port>
    UUID of the port.

<op>
    Operation: 'add', 'replace', or 'remove'.

<path=value>
    Attribute to add, replace, or remove. Can be specified multiple times. For 'remove', only <path> is necessary.

8.2.42. ironic portgroup-create

usage: ironic portgroup-create [-a <address>] -n <node> [--name <name>]
    [-e <key=value>]
    [--standalone-ports-supported <boolean>]
    [-u <uuid>] [-m <mode>] [-p <key=value>]

Create a new portgroup.

Optional arguments:

-a <address>, --address <address>
    MAC address for this portgroup.
--name <name>
   Name for the portgroup.

-e <key=value>, --extra <key=value>
   Record arbitrary key/value metadata. Can be specified multiple times.

--standalone-ports-supported <boolean>
   Specifies whether ports from this portgroup can be used in stand alone mode.

-u <uuid>, --uuid <uuid>
   UUID of the portgroup.

-m <mode>, --mode <mode>
   Portgroup mode. For possible values, refer to Kernel documentation.

-p <key=value>, --properties <key=value>
   Record key/value properties related to this portgroup's configuration.

Required arguments:

-n <node>, --node <node>
   UUID of the node that this portgroup belongs to.

8.2.43. ironic portgroup-delete

   usage: ironic portgroup-delete <portgroup> [ <portgroup> ... ]

   Delete a portgroup.

   Positional arguments:

   <portgroup>
   UUID or Name of the portgroup.

8.2.44. ironic portgroup-list

   usage: ironic portgroup-list [--detail] [-n <node>] [-a <mac-address>]
       [--limit <limit>] [--marker <portgroup>] [--sort-key <field>] [--sort-dir
       [--fields <field> [<field> ...]]]

   List the portgroups.

   Optional arguments:

   --detail
   Show detailed information about portgroups.
-n <node>, --node <node>
    UUID of the node that this portgroup belongs to.

-a <mac-address>, --address <mac-address>
    Only show information for the portgroup with this MAC address.

--limit <limit>
    Maximum number of portgroups to return per request, 0 for no limit. Default is the maximum number used by the Ironic API Service.

--marker <portgroup>
    Portgroup UUID (for example, of the last portgroup in the list from a previous request). Returns the list of portgroups after this UUID.

--sort-key <field>
    Portgroup field that will be used for sorting.

--sort-dir <direction>
    Sort direction: "asc" (the default) or "desc".

--fields <field> [...]
    One or more portgroup fields. Only these fields will be fetched from the server. Can not be used when '--detail' is specified.

8.2.45. ironic portgroup-port-list

usage: ironic portgroup-port-list [--detail] [--limit <limit>]
       [--marker <port>] [--sort-key <field>]
       [--sort-dir <direction>]
       [--fields <field> [...]]
       <portgroup>

List the ports associated with a portgroup.

Positional arguments:

<portgroup>
    Name or UUID of the portgroup.

Optional arguments:

--detail
    Show detailed information about the ports.

--limit <limit>
    Maximum number of ports to return per request, 0 for no limit. Default is the maximum number used by the Ironic API Service.
--marker <port>
Port UUID (for example, of the last port in the list from a previous request). Returns the list of ports after this UUID.

--sort-key <field>
Port field that will be used for sorting.

--sort-dir <direction>
Sort direction: "asc" (the default) or "desc".

--fields <field> [<field> ...]
One or more port fields. Only these fields will be fetched from the server. Can not be used when '--detail' is specified.

8.2.46. ironic portgroup-show

usage: ironic portgroup-show [--address] [--fields <field> [<field> ...]] <id>

Show detailed information about a portgroup.

Positional arguments:

<id>
Name or UUID of the portgroup (or MAC address if --address is specified).

Optional arguments:

--address <id>
is the MAC address (instead of the UUID) of the portgroup.

--fields <field> [<field> ...]
One or more portgroup fields. Only these fields will be fetched from the server.

8.2.47. ironic portgroup-update

usage: ironic portgroup-update <portgroup> <op> <path=value> [<path=value> ...]

Update information about a portgroup.

Positional arguments:

<portgroup>
UUID or Name of the portgroup.

<op>
Operation: 'add', 'replace', or 'remove'.

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<path=value>
    Attribute to add, replace, or remove. Can be specified multiple times. For 'remove', only
    <path> is necessary.
CHAPTER 9. SHARED FILE SYSTEMS SERVICE (MANILA)
COMMAND-LINE CLIENT

The manila client is the command-line interface (CLI) for the Shared File Systems service (manila) API and its extensions.

This chapter documents manila version 1.14.0.

For help on a specific manila command, enter:

$ manila help COMMAND

9.1. MANILA USAGE

            [--os-user-id <auth-user-id>] [--os-username <auth-user-name>]
            [--os-password <auth-password>]
            [--os-tenant-name <auth-tenant-name>]
            [--os-project-name <auth-project-name>]
            [--os-tenant-id <auth-tenant-id>]
            [--os-project-id <auth-project-id>]
            [--os-user-domain-id <auth-user-domain-id>]
            [--os-user-domain-name <auth-user-domain-name>]
            [--os-project-domain-id <auth-project-domain-id>]
            [--os-project-domain-name <auth-project-domain-name>]
            [--os-auth-url <auth-url>] [--os-region-name <region-name>]
            [--os-token <token>] [--bypass-url <bypass-url>]
            [--service-type <service-type>] [--service-name <service-name>]
            [--share-service-name <share-service-name>]
            [--endpoint-type <endpoint-type>]
            [--os-share-api-version <share-api-ver>]
            [--os-cacert <ca-certificate>] [--retries <retries>]
            [--os-cert <certificate>]
            <subcommand> ...

Subcommands:

absolute-limits
   Print a list of absolute limits for a user.

access-allow
   Allow access to the share.

access-deny
   Deny access to a share.

access-list
   Show access list for share.
api-version
Display the API version information.

availability-zone-list
List all availability zones.

create
Creates a new share (NFS, CIFS, CephFS, GlusterFS or HDFS).

credentials
Show user credentials returned from auth.

delete
Remove one or more shares.

disable
Discover endpoints that get returned from the authenticate services.

extend
Increases the size of an existing share.

extra-specs-list
Print a list of current 'share types and extra specs' (Admin Only).

force-delete
Attempt force-delete of share, regardless of state (Admin only).

list
List NAS shares with filters.

manage
Manage share not handled by Manila (Admin only).

metadata
Set or delete metadata on a share.

metadata-show
Show metadata of given share.

metadata-update-all
Update all metadata of a share.

migration-cancel
Cancels migration of a given share when copying (Admin only, Experimental).

migration-complete
Completes migration for a given share (Admin only, Experimental).

**migration-get-progress**
Gets migration progress of a given share when copying (Admin only, Experimental).

**migration-start**
Migrates share to a new host (Admin only, Experimental).

**pool-list**
List all backend storage pools known to the scheduler (Admin only).

**quota-class-show**
List the quotas for a quota class.

**quota-class-update**
Update the quotas for a quota class (Admin only).

**quota-defaults**
List the default quotas for a tenant.

**quota-delete**
Delete quota for a tenant/user. The quota will revert back to default (Admin only).

**quota-show**
List the quotas for a tenant/user.

**quota-update**
Update the quotas for a tenant/user (Admin only).

**rate-limits**
Print a list of rate limits for a user.

**reset-state**
Explicitly update the state of a share (Admin only).

**reset-task-state**
Explicitly update the task state of a share (Admin only, Experimental).

**revert-to-snapshot**
Revert a share to the specified snapshot.

**security-service-create**
Create security service used by tenant.

**security-service-delete**
Delete one or more security services.

**security-service-list**
Get a list of security services.

**security-service-show**
Show security service.

**security-service-update**
Update security service.

**service-disable**
Disables 'manila-share' or 'manila-scheduler' services (Admin only).

**service-enable**
Enables 'manila-share' or 'manila-scheduler' services (Admin only).

**service-list**
List all services (Admin only).

**share-export-location-list**
List export locations of a given share.

**share-export-location-show**
Show export location of the share.

**share-group-create**
Creates a new share group (Experimental).

**share-group-delete**
Remove one or more share groups (Experimental).

**share-group-list**
List share groups with filters (Experimental).

**share-group-reset-state**
Explicitly update the state of a share group (Admin only, Experimental).

**share-group-show**
Show details about a share group (Experimental).

**share-group-snapshot-create**
Creates a new share group snapshot (Experimental).

**share-group-snapshot-delete**
Remove one or more share group snapshots (Experimental).

**share-group-snapshot-list**
List share group snapshots with filters (Experimental).
share-group-snapshot-list-members
List members of a share group snapshot (Experimental).

share-group-snapshot-reset-state
Explicitly update the state of a share group snapshot (Admin only, Experimental).

share-group-snapshot-show
Show details about a share group snapshot (Experimental).

share-group-snapshot-update
Update a share group snapshot (Experimental).

share-group-type-access-add
Adds share group type access for the given project (Admin only).

share-group-type-access-list
Print access information about a share group type (Admin only).

share-group-type-access-remove
Removes share group type access for the given project (Admin only).

share-group-type-create
Create a new share group type (Admin only).

share-group-type-delete
Delete a specific share group type (Admin only).

share-group-type-key
Set or unset group_spec for a share group type (Admin only).

share-group-type-list
Print a list of available 'share group types'.

share-group-type-specs-list
Print a list of 'share group types specs' (Admin Only).

share-group-update
Update a share group (Experimental).

share-instance-export-location-list
List export locations of a given share instance.

share-instance-export-location-show
Show export location for the share instance.

share-instance-force-delete
Force-delete the share instance, regardless of state (Admin only).
**share-instance-list**
List share instances (Admin only).

**share-instance-reset-state**
Explicitly update the state of a share instance (Admin only).

**share-instance-show**
Show details about a share instance (Admin only).

**share-network-create**
Create description for network used by the tenant.

**share-network-delete**
Delete one or more share networks.

**share-network-list**
Get a list of network info.

**share-network-security-service-add**
Associate security service with share network.

**share-network-security-service-list**
Get list of security services associated with a given share network.

**share-network-security-service-remove**
Dissociate security service from share network.

**share-network-show**
Get a description for network used by the tenant.

**share-network-update**
Update share network data.

**share-replica-create**
Create a share replica (Experimental).

**share-replica-delete**
Remove one or more share replicas (Experimental).

**share-replica-list**
List share replicas (Experimental).

**share-replica-promote**
Promote specified replica to 'active' replica_state (Experimental).

**share-replica-reset-replica-state**
Explicitly update the 'replica_state' of a share replica (Experimental).
share-replica-reset-state
   Explicitly update the 'status' of a share replica (Experimental).

share-replica-resync
   Attempt to update the share replica with its 'active' mirror (Experimental).

share-replica-show
   Show details about a replica (Experimental).

share-server-delete
   Delete one or more share servers (Admin only).

share-server-details
   Show share server details (Admin only).

share-server-list
   List all share servers (Admin only).

share-server-show
   Show share server info (Admin only).

show
   Show details about a NAS share.

shrink
   Decreases the size of an existing share.

snapshot-access-allow
   Allow read only access to a snapshot.

snapshot-access-deny
   Deny access to a snapshot.

snapshot-access-list
   Show access list for a snapshot.

snapshot-create
   Add a new snapshot.

snapshot-delete
   Remove one or more snapshots.

snapshot-export-location-list
   List export locations of a given snapshot.

snapshot-export-location-show
   Show export location of the share snapshot.
**snapshot-force-delete**
Attempt force-deletion of one or more snapshots. Regardless of the state (Admin only).

**snapshot-instance-export-location-list**
List export locations of a given snapshot instance.

**snapshot-instance-export-location-show**
Show export location of the share instance snapshot.

**snapshot-instance-list**
List share snapshot instances.

**snapshot-instance-reset-state**
Explicitly update the state of a share snapshot instance.

**snapshot-instance-show**
Show details about a share snapshot instance.

**snapshot-list**
List all the snapshots.

**snapshot-manage**
Manage share snapshot not handled by Manila (Admin only).

**snapshot-rename**
Rename a snapshot.

**snapshot-reset-state**
Explicitly update the state of a snapshot (Admin only).

**snapshot-show**
Show details about a snapshot.

**snapshot-unmanage**
Unmanage one or more share snapshots (Admin only).

**type-access-add**
Adds share type access for the given project (Admin only).

**type-access-list**
Print access information about the given share type (Admin only).

**type-access-remove**
Removes share type access for the given project (Admin only).

**type-create**
Create a new share type (Admin only).
**type-delete**
Delete one or more specific share types (Admin only).

**type-key**
Set or unset extra_spec for a share type (Admin only).

**type-list**
Print a list of available 'share types'.

**unmanage**
Unmanage share (Admin only).

**update**
Rename a share.

**bash-completion**
Print arguments for bash_completion. Prints all of the commands and options to stdout so that the manila.bash_completion script doesn't have to hard code them.

**help**
Display help about this program or one of its subcommands.

**list-extensions**
List all the os-api extensions that are available.

### 9.2. MANILA OPTIONAL ARGUMENTS

**--version**
show program’s version number and exit

**-d, --debug**
Print debugging output.

**--os-cache**
Use the auth token cache. Defaults to env[OS_CACHE].

**--os-reset-cache**
Delete cached password and auth token.

**--os-user-id <auth-user-id>**
Defaults to env [OS_USER_ID].

**--os-username <auth-user-name>**
Defaults to env[OS_USERNAME].

**--os-password <auth-password>**
Defaults to \texttt{env[OS\_PASSWORD]}.

\texttt{--os-tenant-name <auth-tenant-name>}

Defaults to \texttt{env[OS\_TENANT\_NAME]}.

\texttt{--os-project-name <auth-project-name>}

Another way to specify tenant name. This option is mutually exclusive with \texttt{--os-tenant-name}. Defaults to \texttt{env[OS\_PROJECT\_NAME]}.

\texttt{--os-tenant-id <auth-tenant-id>}

Defaults to \texttt{env[OS\_TENANT\_ID]}.

\texttt{--os-project-id <auth-project-id>}

Another way to specify tenant ID. This option is mutually exclusive with \texttt{--os-tenant-id}. Defaults to \texttt{env[OS\_PROJECT\_ID]}.

\texttt{--os-user-domain-id <auth-user-domain-id>}

OpenStack user domain ID. Defaults to \texttt{env[OS\_USER\_DOMAIN\_ID]}.

\texttt{--os-user-domain-name <auth-user-domain-name>}

OpenStack user domain name. Defaults to \texttt{env[OS\_USER\_DOMAIN\_NAME]}.

\texttt{--os-project-domain-id <auth-project-domain-id>}

Defaults to \texttt{env[OS\_PROJECT\_DOMAIN\_ID]}.

\texttt{--os-project-domain-name <auth-project-domain-name>}

Defaults to \texttt{env[OS\_PROJECT\_DOMAIN\_NAME]}.

\texttt{--os-auth-url <auth-url>}

Defaults to \texttt{env[OS\_AUTH\_URL]}.

\texttt{--os-region-name <region-name>}

Defaults to \texttt{env[OS\_REGION\_NAME]}.

\texttt{--os-token <token>}

Defaults to \texttt{env[OS\_TOKEN]}.

\texttt{--bypass-url <bypass-url>}

Use this API endpoint instead of the Service Catalog. Defaults to \texttt{env[OS\_MANILA\_BYPASS\_URL]}.

\texttt{--service-type <service-type>}

Defaults to compute for most actions.

\texttt{--service-name <service-name>}

Defaults to \texttt{env[OS\_MANILA\_SERVICE\_NAME]}.
--share-service-name <share-service-name>
  Defaults to env[OS_MANILA_SHARE_SERVICE_NAME].

--endpoint-type <endpoint-type>
  Defaults to env[OS_MANILA_ENDPOINT_TYPE] or publicURL.

--os-share-api-version <share-api-ver>
  Accepts 1.x to override default to env[OS_SHARE_API_VERSION].

--os-cacert <ca-certificate>
  Specify a CA bundle file to use in verifying a TLS (https) server certificate. Defaults to env[OS_CACERT].

--retries <retries>
  Number of retries.

--os-cert <certificate>
  Defaults to env[OS_CERT].

9.2.1. manila absolute-limits

  usage: manila absolute-limits

Print a list of absolute limits for a user.

9.2.2. manila access-allow

  usage: manila access-allow [--access-level <access_level>]
  <share> <access_type> <access_to>

Allow access to the share.

Positional arguments:

<share>
  Name or ID of the NAS share to modify.

<access_type>
  Access rule type (only "ip", "user"(user or group), "cert" or "cephx" are supported).

<access_to>
  Value that defines access.

Optional arguments:

--access-level <access_level>, --access_level <access_level>
  Share access level ("rw" and "ro" access levels are supported). Defaults to rw.
9.2.3. manila access-deny

usage: manila access-deny <share> <id>

Deny access to a share.

Positional arguments:

<share>
   Name or ID of the NAS share to modify.

<id>
   ID of the access rule to be deleted.

9.2.4. manila access-list

usage: manila access-list [--columns <columns>] <share>

Show access list for share.

Positional arguments:

<share>
   Name or ID of the share.

Optional arguments:

--columns <columns>
   Comma separated list of columns to be displayed e.g. --columns "access_type,access_to"

9.2.5. manila api-version

usage: manila api-version

Display the API version information.

9.2.6. manila availability-zone-list

usage: manila availability-zone-list [--columns <columns>]

List all availability zones.

Optional arguments:

--columns <columns>
   Comma separated list of columns to be displayed e.g. --columns "id,name"

9.2.7. manila create
usage: manila create [--snapshot-id <snapshot-id>] [--name <name>]
       [--metadata [<key=value> [<key=value> ...]]]
       [--share-network <network-info>]
       [--description <description>] [--share-type <share-type>]
       [--public] [--availability-zone <availability-zone>]
       [--share-group <share-group>]
       <share_protocol> <size>

Creates a new share (NFS, CIFS, CephFS, GlusterFS or HDFS).

Positional arguments:

<share_protocol>
    Share protocol (NFS, CIFS, CephFS, GlusterFS or HDFS).

<size>
    Share size in GiB.

Optional arguments:

--snapshot-id <snapshot-id>, --snapshot_id <snapshot-id>
    Optional snapshot ID to create the share from. (Default=None)

--name <name>
    Optional share name. (Default=None)

--metadata [<key=value> [<key=value> ...]]
    Metadata key=value pairs (Optional, Default=None).

--share-network <network-info>, --share_network <network-info>
    Optional network info ID or name.

--description <description>
    Optional share description. (Default=None)

--share-type <share-type>, --share_type <share-type>, --volume-type <share-type>, --volume_type <share-type>
    Optional share type. Use of optional volume type is deprecated (Default=None)

--public
    Level of visibility for share. Defines whether other tenants are able to see it or not.

--availability-zone <availability-zone>, --availability_zone <availability-zone>, --az <availability-zone>
    Availability zone in which share should be created.
--share-group <share-group>, --share_group <share-group>, --group <share-group>

Optional share group name or ID in which to create the share (Experimental, Default=None).

### 9.2.8. manila credentials

usage: manila credentials

Show user credentials returned from auth.

### 9.2.9. manila delete

usage: manila delete [--share-group <share-group>] <share> [<share> ...

Remove one or more shares.

**Positional arguments:**

*<share>*

Name or ID of the share(s).

**Optional arguments:**

--share-group <share-group>, --share_group <share-group>, --group <share-group>

Optional share group name or ID which contains the share (Experimental, Default=None).

### 9.2.10. manila endpoints

usage: manila endpoints

Discover endpoints that get returned from the authenticate services.

### 9.2.11. manila extend

usage: manila extend <share> <new_size>

Increases the size of an existing share.

**Positional arguments:**

*<share>*

Name or ID of share to extend.

*<new_size>*

New size of share, in GiBs.
9.2.12. manila extra-specs-list

usage: manila extra-specs-list [--columns <columns>]

Print a list of current 'share types and extra specs' (Admin Only).

Optional arguments:

--columns <columns>
   Comma separated list of columns to be displayed e.g. --columns "id,name"

9.2.13. manila force-delete

usage: manila force-delete <share> [<share> ...]

Attempt force-delete of share, regardless of state (Admin only).

Positional arguments:

<share>
   Name or ID of the share(s) to force delete.

9.2.14. manila list

usage: manila list [--all-tenants [<0|1>]] [--name <name>] [--status <status>]
   [--share-server-id <share_server_id>]
   [--metadata [key=value] [key=value] ...]]
   [--extra-specs [key=value] [key=value] ...]]
   [--share-type <share_type>] [--limit <limit>]
   [--offset <offset>] [--sort-key <sort_key>]
   [--sort-dir <sort_dir>] [--snapshot <snapshot>]
   [--host <host>] [--share-network <share_network>]
   [--project-id <project_id>] [--public]
   [--share-group <share_group>] [--columns <columns>]

List NAS shares with filters.

Optional arguments:

--all-tenants [<0|1>]
   Display information from all tenants (Admin only).

--name <name>
   Filter results by name.

--status <status>
   Filter results by status.
Filter results by share server ID (Admin only).

--metadata [\[<key=value> \[<key=value> ...]\]]

Filters results by a metadata key and value. OPTIONAL: Default=None

--extra-specs [\[<key=value> \[<key=value> ...]\]], --extra_specs [\[<key=value> \[<key=value> ...]\]]

Filters results by a extra specs key and value of share type that was used for share creation. OPTIONAL: Default=None

--share-type <share_type>, --volume-type <share_type>, --share_type <share_type>, --share-type-id <share_type>, --volume-type-id <share_type>, --share_type_id <share_type>, --share_type-id <share_type>, --volume_type <share_type>, --volume_type_id <share_type>

Filter results by a share type id or name that was used for share creation.

--limit <limit>

Maximum number of shares to return. OPTIONAL: Default=None.

--offset <offset>

Set offset to define start point of share listing. OPTIONAL: Default=None.

--sort-key <sort_key>, --sort_key <sort_key>

Key to be sorted, available keys are ('id', 'status', 'size', 'host', 'share_proto', 'export_location', 'availability_zone', 'user_id', 'project_id', 'created_at', 'updated_at', 'display_name', 'name', 'share_type_id', 'share_type', 'share_network_id', 'share_network', 'snapshot_id', 'snapshot'). OPTIONAL: Default=None.

--sort-dir <sort_dir>, --sort_dir <sort_dir>

Sort direction, available values are ('asc', 'desc'). OPTIONAL: Default=None.

--snapshot <snapshot>

Filter results by snapshot name or id, that was used for share.

--host <host>

Filter results by host.

--share-network <share_network>, --share_network <share_network>

Filter results by share-network name or id.

--project-id <project_id>, --project_id <project_id>

Filter results by project id. Useful with set key '--all-tenants'.

--public

Add public shares from all tenants to result.
--share-group <share_group>, --share_group <share_group>, --group <share_group>

Filter results by share group name or ID (Experimental, Default=None).

--columns <columns>

Comma separated list of columns to be displayed e.g. --columns "export_location,is public"

9.2.15. manila list-extensions

usage: manila list-extensions

List all the os-api extensions that are available.

9.2.16. manila manage

usage: manila manage [--name <name>] [--description <description>]
[--share_type <share-type>]
[--driver_options [<key>=<value> [<key>=<value> ...]]]
[--public]
<service_host> <protocol> <export_path>

Manage share not handled by Manila (Admin only).

Positional arguments:

<service_host>

manage-share service host: some.host@driver#pool

<protocol>

Protocol of the share to manage, such as NFS or CIFS.

<export_path>

Share export path, NFS share such as: 10.0.0.1:/example_path, CIFS share such as: \10.0.0.1\example_cifs_share

Optional arguments:

--name <name>

Optional share name. (Default=None)

--description <description>

Optional share description. (Default=None)

--share_type <share-type>, --share_type <share-type>

Optional share type assigned to share. (Default=None)

--driver_options [<key>=<value> [<key>=<value> ...]], --driver-options [<key>=<value> [<key>=<value> ...]]
Driver option key=value pairs (Optional, Default=None).

--public
Level of visibility for share. Defines whether other tenants are able to see it or not. Available only for microversion >= 2.8

9.2.17. manila metadata

usage: manila metadata <share> <action> <key=value> [<key=value> ...]

Set or delete metadata on a share.

Positional arguments:

<share>
Name or ID of the share to update metadata on.

<action>
Actions: 'set' or 'unset'.

<key=value>
Metadata to set or unset (key is only necessary on unset).

9.2.18. manila metadata-show

usage: manila metadata-show <share>

Show metadata of given share.

Positional arguments:

<share>
Name or ID of the share.

9.2.19. manila metadata-update-all

usage: manila metadata-update-all <share> <key=value> [<key=value> ...]

Update all metadata of a share.

Positional arguments:

<share>
Name or ID of the share to update metadata on.

<key=value>
Metadata entry or entries to update.
9.2.20. manila migration-cancel

usage: manila migration-cancel <share>

Cancels migration of a given share when copying (Admin only, Experimental).

Positional arguments:

<share>  
Name or ID of share to cancel migration.

9.2.21. manila migration-complete

usage: manila migration-complete <share>

Completes migration for a given share (Admin only, Experimental).

Positional arguments:

<share>  
Name or ID of share to complete migration.

9.2.22. manila migration-get-progress

usage: manila migration-get-progress <share>

Gets migration progress of a given share when copying (Admin only, Experimental).

Positional arguments:

<share>  
Name or ID of the share to get share migration progress information.

9.2.23. manila migration-start

usage: manila migration-start [--force_host_assisted_migration <True|False>]  
--preserve-metadata <True|False>  
--preserve-snapshots <True|False>

 writable

<True|False>  
--nondisruptive

[new_share_network]

[--new_share_type <new_share_type>]  
<share> <host@backend#pool>

Migrates share to a new host (Admin only, Experimental).

Positional arguments:
<share>
Name or ID of share to migrate.

<host@backend#pool>
Destination host where share will be migrated to. Use the format "host@backend#pool".

Optional arguments:

--force_host_assisted_migration <True|False>, --force-host-assisted-migration <True|False>
Enforces the use of the host-assisted migration approach, which bypasses driver optimizations. Default=False.

--preserve-metadata <True|False>, --preserve_metadata <True|False>
Enforces migration to preserve all file metadata when moving its contents. If set to True, host-assisted migration will not be attempted.

--preserve-snapshots <True|False>, --preserve_snapshots <True|False>
Enforces migration of the share snapshots to the destination. If set to True, host-assisted migration will not be attempted.

--writable <True|False>
Enforces migration to keep the share writable while contents are being moved. If set to True, host-assisted migration will not be attempted.

--nondisruptive <True|False>
Enforces migration to be nondisruptive. If set to True, host-assisted migration will not be attempted.

--new_share_network <new_share_network>, --new-share-network <new_share_network>
Specify the new share network for the share. Do not specify this parameter if the migrating share has to be retained within its current share network.

--new_share_type <new_share_type>, --new-share-type <new_share_type>
Specify the new share type for the share. Do not specify this parameter if the migrating share has to be retained with its current share type.

9.2.24. manila pool-list

```
usage: manila pool-list [--host <host>] [--backend <backend>] [--pool <pool>]
                     [--columns <columns>] [--detail]
                     [--share-type <share_type>]
```

List all backend storage pools known to the scheduler (Admin only).

Optional arguments:
--host <host>
Filter results by host name. Regular expressions are supported.

--backend <backend>
Filter results by backend name. Regular expressions are supported.

--pool <pool>
Filter results by pool name. Regular expressions are supported.

--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "name,host"

--detail, --detailed
Show detailed information about pools. (Default=False)

--share-type <share_type>, --share_type <share_type>, --share-type-id <share_type>, --share_type_id <share_type>
Filter results by share type name or ID. (Default=None)Available only for microversion >= 2.23

9.2.25. manila quota-class-show

usage: manila quota-class-show <class>

List the quotas for a quota class.

Positional arguments:

<class>
Name of quota class to list the quotas for.

9.2.26. manila quota-class-update

usage: manila quota-class-update [--shares <shares>] [--snapshots <snapshots>]
[--gigabytes <gigabytes>]
[--snapshot-gigabytes <snapshot_gigabytes>]
[--share-networks <share-networks>]
<class-name>

Update the quotas for a quota class (Admin only).

Positional arguments:

<class-name>
Name of quota class to set the quotas for.

Optional arguments:
--shares <shares>
    New value for the "shares" quota.

--snapshots <snapshots>
    New value for the "snapshots" quota.

--gigabytes <gigabytes>
    New value for the "gigabytes" quota.

--snapshot-gigabytes <snapshot_gigabytes>, --snapshot_gigabytes <snapshot_gigabytes>
    New value for the "snapshot_gigabytes" quota.

--share-networks <share-networks>, --share_networks <share-networks>
    New value for the "share_networks" quota.

9.2.27. manila quota-defaults

    usage: manila quota-defaults [--tenant <tenant-id>]

List the default quotas for a tenant.

Optional arguments:

--tenant <tenant-id>
    ID of tenant to list the default quotas for.

9.2.28. manila quota-delete

    usage: manila quota-delete [--tenant <tenant-id>] [--user <user-id>]

Delete quota for a tenant/user. The quota will revert back to default (Admin only).

Optional arguments:

--tenant <tenant-id>
    ID of tenant to delete quota for.

--user <user-id>
    ID of user to delete quota for.

9.2.29. manila quota-show

    usage: manila quota-show [--tenant <tenant-id>] [--user <user-id>] [--detail]

List the quotas for a tenant/user.
Optional arguments:

--tenant <tenant-id>
   ID of tenant to list the quotas for.

--user <user-id>
   ID of user to list the quotas for.

--detail
   Optional flag to indicate whether to show quota in detail. Default false, available only for microversion >= 2.25.

9.2.30. manila quota-update


Update the quotas for a tenant/user (Admin only).

Positional arguments:

<tenant_id>
   UUID of tenant to set the quotas for.

Optional arguments:

--user <user-id>
   ID of user to set the quotas for.

--shares <shares>
   New value for the "shares" quota.

--snapshots <snapshots>
   New value for the "snapshots" quota.

--gigabytes <gigabytes>
   New value for the "gigabytes" quota.

--snapshot-gigabytes <snapshot_gigabytes>, --snapshot_gigabytes <snapshot_gigabytes>
   New value for the "snapshot_gigabytes" quota.

--share-networks <share-networks>, --share_networks <share-networks>
New value for the "share_networks" quota.

--force
Whether force update the quota even if the already used and reserved exceeds the new quota.

9.2.31. manila rate-limits

usage: manila rate-limits [--columns <columns>]
Print a list of rate limits for a user.

Optional arguments:

--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "verb,uri,value"

9.2.32. manila reset-state

usage: manila reset-state [--state <state>] <share>
Explicitly update the state of a share (Admin only).

Positional arguments:

<share>
Name or ID of the share to modify.

Optional arguments:

--state <state>
Indicate which state to assign the share. Options include available, error, creating, deleting, error_deleting. If no state is provided, available will be used.

9.2.33. manila reset-task-state

usage: manila reset-task-state [--task-state <task_state>] <share>
Explicitly update the task state of a share (Admin only, Experimental).

Positional arguments:

<share>
Name or ID of the share to modify.

Optional arguments:

--task-state <task_state>, --task_state <task_state>, --state <task_state>
Indicate which task state to assign the share. Options include migration_starting, migration_in_progress, migration_completing, migration_success, migration_error, migration_cancelled, migration_driver_in_progress, migration_driver_phase1_done, data_copying_starting, data_copying_in_progress, data_copying_completing, data_copying_completed, data_copying_cancelled, data_copying_error. If no value is provided, None will be used.

9.2.34. manila revert-to-snapshot

usage: manila revert-to-snapshot <snapshot>

Revert a share to the specified snapshot.

Positional arguments:

<snapshot>

Name or ID of the snapshot to restore. The snapshot must be the most recent one known to manila.

9.2.35. manila security-service-create


Create security service used by tenant.

Positional arguments:

<type>

Security service type: 'ldap', 'kerberos' or 'active_directory'.

Optional arguments:

--dns-ip <dns_ip>

DNS IP address used inside tenant’s network.

--server <server>

Security service IP address or hostname.

--domain <domain>

Security service domain.

--user <user>

Security service user or group used by tenant.
--password <password>
    Password used by user.

--name <name>
    Security service name.

--description <description>
    Security service description.

9.2.36. manila security-service-delete

    usage: manila security-service-delete <security-service>
            [<security-service> ...]

    Delete one or more security services.

    Positional arguments:

    <security-service>
        Name or ID of the security service(s) to delete

9.2.37. manila security-service-list

    usage: manila security-service-list [--all-tenants [<0|1>]]
            [--share-network <share_network>]
            [--status <status>] [--name <name>]
            [--type <type>] [--user <user>]
            [--dns-ip <dns_ip>] [--server <server>]
            [<0|1>]
            [--domain <domain>] [--detailed]
            [--offset <offset>] [--limit]
            [--columns <columns>]

    Get a list of security services.

    Optional arguments:

    --all-tenants [<0|1>]
        Display information from all tenants (Admin only).

    --share-network <share_network>, --share_network <share_network>
        Filter results by share network id or name.

    --status <status>
        Filter results by status.

    --name <name>
Filter results by name.

--type <type>
  Filter results by type.

--user <user>
  Filter results by user or group used by tenant.

--dns-ip <dns_ip>, --dns_ip <dns_ip>
  Filter results by DNS IP address used inside tenant’s network.

--server <server>
  Filter results by security service IP address or hostname.

--domain <domain>
  Filter results by domain.

--detailed [0|1]
  Show detailed information about filtered security services.

--offset <offset>
  Start position of security services listing.

--limit <limit>
  Number of security services to return per request.

--columns <columns>
  Comma separated list of columns to be displayed e.g. --columns “name,type”

9.2.38. manila security-service-show

usage: manila security-service-show <security-service>

Show security service.

Positional arguments:

<security-service>
  Security service name or ID to show.

9.2.39. manila security-service-update

  [--domain <domain>] [--user <user>]

Update security service.

**Positional arguments:**

```
<security-service>
```

Security service name or ID to update.

**Optional arguments:**

```
--dns-ip <dns-ip>
```

DNS IP address used inside tenant’s network.

```
--server <server>
```

Security service IP address or hostname.

```
--domain <domain>
```

Security service domain.

```
--user <user>
```

Security service user or group used by tenant.

```
--password <password>
```

Password used by user.

```
--name <name>
```

Security service name.

```
--description <description>
```

Security service description.

**9.2.40. manila service-disable**

```
usage: manila service-disable <hostname> <binary>
```

Disables 'manila-share' or 'manila-scheduler' services (Admin only).

**Positional arguments:**

```
<hostname>
```

Host name as 'example_host@example_backend'.

```
<binary>
```

Service binary, could be 'manila-share' or 'manila-scheduler'.
9.2.41. manila service-enable

usage: manila service-enable <hostname> <binary>

Enables 'manila-share' or 'manila-scheduler' services (Admin only).

Positional arguments:

<hostname>
   Host name as 'example_host@example_backend'.

<binary>
   Service binary, could be 'manila-share' or 'manila-scheduler'.

9.2.42. manila service-list

usage: manila service-list [--host <hostname>] [--binary <binary>]
        [--status <status>] [--state <state>]
        [--zone <zone>] [--columns <columns>]

List all services (Admin only).

Optional arguments:

--host <hostname>
   Name of host.

--binary <binary>
   Service binary.

--status <status>
   Filter results by status.

--state <state>
   Filter results by state.

--zone <zone>
   Availability zone.

--columns <columns>
   Comma separated list of columns to be displayed e.g. --columns "id,host"

9.2.43. manila share-export-location-list

usage: manila share-export-location-list [--columns <columns>] <share>

List export locations of a given share.

Positional arguments:
〈share〉
Name or ID of the share.

Optional arguments:

--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "id,host,status"

9.2.44. manila share-export-location-show

usage: manila share-export-location-show 〈share〉 〈export_location〉

Show export location of the share.

Positional arguments:

〈share〉
Name or ID of the share.

〈export_location〉
ID of the share export location.

9.2.45. manila share-group-create

usage: manila share-group-create [--name <name>] [--description <description>]
[--share-types <share_types>] [--share-group-type <share_group_type>]
[--share-network <share_network>] [--source-share-group-snapshot <source_share_group_snapshot>]
[--availability-zone <availability-zone>]

Creates a new share group (Experimental).

Optional arguments:

--name <name>
Optional share group name. (Default=None)

--description <description>
Optional share group description. (Default=None)

--share-types <share_types>, --share_types <share_types>
Comma-separated list of share types. (Default=None)
--share-group-type <share_group_type>, --share_group_type <share_group_type>

Share group type name or ID of the share group to be created. (Default=None)

--share-network <share_network>, --share_network <share_network>

Specify share network name or id.

--source-share-group-snapshot <source_share_group_snapshot>, --source_share_group_snapshot <source_share_group_snapshot>

Optional share group snapshot name or ID to create the share group from. (Default=None)

--availability-zone <availability-zone>, --availability_zone <availability-zone>, --az <availability-zone>

Optional availability zone in which group should be created. (Default=None)

9.2.46. manila share-group-delete

usage: manila share-group-delete [--force] <share_group> [<share_group> ...]

Remove one or more share groups (Experimental).

Positional arguments:

<share_group>

Name or ID of the share_group(s).

Optional arguments:

--force

Attempt to force delete the share group (Default=False) (Admin only).

9.2.47. manila share-group-list

usage: manila share-group-list [--all-tenants [<0|1>]] [--name <name>] [--status <status>]

[--share-server-id <share_server_id>] [--share-group-type]

[<share_group_type>] [--snapshot <snapshot>] [--host]

[<host>] [--share-network <share_network>] [--project-id <project_id>] [--limit]

[<limit>] [--offset <offset>] [--sort-key]

[<sort_key>] [--sort-dir <sort_dir>] [--columns]

List share groups with filters (Experimental).
Optional arguments:

--all-tenants [<0|1>]
Display information from all tenants (Admin only).

--name <name>
Filter results by name.

--status <status>
Filter results by status.

--share-server-id <share_server_id>, --share-server_id <share_server_id>,
--share_server-id <share_server_id>, --share_server_id <share_server_id>
Filter results by share server ID (Admin only).

--share-group-type <share_group_type>, --share-group-type-id
<share_group_type>, --share_group_type <share_group_type>, --
share_group_type_id <share_group_type>
Filter results by a share group type ID or name that was used for share group creation.

--snapshot <snapshot>
Filter results by share group snapshot name or ID that was used to create the share group.

--host <host>
Filter results by host.

--share-network <share_network>, --share_network <share_network>
Filter results by share-network name or ID.

--project-id <project_id>, --project_id <project_id>
Filter results by project ID. Useful with set key '--all-tenants'.

--limit <limit>
Maximum number of share groups to return. (Default=None)

--offset <offset>
Start position of share group listing.

--sort-key <sort_key>, --sort_key <sort_key>
Key to be sorted, available keys are ('id', 'name', 'status', 'host', 'user_id', 'project_id',
'created_at', 'availability_zone', 'share_network', 'share_network_id', 'share_group_type',
'share_group_type_id', 'source_share_group_snapshot_id'). Default=None.

--sort-dir <sort_dir>, --sort_dir <sort_dir>
Sort direction, available values are ('asc', 'desc'). OPTIONAL: Default=None.

--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "id,name"
9.2.48. manila share-group-reset-state

usage: manila share-group-reset-state [--state <state>] <share_group>

Explicitly update the state of a share group (Admin only, Experimental).

Positional arguments:

<share_group>
Name or ID of the share group to modify.

Optional arguments:

--state <state>
Indicate which state to assign the share group. Options include available, error, creating, deleting, error_deleting. If no state is provided, available will be used.

9.2.49. manila share-group-show

usage: manila share-group-show <share_group>

Show details about a share group (Experimental).

Positional arguments:

<share_group>
Name or ID of the share group.

9.2.50. manila share-group-snapshot-create

usage: manila share-group-snapshot-create [--name <name>] [--description <description>] <share_group>

Creates a new share group snapshot (Experimental).

Positional arguments:

<share_group>
Name or ID of the share group.

Optional arguments:

--name <name>
Optional share group snapshot name. (Default=None)

--description <description>
Optional share group snapshot description. (Default=None)
9.2.51. manila share-group-snapshot-delete

usage: manila share-group-snapshot-delete [--force]
       <share_group_snapshot>
       [<share_group_snapshot>
       ...]

Remove one or more share group snapshots (Experimental).

Positional arguments:

<share_group_snapshot>
    Name or ID of the share group snapshot(s) to delete.

Optional arguments:

--force
    Attempt to force delete the share group snapshot(s) (Default=False) (Admin only).

9.2.52. manila share-group-snapshot-list

usage: manila share-group-snapshot-list [--all-tenants [0|1]]
      [--name <name>]
      [--status <status>]
      [--share-group-id <share_group_id>]
      [--limit <limit>]
      [--offset <offset>]
      [--sort-key <sort_key>]
      [--sort-dir <sort_dir>]
      [--detailed DETAILED]
      [--columns <columns>]

List share group snapshots with filters (Experimental).

Optional arguments:

--all-tenants [0|1]
    Display information from all tenants (Admin only).

--name <name>
    Filter results by name.

--status <status>
    Filter results by status.

--share-group-id <share_group_id>, --share_group_id <share_group_id>
    Filter results by share group ID.

--limit <limit>
--offset <offset>
Start position of share group snapshot listing.

--sort-key <sort_key>, --sort_key <sort_key>
Key to be sorted, available keys are (id, name, status, host, user_id, project_id, created_at, share_group_id). Default=None.

--sort-dir <sort_dir>, --sort_dir <sort_dir>
Sort direction, available values are (asc, desc). OPTIONAL: Default=None.

--detailed DETAILED
Show detailed information about share group snapshots.

--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "id,name"

9.2.53. manila share-group-snapshot-list-members

usage: manila share-group-snapshot-list-members [--columns <columns>]
<share_group_snapshot>
List members of a share group snapshot (Experimental).

Positional arguments:

<share_group_snapshot>
Name or ID of the share group snapshot.

Optional arguments:

--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "id,name"

9.2.54. manila share-group-snapshot-reset-state

usage: manila share-group-snapshot-reset-state [--state <state>]
<share_group_snapshot>
Explicitly update the state of a share group snapshot (Admin only, Experimental).

Positional arguments:

<share_group_snapshot>
Name or ID of the share group snapshot.
Optional arguments:

--state <state>
Indicate which state to assign the share group snapshot. Options include available, error, creating, deleting, error_deleting. If no state is provided, available will be used.

9.2.55. manila share-group-snapshot-show

usage: manila share-group-snapshot-show <share_group_snapshot>
Show details about a share group snapshot (Experimental).
Positional arguments:

<share_group_snapshot>
Name or ID of the share group snapshot.

9.2.56. manila share-group-snapshot-update

usage: manila share-group-snapshot-update [--name <name>] [--description <description>]
<share_group_snapshot>
Update a share group snapshot (Experimental).
Positional arguments:

<share_group_snapshot>
Name or ID of the share group snapshot to update.
Optional arguments:

--name <name>
Optional new name for the share group snapshot. (Default=None)
--description <description>
Optional share group snapshot description. (Default=None)

9.2.57. manila share-group-type-access-add

usage: manila share-group-type-access-add <share_group_type> <project_id>
Adds share group type access for the given project (Admin only).
Positional arguments:

<share_group_type>
Share group type name or ID to add access for the given project.

<project_id>
    Project ID to add share group type access for.

9.2.58. manila share-group-type-access-list

usage: manila share-group-type-access-list <share_group_type>

Print access information about a share group type (Admin only).

Positional arguments:

<share_group_type>
    Filter results by share group type name or ID.

9.2.59. manila share-group-type-access-remove

usage: manila share-group-type-access-remove <share_group_type> <project_id>

Removes share group type access for the given project (Admin only).

Positional arguments:

<share_group_type>
    Share group type name or ID to remove access for the given project.

<project_id>
    Project ID to remove share group type access for.

9.2.60. manila share-group-type-create

usage: manila share-group-type-create [--is_public <is_public>] <name> <share_types>

Create a new share group type (Admin only).

Positional arguments:

<name>
    Name of the new share group type.

<share_types>
    Comma-separated list of share type names or IDs.

Optional arguments:
--is_public <is_public>, --is-public <is_public>
   Make type accessible to the public (default true).

9.2.61. manila share-group-type-delete

   usage: manila share-group-type-delete <id>

   Delete a specific share group type (Admin only).

   Positional arguments:

   <id>
   Name or ID of the share group type to delete.

9.2.62. manila share-group-type-key

   usage: manila share-group-type-key <share_group_type> <action>
   [ <key=value> [ <key=value> ... ] ]

   Set or unset group_spec for a share group type (Admin only).

   Positional arguments:

   <share_group_type>
   Name or ID of the share group type.

   <action>
   Actions: 'set' or 'unset'.

   <key=value>
   Group specs to set or unset (key is only necessary on unset).

9.2.63. manila share-group-type-list

   usage: manila share-group-type-list [--all] [--columns <columns>]

   Print a list of available 'share group types'.

   Optional arguments:

   --all
   Display all share group types (Admin only).

   --columns <columns>
   Comma separated list of columns to be displayed e.g. --columns "id,name"

9.2.64. manila share-group-type-specs-list

usage: manila share-group-type-specs-list [--columns <columns>]

Print a list of ‘share group types specs’ (Admin Only).

Optional arguments:

--columns <columns>
  Comma separated list of columns to be displayed e.g. --columns "id,name"

9.2.65. manila share-group-update

usage: manila share-group-update [--name <name>] [--description <description>]

<share_group>

Update a share group (Experimental).

Positional arguments:

<share_group>
  Name or ID of the share group to update.

Optional arguments:

--name <name>
  Optional new name for the share group. (Default=None)

--description <description>
  Optional share group description. (Default=None)

9.2.66. manila share-instance-export-location-list

usage: manila share-instance-export-location-list [--columns <columns>]

<instance>

List export locations of a given share instance.

Positional arguments:

<instance>
  Name or ID of the share instance.

Optional arguments:

--columns <columns>
  Comma separated list of columns to be displayed e.g. --columns "id,host,status"

9.2.67. manila share-instance-export-location-show
usage: manila share-instance-export-location-show <instance> 
  <export_location>

Show export location for the share instance.

Positional arguments:

<instance>
  Name or ID of the share instance.

<export_location>
  ID of the share instance export location.

9.2.68. manila share-instance-force-delete

usage: manila share-instance-force-delete <instance> [<instance> ...]

Force-delete the share instance, regardless of state (Admin only).

Positional arguments:

<instance>
  Name or ID of the instance(s) to force delete.

9.2.69. manila share-instance-list

usage: manila share-instance-list [--share-id <share_id>] 
  [--columns <columns>]

List share instances (Admin only).

Optional arguments:

--share-id <share_id>, --share-id <share_id>
  Filter results by share ID.

--columns <columns>
  Comma separated list of columns to be displayed e.g. --columns "id,host,status"

9.2.70. manila share-instance-reset-state

usage: manila share-instance-reset-state [--state <state>] <instance>

Explicitly update the state of a share instance (Admin only).

Positional arguments:

<instance>
Name or ID of the share instance to modify.

Optional arguments:

--state <state>
Indicate which state to assign the instance. Options include available, error, creating, deleting, error_deleting, migrating,migrating_to. If no state is provided, available will be used.

9.2.71. manila share-instance-show

usage: manila share-instance-show <instance>

Show details about a share instance (Admin only).

Positional arguments:

<instance>
Name or ID of the share instance.

9.2.72. manila share-network-create


Create description for network used by the tenant.

Optional arguments:

Neutron network ID. Used to set up network for share servers.

--neutron-subnet-id <neutron-subnet-id>, --neutron-subnet_id <neutron-subnet-id>, --neutron_subnet_id <neutron-subnet-id>, --neutron-subnet-id <neutron-subnet-id>
Neutron subnet ID. Used to set up network for share servers. This subnet should belong to specified neutron network.

--name <name>
Share network name.

--description <description>
Share network description.

9.2.73. manila share-network-delete
usage: manila share-network-delete <share-network> ...]

Delete one or more share networks.

Positional arguments:

<share-network>
  Name or ID of share network(s) to be deleted.

9.2.74. manila share-network-list

usage: manila share-network-list [--all-tenants [<0|1>]]
  [--project-id <project_id>] [--name <name>]
  [--created-since <created_since>]
  [--created-before <created_before>]
  [--security-service <security_service>]
  [--network-type <network_type>]
  [--segmentation-id <segmentation_id>]
  [--cidr <cidr>] [--ip-version <ip_version>]
  [--offset <offset>] [--limit <limit>]
  [--columns <columns>]

Get a list of network info.

Optional arguments:

--all-tenants [<0|1>]
  Display information from all tenants (Admin only).

--project-id <project_id>, --project_id <project_id>
  Filter results by project ID.

--name <name>
  Filter results by name.

--created-since <created_since>, --created_since <created_since>
  Return only share networks created since given date. The date is in the format 'yyyy-mm-dd'.

--created-before <created_before>, --created_before <created_before>
  Return only share networks created until given date. The date is in the format 'yyyy-mm-dd'.
--security-service <security_service>, --security_service <security_service>
Filter results by attached security service.

--neutron-net-id <neutron_net_id>, --neutron_net_id <neutron_net_id>, --neutron_net-id <neutron_net_id>, --neutron-net-id <neutron_net_id>
Filter results by neutron net ID.

--neutron-subnet-id <neutron_subnet_id>, --neutron_subnet_id <neutron_subnet_id>, --neutron-subnet-id <neutron_subnet_id>, --neutron-subnet-id <neutron_subnet_id>
Filter results by neutron subnet ID.

--network-type <network_type>, --network_type <network_type>
Filter results by network type.

--segmentation-id <segmentation_id>, --segmentation_id <segmentation_id>
Filter results by segmentation ID.

--cidr <cidr>
Filter results by CIDR.

--ip-version <ip_version>, --ip_version <ip_version>
Filter results by IP version.

--offset <offset>
Start position of share networks listing.

--limit <limit>
Number of share networks to return per request.

--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "id"

9.2.75. manila share-network-security-service-add

usage: manila share-network-security-service-add <share-network> <security-service>

Associate security service with share network.

Positional arguments:

<share-network>
Share network name or ID.

<security-service>
Security service name or ID to associate with.
9.2.76. manila share-network-security-service-list

usage: manila share-network-security-service-list [--columns <columns>] <share-network>

Get list of security services associated with a given share network.

Positional arguments:

<share-network>
    Share network name or ID.

Optional arguments:

--columns <columns>
    Comma separated list of columns to be displayed e.g. --columns "id,name"

9.2.77. manila share-network-security-service-remove

usage: manila share-network-security-service-remove <share-network> <security-service>

Dissociate security service from share network.

Positional arguments:

<share-network>
    Share network name or ID.

<security-service>
    Security service name or ID to dissociate.

9.2.78. manila share-network-show

usage: manila share-network-show <share-network>

Get a description for network used by the tenant.

Positional arguments:

<share-network>
    Name or ID of the share network to show.

9.2.79. manila share-network-update


Update share network data.

Positional arguments:

<share-network>

Name or ID of share network to update.

Optional arguments:


Neutron network ID. Used to set up network for share servers. This option is deprecated and will be rejected in newer releases of OpenStack Manila.

--neutron-subnet-id <neutron-subnet-id>, --neutron-subnet_id <neutron-subnet-id>, --neutron_subnet_id <neutron-subnet-id>, --neutron_subnet-id <neutron-subnet-id>

Neutron subnet ID. Used to set up network for share servers. This subnet should belong to specified neutron network.

--name <name>

Share network name.

--description <description>

Share network description.

9.2.80. manila share-replica-create

usage: manila share-replica-create [--availability-zone <availability-zone>] [--share-network <network-info>] <share>

Create a share replica (Experimental).

Positional arguments:

<share>

Name or ID of the share to replicate.

Optional arguments:

--availability-zone <availability-zone>, --availability_zone <availability-zone>, --az <availability-zone>

Optional Availability zone in which replica should be created.
--share-network <network-info>, --share_network <network-info>
Optional network info ID or name.

9.2.81. manila share-replica-delete

usage: manila share-replica-delete [--force] <replica> [<replica> ...]
Remove one or more share replicas (Experimental).

Positional arguments:

<replica>
ID of the share replica.

Optional arguments:

--force
Attempt to force deletion of a replica on its backend. Using this option will purge the replica from Manila even if it is not cleaned up on the backend. Defaults to False.

9.2.82. manila share-replica-list

usage: manila share-replica-list [--share-id <share_id>] [--columns <columns>]
List share replicas (Experimental).

Optional arguments:

--share-id <share_id>, --share_id <share_id>, --si <share_id>
List replicas belonging to share.

--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "replica_state,id"

9.2.83. manila share-replica-promote

usage: manila share-replica-promote <replica>
Promote specified replica to 'active' replica_state (Experimental).

Positional arguments:

<replica>
ID of the share replica.

9.2.84. manila share-replica-reset-replica-state
usage: manila share-replica-reset-replica-state
   [--replica-state <replica_state>]
   <replica>

Explicitly update the 'replica_state' of a share replica (Experimental).

Positional arguments:

<replica>
   ID of the share replica to modify.

Optional arguments:

   --replica-state <replica_state>, --replica_state <replica_state>, --state <replica_state>
   Indicate which replica_state to assign the replica. Options include in_sync, out_of_sync, active, error. If no state is provided, out_of_sync will be used.

9.2.85. manila share-replica-reset-state

usage: manila share-replica-reset-state [--state <state>] <replica>

Explicitly update the 'status' of a share replica (Experimental).

Positional arguments:

<replica>
   ID of the share replica to modify.

Optional arguments:

   --state <state>
   Indicate which state to assign the replica. Options include available, error, creating, deleting, error_deleting. If no state is provided, available will be used.

9.2.86. manila share-replica-resync

usage: manila share-replica-resync <replica>

Attempt to update the share replica with its 'active' mirror (Experimental).

Positional arguments:

<replica>
   ID of the share replica to resync.

9.2.87. manila share-replica-show
usage: manila share-replica-show <replica>

Show details about a replica (Experimental).

**Positional arguments:**

<replica>

ID of the share replica.

9.2.88. manila share-server-delete

usage: manila share-server-delete <id> [<id> ...]

Delete one or more share servers (Admin only).

**Positional arguments:**

<id>

ID of the share server(s) to delete.

9.2.89. manila share-server-details

usage: manila share-server-details <id>

Show share server details (Admin only).

**Positional arguments:**

<id>

ID of share server.

9.2.90. manila share-server-list

usage: manila share-server-list [--host <hostname>] [--status <status>]

[--share-network <share_network>]

[--project-id <project_id>]

[--columns <columns>]

List all share servers (Admin only).

**Optional arguments:**

--host <hostname>

Filter results by name of host.

--status <status>

Filter results by status.

--share-network <share_network>
Filter results by share network.

```
--project-id <project_id>
Filter results by project ID.
```

```
--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "id,host,status"
```

9.2.91. manila share-server-show

```
usage: manila share-server-show <id>
```

Show share server info (Admin only).

**Positional arguments:**

```
<id>
ID of share server.
```

9.2.92. manila show

```
usage: manila show <share>
```

Show details about a NAS share.

**Positional arguments:**

```
<share>
Name or ID of the NAS share.
```

9.2.93. manila shrink

```
usage: manila shrink <share> <new_size>
```

Decreases the size of an existing share.

**Positional arguments:**

```
<share>
Name or ID of share to shrink.
```

```
<new_size>
New size of share, in GiBs.
```

9.2.94. manila snapshot-access-allow

```
usage: manila snapshot-access-allow <snapshot> <access_type> <access_to>
```
- Allow read only access to a snapshot.

**Positional arguments:**

```xml
<snapshot>
  Name or ID of the share snapshot to allow access to.
<access_type>
  Access rule type (only "ip", "user"(user or group), "cert" or "cephx" are supported).
<access_to>
  Value that defines access.
```

### 9.2.95. manila snapshot-access-deny

```bash
usage: manila snapshot-access-deny <snapshot> <id> [ <id> ... ]
```

Deny access to a snapshot.

**Positional arguments:**

```xml
<snapshot>
  Name or ID of the share snapshot to deny access to.
<id>
  ID(s) of the access rule(s) to be deleted.
```

### 9.2.96. manila snapshot-access-list

```bash
usage: manila snapshot-access-list [ --columns <columns> ] <snapshot>
```

Show access list for a snapshot.

**Positional arguments:**

```xml
<snapshot>
  Name or ID of the share snapshot to list access of.
```

**Optional arguments:**

```bash
--columns <columns>
  Comma separated list of columns to be displayed e.g. --columns "access_type,access_to"
```

### 9.2.97. manila snapshot-create
usage: manila snapshot-create [--force <True|False>] [--name <name>] [--description <description>] <share>

Add a new snapshot.

Positional arguments:

<share>
   Name or ID of the share to snapshot.

Optional arguments:

--force <True|False>
   Optional flag to indicate whether to snapshot a share even if it's busy. (Default=False)

--name <name>
   Optional snapshot name. (Default=None)

--description <description>
   Optional snapshot description. (Default=None)

9.2.98. manila snapshot-delete

usage: manila snapshot-delete <snapshot> [<snapshot> ...]

Remove one or more snapshots.

Positional arguments:

<snapshot>
   Name or ID of the snapshot(s) to delete.

9.2.99. manila snapshot-export-location-list

usage: manila snapshot-export-location-list [--columns <columns>] <snapshot>

List export locations of a given snapshot.

Positional arguments:

<snapshot>
   Name or ID of the snapshot.

Optional arguments:

--columns <columns>
9.2.100. manila snapshot-export-location-show

usage: manila snapshot-export-location-show <snapshot> <export_location>

Show export location of the share snapshot.

Positional arguments:

<snapshot>
   Name or ID of the snapshot.

<export_location>
   ID of the share snapshot export location.

9.2.101. manila snapshot-force-delete

usage: manila snapshot-force-delete <snapshot> [<snapshot> ...]

Attempt force-deletion of one or more snapshots. Regardless of the state (Admin only).

Positional arguments:

<snapshot>
   Name or ID of the snapshot(s) to force delete.

9.2.102. manila snapshot-instance-export-location-list

usage: manila snapshot-instance-export-location-list [--columns <columns>]

List export locations of a given snapshot instance.

Positional arguments:

<instance>
   Name or ID of the snapshot instance.

Optional arguments:

--columns <columns>
   Comma separated list of columns to be displayed e.g. --columns "id,path,is_admin_only"

9.2.103. manila snapshot-instance-export-location-show
usage: manila snapshot-instance-export-location-show
     <snapshot_instance>
     <export_location>

Show export location of the share instance snapshot.

**Positional arguments:**

<snapshot_instance>
   ID of the share snapshot instance.

<export_location>
   ID of the share snapshot instance export location.

9.2.104. manila snapshot-instance-list

usage: manila snapshot-instance-list [--snapshot <snapshot>]
     [--columns <columns>]
     [--detailed <detailed>]

List share snapshot instances.

**Optional arguments:**

--snapshot <snapshot>
   Filter results by share snapshot ID.

--columns <columns>
   Comma separated list of columns to be displayed e.g. --columns "id"

--detailed <detailed>
   Show detailed information about snapshot instances. (Default=False)

9.2.105. manila snapshot-instance-reset-state

usage: manila snapshot-instance-reset-state [--state <state>]
     <snapshot_instance>

Explicitly update the state of a share snapshot instance.

**Positional arguments:**

<snapshot_instance>
   ID of the snapshot instance to modify.

**Optional arguments:**

--state <state>
Indicate which state to assign the snapshot instance. Options include available, error, creating, deleting, error_deleting. If no state is provided, available will be used.

9.2.106. manila snapshot-instance-show

usage: manila snapshot-instance-show <snapshot_instance>

Show details about a share snapshot instance.

Positional arguments:

<snapshot_instance>
ID of the share snapshot instance.

9.2.107. manila snapshot-list


List all the snapshots.

Optional arguments:

--all-tenants [0|1]
Display information from all tenants (Admin only).

--name <name>
Filter results by name.

--status <status>
Filter results by status.

--share-id <share_id>, --share_id <share_id>
Filter results by source share ID.

--usage [any|used|unused]
Either filter or not snapshots by its usage. OPTIONAL: Default=any.

--limit <limit>
Maximum number of share snapshots to return. OPTIONAL: Default=None.

--offset <offset>
Set offset to define start point of share snapshots listing. OPTIONAL: Default=None.

```
   --sort-key <sort_key>, --sort_key <sort_key>
   Key to be sorted, available keys are ('id', 'status', 'size', 'share_id', 'user_id', 'project_id', 'progress', 'name', 'display_name'). Default=None.
```

```
   --sort-dir <sort_dir>, --sort_dir <sort_dir>
   Sort direction, available values are ('asc', 'desc'). OPTIONAL: Default=None.
```

```
   --columns <columns>
   Comma separated list of columns to be displayed e.g. --columns "id,name"
```

### 9.2.108. manila snapshot-manage

```
usage: manila snapshot-manage [--name <name>] [--description <description>] [--driver_options [<key=value> [<key=value> ...]]] <share> <provider_location>
```

Manage share snapshot not handled by Manila (Admin only).

**Positional arguments:**

- `<share>`
  Name or ID of the share.

- `<provider_location>`
  Provider location of the snapshot on the backend.

**Optional arguments:**

- `--name <name>`
  Optional snapshot name (Default=None).

- `--description <description>`
  Optional snapshot description (Default=None).

- `--driver_options [<key=value> [<key=value> ...]]`, `--driver-options [<key=value> [<key=value> ...]]`
  Optional driver options as key=value pairs (Default=None).

### 9.2.109. manila snapshot-rename

```
usage: manila snapshot-rename [--description <description>] <snapshot> [ <name>]
```

Rename a snapshot.
Positional arguments:

<snapshot>
   Name or ID of the snapshot to rename.

Optional arguments:

--description <description>
   Optional snapshot description. (Default=None)

9.2.110. manila snapshot-reset-state

usage: manila snapshot-reset-state [--state <state>] <snapshot>

Explicitly update the state of a snapshot (Admin only).

Positional arguments:

<snapshot>
   Name or ID of the snapshot to modify.

Optional arguments:

--state <state>
   Indicate which state to assign the snapshot. Options include available, error, creating, deleting, error_deleting. If no state is provided, available will be used.

9.2.111. manila snapshot-show

usage: manila snapshot-show <snapshot>

Show details about a snapshot.

Positional arguments:

<snapshot>
   Name or ID of the snapshot.

9.2.112. manila snapshot-unmanage

usage: manila snapshot-unmanage <snapshot> [...]

Unmanage one or more share snapshots (Admin only).

Positional arguments:
9.2.113. manila type-access-add

usage: manila type-access-add <share_type> <project_id>

Adds share type access for the given project (Admin only).

Positional arguments:

<share_type>

Share type name or ID to add access for the given project.

<project_id>

Project ID to add share type access for.

9.2.114. manila type-access-list

usage: manila type-access-list <share_type>

Print access information about the given share type (Admin only).

Positional arguments:

<share_type>

Filter results by share type name or ID.

9.2.115. manila type-access-remove

usage: manila type-access-remove <share_type> <project_id>

Removes share type access for the given project (Admin only).

Positional arguments:

<share_type>

Share type name or ID to remove access for the given project.

<project_id>

Project ID to remove share type access for.

9.2.116. manila type-create

usage: manila type-create [--snapshot_support <snapshot_support>]

[-create_share_from_snapshot_support]

<create_share_from_snapshot_support>[

--revert_to_snapshot_support]
Create a new share type (Admin only).

**Positional arguments:**

```plaintext
<name>
Name of the new share type.
```

```plaintext
<spec_driver_handles_share_servers>
Required extra specification. Valid values are ‘true’/‘1’ and ‘false’/‘0’
```

**Optional arguments:**

```plaintext
--snapshot_support <snapshot_support>, --snapshot-support <snapshot_support>
Boolean extra spec used for filtering of back ends by their capability to create share snapshots.
```

```plaintext
--create_share_from_snapshot_support <create_share_from_snapshot_support>, --create-share-from-snapshot-support <create_share_from_snapshot_support>
Boolean extra spec used for filtering of back ends by their capability to create shares from snapshots.
```

```plaintext
--revert_to_snapshot_support <revert_to_snapshot_support>, --revert-to-snapshot-support <revert_to_snapshot_support>
Boolean extra spec used for filtering of back ends by their capability to revert shares to snapshots. (Default is False).
```

```plaintext
--mount_snapshot_support <mount_snapshot_support>, --mount-snapshot-support <mount_snapshot_support>
Boolean extra spec used for filtering of back ends by their capability to mount share snapshots. (Default is False).
```

```plaintext
--extra-specs [key=value [key=value ...]], --extra_specs [key=value [key=value ...]]
Extra specs key and value of share type that will be used for share type creation. OPTIONAL: Default=None. e.g --extra-specs thin_provisioning='is True', replication_type=readable.
```

```plaintext
--is_public <is_public>, --is-public <is_public>
Make type accessible to the public (default true).
```
9.2.117. manila type-delete

usage: manila type-delete <id> [ <id> ... ]

Delete one or more specific share types (Admin only).

Positional arguments:

<id>
Name or ID of the share type(s) to delete.

9.2.118. manila type-key

usage: manila type-key <stype> <action> [ <key=value> [ <key=value> ... ] ]

Set or unset extra_spec for a share type (Admin only).

Positional arguments:

<stype>
Name or ID of the share type.

<action>
Actions: 'set' or 'unset'.

<key=value>
Extra_specs to set or unset (key is only necessary on unset).

9.2.119. manila type-list

usage: manila type-list [ --all ] [ --columns <columns> ]

Print a list of available 'share types'.

Optional arguments:

--all
Display all share types (Admin only).

--columns <columns>
Comma separated list of columns to be displayed e.g. --columns "id,name"

9.2.120. manila unmanage

usage: manila unmanage <share>

Unmanage share (Admin only).

Positional arguments:
<share>
Name or ID of the share(s).

9.2.121. manila update

usage: manila update [--name <name>] [--description <description>]
[--is-public <is_public>]
<share>

Rename a share.

Positional arguments:

<share>
Name or ID of the share to rename.

Optional arguments:

--name <name>
New name for the share.

--description <description>
Optional share description. (Default=None)

--is-public <is_public>, --is_public <is_public>
Public share is visible for all tenants.
CHAPTER 10. NETWORKING SERVICE (NEUTRON) COMMAND-LINE CLIENT

The neutron client is the command-line interface (CLI) for the Networking service (neutron) API and its extensions.

This chapter documents neutron version 6.1.0.

For help on a specific neutron command, enter:

```
$ neutron help COMMAND
```

10.1. NEUTRON USAGE

```
               [--os-service-type <os-service-type>]
               [--os-endpoint-type <os-endpoint-type>]
               [--service-type <service-type>]
               [--endpoint-type <endpoint-type>]
               [--os-auth-strategy <auth-strategy>]
               [--os-cloud <cloud>]
               [--os-auth-url <auth-url>]
               [--os-tenant-name <auth-tenant-name>]
               [--os-project-name <auth-project-name>]
               [--os-tenant-id <auth-tenant-id>]
               [--os-project-id <auth-project-id>]
               [--os-username <auth-username>]
               [--os-user-id <auth-user-id>]
               [--os-user-domain-id <auth-user-domain-id>]
               [--os-user-domain-name <auth-user-domain-name>]
               [--os-project-domain-id <auth-project-domain-id>]
               [--os-project-domain-name <auth-project-domain-name>]
               [--os-cert <certificate>]
               [--os-cacert <ca-certificate>]
               [--os-key <key>]
               [--os-password <auth-password>]
               [--os-region-name <auth-region-name>]
               [--os-token]
               [--http-timeout <seconds>]
               [--os-url <url>]
               [--insecure]
```

10.2. NEUTRON OPTIONAL ARGUMENTS

- `--version`
  show program's version number and exit

- `-v, --verbose, --debug`
  Increase verbosity of output and show tracebacks on errors. You can repeat this option.

- `-q, --quiet`
  Suppress output except warnings and errors.
-h, --help
    Show this help message and exit.

-r NUM, --retries NUM
    How many times the request to the Neutron server should be retried if it fails.

--os-service-type <os-service-type>
    Defaults to env[OS_NETWORK_SERVICE_TYPE] or network.

--os-endpoint-type <os-endpoint-type>
    Defaults to env[OS_ENDPOINT_TYPE] or public.

--service-type <service-type>
    DEPRECATED! Use --os-service-type.

--endpoint-type <endpoint-type>
    DEPRECATED! Use --os-endpoint-type.

--os-auth-strategy <auth-strategy>
    DEPRECATED! Only keystone is supported.

--os-cloud <cloud>
    Defaults to env[OS_CLOUD].

--os-auth-url <auth-url>
    Authentication URL, defaults to env[OS_AUTH_URL].

--os-tenant-name <auth-tenant-name>
    Authentication tenant name, defaults to env[OS_TENANT_NAME].

--os-project-name <auth-project-name>
    Another way to specify tenant name. This option is mutually exclusive with --os-tenant-name. Defaults to env[OS_PROJECT_NAME].

--os-tenant-id <auth-tenant-id>
    Authentication tenant ID, defaults to env[OS_TENANT_ID].

--os-project-id <auth-project-id>
    Another way to specify tenant ID. This option is mutually exclusive with --os-tenant-id. Defaults to env[OS_PROJECT_ID].

--os-username <auth-username>
    Authentication username, defaults to env[OS_USERNAME].

--os-user-id <auth-user-id>
    Authentication user ID (Env: OS_USER_ID)
--os-user-domain-id <auth-user-domain-id>
    OpenStack user domain ID. Defaults to env[OS_USER_DOMAIN_ID].

--os-user-domain-name <auth-user-domain-name>
    OpenStack user domain name. Defaults to env[OS_USER_DOMAIN_NAME].

--os-project-domain-id <auth-project-domain-id>
    Defaults to env[OS_PROJECT_DOMAIN_ID].

--os-project-domain-name <auth-project-domain-name>
    Defaults to env[OS_PROJECT_DOMAIN_NAME].

--os-cert <certificate>
    Path of certificate file to use in SSL connection. This file can optionally be prepended with the private key. Defaults to env[OS_CERT].

--os-cacert <ca-certificate>
    Specify a CA bundle file to use in verifying a TLS (https) server certificate. Defaults to env[OS_CACERT].

--os-key <key>
    Path of client key to use in SSL connection. This option is not necessary if your key is prepended to your certificate file. Defaults to env[OS_KEY].

--os-password <auth-password>
    Authentication password, defaults to env[OS_PASSWORD].

--os-region-name <auth-region-name>
    Authentication region name, defaults to env[OS_REGION_NAME].

--os-token <token>
    Authentication token, defaults to env[OS_TOKEN].

--http-timeout <seconds>
    Timeout in seconds to wait for an HTTP response. Defaults to env[OS_NETWORK_TIMEOUT] or None if not specified.

--os-url <url>
    Defaults to env[OS_URL].

--insecure
    Explicitly allow neutronclient to perform "insecure" SSL (https) requests. The server's certificate will not be verified against any certificate authorities. This option should be used with caution.

10.3. NEUTRON API V2.0 COMMANDS
address-scope-create
  Create an address scope for a given tenant.

address-scope-delete
  Delete an address scope.

address-scope-list
  List address scopes that belong to a given tenant.

address-scope-show
  Show information about an address scope.

address-scope-update
  Update an address scope.

agent-delete
  Delete a given agent.

agent-list
  List agents.

agent-show
  Show information of a given agent.

agent-update
  Updates the admin status and description for a specified agent.

auto-allocated-topology-delete
  Delete the auto-allocated topology of a given tenant.

auto-allocated-topology-show
  Show the auto-allocated topology of a given tenant.

availability-zone-list
  List availability zones.

bash-completion
  Prints all of the commands and options for bash-completion.

bgp-dragent-list-hosting-speaker
  List Dynamic Routing agents hosting a BGP speaker.

bgp-dragent-speaker-add
  Add a BGP speaker to a Dynamic Routing agent.

bgp-dragent-speaker-remove
  Removes a BGP speaker from a Dynamic Routing agent.
**bgp-peer-create**
Create a BGP Peer.

**bgp-peer-delete**
Delete a BGP peer.

**bgp-peer-list**
List BGP peers.

**bgp-peer-show**
Show information of a given BGP peer.

**bgp-peer-update**
Update BGP Peer's information.

**bgp-speaker-advertiseroute-list**
List routes advertised by a given BGP speaker.

**bgp-speaker-create**
Create a BGP Speaker.

**bgp-speaker-delete**
Delete a BGP speaker.

**bgp-speaker-list**
List BGP speakers.

**bgp-speaker-list-on-dragent**
List BGP speakers hosted by a Dynamic Routing agent.

**bgp-speaker-network-add**
Add a network to the BGP speaker.

**bgp-speaker-network-remove**
Remove a network from the BGP speaker.

**bgp-speaker-peer-add**
Add a peer to the BGP speaker.

**bgp-speaker-peer-remove**
Remove a peer from the BGP speaker.

**bgp-speaker-show**
Show information of a given BGP speaker.

**bgp-speaker-update**
Update BGP Speaker's information.
dhcp-agent-list-hosting-net
   List DHCP agents hosting a network.

dhcp-agent-network-add
   Add a network to a DHCP agent.

dhcp-agent-network-remove
   Remove a network from a DHCP agent.

ext-list
   List all extensions.

ext-show
   Show information of a given resource.

firewall-create
   Create a firewall.

firewall-delete
   Delete a given firewall.

firewall-list
   List firewalls that belong to a given tenant.

firewall-policy-create
   Create a firewall policy.

firewall-policy-delete
   Delete a given firewall policy.

firewall-policy-insert-rule
   Insert a rule into a given firewall policy.

firewall-policy-list
   List firewall policies that belong to a given tenant.

firewall-policy-remove-rule
   Remove a rule from a given firewall policy.

firewall-policy-show
   Show information of a given firewall policy.

firewall-policy-update
   Update a given firewall policy.

firewall-rule-create
   Create a firewall rule.
**firewall-rule-delete**
Delete a given firewall rule.

**firewall-rule-list**
List firewall rules that belong to a given tenant.

**firewall-rule-show**
Show information of a given firewall rule.

**firewall-rule-update**
Update a given firewall rule.

**firewall-show**
Show information of a given firewall.

**firewall-update**
Update a given firewall.

**flavor-associate**
Associate a Neutron service flavor with a flavor profile.

**flavor-create**
Create a Neutron service flavor.

**flavor-delete**
Delete a given Neutron service flavor.

**flavor-disassociate**
Disassociate a Neutron service flavor from a flavor profile.

**flavor-list**
List Neutron service flavors.

**flavor-profile-create**
Create a Neutron service flavor profile.

**flavor-profile-delete**
Delete a given Neutron service flavor profile.

**flavor-profile-list**
List Neutron service flavor profiles.

**flavor-profile-show**
Show information about a given Neutron service flavor profile.

**flavor-profile-update**
Update a given Neutron service flavor profile.
flavor-show
    Show information about a given Neutron service flavor.

flavor-update
    Update a Neutron service flavor.

floatingip-associate
    Create a mapping between a floating IP and a fixed IP.

floatingip-create
    Create a floating IP for a given tenant.

floatingip-delete
    Delete a given floating IP.

floatingip-disassociate
    Remove a mapping from a floating IP to a fixed IP.

floatingip-list
    List floating IPs that belong to a given tenant.

floatingip-show
    Show information of a given floating IP.

help
    print detailed help for another command

ipsec-site-connection-create
    Create an IPsec site connection.

ipsec-site-connection-delete
    Delete a given IPsec site connection.

ipsec-site-connection-list
    List IPsec site connections that belong to a given tenant.

ipsec-site-connection-show
    Show information of a given IPsec site connection.

ipsec-site-connection-update
    Update a given IPsec site connection.

l3-agent-list-hosting-router
    List L3 agents hosting a router.

l3-agent-router-add
    Add a router to a L3 agent.
**l3-agent-router-remove**
Remove a router from a L3 agent.

**lb-agent-hosting-pool**
Get loadbalancer agent hosting a pool.

**lb-healthmonitor-associate**
Create a mapping between a health monitor and a pool.

**lb-healthmonitor-create**
Create a health monitor.

**lb-healthmonitor-delete**
Delete a given health monitor.

**lb-healthmonitor-disassociate**
Remove a mapping from a health monitor to a pool.

**lb-healthmonitor-list**
List health monitors that belong to a given tenant.

**lb-healthmonitor-show**
Show information of a given health monitor.

**lb-healthmonitor-update**
Update a given health monitor.

**lb-member-create**
Create a member.

**lb-member-delete**
Delete a given member.

**lb-member-list**
List members that belong to a given tenant.

**lb-member-show**
Show information of a given member.

**lb-member-update**
Update a given member.

**lb-pool-create**
Create a pool.

**lb-pool-delete**
Delete a given pool.
lb-pool-list
List pools that belong to a given tenant.

lb-pool-list-on-agent
List the pools on a loadbalancer agent.

lb-pool-show
Show information of a given pool.

lb-pool-stats
Retrieve stats for a given pool.

lb-pool-update
Update a given pool.

lb-vip-create
Create a vip.

lb-vip-delete
Delete a given vip.

lb-vip-list
List vips that belong to a given tenant.

lb-vip-show
Show information of a given vip.

lb-vip-update
Update a given vip.

lbaas-agent-hosting-loadbalancer
Get lbaas v2 agent hosting a loadbalancer.

lbaas-healthmonitor-create
LBaaS v2 Create a healthmonitor.

lbaas-healthmonitor-delete
LBaaS v2 Delete a given healthmonitor.

lbaas-healthmonitor-list
LBaaS v2 List healthmonitors that belong to a given tenant.

lbaas-healthmonitor-show
LBaaS v2 Show information of a given healthmonitor.

lbaas-healthmonitor-update
LBaaS v2 Update a given healthmonitor.
lbaas-l7policy-create
LBaaS v2 Create L7 policy.

lbaas-l7policy-delete
LBaaS v2 Delete a given L7 policy.

lbaas-l7policy-list
LBaaS v2 List L7 policies that belong to a given listener.

lbaas-l7policy-show
LBaaS v2 Show information of a given L7 policy.

lbaas-l7policy-update
LBaaS v2 Update a given L7 policy.

lbaas-l7rule-create
LBaaS v2 Create L7 rule.

lbaas-l7rule-delete
LBaaS v2 Delete a given L7 rule.

lbaas-l7rule-list
LBaaS v2 List L7 rules that belong to a given L7 policy.

lbaas-l7rule-show
LBaaS v2 Show information of a given rule.

lbaas-l7rule-update
LBaaS v2 Update a given L7 rule.

lbaas-listener-create
LBaaS v2 Create a listener.

lbaas-listener-delete
LBaaS v2 Delete a given listener.

lbaas-listener-list
LBaaS v2 List listeners that belong to a given tenant.

lbaas-listener-show
LBaaS v2 Show information of a given listener.

lbaas-listener-update
LBaaS v2 Update a given listener.

lbaas-loadbalancer-create
LBaaS v2 Create a loadbalancer.
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**lbaas-loadbalancer-delete**
LBaaS v2 Delete a given loadbalancer.

**lbaas-loadbalancer-list**
LBaaS v2 List loadbalancers that belong to a given tenant.

**lbaas-loadbalancer-list-on-agent**
List the loadbalancers on a loadbalancer v2 agent.

**lbaas-loadbalancer-show**
LBaaS v2 Show information of a given loadbalancer.

**lbaas-loadbalancer-stats**
Retrieve stats for a given loadbalancer.

**lbaas-loadbalancer-status**
Retrieve status for a given loadbalancer.

**lbaas-loadbalancer-update**
LBaaS v2 Update a given loadbalancer.

**lbaas-member-create**
LBaaS v2 Create a member.

**lbaas-member-delete**
LBaaS v2 Delete a given member.

**lbaas-member-list**
LBaaS v2 List members that belong to a given pool.

**lbaas-member-show**
LBaaS v2 Show information of a given member.

**lbaas-member-update**
LBaaS v2 Update a given member.

**lbaas-pool-create**
LBaaS v2 Create a pool.

**lbaas-pool-delete**
LBaaS v2 Delete a given pool.

**lbaas-pool-list**
LBaaS v2 List pools that belong to a given tenant.

**lbaas-pool-show**
LBaaS v2 Show information of a given pool.
**lbaas-pool-update**
LBaaS v2 Update a given pool.

**meter-label-create**
Create a metering label for a given tenant.

**meter-label-delete**
Delete a given metering label.

**meter-label-list**
List metering labels that belong to a given tenant.

**meter-label-rule-create**
Create a metering label rule for a given label.

**meter-label-rule-delete**
Delete a given metering label.

**meter-label-rule-list**
List metering labels that belong to a given label.

**meter-label-rule-show**
Show information of a given metering label rule.

**meter-label-show**
Show information of a given metering label.

**net-create**
Create a network for a given tenant.

**net-delete**
Delete a given network.

**net-external-list**
List external networks that belong to a given tenant.

**net-ip-availability-list**
List IP usage of networks

**net-ip-availability-show**
Show IP usage of specific network

**net-list**
List networks that belong to a given tenant.

**net-list-on-dhcp-agent**
List the networks on a DHCP agent.
net-show
    Show information of a given network.

net-update
    Update network's information.

port-create
    Create a port for a given tenant.

port-delete
    Delete a given port.

port-list
    List ports that belong to a given tenant.

port-show
    Show information of a given port.

port-update
    Update port's information.

purge
    Delete all resources that belong to a given tenant.

qos-available-rule-types
    List available qos rule types.

qos-bandwidth-limit-rule-create
    Create a qos bandwidth limit rule.

qos-bandwidth-limit-rule-delete
    Delete a given qos bandwidth limit rule.

qos-bandwidth-limit-rule-list
    List all qos bandwidth limit rules belonging to the specified policy.

qos-bandwidth-limit-rule-show
    Show information about the given qos bandwidth limit rule.

qos-bandwidth-limit-rule-update
    Update the given qos bandwidth limit rule.

qos-dscp-marking-rule-create
    Create a QoS DSCP marking rule.

qos-dscp-marking-rule-delete
    Delete a given qos dscp marking rule.
qos-dscp-marking-rule-list
List all QoS DSCP marking rules belonging to the specified policy.

qos-dscp-marking-rule-show
Show information about the given qos dscp marking rule.

qos-dscp-marking-rule-update
Update the given QoS DSCP marking rule.

qos-minimum-bandwidth-rule-create
Create a qos minimum bandwidth rule.

qos-minimum-bandwidth-rule-delete
Delete a given qos minimum bandwidth rule.

qos-minimum-bandwidth-rule-list
List all qos minimum bandwidth rules belonging to the specified policy.

qos-minimum-bandwidth-rule-show
Show information about the given qos minimum bandwidth rule.

qos-minimum-bandwidth-rule-update
Update the given qos minimum bandwidth rule.

qos-policy-create
Create a qos policy.

qos-policy-delete
Delete a given qos policy.

qos-policy-list
List QoS policies that belong to a given tenant connection.

qos-policy-show
Show information of a given qos policy.

qos-policy-update
Update a given qos policy.

quota-default-show
Show default quotas for a given tenant.

quota-delete
Delete defined quotas of a given tenant.

quota-list
List quotas of all tenants who have non-default quota values.
quota-show
  Show quotas for a given tenant.

quota-update
  Define tenant's quotas not to use defaults.

rbac-create
  Create a RBAC policy for a given tenant.

rbac-delete
  Delete a RBAC policy.

rbac-list
  List RBAC policies that belong to a given tenant.

rbac-show
  Show information of a given RBAC policy.

rbac-update
  Update RBAC policy for given tenant.

router-create
  Create a router for a given tenant.

router-delete
  Delete a given router.

router-gateway-clear
  Remove an external network gateway from a router.

router-gateway-set
  Set the external network gateway for a router.

router-interface-add
  Add an internal network interface to a router.

router-interface-delete
  Remove an internal network interface from a router.

router-list
  List routers that belong to a given tenant.

router-list-on-l3-agent
  List the routers on a L3 agent.

router-port-list
  List ports that belong to a given tenant, with specified router.
router-show
   Show information of a given router.

router-update
   Update router's information.

security-group-create
   Create a security group.

security-group-delete
   Delete a given security group.

security-group-list
   List security groups that belong to a given tenant.

security-group-rule-create
   Create a security group rule.

security-group-rule-delete
   Delete a given security group rule.

security-group-rule-list
   List security group rules that belong to a given tenant.

security-group-rule-show
   Show information of a given security group rule.

security-group-show
   Show information of a given security group.

security-group-update
   Update a given security group.

service-provider-list
   List service providers.

subnet-create
   Create a subnet for a given tenant.

subnet-delete
   Delete a given subnet.

subnet-list
   List subnets that belong to a given tenant.

subnet-show
   Show information of a given subnet.
**subnet-update**
Update subnet's information.

**subnetpool-create**
Create a subnetpool for a given tenant.

**subnetpool-delete**
Delete a given subnetpool.

**subnetpool-list**
List subnetpools that belong to a given tenant.

**subnetpool-show**
Show information of a given subnetpool.

**subnetpool-update**
Update subnetpool's information.

**tag-add**
Add a tag into the resource.

**tag-remove**
Remove a tag on the resource.

**tag-replace**
Replace all tags on the resource.

**vpn-endpoint-group-create**
Create a VPN endpoint group.

**vpn-endpoint-group-delete**
Delete a given VPN endpoint group.

**vpn-endpoint-group-list**
List VPN endpoint groups that belong to a given tenant.

**vpn-endpoint-group-show**
Show a specific VPN endpoint group.

**vpn-endpoint-group-update**
Update a given VPN endpoint group.

**vpn-ikepolicy-create**
Create an IKE policy.

**vpn-ikepolicy-delete**
Delete a given IKE policy.
**vpn-ikepolicy-list**
List IKE policies that belong to a tenant.

**vpn-ikepolicy-show**
Show information of a given IKE policy.

**vpn-ikepolicy-update**
Update a given IKE policy.

**vpn-ipsecpolicy-create**
Create an IPsec policy.

**vpn-ipsecpolicy-delete**
Delete a given IPsec policy.

**vpn-ipsecpolicy-list**
List IPsec policies that belong to a given tenant connection.

**vpn-ipsecpolicy-show**
Show information of a given IPsec policy.

**vpn-ipsecpolicy-update**
Update a given IPsec policy.

**vpn-service-create**
Create a VPN service.

**vpn-service-delete**
Delete a given VPN service.

**vpn-service-list**
List VPN service configurations that belong to a given tenant.

**vpn-service-show**
Show information of a given VPN service.

**vpn-service-update**
Update a given VPN service.

### 10.3.1. neutron address-scope-create

```bash
```
Create an address scope for a given tenant.

Positional arguments:

NAME

Specify the name of the address scope.

IP_VERSION

Specify the address family of the address scope.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID

The owner tenant ID.

--shared

Set the address scope as shared.

10.3.2. neutron address-scope-delete

usage: neutron address-scope-delete [-h] [--request-format {json}]

ADDRESS_SCOPE [ADDRESS_SCOPE ...]

Delete an address scope.

Positional arguments:

ADDRESS_SCOPE

ID(s) or name(s) of address_scope to delete.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.
10.3.3. neutron address-scope-list


List address scopes that belong to a given tenant.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.

-F FIELD, --field FIELD
  Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
  Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
  Sorts the list in the specified direction. You can repeat this option.

10.3.4. neutron address-scope-show


ADDRESS_SCOPE

Red Hat OpenStack Platform 11 Command-Line Interface Reference
Show information about an address scope.

**Positional arguments:**

**ADDRESS_SCOPE**

ID or name of address_scope to look up.

**Optional arguments:**

- `-h, --help`
  show this help message and exit

- `--request-format {json}`
  
  **DEPRECATED!** Only JSON request format is supported.

- `-D, --show-details`
  Show detailed information.

- `-F FIELD, --field FIELD`
  Specify the field(s) to be returned by server. You can repeat this option.

### 10.3.5. neutron address-scope-update

**usage:** neutron address-scope-update [-h] [--request-format {json}] [-D, --show-details] {-F FIELD, --field FIELD} ADDRESS_SCOPE

Update an address scope.

**Positional arguments:**

**ADDRESS_SCOPE**

ID or name of address_scope to update.

**Optional arguments:**

- `-h, --help`
  show this help message and exit

- `--request-format {json}`
  
  **DEPRECATED!** Only JSON request format is supported.

- `-F FIELD, --field FIELD`
  Updated name of the address scope.

- `--shared {True,False}`
  Set sharing of address scope. (True means shared)
10.3.6. neutron agent-delete

usage: neutron agent-delete [-h] [--request-format {json}] AGENT [AGENT ...

Delete a given agent.

Positional arguments:

AGENT
   ID(s) of agent to delete.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.7. neutron agent-list


List agents.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
   Sorts the list in the specified direction. You can repeat this option.

10.3.8. neutron agent-show


Show information of a given agent.

Positional arguments:

AGENT
   ID of agent to look up.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

10.3.9. neutron agent-update


Updates the admin status and description for a specified agent.

Positional arguments:

AGENT
ID of agent to update.

Optional arguments:

- `--request-format {json}`
  DEPRECATED! Only JSON request format is supported.

- `--admin-state-down`
  Set admin state up of the agent to false.

- `--description DESCRIPTION`
  Description for the agent.

10.3.10. neutron auto-allocated-topology-delete

```
usage: neutron auto-allocated-topology-delete [-h] [--request-format {json}] [--tenant-id tenant-id]
```

Delete the auto-allocated topology of a given tenant.

Optional arguments:

- `--tenant-id`
  tenant-id The owner tenant ID.

10.3.11. neutron auto-allocated-topology-show

```
usage: neutron auto-allocated-topology-show [-h] [-f {html,json,shell,table,value,yaml}] [-c COLUMN]
[-max-width <integer>] [-print-empty] [--noindent]
[-prefix PREFIX] [-request-format {json}]
[-dry-run] [-tenant-id tenant-id]
```
Show the auto-allocated topology of a given tenant.

Optional arguments:

- **-h**, **--help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **--dry-run**
  Validate the requirements for auto-allocated-topology. (Does not return a topology.)

- **--tenant-id**
  tenant-id The owner tenant ID.

10.3.12. neutron availability-zone-list

```
usage: neutron availability-zone-list [-h]
    [-f {csv,html,json,table,value,yaml}]
    [-c COLUMN] [---max-width <integer>]
    [---print-empty] [---noindent] [---quote {all,minimal,none,nonnumeric}]
    [---request-format {json}] [-D]
    [-F FIELD] [-P SIZE] [---sort-key FIELD]
    [---sort-dir {asc,desc}]
```

List availability zones.

Optional arguments:

- **-h**, **--help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D**, **--show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**
  Specify retrieve unit of each request, then split one request to several requests.
**--sort-key** FIELD

Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

**--sort-dir** {asc,desc}

Sorts the list in the specified direction. You can repeat this option.

### 10.3.13. neutron bgp-dragent-list-hosting-speaker

**usage:** neutron bgp-dragent-list-hosting-speaker [-h] [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [--max-width <integer>] [-D] [-F FIELD] [--quote {all,minimal,none,nonnumeric}] [--request-format {json}] --print-empty] --noindent] BGP_SPEAKER

List Dynamic Routing agents hosting a BGP speaker.

**Positional arguments:**

BGP_SPEAKER

ID or name of the BGP speaker.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format** {json}
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

### 10.3.14. neutron bgp-dragent-speaker-add

**usage:** neutron bgp-dragent-speaker-add [-h] [--request-format {json}] BGP_DRAGENT_ID BGP_SPEAKER

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Add a BGP speaker to a Dynamic Routing agent.

Positional arguments:

\textbf{BGP\_DRAGENT\_ID}

ID of the Dynamic Routing agent.

\textbf{BGP\_SPEAKER}

ID or name of the BGP speaker.

Optional arguments:

\texttt{-h, --help}

show this help message and exit

\texttt{--request-format \{json\}}

DEPRECATED! Only JSON request format is supported.

10.3.15. neutron bgp-dragent-speaker-remove

usage: neutron bgp-dragent-speaker-remove [-h] \{-request-format \{json\}]

\texttt{BGP\_DRAGENT\_ID} \texttt{BGP\_SPEAKER}

Removes a BGP speaker from a Dynamic Routing agent.

Positional arguments:

\textbf{BGP\_DRAGENT\_ID}

ID of the Dynamic Routing agent.

\textbf{BGP\_SPEAKER}

ID or name of the BGP speaker.

Optional arguments:

\texttt{-h, --help}

show this help message and exit

\texttt{--request-format \{json\}}

DEPRECATED! Only JSON request format is supported.

10.3.16. neutron bgp-peer-create

usage: neutron bgp-peer-create [-h] [-f \{html, json, shell, table, value, yaml\}]

\[[-c COLUMN] [-max-width <integer>]\]

\[[-print-empty] [-noindent] [-prefix
Create a BGP Peer.

Positional arguments:

NAME

Name of the BGP peer to create.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--peer-ip PEER_IP_ADDRESS
Peer IP address.

--remote-as PEER_REMOTE_AS
Peer AS number. (Integer in [1, 65535] is allowed.)

--auth-type PEER_AUTH_TYPE
Authentication algorithm. Supported algorithms: none(default), md5

--password AUTH_PASSWORD
Authentication password.

10.3.17. neutron bgp-peer-delete

usage: neutron bgp-peer-delete [-h] [--request-format {json}]

Delete a BGP peer.

Positional arguments:
ID(s) or name(s) of bgp_peer to delete.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

### 10.3.18. neutron bgp-peer-list

```bash
[-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]
```

List BGP peers.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**
  Specify retrieve unit of each request, then split one request to several requests.

- **--sort-key FIELD**
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

- **--sort-dir {asc,desc}**
  Sorts the list in the specified direction. You can repeat this option.

### 10.3.19. neutron bgp-peer-show

BGP_PEER

Show information of a given BGP peer.

Positional arguments:

BGP_PEER

ID or name of bgp_peer to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.20. neutron bgp-peer-update

usage: neutron bgp-peer-update [-h] [--request-format {json}] [--name NAME] [--password AUTH_PASSWORD]

BGP_PEER

Update BGP Peer's information.

Positional arguments:

BGP_PEER

ID or name of bgp_peer to update.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--name NAME
    Updated name of the BGP peer.

--password AUTH_PASSWORD
    Updated authentication password.

10.3.21. neutron bgp-speaker-advertiseroute-list

usage: neutron bgp-speaker-advertiseroute-list [-h]
        [-f {csv,html,json,table,value,yaml}]
        [-c COLUMN] [-max-width <integer>]
        [-print-empty] [-noindent] [-quote {all,minimal,none,nonnumeric}]
        [-request-format {json}] [-D]
        [-F FIELD] [-P SIZE] [-sort-key FIELD] [-sort-dir {asc,desc}]

List routes advertised by a given BGP speaker.

Positional arguments:

BGP_SPEAKER
    ID or name of the BGP speaker.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.22. neutron bgp-speaker-create

```
usage: neutron bgp-speaker-create [-h] [-f {html,json,shell(table, value)},yaml]
                                  [-c COLUMN] [--max-width <integer>] [--print-empty] [--noindent]
                                  [--prefix PREFIX] [--request-format {json}]
                                  [--tenant-id TENANT_ID] --local-as LOCAL_AS
                                  [--ip-version {4,6}]
                                  [--advertise-floating-ip-host-routes {True,False}]
                                  [--advertise-tenant-networks {True,False}]
                                  NAME
```

Create a BGP Speaker.

**Positional arguments:**

NAME
Name of the BGP speaker to create.

**Optional arguments:**

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--local-as LOCAL_AS
Local AS number. (Integer in [1, 65535] is allowed.)

--ip-version {4,6} IP
version for the BGP speaker (default is 4).
--advertise-floating-ip-host-routes \{True, False\}
Whether to enable or disable the advertisement of floating-ip host routes by the BGP
speaker. By default floating ip host routes will be advertised by the BGP speaker.

--advertise-tenant-networks \{True, False\}
Whether to enable or disable the advertisement of tenant network routes by the BGP
speaker. By default tenant network routes will be advertised by the BGP speaker.

10.3.23. neutron bgp-speaker-delete

usage: neutron bgp-speaker-delete [-h] [--request-format \{json\}]
   BGP_SPEAKER [BGP_SPEAKER ...]

Delete a BGP speaker.

Positional arguments:

BGP_SPEAKER
   ID(s) or name(s) of bgp_speaker to delete.

Optional arguments:

-h, --help
   show this help message and exit

--request-format \{json\}
   DEPRECATED! Only JSON request format is supported.

10.3.24. neutron bgp-speaker-list

usage: neutron bgp-speaker-list [-h] [-f
{csv, html, json, table, value, yaml}]
   [-c COLUMN] [-max-width \<integer\>]
   [-print-empty] [-noindent]
   [-quote
{all, minimal, none, nonnumeric}]
   [-request-format \{json\}] [-D] [-F
FIELD]
   [-P SIZE] [--sort-key FIELD]
   [--sort-dir \{asc, desc\}]

List BGP speakers.

Optional arguments:

-h, --help
   show this help message and exit

--request-format \{json\}
   DEPRECATED! Only JSON request format is supported.
-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
    Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
    Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
    Sorts the list in the specified direction. You can repeat this option.

10.3.25. neutron bgp-speaker-list-on-dragent

    usage: neutron bgp-speaker-list-on-dragent [-h] [-f]
           {csv,html,json,table,value,yaml} [-c COLUMN] [--max-width]
           <integer>] [noindent]
           {all, minimal, none, nonnumeric}
           [-D]
           BGP_DRAGENT_ID

List BGP speakers hosted by a Dynamic Routing agent.

Positional arguments:

    BGP_DRAGENT_ID
        ID of the Dynamic Routing agent.

Optional arguments:

    -h, --help
        show this help message and exit

    --request-format {json}
        DEPRECATED! Only JSON request format is supported.

    -D, --show-details
Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

10.3.26. neutron bgp-speaker-network-add

usage: neutron bgp-speaker-network-add [-h] [--request-format {json}]
                      BGP_SPEAKER NETWORK

Add a network to the BGP speaker.

Positional arguments:

BGP_SPEAKER
   ID or name of the BGP speaker.

NETWORK
   ID or name of the network to add.

Optional arguments:

   -h, --help
      show this help message and exit

   --request-format {json}
      DEPRECATED! Only JSON request format is supported.

10.3.27. neutron bgp-speaker-network-remove

usage: neutron bgp-speaker-network-remove [-h] [--request-format
                      {json}]
                      BGP_SPEAKER NETWORK

Remove a network from the BGP speaker.

Positional arguments:

BGP_SPEAKER
   ID or name of the BGP speaker.

NETWORK
   ID or name of the network to remove.

Optional arguments:

   -h, --help
      show this help message and exit
--request-format {json}

DEPRECATED! Only JSON request format is supported.

10.3.28. neutron bgp-speaker-peer-add

usage: neutron bgp-speaker-peer-add [-h] [--request-format {json}]
       BGP_SPEAKER BGP_PEER

Add a peer to the BGP speaker.

Positional arguments:

BGP_SPEAKER
   ID or name of the BGP speaker.

BGP_PEER
   ID or name of the BGP peer to add.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.29. neutron bgp-speaker-peer-remove

usage: neutron bgp-speaker-peer-remove [-h] [--request-format {json}]
       BGP_SPEAKER BGP_PEER

Remove a peer from the BGP speaker.

Positional arguments:

BGP_SPEAKER
   ID or name of the BGP speaker.

BGP_PEER
   ID or name of the BGP peer to remove.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.
10.3.30. neutron bgp-speaker-show


Show information of a given BGP speaker.

Positional arguments:

BGP_SPEAKER
    ID or name of bgp_speaker to look up.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

10.3.31. neutron bgp-speaker-update

usage: neutron bgp-speaker-update [-h] [--request-format {json}] [--name NAME] [--advertise-floating-ip-host-routes {True,False}] [--advertise-tenant-networks {True,False}]

Update BGP Speaker's information.

Positional arguments:

BGP_SPEAKER
    ID or name of bgp_speaker to update.

Optional arguments:
-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--name NAME
  Name of the BGP speaker to update.

--advertise-floating-ip-host-routes {True,False}
  Whether to enable or disable the advertisement of floating-ip host routes by the BGP
  speaker. By default floating ip host routes will be advertised by the BGP speaker.

--advertise-tenant-networks {True,False}
  Whether to enable or disable the advertisement of tenant network routes by the BGP
  speaker. By default tenant network routes will be advertised by the BGP speaker.

10.3.32. neutron dhcp-agent-list-hosting-net

usage: neutron dhcp-agent-list-hosting-net [-h]
       [-f {csv,html,json,table,value,yaml}]
       [-c COLUMN] [-max-width <integer>]
       [--print-empty] [--noindent]
       [--quote {all,minimal,none,nonnumeric}]
       [-D]

List DHCP agents hosting a network.

Positional arguments:

  NETWORK
    Network to query.

Optional arguments:

- h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.
-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.33. neutron dhcp-agent-network-add

usage: neutron dhcp-agent-network-add [-h] [--request-format {json}]
       DHCP_AGENT NETWORK

Add a network to a DHCP agent.

Positional arguments:

DHCP_AGENT
   ID of the DHCP agent.

NETWORK
   Network to add.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.34. neutron dhcp-agent-network-remove

usage: neutron dhcp-agent-network-remove [-h] [--request-format {json}]
       DHCP_AGENT NETWORK

Remove a network from a DHCP agent.

Positional arguments:

DHCP_AGENT
   ID of the DHCP agent.

NETWORK
   Network to remove.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.35. neutron ext-list

usage: neutron ext-list [-h] [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent] [-quote {all,minimal,none,nonnumeric}] [-request-format {json}] [-D] [-F FIELD]

List all extensions.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

10.3.36. neutron ext-show


Show information of a given resource.

Positional arguments:

EXTENSION
    ID of extension to look up.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.37. neutron firewall-create

usage: neutron firewall-create [-h] [-f {html, json, shell, table, value, yaml}]
[-c COLUMN] [-m max-width <integer>] [-p print-empty] [-n noindent] [-p prefix
PREFIX]
[-r request-format {json}]
[-t tenant-id TENANT_ID] [-n name NAME]
[-d description DESCRIPTION]
[-r router ROUTER | --no-routers]
[-a admin-state-down]
POLICY

Create a firewall.

Positional arguments:

POLICY
ID or name of the firewall policy associated to this firewall.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

-name NAME
Name for the firewall.

--description DESCRIPTION
Description for the firewall.

--router ROUTER
ID or name of the router associated with the firewall (requires FWaaS router insertion extension to be enabled). This option can be repeated.
--no-routers
Associate no routers with the firewall (requires FWaaS router insertion extension).

--admin-state-down
Set admin state up to false.

10.3.38. neutron firewall-delete

usage: neutron firewall-delete [-h] [--request-format {json}]
      FIREWALL [FIREWALL ...]

Delete a given firewall.

Positional arguments:

FIREWALL
   ID(s) or name(s) of firewall to delete.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

10.3.39. neutron firewall-list

usage: neutron firewall-list [-h] [-f {csv,html,json,table,value,yaml}]
                        [-c COLUMN] [-max-width <integer>]
                        [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]]
                        [--request-format {json}] [-D] [-F FIELD]
                        [-P SIZE] [--sort-key FIELD]
                        [--sort-dir {asc,desc}]

List firewalls that belong to a given tenant.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.
-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.40. neutron firewall-policy-create

usage: neutron firewall-policy-create [-h]
       [-f {html,json,shell,table,value,yaml}]
       [-c COLUMN] [-m max-width <integer>]
       [--print-empty] [--noindent]
       [--prefix PREFIX]
       [--request-format {json}]
       [--tenant-id TENANT_ID] [--shared]
       [--audited] [--description DESCRIPTION]
       [--firewall-rules]
       NAME

Create a firewall policy.

Positional arguments:

NAME
Name for the firewall policy.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.
--shared
Create a shared policy.

--audited
Sets audited to True.

--description DESCRIPTION
Description for the firewall policy.

--firewall-rules FIREWALL_RULES
Ordered list of whitespace-delimited firewall rule names or IDs; e.g., --firewall-rules "rule1
rule2"

10.3.41. neutron firewall-policy-delete

usage: neutron firewall-policy-delete [-h] [--request-format {json}] 
                       [FIREWALL_POLICY ...]

Delete a given firewall policy.

Positional arguments:

FIREWALL_POLICY
ID(s) or name(s) of firewall_policy to delete.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.42. neutron firewall-policy-insert-rule

usage: neutron firewall-policy-insert-rule [-h] [--request-format {json}] 
                      [--insert-before FIREWALL_RULE] 
                      [--insert-after FIREWALL_RULE] 
                      [FIREWALL_POLICY]

Insert a rule into a given firewall policy.

Positional arguments:
**FIREWALL_POLICY**

ID or name of firewall_policy to update.

**FIREWALL_RULE**

New rule to insert.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **--insert-before FIREWALL_RULE**
  Insert before this rule.

- **--insert-after FIREWALL_RULE**
  Insert after this rule.

### 10.3.43. neutron firewall-policy-list


List firewall policies that belong to a given tenant.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.
-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.44. neutron firewall-policy-remove-rule

usage: neutron firewall-policy-remove-rule [-h] [--request-format {json}]

FIREWALL_POLICY
FIREWALL_RULE

Remove a rule from a given firewall policy.

Positional arguments:

FIREWALL_POLICY
ID or name of firewall_policy to update.

FIREWALL_RULE
ID or name of the firewall rule to be removed from the policy.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.45. neutron firewall-policy-show

usage: neutron firewall-policy-show [-h] [-f {html, json, shell, table, value, yaml}]

[-c COLUMN] [--max-width <integer>]
[--print-empty] [--noindent]
[--prefix PREFIX]
[--request-format {json}] [-D] [-

F FIELD]

Show information of a given firewall policy.
Positional arguments:

FIREWALL_POLICY
    ID or name of firewall_policy to look up.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

10.3.46. neutron firewall-policy-update

usage: neutron firewall-policy-update [-h] [--request-format {json}]
       [--description DESCRIPTION]
       [--firewall-rules FIREWALL_RULES]
       [-D] [--field FIELD]
       [--name NAME] [--shared {True,False}]
       [--audited {True,False}]
       FIREWALL_POLICY

Update a given firewall policy.

Positional arguments:

FIREWALL_POLICY
    ID or name of firewall_policy to update.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--description DESCRIPTION
    Description for the firewall policy.

--firewall-rules FIREWALL_RULES
Ordered list of whitespace-delimited firewall rule names or IDs; e.g., --firewall-rules "rule1 rule2"

**--name NAME**
Name for the firewall policy.

**--shared {True, False}**
Update the sharing status of the policy. (True means shared).

**--audited {True, False}**
Update the audit status of the policy. (True means auditing is enabled).

### 10.3.47. neutron firewall-rule-create

```
usage: neutron firewall-rule-create [-h]
     [-f {html, json, shell, table, value, yaml}]
     [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent]
     [-prefix PREFIX] [-request-format {json}]
     [--tenant-id TENANT_ID] [--shared]
     [-name NAME] [-description DESCRIPTION]
     [-source-ip-address]
     [-destination-ip-address]
     [-source-port SOURCE_PORT]
     [-destination-port]
     [-enabled {True, False}] [-protocol]
     {tcp, udp, icmp, any} [-action]
     {allow, deny, reject} [-ip-version {4, 6}]
```

Create a firewall rule.

**Optional arguments:**

- `-h`, `--help`
  show this help message and exit

- `--request-format {json}`
  DEPRECATED! Only JSON request format is supported.

- `--tenant-id TENANT_ID`
  The owner tenant ID.
--shared
  Set shared flag for the firewall rule.

--name NAME
  Name for the firewall rule.

--description DESCRIPTION
  Description for the firewall rule.

--source-ip-address SOURCE_IP_ADDRESS
  Source IP address or subnet.

--destination-ip-address DESTINATION_IP_ADDRESS
  Destination IP address or subnet.

--source-port SOURCE_PORT
  Source port (integer in [1, 65535] or range in a:b).

--destination-port DESTINATION_PORT
  Destination port (integer in [1, 65535] or range in a:b).

--enabled {True,False}
  Whether to enable or disable this rule.

--protocol {tcp,udp,icmp,any}
  Protocol for the firewall rule.

--action {allow,deny,reject}
  Action for the firewall rule.

--ip-version {4,6} IP
  version for the firewall rule (default is 4).

10.3.48. neutron firewall-rule-delete

usage: neutron firewall-rule-delete [-h] [--request-format {json}]
   FIREWALL_RULE [FIREWALL_RULE ...]

Delete a given firewall rule.

Positional arguments:

FIREWALL_RULE
  ID(s) or name(s) of firewall_rule to delete.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

10.3.49. neutron firewall-rule-list


List firewall rules that belong to a given tenant.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.50. neutron firewall-rule-show

usage: neutron firewall-rule-show [-h] [-f {html,json,shell,table,value,yaml}]
Show information of a given firewall rule.

**Positional arguments:**

FIREWALL_RULE

ID or name of firewall_rule to look up.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

10.3.51. neutron firewall-rule-update

Update a given firewall rule.

**Positional arguments:**

FIREWALL_RULE
ID or name of firewall_rule to update.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--shared {True,False}
Update the shared flag for the firewall rule.

--ip-version {4,6}
Update IP version for the firewall rule.

--name NAME
Name for the firewall rule.

--description DESCRIPTION
Description for the firewall rule.

--source-ip-address SOURCE_IP_ADDRESS
Source IP address or subnet.

--destination-ip-address DESTINATION_IP_ADDRESS
Destination IP address or subnet.

--source-port SOURCE_PORT
Source port (integer in [1, 65535] or range in a:b).

--destination-port DESTINATION_PORT
Destination port (integer in [1, 65535] or range in a:b).

--enabled {True,False}
Whether to enable or disable this rule.

--protocol {tcp,udp,icmp,any}
Protocol for the firewall rule.

--action {allow,deny,reject}
Action for the firewall rule.

10.3.52. neutron firewall-show

usage: neutron firewall-show [-h] [-f
Show information of a given firewall.

**Positional arguments:**

FIREWALL

ID or name of firewall to look up.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  
  **DEPRECATED!** Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

### 10.3.53. neutron firewall-update

Update a given firewall.

**Positional arguments:**

FIREWALL

ID or name of firewall to update.

**Optional arguments:**

- **-h, --help**
  show this help message and exit
--request-format \{json\}
   DEPRECATED! Only JSON request format is supported.

--name NAME
   Name for the firewall.

--description DESCRIPTION
   Description for the firewall.

--router ROUTER
   ID or name of the router associated with the firewall (requires FWaaS router insertion extension to be enabled). This option can be repeated.

--no-routers
   Associate no routers with the firewall (requires FWaaS router insertion extension).

--policy POLICY
   ID or name of the firewall policy associated to this firewall.

--admin-state-up \{True, False\}
   Update the admin state for the firewall (True means UP).

10.3.54. neutron flavor-associate

   usage: neutron flavor-associate [-h] [--request-format \{json\}]
   FLAVOR FLAVOR_PROFILE

   Associate a Neutron service flavor with a flavor profile.

   Positional arguments:

   FLAVOR
      ID or name of the flavor to associate.

   FLAVOR_PROFILE
      ID of the flavor profile to be associated with the flavor.

   Optional arguments:

   -h, --help
      show this help message and exit

   --request-format \{json\}
      DEPRECATED! Only JSON request format is supported.

10.3.55. neutron flavor-create

   usage: neutron flavor-create [-h] [-f
Create a Neutron service flavor.

**Positional arguments:**

**NAME**
Name for the flavor.

**SERVICE_TYPE**
Service type to which the flavor applies to: e.g. VPN. (See service-provider-list for loaded examples.)

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **--tenant-id TENANT_ID**
  The owner tenant ID.

- **--description DESCRIPTION**
  Description for the flavor.

- **--enabled {True,False}**
  Sets enabled flag.

10.3.56. neutron flavor-delete

**usage:** neutron flavor-delete [-h] [--request-format {json}]

FLAVOR [FLAVOR ...]

Delete a given Neutron service flavor.

**Positional arguments:**

**FLAVOR**
ID(s) or name(s) of flavor to delete.
Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.57. neutron flavor-disassociate

usage: neutron flavor-disassociate [-h] [--request-format {json}]
      FLAVOR FLAVOR_PROFILE

Disassociate a Neutron service flavor from a flavor profile.

Positional arguments:

FLAVOR
    ID or name of the flavor to be disassociated.

FLAVOR_PROFILE
    ID of the flavor profile to be disassociated from the flavor.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.58. neutron flavor-list

usage: neutron flavor-list [-h] [-f {csv,html,json,table,value,yaml}]
              [-c COLUMN] [--max-width <integer>] [--print-empty]
              [-P SIZE] [-D] [-F FIELD]

List Neutron service flavors.

Optional arguments:

-h, --help
    show this help message and exit
--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.59. neutron flavor-profile-create

usage: neutron flavor-profile-create [-h]
      [-f {html,json,shell,table,value,yaml}]
      [-c COLUMN] [---max-width <integer>]
      [---print-empty] [---noindent]
      [---prefix PREFIX]
      [---request-format {json}]
      [---tenant-id TENANT_ID]
      [---description DESCRIPTION]
      [---driver DRIVER] [---metainfo METAINFO]
      [---enabled {True,False}]

Create a Neutron service flavor profile.

Optional arguments:

-h, --help
      show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--description DESCRIPTION
Description for the flavor profile.

--driver DRIVER
   Python module path to driver.

--metainfo METAINFO
   Metainfo for the flavor profile.

--enabled {True, False}
   Sets enabled flag.

10.3.60. neutron flavor-profile-delete

usage: neutron flavor-profile-delete [-h] [--request-format {json}]
   SERVICE_PROFILE [SERVICE_PROFILE ...]

Delete a given Neutron service flavor profile.

Positional arguments:

SERVICE_PROFILE
   ID(s) or name(s) of service_profile to delete.

Optional arguments:

  -h, --help
      show this help message and exit

  --request-format {json}
      DEPRECATED! Only JSON request format is supported.

10.3.61. neutron flavor-profile-list

usage: neutron flavor-profile-list [-h] [-f {csv,html,json,table,value,yaml}]
   [-c COLUMN] [-m max-width <integer>] [-p FIELD]
   [-q {all, minimal, none, nonnumeric}] [-r request-format {json}]
   [-D] [-F FIELD] [-P SIZE] [-k FIELD] [-d {asc,desc}]

List Neutron service flavor profiles.

Optional arguments:
-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
    Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
    Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
    Sorts the list in the specified direction. You can repeat this option.

10.3.62. neutron flavor-profile-show

    usage: neutron flavor-profile-show [-h]
            [-f {html, json, shell, table, value, yaml}]
            [-c COLUMN] [--max-width <integer>]
            [--print-empty] [--noindent]
            [--prefix PREFIX] [-D] [-F FIELD]
            [--request-format {json}]

    SERVICE_PROFILE
    ID or name of service_profile to look up.

    Optional arguments:

    -h, --help
        show this help message and exit

    --request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.63. neutron flavor-profile-update

```
usage: neutron flavor-profile-update [-h] [--request-format {json}]
                                [--description DESCRIPTION]
                                [--driver DRIVER] [--metainfo METAINFO]
                                [--enabled {True,False}]
                                SERVICE_PROFILE

Update a given Neutron service flavor profile.

Positional arguments:

SERVICE_PROFILE
ID or name of service_profile to update.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--description DESCRIPTION
  Description for the flavor profile.

--driver DRIVER
  Python module path to driver.

--metainfo METAINFO
  Metainfo for the flavor profile.

--enabled {True,False}
  Sets enabled flag.
```

10.3.64. neutron flavor-show

```
usage: neutron flavor-show [-h] [-f {html,json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--print-empty]
```
Show information about a given Neutron service flavor.

Positional arguments:

FLAVOR

ID or name of flavor to look up.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details

Show detailed information.

-F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

10.3.65. neutron flavor-update

usage: neutron flavor-update [-h] [--request-format {json}] [--name NAME] [--description DESCRIPTION] [--enabled {True,False}] FLAVOR

Update a Neutron service flavor.

Positional arguments:

FLAVOR

ID or name of flavor to update.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

--name NAME
Name for the flavor.

```
--description DESCRIPTION
```
Description for the flavor.

```
--enabled {True,False}
```
Sets enabled flag.

10.3.66. neutron floatingip-associate

```
usage: neutron floatingip-associate [-h] [--request-format {json}]
      FIXED_IP_ADDRESS]
      FLOATINGIP_ID PORT
```
Create a mapping between a floating IP and a fixed IP.

**Positional arguments:**

```
FLOATINGIP_ID
```
ID of the floating IP to associate.

```
PORT
```
ID or name of the port to be associated with the floating IP.

**Optional arguments:**

```
-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--fixed-ip-address FIXED_IP_ADDRESS
  IP address on the port (only required if port has multiple IPs).
```

10.3.67. neutron floatingip-create

```
usage: neutron floatingip-create [-h] [-f
{html, json, shell, table, value, yaml}]
      [-c COLUMN] [-max-width <integer>]
      [-print-empty] [-noindent]
      [--prefix PREFIX] [--request-format
{json}]
      [-t TENANT_ID]
      [--description DESCRIPTION]
      [-p PORT_ID]
      [--fixed-ip-address
      FIXED_IP_ADDRESS]
      [--floating-ip-address
```

[344]
Create a floating IP for a given tenant.

Positional arguments:

FLOATING_NETWORK
ID or name of the network from which the floating IP is allocated.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--description DESCRIPTION
Description of the floating IP.

--port-id PORT_ID
ID of the port to be associated with the floating IP.

--fixed-ip-address FIXED_IP_ADDRESS
IP address on the port (only required if port has multiple IPs).

--floating-ip-address FLOATING_IP_ADDRESS
IP address of the floating IP

--subnet SUBNET_ID
Subnet ID on which you want to create the floating IP.

--dns-domain DNS_DOMAIN
Assign DNS domain to the floatingip (requires DNS integration extension)

--dns-name DNS_NAME
Assign DNS name to the floatingip (requires DNS integration extension)

10.3.68. neutron floatingip-delete

usage: neutron floatingip-delete [-h] [--request-format {json}]
FLOATINGIP [FLOATINGIP ...]
Delete a given floating IP.

**Positional arguments:**

`FLOATINGIP`

ID(s) of floatingip to delete.

**Optional arguments:**

-h, --help

to show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

10.3.69. neutron floatingip-disassociate

usage: neutron floatingip-disassociate [-h] [--request-format {json}] FLOATINGIP_ID

Remove a mapping from a floating IP to a fixed IP.

**Positional arguments:**

FLOATINGIP_ID

ID of the floating IP to disassociate.

**Optional arguments:**

-h, --help

to show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

10.3.70. neutron floatingip-list


List floating IPs that belong to a given tenant.
Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.

-F FIELD, --field FIELD
  Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
  Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
  Sorts the list by the specified fields in the specified directions. You can repeat this option,
  but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir
  options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
  Sorts the list in the specified direction. You can repeat this option.

10.3.71. neutron floatingip-show

usage: neutron floatingip-show [-h] [-f
{html, json, shell, table, value, yaml}]
  [-c COLUMN] [--max-width <integer>]
  [-p COLUMN] [-d [NO, Y]] [-n]
  [-p PREFIX]
  [-request-format {json}] [-D] [-F
FIELD]
  FLOATINGIP

Show information of a given floating IP.

Positional arguments:

FLOATINGIP
  ID of floatingip to look up.

Optional arguments:

-h, --help
  show this help message and exit
--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details

Show detailed information.

-F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

10.3.72. neutron ipsec-site-connection-create

usage: neutron ipsec-site-connection-create [-h]
    [-f
{html, json, shell, table, value, yaml}]
    [-c COLUMN]
    [-max-width <integer>]
    [-print-empty] [--noindent]
    [--prefix PREFIX]
    [--request-format]
{json}]
    [--tenant-id TENANT_ID]
    [--admin-state-down]
    --vpnservice-id
    --ikepolicy-id IKEPOLICY
    --ipsecpolicy-id
    --name NAME]
    [--description]
    [--dpd]
    action=ACTION, interval=INTERVAL, timeout=TIMEOUT]
    [--local-ep-group]
    [--peer-ep-group]
    [--peer-cidr PEER_CIDRS]
    [--peer-id]
    PEER_ID --peer-address
    [--mtu MTU]
    PEER_ADDRESS --psk PSK
    [--directional, response-only]]
    [--initiator {bi-

Create an IPsec site connection.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
    The owner tenant ID.

--admin-state-down
    Set admin state up to false.

--vpnservice-id VPNSERVICE
    VPN service instance ID associated with this connection.

--ikepolicy-id IKEPOLICY
    IKE policy ID associated with this connection.

--ipsecpolicy-id IPSECPOLICY
    IPsec policy ID associated with this connection.

--name NAME
    Set friendly name for the connection.

--description DESCRIPTION
    Set a description for the connection.

--dpd
    action=ACTION,interval=INTERVAL,timeout=TIMEOUT Ipsec connection. Dead Peer Detection attributes. 'action'-hold,clear,disabled,restart,restart-by-peer. 'interval' and 'timeout' are non negative integers. 'interval' should be less than 'timeout' value. 'action', default:hold 'interval', default:30, 'timeout', default:120.

--local-ep-group LOCAL_EP_GROUP
    Local endpoint group ID/name with subnet(s) for IPSec connection.

--peer-ep-group PEER_EP_GROUP
    Peer endpoint group ID/name with CIDR(s) for IPSec connection.

--peer-cidr PEER_CIDRS
    [DEPRECATED in Mitaka] Remote subnet(s) in CIDR format. Cannot be specified when using endpoint groups. Only applicable, if subnet provided for VPN service.

--peer-id PEER_ID
    Peer router identity for authentication. Can be IPv4/IPv6 address, e-mail address, key id, or FQDN.

--peer-address PEER_ADDRESS
    Peer gateway public IPv4/IPv6 address or FQDN.

--psk PSK
    Pre-shared key string.
--mtu MTU
MTU size for the connection, default:1500.

--initiator {bi-directional,response-only}
Initiator state in lowercase, default:bi-directional

10.3.73. neutron ipsec-site-connection-delete

usage: neutron ipsec-site-connection-delete [-h] [--request-format {json}]

IPSEC_SITE_CONNECTION
IPSEC_SITE_CONNECTION...

Delete a given IPsec site connection.

Positional arguments:

IPSEC_SITE_CONNECTION
ID(s) or name(s) of IPsec site connection to delete.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.74. neutron ipsec-site-connection-list

usage: neutron ipsec-site-connection-list [-h] [-f {csv,html,json,table,value,yaml}]

<integer>]
--noindent
{all,minimal,none,nonnumeric}]
[-D]

List IPsec site connections that belong to a given tenant.

Optional arguments:
-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.75. neutron ipsec-site-connection-show


Show information of a given IPsec site connection.

Positional arguments:

IPSEC_SITE_CONNECTION
ID or name of IPsec site connection to look up.

Optional arguments:

-h, --help
show this help message and exit
--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.76. neutron ipsec-site-connection-update

usage: neutron ipsec-site-connection-update [-h] [-request-format {json}]

[-admin-state-up {True, False}]
[-name NAME]
[-description DESCRIPTION]

[-dpd action=ACTION, interval=INTERVAL, timeout=TIMEOUT]
[-local-ep-group LOCAL_EP_GROUP]
[-peer-ep-group PEER_EP_GROUP]

[-peer-cidr PEER_CIDRS]
[-peer-id PEER_ID]
[-peer-address PEER_ADDRESS]

[-psk PSK] [-mtu MTU]
[-initiator {bidirectional, response-only}]

IPSEC_SITE_CONNECTION

Update a given IPsec site connection.

Positional arguments:

IPSEC_SITE_CONNECTION
ID or name of IPsec site connection to update.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

--admin-state-up {True, False}
Update the administrative state. (True meaning "Up")
--name NAME
Set friendly name for the connection.

--description DESCRIPTION
Set a description for the connection.

--dpd
action=ACTION,interval=INTERVAL,timeout=TIMEOUT Ipsec connection. Dead Peer Detection attributes. 'action'-hold,clear,disabled,restart,restart-by-peer. 'interval' and 'timeout' are non negative integers. 'interval' should be less than 'timeout' value. 'action', default:hold 'interval', default:30, 'timeout', default:120.

--local-ep-group LOCAL_EP_GROUP
Local endpoint group ID/name with subnet(s) for IPSec connection.

--peer-ep-group PEER_EP_GROUP
Peer endpoint group ID/name with CIDR(s) for IPSec connection.

--peer-cidr PEER_CIDRS
[DEPRECATED in Mitaka] Remote subnet(s) in CIDR format. Cannot be specified when using endpoint groups. Only applicable, if subnet provided for VPN service.

--peer-id PEER_ID
Peer router identity for authentication. Can be IPv4/IPv6 address, e-mail address, key id, or FQDN.

--peer-address PEER_ADDRESS
Peer gateway public IPv4/IPv6 address or FQDN.

--psk PSK
Pre-shared key string.

--mtu MTU
MTU size for the connection, default:1500.

--initiator {bi-directional,response-only}
Initiator state in lowercase, default:bi-directional

10.3.77. neutron l3-agent-list-hosting-router

usage: neutron l3-agent-list-hosting-router [-h] [-f]
{csv,html,json,table,value,yaml}] [-c COLUMN]
[--max-width <integer>]
[--print-empty] [--noindent]
[--quote]
{all,minimal,none,nonnumeric]
List L3 agents hosting a router.

**Positional arguments:**

`ROUTER`

Router to query.

**Optional arguments:**

- `-h`, `--help`
  
  show this help message and exit

- `--request-format {json}`
  
  DEPRECATED! Only JSON request format is supported.

- `-D`, `--show-details`
  
  Show detailed information.

- `-F FIELD`, `--field FIELD`
  
  Specify the field(s) to be returned by server. You can repeat this option.

### 10.3.78. neutron l3-agent-router-add

**Usage:**

```
usage: neutron l3-agent-router-add [-h] [--request-format {json}] 

L3_AGENT  ROUTER
```

Add a router to a L3 agent.

**Positional arguments:**

- `L3_AGENT`
  
  ID of the L3 agent.

- `ROUTER`
  
  Router to add.

**Optional arguments:**

- `-h`, `--help`
  
  show this help message and exit

- `--request-format {json}`
  
  DEPRECATED! Only JSON request format is supported.
10.3.79. neutron l3-agent-router-remove

Usage: neutron l3-agent-router-remove [-h] [--request-format {json}]

Remove a router from a L3 agent.

Positional arguments:

L3_AGENT
   ID of the L3 agent.

ROUTER
   Router to remove.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.80. neutron lb-agent-hosting-pool

Usage: neutron lb-agent-hosting-pool [-h]

[-f {csv,html,json,table,value,yaml}]

[-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent] [-quote {all,minimal,none,nonnumeric}]

[-F FIELD] [--request-format {json}] [-D]

Get loadbalancer agent hosting a pool. Deriving from ListCommand though server will return only one agent to keep common output format for all agent schedulers.

Positional arguments:

POOL
   Pool to query.

Optional arguments:

-h, --help
   show this help message and exit
--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details

Show detailed information.

-F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

10.3.81. neutron lb-healthmonitor-associate

usage: neutron lb-healthmonitor-associate [-h] [--request-format {json}]

HEALTH_MONITOR_ID POOL

Create a mapping between a health monitor and a pool.

Positional arguments:

HEALTH_MONITOR_ID

Health monitor to associate.

POOL

ID of the pool to be associated with the health monitor.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

10.3.82. neutron lb-healthmonitor-create

usage: neutron lb-healthmonitor-create [-h] [-f]

{html, json, shell, table, value, yaml} [-c COLUMN] [-max-width <integer>]

[-print-empty] [-noindent]

[--prefix PREFIX]

[--request-format {json}]

[--tenant-id TENANT_ID]

[--admin-state-down]

[--expected-codes]

[--http-method HTTP_METHOD]

[--url-path URL_PATH] --delay
Create a health monitor.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
  The owner tenant ID.

--admin-state-down
  Set admin state up to false.

--expected-codes EXPECTED_CODES
  The list of HTTP status codes expected in response from the member to declare it healthy. This attribute can contain one value, or a list of values separated by comma, or a range of values (e.g. "200-299"). If this attribute is not specified, it defaults to "200".

--http-method HTTP_METHOD
  The HTTP method used for requests by the monitor of type HTTP.

--url-path URL_PATH
  The HTTP path used in the HTTP request used by the monitor to test a member health. This must be a string beginning with a / (forward slash).

--delay DELAY
  The time in milliseconds between sending probes to members.

--max-retries MAX_RETRIES
  Number of permissible connection failures before changing the member status to INACTIVE. [1..10]

--timeout TIMEOUT
  Maximum number of milliseconds for a monitor to wait for a connection to be established before it times out. The value must be less than the delay value.

--type {PING,TCP,HTTP,HTTPS}
  One of the predefined health monitor types.

10.3.83. neutron lb-healthmonitor-delete
usage: neutron lb-healthmonitor-delete [-h] [--request-format {json}]

Delete a given health monitor.

Positional arguments:

HEALTH_MONITOR
  ID(s) of health_monitor to delete.

Optional arguments:

  -h, --help
    show this help message and exit

  --request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.84. neutron lb-healthmonitor-disassociate

usage: neutron lb-healthmonitor-disassociate [-h] [--request-format {json}]

Remove a mapping from a health monitor to a pool.

Positional arguments:

HEALTH_MONITOR_ID
  Health monitor to disassociate.

POOL
  ID of the pool to be disassociated with the health monitor.

Optional arguments:

  -h, --help
    show this help message and exit

  --request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.85. neutron lb-healthmonitor-list

usage: neutron lb-healthmonitor-list [-h]

Red Hat OpenStack Platform 11 Command-Line Interface Reference
List health monitors that belong to a given tenant.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
   Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
   Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
   Sorts the list in the specified direction. You can repeat this option.

10.3.86. neutron lb-healthmonitor-show

usage: neutron lb-healthmonitor-show [-h]
   [-f]
   {html, json, shell, table, value, yaml}] [-c COLUMN] [-max-width]
   <integer>]
   [-F FIELD]
   [ --request-format {json}] [-D]
   [-P SIZE] [--sort-key FIELD]
   [ --sort-dir {asc,desc}]

   Show information of a given health monitor.
Positional arguments:

HEALTH_MONITOR
ID of health_monitor to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.87. neutron lb-healthmonitor-update

usage: neutron lb-healthmonitor-update [-h] [--request-format {json}]
HEALTH_MONITOR

Update a given health monitor.

Positional arguments:

HEALTH_MONITOR
ID of health_monitor to update.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.88. neutron lb-member-create

usage: neutron lb-member-create [-h] [-f {html,json,shell,table,value,yaml}]
prefix PREFIX]
--request-format {json}]
[--tenant-id TENANT_ID] [--admin-
state-down]
Create a member.

Positional arguments:

POOL

ID or name of the pool this vip belongs to.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--admin-state-down
Set admin state up to false.

--weight WEIGHT
Weight of pool member in the pool (default:1, [0..256]).

--address ADDRESS
IP address of the pool member on the pool network.

--protocol-port PROTOCOL_PORT
Port on which the pool member listens for requests or connections.

10.3.89. neuron lb-member-delete

usage: neutron lb-member-delete [-h] [--request-format {json}]
 MEMBER [MEMBER ...]

Delete a given member.

Positional arguments:

MEMBER
ID(s) or name(s) of member to delete.

Optional arguments:

-h, --help
10.3.90. neutron lb-member-list


List members that belong to a given tenant.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
    Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
    Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
    Sorts the list in the specified direction. You can repeat this option.

10.3.91. neutron lb-member-show

usage: neutron lb-member-show [-h] [-f {html,json,shell,table,value,yaml}] [-c COLUMN] [--max-width <integer>]

Red Hat OpenStack Platform 11 Command-Line Interface Reference
Show information of a given member.

**Positional arguments:**

MEMBER

ID of member to look up.

**Optional arguments:**

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details

Show detailed information.

-F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

### 10.3.92. neutron lb-member-update

**usage:** neutron lb-member-update [-h] [--request-format {json}] MEMBER

Update a given member.

**Positional arguments:**

MEMBER

ID or name of member to update.

**Optional arguments:**

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

### 10.3.93. neutron lb-pool-create

**usage:** neutron lb-pool-create [-h] [-f
Create a pool.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
    The owner tenant ID.

--admin-state-down
    Set admin state up to false.

--description DESCRIPTION
    Description of the pool.

--lb-method {ROUND_ROBIN,LEAST_CONNECTIONS,SOURCE_IP}
    The algorithm used to distribute load between the members of the pool.

--name NAME
    The name of the pool.

--protocol {HTTP,HTTPS,TCP}
    Protocol for balancing.

--subnet-id SUBNET
    The subnet on which the members of the pool will be located.

--provider PROVIDER
    Provider name of the loadbalancer service.
usage: neutron lb-pool-delete [-h] [--request-format {json}] POOL [POOL ...

Delete a given pool.

Positional arguments:

POOL
   ID(s) or name(s) of pool to delete.

Optional arguments:

-h,  --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.95. neutron lb-pool-list


List pools that belong to a given tenant.

Optional arguments:

-h,  --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D,  --show-details
   Show detailed information.

-F FIELD,  --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE,  --page-size SIZE
   Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

```
--sort-dir {asc,desc}
```

Sorts the list in the specified direction. You can repeat this option.

### 10.3.96. neutron lb-pool-list-on-agent

**usage:** neutron lb-pool-list-on-agent [-h] [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent] [-quote {all,minimal,none,nonnumeric}] [-request-format {json}] [-D]

LBAAS_AGENT

List the pools on a loadbalancer agent.

**Positional arguments:**

- **LBAAS_AGENT**
  
  ID of the loadbalancer agent to query.

**Optional arguments:**

- **-h, --help**
  
  show this help message and exit

- **--request-format {json}**

  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**

  Show detailed information.

- **-F FIELD, --field FIELD**

  Specify the field(s) to be returned by server. You can repeat this option.

### 10.3.97. neutron lb-pool-show

POOL

Show information of a given pool.

Positional arguments:

POOL

ID or name of pool to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.98. neutron lb-pool-stats

Retrieve stats for a given pool.

Positional arguments:

POOL

ID or name of pool to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.
-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

10.3.99. neutron lb-pool-update

    usage: neutron lb-pool-update [-h] [--request-format {json}] POOL

    Update a given pool.

    Positional arguments:

    POOL
        ID or name of pool to update.

    Optional arguments:

    -h, --help
        show this help message and exit

    --request-format {json}
        DEPRECATED! Only JSON request format is supported.

10.3.100. neutron lb-vip-create

    usage: neutron lb-vip-create [-h] [-f {html,json,shell,table,value,yaml}]
        [-c COLUMN] [--max-width <integer>] [--print-empty] [--noindent] [--prefix
        PREFIX]
        [--request-format {json}] [--tenant-id TENANT_ID]
        [--address ADDRESS] [--admin-state-down]
        [--connection-limit CONNECTION_LIMIT]
        [--description DESCRIPTION] --name NAME
        --protocol-port PROTOCOL_PORT --protocol
        {TCP,HTTP,HTTPS} --subnet-id SUBNET
        POOL

    Create a vip.

    Positional arguments:

    POOL
        ID or name of the pool to which this vip belongs.

    Optional arguments:
-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
  The owner tenant ID.

--address ADDRESS
  IP address of the vip.

--admin-state-down
  Set admin state up to false.

--connection-limit CONNECTION_LIMIT
  The maximum number of connections per second allowed for the vip. Valid values: a positive integer or -1 for unlimited (default).

--description DESCRIPTION
  Description of the vip to be created.

--name NAME
  Name of the vip to be created.

--protocol-port PROTOCOL_PORT
  TCP port on which to listen for client traffic that is associated with the vip address.

--protocol {TCP,HTTP,HTTPS}
  Protocol for balancing.

--subnet-id SUBNET
  The subnet on which to allocate the vip address.

10.3.101. neutron lb-vip-delete

usage: neutron lb-vip-delete [-h] [--request-format {json}] VIP [VIP ...]

Delete a given vip.

Positional arguments:

VIP
  ID(s) or name(s) of vip to delete.

Optional arguments:
-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.102. neutron lb-vip-list


List vips that belong to a given tenant.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
    Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
    Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
    Sorts the list in the specified direction. You can repeat this option.

10.3.103. neutron lb-vip-show

usage: neutron lb-vip-show [-h] [-f {html,json,shell,table,value,yaml}] [-c COLUMN] [--max-width <integer>] [--print-empty]
Show information of a given vip.

**Positional arguments:**

**VIP**

ID or name of vip to look up.

**Optional arguments:**

- **-h, --help**
  
  show this help message and exit

- **--request-format {json}**
  
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  
  Show detailed information.

- **-F FIELD, --field FIELD**
  
  Specify the field(s) to be returned by server. You can repeat this option.

### 10.3.104. neutron lb-vip-update

**usage:** neutron lb-vip-update [-h] [--request-format {json}] VIP

Update a given vip.

**Positional arguments:**

**VIP**

ID or name of vip to update.

**Optional arguments:**

- **-h, --help**
  
  show this help message and exit

- **--request-format {json}**
  
  DEPRECATED! Only JSON request format is supported.

### 10.3.105. neutron lbaas-agent-hosting-loadbalancer

**usage:** neutron lbaas-agent-hosting-loadbalancer [-h] [-f {csv,html,json,table,value,yaml}]
Get lbaas v2 agent hosting a loadbalancer. Deriving from ListCommand though server will return only one agent to keep common output format for all agent schedulers

**Positional arguments:**

LOADBALANCER

LoadBalancer to query.

**Optional arguments:**

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.106. neutron lbaas-healthmonitor-create

usage: neutron lbaas-healthmonitor-create [-h] [-f]
{html,json,shell,table,value,yaml}

<integer>]

noindent]

{all,minimal,none,nonnumeric}]

{json}] [-D]

[-c COLUMN] [-max-width]

[--print-empty] [--

[--quote

[--request-format

[-F FIELD]

LOADBALANCER

10.3.106. neutron lbaas-healthmonitor-create

usage: neutron lbaas-healthmonitor-create [-h]

{html,json,shell,table,value,yaml}

<integer>]

noindent]

[-c COLUMN] [-max-width]

[--print-empty] [--

[--prefix PREFIX]

[--request-format {json}]

[--tenant-id TENANT_ID] --

delay

timeout

HTTP_METHOD]

[--url-path URL_PATH] --
LBaaS v2 Create a healthmonitor.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **--tenant-id TENANT_ID**
  The owner tenant ID.

- **--delay DELAY**
  The time in seconds between sending probes to members.

- **--name NAME**
  Name of the health monitor.

- **--timeout TIMEOUT**
  Maximum number of seconds for a monitor to wait for a connection to be established before it times out. The value must be less than the delay value.

- **--http-method HTTP_METHOD**
  The HTTP method used for requests by the monitor of type HTTP.

- **--url-path URL_PATH**
  The HTTP path used in the HTTP request used by the monitor to test a member health. This must be a string beginning with a / (forward slash).

- **--max-retries MAX_RETRIES**
  Number of permissible connection failures before changing the member status to INACTIVE. [1..10].

- **--expected-codes EXPECTED_CODES**
  The list of HTTP status codes expected in response from the member to declare it healthy. This attribute can contain one value, or a list of values separated by comma, or a range of values (e.g. "200-299"). If this attribute is not specified, it defaults to "200".

- **--admin-state-down**
  Set admin state up to false.
--type \{PING, TCP, HTTP, HTTPS\}

One of the predefined health monitor types.

--pool POOL

ID or name of the pool that this healthmonitor will monitor.

10.3.107. neutron lbaas-healthmonitor-delete

usage: neutron lbaas-healthmonitor-delete [-h] [--request-format {json}]

[HEALTHMONITOR ...]

LBaaS v2 Delete a given healthmonitor.

Positional arguments:

HEALTHMONITOR

ID(s) or name(s) of healthmonitor to delete.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

10.3.108. neutron lbaas-healthmonitor-list

usage: neutron lbaas-healthmonitor-list [-h] [-f {csv, html, json, table, value, yaml}]

[-c COLUMN] [-max-width <integer>]

[-print-empty] [-noindent] [-quote {all, minimal, none, nonnumeric}]

[-F FIELD] [-P SIZE] [-sort-key FIELD] [-sort-dir {asc, desc}]

LBaaS v2 List healthmonitors that belong to a given tenant.

Optional arguments:

-h, --help

show this help message and exit
--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.109. neutron lbaas-healthmonitor-show

usage: neutron lbaas-healthmonitor-show [-h]
      [-f {html, json, shell, table, value, yaml}]
      [-c COLUMN] [--max-width <integer>]
      [--print-empty] [--noindent]
      [--prefix PREFIX]
      [--request-format {json}]
      [-D]

LBaaS v2 Show information of a given healthmonitor.

Positional arguments:

HEALTHMONITOR
ID or name of healthmonitor to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.110. neutron lbaas-healthmonitor-update

usage: neutron lbaas-healthmonitor-update [-h] [--request-format {json}]
        [--delay DELAY] [--name NAME]
        [--timeout TIMEOUT] [--http-method HTTP_METHOD]
        [--url-path URL_PATH] [--max-retries MAX_RETRIES]
        [--expected-codes EXPECTED_CODES] [--admin-state-up {True,False}]
        HEALTHMONITOR

LBaaS v2 Update a given healthmonitor.

Positional arguments:

HEALTHMONITOR
    ID or name of healthmonitor to update.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--delay DELAY
    The time in seconds between sending probes to members.

--name NAME
    Name of the health monitor.

--timeout TIMEOUT
    Maximum number of seconds for a monitor to wait for a connection to be established before it times out. The value must be less than the delay value.

--http-method HTTP_METHOD
    The HTTP method used for requests by the monitor of type HTTP.
The HTTP path used in the HTTP request used by the monitor to test a member health. This must be a string beginning with a / (forward slash).

Number of permissible connection failures before changing the member status to INACTIVE. [1..10].

The list of HTTP status codes expected in response from the member to declare it healthy. This attribute can contain one value, or a list of values separated by comma, or a range of values (e.g. “200-299”). If this attribute is not specified, it defaults to “200”.

Update the administrative state of the health monitor (True meaning “Up”).

10.3.111. neutron lbaas-l7policy-create


LBaaS v2 Create L7 policy.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
    The owner tenant ID.

--name NAME
Name of the policy.

--description DESCRIPTION
Description of the policy.

--action ACTION
Action type of the policy.

--redirect-pool REDIRECT_POOL
ID or name of the pool for REDIRECT_TO_POOL action type.

--redirect-url REDIRECT_URL
URL for REDIRECT_TO_URL action type. This should be a valid URL string.

--position POSITION
L7 policy position in ordered policies list. This must be an integer starting from 1. Not specifying the position will place the policy at the tail of existing policies list.

--admin-state-down
Set admin state up to false.

--listener LISTENER
ID or name of the listener this policy belongs to.

10.3.112. neutron lbaas-l7policy-delete

usage: neutron lbaas-l7policy-delete [-h] [--request-format {json}] L7POLICY [L7POLICY ...]

LBaaS v2 Delete a given L7 policy.

Positional arguments:

L7POLICY
ID(s) or name(s) of l7policy to delete.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.113. neutron lbaas-l7policy-list

usage: neutron lbaas-l7policy-list [-h] [-f {csv,html,json,table,value,yaml}]
LBaaS v2 List L7 policies that belong to a given listener.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.114. neutron lbaas-l7policy-show

usage: neutron lbaas-l7policy-show [-h] [-f {html,json,shell,table,value,yaml}] [-c COLUMN] [--max-width <integer>] [-D] [-F FIELD] [--request-format {json}]
L7POLICY
Positional arguments:

L7POLICY
   ID or name of l7policy to look up.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

10.3.115. neutron lbaas-l7policy-update

usage: neutron lbaas-l7policy-update [-h] [--request-format {json}]
                    [--name NAME] [--description DESCRIPTION]
                    [--action ACTION]
                    [--redirect-pool REDIRECT_POOL]
                    [--redirect-url REDIRECT_URL]
                    [--position POSITION]
                    [--admin-state-up {True,False}] L7POLICY

LBaaS v2 Update a given L7 policy.

Positional arguments:

L7POLICY
   ID or name of l7policy to update.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

--name NAME
   Name of the policy.
--description DESCRIPTION
  Description of the policy.

--action ACTION
  Action type of the policy.

--redirect-pool REDIRECT_POOL
  ID or name of the pool for REDIRECT_TO_POOL action type.

--redirect-url REDIRECT_URL
  URL for REDIRECT_TO_URL action type. This should be a valid URL string.

--position POSITION
  L7 policy position in ordered policies list. This must be an integer starting from 1. Not specifying the position will place the policy at the tail of existing policies list.

--admin-state-up {True,False}
  Specify the administrative state of the policy (True meaning "Up").

10.3.116. neutron lbaas-l7rule-create


LBaaS v2 Create L7 rule.

Positional arguments:

L7POLICY
  ID or name of L7 policy this rule belongs to.

Optional arguments:

-h, --help
--request-format \{json\}

DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID

The owner tenant ID.

--type \{HOST_NAME, PATH, FILE_TYPE, HEADER, COOKIE\}

Rule type.

--compare-type \{REGEX, STARTS_WITH, ENDS_WITH, CONTAINS, EQUAL_TO\}

Rule compare type.

--invert-compare

Invert the compare type.

--key KEY

Key to compare. Relevant for HEADER and COOKIE types only.

--value VALUE

Value to compare.

--admin-state-down

Set admin state up to false

10.3.117. neutron lbaas-l7rule-delete

usage: neutron lbaas-l7rule-delete [-h] [--request-format \{json\}]

RULE [RULE ...] L7POLICY

LBaaS v2 Delete a given L7 rule.

Positional arguments:

RULE

ID(s) or name(s) of rule to delete.

L7POLICY

ID or name of L7 policy this rule belongs to.

Optional arguments:

-h, --help

show this help message and exit

--request-format \{json\}

DEPRECATED! Only JSON request format is supported.
10.3.118. neutron lbaas-l7rule-list


**LBaaS v2 List L7 rules that belong to a given L7 policy.**

**Positional arguments:**

**L7POLICY**
ID or name of L7 policy this rule belongs to.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**
  Specify retrieve unit of each request, then split one request to several requests.

- **--sort-key FIELD**
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

- **--sort-dir {asc,desc}**
  Sorts the list in the specified direction. You can repeat this option.

10.3.119. neutron lbaas-l7rule-show

**usage:** neutron lbaas-l7rule-show [-h] [-f {html, json, shell, table, value, yaml}]
LBaaS v2 Show information of a given rule.

Positional arguments:

**RULE**

ID or name of rule to look up.

**L7POLICY**

ID or name of L7 policy this rule belongs to.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

10.3.120. neutron lbaas-l7rule-update

usage: neutron lbaas-l7rule-update [-h] [--request-format {json}]

[--type {HOST_NAME, PATH, FILE_TYPE, HEADER, COOKIE}]

[--compare-type {REGEX, STARTS_WITH, ENDS_WITH, CONTAINS, EQUAL_TO}]

[--invert-compare] [--key KEY]

[--admin-state-up {True, False}]

RULE L7POLICY

LBaaS v2 Update a given L7 rule.

Positional arguments:

**RULE**

ID or name of rule to update.
L7POLICY
ID or name of L7 policy this rule belongs to.

Optional arguments:

- -h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--type {HOST_NAME, PATH, FILE_TYPE, HEADER, COOKIE}
  Rule type.

--compare-type {REGEX, STARTS_WITH, ENDS_WITH, CONTAINS, EQUAL_TO}
  Rule compare type.

--invert-compare
  Invert the compare type.

--key KEY
  Key to compare. Relevant for HEADER and COOKIE types only.

--value VALUE
  Value to compare.

--admin-state-up {True, False}
  Specify the administrative state of the rule (True meaning "Up").

10.3.121. neutron lbaas-listener-create

usage: neutron lbaas-listener-create [-h] [-f]
{html, json, shell, table, value, yaml]
        [-c COLUMN] [-max-width <integer>]
[- --print-empty] [-noindent]
[- --prefix PREFIX]
[- --request-format {json}]
[- --tenant-id TENANT_ID]
[- --description DESCRIPTION]
[- --connection-limit CONNECTION_LIMIT]
[- --default-pool DEFAULT_POOL]
[- --admin-state-down] [- --name NAME]
[- --default-tls-container-ref DEFAULT_TLS_CONTAINER_REF]
        [- --sni-container-refs SNI_CONTAINER_REFS [SNI_CONTAINER_REFS ...]]
LBaaS v2 Create a listener.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
  The owner tenant ID.

--description DESCRIPTION
  Description of the listener.

--connection-limit CONNECTION_LIMIT
  The maximum number of connections per second allowed for the listener. Positive integer or -1 for unlimited (default).

--default-pool DEFAULT_POOL
  Default pool for the listener.

--admin-state-down
  Set admin state up to false.

--name NAME
  The name of the listener. At least one of --default-pool or --loadbalancer must be specified.

--default-tls-container-ref DEFAULT_TLS_CONTAINER_REF
  Default TLS container reference to retrieve TLS information.

--sni-container-refs SNI_CONTAINER_REFS [SNI_CONTAINER_REFS ...]
  List of TLS container references for SNI.

--loadbalancer LOADBALANCER
  ID or name of the load balancer.

--protocol {TCP,HTTP,HTTPS,TERMINATED_HTTPS}
  Protocol for the listener.

--protocol-port PORT
  Protocol port for the listener.
10.3.122. neutron lbaas-listener-delete

usage: neutron lbaas-listener-delete [-h] [--request-format {json}] LISTENER [LISTENER ...]

LBaaS v2 Delete a given listener.

Positional arguments:

LISTENER
   ID(s) or name(s) of listener to delete.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.123. neutron lbaas-listener-list


LBaaS v2 List listeners that belong to a given tenant.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.
-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.124. neutron lbaas-listener-show

usage: neutron lbaas-listener-show [-h]
    [-f {html,json,shell,table,value,yaml}]
    [-c COLUMN] [-m max-width]
    [-p COLUMN] [-m max-width]
    [-r COLUMN] [-m max-width]
    [-r COLUMN] [-m max-width]
    [-r COLUMN] [-m max-width]
    [-r COLUMN] [-m max-width]
    [-r COLUMN] [-m max-width]

LBaaS v2 Show information of a given listener.

Positional arguments:

LISTENER
ID or name of listener to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.125. neutron lbaas-listener-update

usage: neutron lbaas-listener-update [-h] [--request-format {json}]
    [--description DESCRIPTION]
CONNECTION_LIMIT

[--connection-limit]

--default-pool DEFAULT_POOL

[--name NAME]

[--admin-state-up {True,False}]

LISTENER

LBaaS v2 Update a given listener.

**Positional arguments:**

LISTENER

ID or name of listener to update.

**Optional arguments:**

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

--description DESCRIPTION

Description of the listener.

--connection-limit CONNECTION_LIMIT

The maximum number of connections per second allowed for the listener. Positive integer or -1 for unlimited (default).

--default-pool DEFAULT_POOL

Default pool for the listener.

--name NAME

Name of the listener.

--admin-state-up {True,False}

Specify the administrative state of the listener. (True meaning "Up")

**10.3.126. neutron lbaas-loadbalancer-create**

usage: neutron lbaas-loadbalancer-create [-h] [-f 
LBaaS v2 Create a loadbalancer.

**Positional arguments:**

VIP_SUBNET

Load balancer VIP subnet.

**Optional arguments:**

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID

The owner tenant ID.

--description DESCRIPTION

Description of the load balancer.

--name NAME

Name of the load balancer.

--admin-state-down

Set admin state up to false.

--provider PROVIDER

Provider name of the load balancer service.

--flavor FLAVOR

ID or name of the flavor.

--vip-address VIP_ADDRESS

VIP address for the load balancer.

10.3.127. neutron lbaas-loadbalancer-delete

usage: neutron lbaas-loadbalancer-delete [-h] [--request-format {json}]

LOADBALANCER [LOADBALANCER]...
LBaaS v2 Delete a given loadbalancer.

Positional arguments:

**LOADBALANCER**

ID(s) or name(s) of loadbalancer to delete.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

10.3.128. neutron lbaas-loadbalancer-list

usage: neutron lbaas-loadbalancer-list [-h]
                                 [-f {csv,html,json,table,value,yaml}]
                                 [-c COLUMN] [-max-width <integer>]
                                 [-F FIELD] [-P SIZE] [-D]
                                 [-P SIZE, --page-size SIZE]
                                 [-P SIZE, --page-size SIZE]
                                 [-c COLUMN] [-max-width <integer>]
                                 [-F FIELD] [-P SIZE] [-D]
                                 [-F FIELD] [-P SIZE] [-D]
                                 [-F FIELD] [-P SIZE] [-D]
                                 [-F FIELD] [-P SIZE] [-D]
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                                 [-F FIELD] [-P SIZE] [-D]
                                 [-F FIELD] [-P SIZE] [-D]
                                 [-F FIELD] [-P SIZE] [-D]
                                 [-D, --show-details]
                                 Show detailed information.

LBaaS v2 List loadbalancers that belong to a given tenant.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**
  Specify retrieve unit of each request, then split one request to several requests.
--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.129. neutron lbaas-loadbalancer-list-on-agent

usage: neutron lbaas-loadbalancer-list-on-agent [-h] [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [--max-width <integer>] [--print-empty] [--noindent] [--quote {all,minimal,none,nonnumeric}] [--request-format {json}] [-D] [-F FIELD]

LBAAS_AGENT
ID of the loadbalancer agent to query.

Positional arguments:

LBAAS_AGENT
ID of the loadbalancer agent to query.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.130. neutron lbaas-loadbalancer-show

usage: neutron lbaas-loadbalancer-show [-h] [-f
LBaaS v2 Show information of a given loadbalancer.

Positional arguments:

LOADBALANCER
ID or name of loadbalancer to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.131. neutron lbaas-loadbalancer-stats

Retrieve stats for a given loadbalancer.

Positional arguments:

LOADBALANCER
ID or name of loadbalancer to look up.
Optional arguments:

- **h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

### 10.3.132. neutron lbaas-loadbalancer-status

```bash
usage: neutron lbaas-loadbalancer-status [-h] [--request-format {json}] LOADBALANCER
```

Retrieve status for a given loadbalancer. The only output is a formatted JSON tree, and the table format does not support this type of data.

Positional arguments:

```
LOADBALANCER
```

ID or name of loadbalancer to show.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

### 10.3.133. neutron lbaas-loadbalancer-update

```bash
usage: neutron lbaas-loadbalancer-update [-h] [--request-format {json}] [--admin-state-up {True,False}] [--description DESCRIPTION] [--name NAME] LOADBALANCER
```

LBaaS v2 Update a given loadbalancer.

Positional arguments:

```
LOADBALANCER
```
ID or name of loadbalancer to update.

Optional arguments:

- **-h, --help**
  
  show this help message and exit

- **--request-format {json}**
  
  DEPRECATED! Only JSON request format is supported.

- **--admin-state-up {True, False}**
  
  Update the administrative state of the load balancer (True meaning "Up").

- **--description DESCRIPTION**
  
  Description of the load balancer.

- **--name NAME**
  
  Name of the load balancer.

### 10.3.134. neutron lbaas-member-create

usage: neutron lbaas-member-create [-h] [-f]

{html, json, shell, table, value, yaml}]

[-c COLUMN] [-max-width ]

<Integer>]

[-print-empty] [-noindent]

[-prefix PREFIX] [-request-

format {json}]

[--tenant-id TENANT_ID] [--name 

NAME]

[--weight WEIGHT] [--admin-state-

down]

--subnet SUBNET --address ADDRESS

--protocol-port PROTOCOL_PORT

POOL

LBaaS v2 Create a member.

Positional arguments:

POOL

ID or name of the pool that this member belongs to.

Optional arguments:

- **-h, --help**
  
  show this help message and exit

- **--request-format {json}**
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--name NAME
Name of the member.

--weight WEIGHT
Weight of the member in the pool (default:1, [0..256]).

--admin-state-down
Set admin state up to false.

--subnet SUBNET
Subnet ID or name for the member.

--address ADDRESS
IP address of the pool member in the pool.

--protocol-port PROTOCOL_PORT
Port on which the pool member listens for requests or connections.

10.3.135. neutron lbaas-member-delete

Usage: neutron lbaas-member-delete [-h] [--request-format {json}] MEMBER [MEMBER ...] POOL

LBaaS v2 Delete a given member.

Positional arguments:

MEMBER
ID(s) or name(s) of member to delete.

POOL
ID or name of the pool that this member belongs to.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.136. neutron lbaas-member-list
LBaaS v2 List members that belong to a given pool.

**Positional arguments:**

**POOL**

ID or name of the pool that this member belongs to.

**Optional arguments:**

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details

Show detailed information.

-F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE

Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD

Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}

Sorts the list in the specified direction. You can repeat this option.

10.3.137. neutron lbaas-member-show

usage: neutron lbaas-member-show [-h] [-f

{html, json, shell, table, value, yaml}]

[-c COLUMN] [-max-width <integer>]

[--print-empty] [--noindent]

[--quote

{all, minimal, none, nonnumeric}]

[-request-format {json}] [-D] [-F

FIELD]

[-P SIZE] [-sort-key FIELD]

[-sort-dir {asc, desc}]

POOl
LBaaS v2 Show information of a given member.

**Positional arguments:**

**MEMBER**
ID or name of member to look up.

**POOL**
ID or name of the pool that this member belongs to.

**Optional arguments:**

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.138. neutron lbaas-member-update

usage: neutron lbaas-member-update [-h] [--request-format {json}]
[--admin-state-up {True,False}]
[--name NAME] [--weight WEIGHT]
MEMBER POOL

LBaaS v2 Update a given member.

**Positional arguments:**

**MEMBER**
ID or name of member to update.

**POOL**
ID or name of the pool that this member belongs to.

**Optional arguments:**

-h, --help
--request-format {json}
   DEPRECATED! Only JSON request format is supported.

--admin-state-up {True,False}
   Update the administrative state of the member (True meaning "Up").

--name NAME
   Name of the member.

--weight WEIGHT
   Weight of the member in the pool (default:1, [0..256]).

10.3.139. neutron lbaas-pool-create

usage: neutron lbaas-pool-create [-h] [-f
{html,json,shell,table,value,yaml}]
   [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent]
   [-prefix PREFIX] [-request-format
{json}]
   [-tenant-id TENANT_ID]
   [-description DESCRIPTION] [-name NAME]
   --lb-algorithm
   {ROUND_ROBIN,LEAST_CONNECTIONS,SOURCE_IP}
   [-admin-state-down] [-listener
LISTENER]
   [-loadbalancer LOADBALANCER] --
protocol
   {HTTP,HTTPS,TCP}
   [-session-persistence
   type=TYPE[,cookie_name=COOKIE_NAME]]

LBaaS v2 Create a pool.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
   The owner tenant ID.

--description DESCRIPTION
Description of the pool.

--name NAME
   The name of the pool.

--lb-algorithm {ROUND_ROBIN,LEAST_CONNECTIONS,SOURCE_IP}
   The algorithm used to distribute load between the members of the pool.

--admin-state-down
   Set admin state up to false.

--listener LISTENER
   Listener whose default-pool should be set to this pool. At least one of --listener or --loadbalancer must be specified.

--loadbalancer LOADBALANCER
   Loadbalancer with which this pool should be associated. At least one of --listener or --loadbalancer must be specified.

--protocol {HTTP,HTTPS,TCP}
   Protocol for balancing.

--session-persistence
   type=TYPE[,cookie_name=COOKIE_NAME] The type of session persistence to use and associated cookie name.

10.3.140. neutron lbaas-pool-delete

   usage: neutron lbaas-pool-delete [-h] [--request-format {json}] POOL [POOL ...]

LBaaS v2 Delete a given pool.

Positional arguments:

POOL
   ID(s) or name(s) of pool to delete.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.141. neutron lbaas-pool-list

LBaaS v2 List pools that belong to a given tenant.

Optional arguments:

- h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.

-F FIELD, --field FIELD
  Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
  Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
  Sorts the list in the specified direction. You can repeat this option.

10.3.142. neutron lbaas-pool-show


LBaaS v2 Show information of a given pool.
Positional arguments:

POOL

ID or name of pool to look up.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details

Show detailed information.

-F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

10.3.143. neutron lbaas-pool-update

usage: neutron lbaas-pool-update [-h] [--request-format {json}]

[--admin-state-up {True,False}]

[--session-persistence

type=TYPE[,cookie_name=COOKIE_NAME]

| --no-session-persistence]

|--description DESCRIPTION] [--name

NAME]

[--lb-algorithm

{ROUND_ROBIN, LEAST_CONNECTIONS, SOURCE_IP}]

POOL

LBaaS v2 Update a given pool.

Positional arguments:

POOL

ID or name of pool to update.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

--admin-state-up {True,False}

Update the administrative state of the pool (True meaning "Up").
--session-persistence
   type=TYPE[,cookie_name=COOKIE_NAME] The type of session persistence to use and associated cookie name.

--no-session-persistence
   Clear session persistence for the pool.

--description DESCRIPTION
   Description of the pool.

--name NAME
   The name of the pool.

--lb-algorithm {ROUND_ROBIN,LEAST_CONNECTIONS,SOURCE_IP}
   The algorithm used to distribute load between the members of the pool.

10.3.144. neutron meter-label-create


Create a metering label for a given tenant.

Positional arguments:

NAME
   Name of the metering label to be created.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
   The owner tenant ID.

--description DESCRIPTION
   Description of the metering label to be created.
--shared

Set the label as shared.

10.3.145. neutron meter-label-delete

usage: neutron meter-label-delete [-h] [--request-format {json}]
METERING_LABEL [METERING_LABEL ...]

Delete a given metering label.

Positional arguments:

METERING_LABEL
ID(s) or name(s) of metering_label to delete.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

10.3.146. neutron meter-label-list

usage: neutron meter-label-list [-h] [-f {csv,html,json,table,value,yaml}]
[-c COLUMN] [--max-width <integer>] [--print-empty] [--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--request-format {json}] [-D] [-F FIELD]
[-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]

List metering labels that belong to a given tenant.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.
-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.147. neutron meter-label-rule-create


Create a metering label rule for a given label.

Positional arguments:

LABEL
ID or name of the label.

REMOTE_IP_PREFIX
CIDR to match on.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.
--direction {ingress, egress}
   Direction of traffic, default: ingress.

--excluded
   Exclude this CIDR from the label, default: not excluded.

10.3.148. neutron meter-label-rule-delete

    usage: neutron meter-label-rule-delete [-h] [--request-format {json}]
          METERING_LABEL_RULE
          [METERING_LABEL_RULE ...]

Delete a given metering label.

Positional arguments:

METERING_LABEL_RULE
   ID(s) of metering_label_rule to delete.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.149. neutron meter-label-rule-list

    usage: neutron meter-label-rule-list [-h] [-f {csv, html, json, table, value, yaml}]
          <integer>] [-c COLUMN] [-max-width
          [--print-empty] [--noindent]
          [--quote {all, minimal, none, nonnumeric}]
          [--request-format {json}] [-D]
          [-F FIELD]
          [-P SIZE] [--sort-key FIELD]
          [--sort-dir {asc, desc}]

List metering labels that belong to a given label.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.150. neutron meter-label-rule-show

usage: neutron meter-label-rule-show [-h] [-f {html, json, shell, table, value, yaml}] [-c COLUMN] [-m <integer>] [-F FIELD]

Show information of a given metering label rule.

Positional arguments:

METERING_LABEL_RULE
ID of metering_label_rule to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.
-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.151. neutron meter-label-show


Show information of a given metering label.

Positional arguments:

METERING_LABEL
ID or name of metering_label to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.152. neutron net-create

Create a network for a given tenant.

Positional arguments:

NAME
Name of the network to be created.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--admin-state-down
Set admin state up to false.

--shared
Set the network as shared.

--provider:network_type <network_type>
The physical mechanism by which the virtual network is implemented.

--provider:physical_network <physical_network_name>
Name of the physical network over which the virtual network is implemented.

--provider:segmentation_id <segmentation_id>
VLAN ID for VLAN networks or tunnel-id for GRE/VXLAN networks.

--vlan-transparent {True,False}
Create a VLAN transparent network.

--description DESCRIPTION
Description of network.

--qos-policy QOS_POLICY
ID or name of the QoS policy that should be attached to the resource.
--availability-zone-hint AVAILABILITY_ZONE

Availability Zone for the network (requires availability zone extension, this option can be repeated).

--dns-domain DNS_DOMAIN

Assign DNS domain to the network (requires DNS integration extension)

10.3.153. neutron net-delete

usage: neutron net-delete [-h] [--request-format {json}] NETWORK [NETWORK ...]

Delete a given network.

Positional arguments:

NETWORK

ID(s) or name(s) of network to delete.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

10.3.154. neutron net-external-list


List external networks that belong to a given tenant.
Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
    Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
    Sorts the list by the specified fields in the specified directions. You can repeat this option,
    but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir
    options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
    Sorts the list in the specified direction. You can repeat this option.

10.3.155. neutron net-ip-availability-list

usage: neutron net-ip-availability-list [-h]
    [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [-max-width <integer>]
    [-print-empty] [-noindent] [-quote {all,minimal,none,nonnumeric}]
    [--request-format {json}] [-D] [-F FIELD] [-sort-key FIELD]
    [-sort-dir {asc,desc}] [-ip-version {4,6}] [-network-id NETWORK_ID]
    [-network-name NETWORK_NAME] [-tenant-id TENANT_ID]

List IP usage of networks

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.156. neutron net-ip-availability-show

usage: neutron net-ip-availability-show [-h]
[-f {html, json, shell, table, value, yaml}]
{-c COLUMN} [-m --max-width <integer>]
[-p --print-empty] [-n --noindent]
[-p --prefix PREFIX]
[-r --request-format {json}]

NETWORK
Show IP usage of specific network

Positional arguments:

NETWORK
ID or name of network to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

10.3.157. neutron net-list

usage: neutron net-list [-h] [-f {csv, html, json, table, value, yaml}]
[-c
List networks that belong to a given tenant.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**
  Specify retrieve unit of each request, then split one request to several requests.

- **--sort-key FIELD**
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

- **--sort-dir {asc,desc}**
  Sorts the list in the specified direction. You can repeat this option.

10.3.158. neutron net-list-on-dhcp-agent

```
usage: neutron net-list-on-dhcp-agent [-h]

{csv,html,json,table,value,yaml}] [-c COLUMN] [--max-width
<integer>] [--print-empty] [--noindent]
```
List the networks on a DHCP agent.

**Positional arguments:**

**DHCP_AGENT**  
ID of the DHCP agent.

**Optional arguments:**

- **-h, --help**  
  show this help message and exit

- **--request-format {json}**  
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**  
  Show detailed information.

- **-F FIELD, --field FIELD**  
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**  
  Specify retrieve unit of each request, then split one request to several requests.

- **--sort-key FIELD**  
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

- **--sort-dir {asc,desc}**  
  Sorts the list in the specified direction. You can repeat this option.

Show information of a given network.

Positional arguments:

NETWORK
   ID or name of network to look up.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

10.3.160. neutron net-update


Update network's information.

Positional arguments:

NETWORK
   ID or name of network to update.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--name NAME
Name of the network.

--description DESCRIPTION
Description of this network.

--qos-policy QOS_POLICY
ID or name of the QoS policy that should be attached to the resource.

--no-qos-policy
Detach QoS policy from the resource.

--dns-domain DNS_DOMAIN
Assign DNS domain to the network (requires DNS integration extension.)

--no-dns-domain
Unassign DNS domain from the network (requires DNS integration extension.)

10.3.161. neutron port-create


Create a port for a given tenant.

Positional arguments:
NETWORK
   ID or name of the network this port belongs to.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
   The owner tenant ID.

--name NAME
   Name of this port.

--description DESCRIPTION
   Description of this port.

--fixed-ip
   subnet_id=SUBNET, ip_address=IP_ADDR Desired IP and/or subnet for this port:
   subnet_id=<name_or_id>, ip_address=<ip>. You can repeat this option.

--device-id DEVICE_ID
   Device ID of this port.

--device-owner DEVICE_OWNER
   Device owner of this port.

--admin-state-down
   Set admin state up to false.

--mac-address MAC_ADDRESS
   MAC address of this port.

--vnic-type <direct | direct-physical | macvtap | normal | baremetal>
   VNIC type for this port.

--binding-profile BINDING_PROFILE
   Custom data to be passed as binding:profile.

--security-group SECURITY_GROUP
   Security group associated with the port. You can repeat this option.

--no-security-groups
   Associate no security groups with the port.
--extra-dhcp-opt EXTRA_DHCP_OPTS
Extra dhcp options to be assigned to this port: opt_name=<dhcp_option_name>,opt_value=<value>,ip_version={4, 6}. You can repeat this option.

--qos-policy QOS_POLICY
ID or name of the QoS policy that should be attached to the resource.

--allowed-address-pair
ip_address=IP_ADDR[,mac_address=MAC_ADDR] Allowed address pair associated with the port. You can repeat this option.

--no-allowed-address-pairs
Associate no allowed address pairs with the port.

--dns-name DNS_NAME
Assign DNS name to the port (requires DNS integration extension)

10.3.162. neutron port-delete

usage: neutron port-delete [-h] [--request-format {json}] PORT [PORT ...]

Delete a given port.

Positional arguments:
PORT
ID(s) or name(s) of port to delete.

Optional arguments:
-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.163. neutron port-list


List ports that belong to a given tenant.
Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**
  Specify retrieve unit of each request, then split one request to several requests.

- **--sort-key FIELD**
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

- **--sort-dir {asc,desc}**
  Sorts the list in the specified direction. You can repeat this option.

10.3.164. neutron port-show

```usage: neutron port-show [-h] [-f {html, json, shell, table, value, yaml}] [-c COLUMN] [-max-width <integer>] [--print-empty] 
  [-noindent] [-prefix PREFIX] [-request-format {json}] [-D] [-F FIELD]
PORT```

Show information of a given port.

Positional arguments:

**PORT**

ID or name of port to look up.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.
-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

10.3.165. neutron port-update

usage: neutron port-update [-h] [--request-format {json}] [--name NAME]
                    [--description DESCRIPTION]
                    [--fixed-ip subnet_id=SUBNET,ip_address=IP_ADDR]
                    [--device-id DEVICE_ID]
                    [--device-owner DEVICE_OWNER]
                    [--admin-state-up {True,False}]
                    [--security-group SECURITY_GROUP | --no-security-groups]
                    [--extra-dhcp-opt EXTRA_DHCP_OPTS]
                    [--qos-policy QOS_POLICY | --no-qos-policy]
                    [--allowed-address-pair ip_address=IP_ADDR[,mac_address=MAC_ADDR]
                     | --no-allowed-address-pairs]
                    [--dns-name DNS_NAME | --no-dns-name]
PORT

Update port's information.

Positional arguments:

PORT
    ID or name of port to update.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--name NAME
    Name of this port.

--description DESCRIPTION
    Description of this port.

--fixed-ip
subnet_id=SUBNET,ip_address=IP_ADDR Desired IP and/or subnet for this port: subnet_id=<name_or_id>,ip_address=<ip>. You can repeat this option.

--device-id DEVICE_ID
Device ID of this port.

--device-owner DEVICE_OWNER
Device owner of this port.

--admin-state-up {True,False}
Set admin state up for the port.

--security-group SECURITY_GROUP
Security group associated with the port. You can repeat this option.

--no-security-groups
Associate no security groups with the port.

--extra-dhcp-opt EXTRA_DHCP_OPTS
Extra dhcp options to be assigned to this port: opt_name=<dhcp_option_name>,opt_value=<value>,ip_version={4, 6}. You can repeat this option.

--qos-policy QOS_POLICY
ID or name of the QoS policy that should be attached to the resource.

--no-qos-policy
Detach QoS policy from the resource.

--allowed-address-pair
ip_address=IP_ADDR[,mac_address=MAC_ADDR] Allowed address pair associated with the port. You can repeat this option.

--no-allowed-address-pairs
Associate no allowed address pairs with the port.

--dns-name DNS_NAME
Assign DNS name to the port (requires DNS integration extension.)

--no-dns-name
Unassign DNS name from the port (requires DNS integration extension.)

10.3.166. neutron purge

usage: neutron purge [-h] [--request-format {json}] TENANT

Delete all resources that belong to a given tenant.

Positional arguments:
TENANT

ID of Tenant owning the resources to be deleted.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.167. neutron qos-available-rule-types


List available qos rule types.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
    Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
    Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.
--sort-dir {asc,desc}
  Sorts the list in the specified direction. You can repeat this option.

10.3.168. neutron qos-bandwidth-limit-rule-create

usage: neutron qos-bandwidth-limit-rule-create [-h]
       [-f {html, json, shell, table, value, yaml}]
       [-c COLUMN]
       [-max-width <integer>]
       [-print-empty] [--noindent]
       [--prefix PREFIX]
       [--request-format {json}]
       [--tenant-id TENANT_ID]
       [--max-kbps MAX_KBPS]
       [--max-burst-kbps MAX_BURST_KBPS]

QOS_POLICY

Create a qos bandwidth limit rule.

Positional arguments:

QOS_POLICY
  ID or name of the QoS policy.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
  The owner tenant ID.

--max-kbps MAX_KBPS
  Maximum bandwidth in kbps.

--max-burst-kbps MAX_BURST_KBPS
  Maximum burst bandwidth in kbps.

10.3.169. neutron qos-bandwidth-limit-rule-delete

usage: neutron qos-bandwidth-limit-rule-delete [-h] [--request-format
Delete a given qos bandwidth limit rule.

**Positional arguments:**

[BANDWIDTH_LIMIT_RULE]
ID(s) of bandwidth_limit_rule to delete.

[QOS_POLICY]
ID or name of the QoS policy.

**Optional arguments:**

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.170. neutron qos-bandwidth-limit-rule-list

```
usage: neutron qos-bandwidth-limit-rule-list [-h]
   [-f {csv,html,json,table,value,yaml}]
   [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent]
   [-quote {all,minimal,none,nonnumeric}] [-request-format {json}]
   [-D]
```

List all qos bandwidth limit rules belonging to the specified policy.

**Positional arguments:**

[QOS_POLICY]
ID or name of the QoS policy.

**Optional arguments:**
-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.

-F FIELD, --field FIELD
  Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
  Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
  Sorts the list in the specified direction. You can repeat this option.

10.3.171. neutron qos-bandwidth-limit-rule-show

usage: neutron qos-bandwidth-limit-rule-show [-h] [-f]
  {html, json, shell, table, value, yaml] [-c COLUMN]
  [-max-width <integer>] [-print-empty] [--noindent]
  [-f FIELD]
  [BANDWIDTH_LIMIT_RULE ID] [-D]
  [QOS_POLICY ID] [-c COLUMN]

QOS_POLICY

Show information about the given qos bandwidth limit rule.

Positional arguments:

BANDWIDTH_LIMIT_RULE
  ID of bandwidth_limit_rule to look up.

QOS_POLICY
  ID or name of the QoS policy.

Optional arguments:
-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

10.3.172. neutron qos-bandwidth-limit-rule-update


Update the given qos bandwidth limit rule.

Positional arguments:

BANDWIDTH_LIMIT_RULE
    ID of bandwidth_limit_rule to update.

QOS_POLICY
    ID or name of the QoS policy.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--max-kbps MAX_KBPS
    Maximum bandwidth in kbps.

--max-burst-kbps MAX_BURST_KBPS
    Maximum burst bandwidth in kbps.

10.3.173. neutron qos-dscp-marking-rule-create
Create a QoS DSCP marking rule.

**Positional arguments:**

**QOS_POLICY**

ID or name of the QoS policy.

**Optional arguments:**

```
-h, --help
```

show this help message and exit

```
--request-format {json}
```

DEPRECATED! Only JSON request format is supported.

```
--tenant-id TENANT_ID
```

The owner tenant ID.

```
--dscp-mark DSCP_MARK
```

DSCP mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54.

### 10.3.174. neutron qos-dscp-marking-rule-delete

Delete a given qos dscp marking rule.

**Positional arguments:**

**DSCP_MARKING_RULE**

ID(s) of dscp_marking_rule to delete.
**QOS_POLICY**

ID or name of the QoS policy.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

### 10.3.175. neutron qos-dscp-marking-rule-list


List all QoS DSCP marking rules belonging to the specified policy.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.
-P SIZE, --page-size SIZE
    Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
    Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
    Sorts the list in the specified direction. You can repeat this option.

10.3.176. neutron qos-dscp-marking-rule-show

usage: neutron qos-dscp-marking-rule-show [-h]
    [-f {html,json,shell,table,value,yaml}]
    [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent] [-D]
    [-F FIELD] --request-format {json}
QOS_POLICY
DSCP_MARKING_RULE

Show information about the given qos dscp marking rule.

Positional arguments:

DSCP_MARKING_RULE
    ID of dscp_marking_rule to look up.

QOS_POLICY
    ID or name of the QoS policy.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-D, --show-details
    Show detailed information.

-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.
10.3.177. neutron qos-dscp-marking-rule-update

usage: neutron qos-dscp-marking-rule-update [-h] [--request-format {json}] --dscp-mark DSCP_MARK DSCP_MARKING_RULE

QOS_POLICY

Update the given QoS DSCP marking rule.

Positional arguments:

DSCP_MARKING_RULE
ID of dscp_marking_rule to update.

QOS_POLICY
ID or name of the QoS policy.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--dscp-mark DSCP_MARK
DSCP mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54.

10.3.178. neutron qos-minimum-bandwidth-rule-create


Create a qos minimum bandwidth rule.

Positional arguments:
QOS_POLICY  
ID or name of the QoS policy.

Optional arguments:

-h, --help  
show this help message and exit

--request-format {json}  
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID  
The owner tenant ID.

--min-kbps MIN_KBPS  
QoS minimum bandwidth assurance, expressed in kilobits per second.

--direction {egress}  
Traffic direction.

10.3.179. neutron qos-minimum-bandwidth-rule-delete  

usage: neutron qos-minimum-bandwidth-rule-delete [-h]  
[--request-format {json}]  

MINIMUM_BANDWIDTH_RULE  
[MINIMUM_BANDWIDTH_RULE ...]  

QOS_POLICY  

Delete a given qos minimum bandwidth rule.

Positional arguments:

MINIMUM_BANDWIDTH_RULE  
ID(s) of minimum_bandwidth_rule to delete.

QOS_POLICY  
ID or name of the QoS policy.

Optional arguments:

-h, --help  
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

### 10.3.180. neutron qos-minimum-bandwidth-rule-list

**Usage:**
```
neutron qos-minimum-bandwidth-rule-list [-h]
{csv,html,json,table,value,yaml}]
[-f]
[colum,table,html,json,table,value,yaml]]
[-c COLUMN]
[-m max-width]
<integer>]
[-p print-empty] [-n]
noindent]
[-q quote]
{all, minimal, none, nonnumeric}]
[-r request-format]
{json} [-D]
[-r]
{asc, desc}]
```

List all qos minimum bandwidth rules belonging to the specified policy.

**Positional arguments:**

**QOS_POLICY**
ID or name of the QoS policy.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**
  Specify retrieve unit of each request, then split one request to several requests.

- **--sort-key FIELD**
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.
--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.181. neutron qos-minimum-bandwidth-rule-show

usage: neutron qos-minimum-bandwidth-rule-show [-h]
{html, json, shell, table, value, yaml} [-c COLUMN]
[-max-width <integer>]
[-print-empty] [--noindent]
[--prefix PREFIX] [--request-format {json}] [-D]
MINIMUM_BANDWIDTH_RULE QOS_POLICY

Show information about the given qos minimum bandwidth rule.

Positional arguments:

MINIMUM_BANDWIDTH_RULE
ID of minimum_bandwidth_rule to look up.

QOS_POLICY
ID or name of the QoS policy.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.182. neutron qos-minimum-bandwidth-rule-update

usage: neutron qos-minimum-bandwidth-rule-update [-h] {json}
Update the given qos minimum bandwidth rule.

**Positional arguments:**

**MINIMUM_BANDWIDTH_RULE**
ID of minimum_bandwidth_rule to update.

**QOS_POLICY**
ID or name of the QoS policy.

**Optional arguments:**

- `--min-kbps MIN_KBPS`
  QoS minimum bandwidth assurance, expressed in kilobits per second.

- `--direction {egress}`
  Traffic direction.

10.3.183. neuton qos-policy-create


Create a qos policy.

**Positional arguments:**

**NAME**
Name of the QoS policy to be created.
Optional arguments:

- `-h, --help`
  show this help message and exit

- `--request-format {json}
  DEPRECATED! Only JSON request format is supported.

- `--tenant-id TENANT_ID`
  The owner tenant ID.

- `--description DESCRIPTION`
  Description of the QoS policy to be created.

- `--shared`
  Accessible by other tenants. Set shared to True (default is False).

10.3.184. neutron qos-policy-delete

usage: neutron qos-policy-delete [-h] [--request-format {json}] POLICY [POLICY ...]

Delete a given qos policy.

Positional arguments:

POLICY
  ID(s) or name(s) of policy to delete.

Optional arguments:

- `-h, --help`
  show this help message and exit

- `--request-format {json}
  DEPRECATED! Only JSON request format is supported.

10.3.185. neutron qos-policy-list

List QoS policies that belong to a given tenant connection.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**
  Specify retrieve unit of each request, then split one request to several requests.

- **--sort-key FIELD**
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

- **--sort-dir {asc,desc}**
  Sorts the list in the specified direction. You can repeat this option.

### 10.3.186. neutron qos-policy-show

```

Show information of a given qos policy.

Positional arguments:

POLICY
  ID or name of policy to look up.

Optional arguments:

- **-h, --help**
```
show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

10.3.187. neutron qos-policy-update

usage: neutron qos-policy-update [-h] [--request-format {json}] [--name
       NAME] [--description DESCRIPTION] [--shared | --no-shared]
       POLICY

Update a given qos policy.

Positional arguments:

   POLICY
       ID or name of policy to update.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

--name NAME
   Name of the QoS policy.

--description DESCRIPTION
   Description of the QoS policy.

--shared
   Accessible by other tenants. Set shared to True (default is False).

--no-shared
   Not accessible by other tenants. Set shared to False.

10.3.188. neutron quota-default-show
usage: neutron quota-default-show [-h] [-f {html, json, shell, table, value, yaml}]
               [-c COLUMN] [--max-width <integer>] [--print-empty] [--noindent]
               [--prefix PREFIX] [--request-format {json}] [--tenant-id tenant-id]

Show default quotas for a given tenant.

Optional arguments:

-h,  --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-tenant-id
    tenant-id The owner tenant ID.

10.3.189. neutron quota-delete

usage: neutron quota-delete [-h] [--request-format {json}]
                              [--tenant-id tenant-id]

Delete defined quotas of a given tenant.

Optional arguments:

-h,  --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

-tenant-id
    tenant-id The owner tenant ID.

10.3.190. neutron quota-list

usage: neutron quota-list [-h] [-f {csv, html, json, table, value, yaml}]
                          [-c COLUMN] [--max-width <integer>] [--print-empty]
                          [--noindent] [--quote {all, minimal, none, nonnumeric}]
                          [--request-format {json}]

List quotas of all tenants who have non-default quota values.
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Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.191. neutron quota-show

usage: neutron quota-show [-h] [-f {html,json,shell,table,value,yaml}]
    [-c COLUMN] [-m max-width <integer>] [-p print-empty]
    [-n noindent] [-p prefix PREFIX]
    [--request-format {json}] [--tenant-id tenant-id]

Show quotas for a given tenant.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--tenant-id
    tenant-id The owner tenant ID.

10.3.192. neutron quota-update

usage: neutron quota-update [-h] [-f
    {html, json, shell, table, value, yaml}]
    [-c COLUMN] [-m max-width <integer>]
    [-p print-empty] [-n noindent] [-p prefix PREFIX]
    [--request-format {json}] [-t tenant-id]
    [-n network networks] [-s subnet subnets]
    [-p port ports] [-r router routers]
    [-f floatingip floatingips]
    [-g security-group security_groups]
    [-r security-group-rule security_group_rules]
    [-v vip vips] [-p pool pools] [-m member members]
    [-h健康-monitor health_monitors]
    [-l loadbalancer loadbalancers]
    [-l listener listeners]
    [-r rbac-policy rbac_policies]
Define tenant's quotas not to use defaults.

Optional arguments:

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **--tenant-id**
  tenant-id The owner tenant ID.

- **--network**
  networks The limit of networks.

- **--subnet**
  subnets The limit of subnets.

- **--port**
  ports The limit of ports.

- **--router**
  routers The limit of routers.

- **--floatingip**
  floatingips The limit of floating IPs.

- **--security-group**
  security_groups The limit of security groups.

- **--security-group-rule**
  security_group_rules The limit of security groups rules.

- **--vip**
  vips The limit of vips.

- **--pool**
  pools The limit of pools.

- **--member**
  members The limit of pool members.

- **--health-monitor**
  health_monitors The limit of health monitors.

- **--loadbalancer**
loadbalancers The limit of load balancers.

--listener
listeners The limit of listeners.

--rbac-policy
rbac_policies The limit of RBAC policies.

10.3.193. neutron rbac-create

Create a RBAC policy for a given tenant.

Positional arguments:

RBAC_OBJECT
ID or name of the RBAC object.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--type {qos-policy, network}
Type of the object that RBAC policy affects.

--target-tenant TARGET_TENANT
ID of the tenant to which the RBAC policy will be enforced.

--action {access_as_external, access_as_shared}
Action for the RBAC policy.

10.3.194. neutron rbac-delete
usage: neutron rbac-delete [-h] [--request-format {json}] 
                                          RBAC_POLICY [RBAC_POLICY ...]

Delete a RBAC policy.

Positional arguments:

RBAC_POLICY
   ID(s) of rbac_policy to delete.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.195. neutron rbac-list

usage: neutron rbac-list [-h] [-f {csv,html,json,table,value,yaml}] 
                                      [-c COLUMN] [--max-width <integer>] [--
print-empty] [--noindent] [--quote
{all,minimal,none,nonnumeric}] [--request-format {json}] [-D] [-F FIELD] [-
P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]

List RBAC policies that belong to a given tenant.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
   Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}

Sorts the list in the specified direction. You can repeat this option.

10.3.196. neutron rbac-show


RBAC_POLICY

Show information of a given RBAC policy.

Positional arguments:

RBAC_POLICY

ID of rbac_policy to look up.

Optional arguments:

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

-D, --show-details

Show detailed information.

-F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

10.3.197. neutron rbac-update

usage: neutron rbac-update [-h] [---request-format {json}]

[---target-tenant TARGET_TENANT]

RBAC_POLICY

Update RBAC policy for given tenant.

Positional arguments:

RBAC_POLICY

ID of rbac_policy to update.
Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--target-tenant TARGET_TENANT
    ID of the tenant to which the RBAC policy will be enforced.

10.3.198. neutron router-create

usage: neutron router-create [-h] [-f {html, json, shell, table, value, yaml}]
    [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent] [-prefix PREFIX]
    [--request-format {json}] [--tenant-id TENANT_ID]
    [--admin-state-down] [--description DESCRIPTION]
    [--flavor FLAVOR] [--distributed {True, False}]
    [--ha {True, False}]
    [--availability-zone-hint AVAILABILITY_ZONE]

Create a router for a given tenant.

Positional arguments:

NAME
    Name of the router to be created.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
    The owner tenant ID.

--admin-state-down
    Set admin state up to false.
--description DESCRIPTION
    Description of router.

--flavor FLAVOR
    ID or name of flavor.

--distributed {True, False}
    Create a distributed router.

--ha {True, False}
    Create a highly available router.

--availability-zone-hint AVAILABILITY_ZONE
    Availability Zone for the router (requires availability zone extension, this option can be repeated).

10.3.199. neutron router-delete

usage: neutron router-delete [-h] [--request-format {json}]
    ROUTER [ROUTER ...]

Delete a given router.

Positional arguments:

ROUTER
    ID(s) or name(s) of router to delete.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.200. neutron router-gateway-clear

usage: neutron router-gateway-clear [-h] [--request-format {json}]
    ROUTER

Remove an external network gateway from a router.

Positional arguments:

ROUTER
    ID or name of the router.

Optional arguments:
-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

10.3.201. neutron router-gateway-set

usage: neutron router-gateway-set [-h] [--request-format {json}]
                              [--enable-snat] [--disable-snat]
                              [--fixed-ip
    subnet_id=SUBNET,ip_address=IP_ADDR]
ROUTER EXTERNAL-NETWORK

Set the external network gateway for a router.

Positional arguments:

ROUTER
    ID or name of the router.

EXTERNAL-NETWORK
    ID or name or the external network for the gateway.

Optional arguments:

- h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--enable-snat
    Enable source NAT on the router gateway.

--disable-snat
    Disable source NAT on the router gateway.

--fixed-ip
    subnet_id=SUBNET,ip_address=IP_ADDR Desired IP and/or subnet on external network:
    subnet_id=<name_or_id>,ip_address=<ip>. You can specify both of subnet_id and
    ip_address or specify one of them as well. You can repeat this option.

10.3.202. neutron router-interface-add

usage: neutron router-interface-add [-h] [--request-format {json}]
                                    ROUTER INTERFACE

Add an internal network interface to a router.
Positional arguments:

ROUTER
ID or name of the router.

INTERFACE
The format is "SUBNET|subnet=SUBNET|port=PORT". Either a subnet or port must be specified. Both ID and name are accepted as SUBNET or PORT. Note that "subnet=" can be omitted when specifying a subnet.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.203. neutron router-interface-delete

usage: neutron router-interface-delete [-h] [--request-format {json}] ROUTER INTERFACE

Remove an internal network interface from a router.

Positional arguments:

ROUTER
ID or name of the router.

INTERFACE
The format is "SUBNET|subnet=SUBNET|port=PORT". Either a subnet or port must be specified. Both ID and name are accepted as SUBNET or PORT. Note that "subnet=" can be omitted when specifying a subnet.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.204. neutron router-list

usage: neutron router-list [-h] [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [--max-width <integer>] [--print-empty] [--noindent]
List routers that belong to a given tenant.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.205. neutron router-list-on-l3-agent

usage: neutron router-list-on-l3-agent [-h] [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [-max-width <integer>] [-D] [-F FIELD] [-quote {all,minimal,none,nonnumeric}] [-request-format {json}] [-F FIELD] L3_AGENT

List the routers on a L3 agent.

Positional arguments:
L3_AGENT
   ID of the L3 agent to query.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

10.3.206. neutron router-port-list

   usage: neutron router-port-list [-h] [-f {csv,html,json,table,value,yaml}]
   [-c COLUMN] [--max-width <integer>] [--print-empty] [--noindent]
   [--quote {all,minimal,none,nonnumeric}]
   [--request-format {json}] [-D] [-F FIELD]
   [-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]
   ROUTER

List ports that belong to a given tenant, with specified router.

Positional arguments:

ROUTER
   ID or name of the router to look up.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.
-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.207. neutron router-show


Show information of a given router.

Positional arguments:

ROUTER
ID or name of router to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.208. neutron router-update

usage: neutron router-update [-h] [--request-format {json}] [--name NAME] [--description DESCRIPTION]
Update router’s information.

**Positional arguments:**

**ROUTER**

ID or name of router to update.

**Optional arguments:**

-h, --help

show this help message and exit

--request-format {json}

DEPRECATED! Only JSON request format is supported.

--name NAME

Updated name of the router.

--description DESCRIPTION

Description of router.

--admin-state-up {True,False}

Specify the administrative state of the router (True means “Up”).

--distributed {True,False}

True means this router should operate in distributed mode.

--route

destination=CIDR,nexthop=IP_ADDR Route to associate with the router. You can repeat this option.

--no-routes

Remove routes associated with the router.

### 10.3.209. neutron security-group-create

usage: neutron security-group-create [-h]

[-f {html,json,shell,table,value,yaml}]

[-c COLUMN] [-max-width <integer>]

[--print-empty] [--noindent]

[--prefix PREFIX]}
Create a security group.

**Positional arguments:**

**NAME**
Name of the security group to be created.

**Optional arguments:**

- `-h, --help`
  show this help message and exit

- `--request-format {json}
  DEPRECATED! Only JSON request format is supported.`

- `--tenant-id TENANT_ID`
  The owner tenant ID.

- `--description DESCRIPTION`
  Description of the security group to be created.

**10.3.210. neutron security-group-delete**

```bash
usage: neutron security-group-delete [-h] [--request-format {json}]
                                SECURITY_GROUP [SECURITY_GROUP
...
```

Delete a given security group.

**Positional arguments:**

**SECURITY_GROUP**
ID(s) or name(s) of security_group to delete.

**Optional arguments:**

- `-h, --help`
  show this help message and exit

- `--request-format {json}
  DEPRECATED! Only JSON request format is supported.`

**10.3.211. neutron security-group-list**

List security groups that belong to a given tenant.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

- **-P SIZE, --page-size SIZE**
  Specify retrieve unit of each request, then split one request to several requests.

- **--sort-key FIELD**
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

- **--sort-dir {asc,desc}**
  Sorts the list in the specified direction. You can repeat this option.

10.3.212. neutron security-group-rule-create

Create a security group rule.

Positional arguments:

SECURITY_GROUP
ID or name of the security group to which the rule is added.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--description DESCRIPTION
Description of security group rule.

--direction {ingress, egress}
Direction of traffic: ingress/egress.

--ethertype ETHERTYPE
IPv4/IPv6

--protocol PROTOCOL
Protocol of packet. Allowed values are [icmp, icmpv6, tcp, udp] and integer representations [0-255].

--port-range-min PORT_RANGE_MIN
Starting port range. For ICMP it is type.
--port-range-max PORT_RANGE_MAX
Ending port range. For ICMP it is code.

--remote-ip-prefix REMOTE_IP_PREFIX
CIDR to match on.

--remote-group-id REMOTE_GROUP
ID or name of the remote security group to which the rule is applied.

10.3.213. neutron security-group-rule-delete

usage: neutron security-group-rule-delete [-h] [--request-format {json}]
SECURITY_GROUP_RULE
[SECURITY_GROUP_RULE ...]

Delete a given security group rule.

Positional arguments:

SECURITY_GROUP_RULE
ID(s) of security_group_rule to delete.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.214. neutron security-group-rule-list

usage: neutron security-group-rule-list [-h]
[f
{csv,html,json,table,value,yaml}]
<integer>]
[colum
[all,minimal,none,nonnumeric}]
[-D]

List security group rules that belong to a given tenant.

Optional arguments:
-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.

-F FIELD, --field FIELD
  Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
  Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
  Sorts the list in the specified direction. You can repeat this option.

--no-nameconv
  Do not convert security group ID to its name.

10.3.215. neutron security-group-rule-show

usage: neutron security-group-rule-show [-h]
  [-f {html, json, shell, table, value, yaml}]
  [-c COLUMN] [-max-width <integer>]
  [-p] [-P SIZE] [-D]
  [-F FIELD]
  SECURITY_GROUP_RULE

Show information of a given security group rule.

Positional arguments:

  SECURITY_GROUP_RULE
    ID of security_group_rule to look up.

Optional arguments:
-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

10.3.216. neutron security-group-show

usage: neutron security-group-show [-h]
   [-f {html, json, shell, table, value, yaml}]
   [-c COLUMN] [-m max-width]
   [-p print-empty] [-n noindent]
   [-x prefix PREFIX] [--request-format {json}]
   [-D] [-F FIELD]
   SECURITY_GROUP

Show information of a given security group.

Positional arguments:

SECURITY_GROUP
   ID or name of security_group to look up.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

10.3.217. neutron security-group-update
usage: neutron security-group-update [-h] [--request-format {json}] [--name NAME] [--description DESCRIPTION]

Update a given security group.

Positional arguments:

SECURITY_GROUP
ID or name of security_group to update.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--name NAME
Updated name of the security group.

--description DESCRIPTION
Updated description of the security group.

10.3.218. neutron service-provider-list

usage: neutron service-provider-list [-h] [-f {csv,html,json,table,value,yaml}] [-c COLUMN] [-max-width <integer>] [-D]
 [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]

List service providers.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.
-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
   Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
   Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
   Sorts the list in the specified direction. You can repeat this option.

10.3.219. neutron subnet-create


Create a subnet for a given tenant.

Positional arguments:

NETWORK
   Network ID or name this subnet belongs to.
**CIDR**

CIDR of subnet to create.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **--tenant-id TENANT_ID**
  The owner tenant ID.

- **--name NAME**
  Name of this subnet.

- **--description DESCRIPTION**
  Description of this subnet.

- **--gateway GATEWAY_IP**
  Gateway IP of this subnet.

- **--no-gateway**
  Do not configure a gateway for this subnet.

- **--allocation-pool**
  start=IP_ADDR,end=IP_ADDR Allocation pool IP addresses for this subnet (This option can be repeated).

- **--host-route**
  destination=CIDR,nexthop=IP_ADDR Additional route (This option can be repeated).

- **--dns-nameserver DNS_NAMESERVER**
  DNS name server for this subnet (This option can be repeated).

- **--disable-dhcp**
  Disable DHCP for this subnet.

- **--enable-dhcp**
  Enable DHCP for this subnet.

- **--ip-version {4,6} IP**
  version to use, default is 4. Note that when subnetpool is specified, IP version is determined from the subnetpool and this option is ignored.

- **--ipv6-ra-mode {dhcpv6-stateful, dhcpv6-stateless, slaac}**
  IPv6 RA (Router Advertisement) mode.
--ipv6-address-mode {dhcpv6-stateful, dhcpv6-stateless, slaac}
IPv6 address mode.

--subnetpool SUBNETPOOL
ID or name of subnetpool from which this subnet will obtain a CIDR.

--use-default-subnetpool
Use default subnetpool for ip_version, if it exists.

--prefixlen PREFIX_LENGTH
Prefix length for subnet allocation from subnetpool.

--segment SEGMENT
ID of segment with which this subnet will be associated.

10.3.220. neutron subnet-delete

usage: neutron subnet-delete [-h] [--request-format {json}]
SUBNET [SUBNET ...]

Delete a given subnet.

Positional arguments:

SUBNET
ID(s) or name(s) of subnet to delete.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.221. neutron subnet-list

usage: neutron subnet-list [-h] [-f {csv,html,json,table,value,yaml}]
[-c COLUMN] [--max-width <integer>] [--print-empty] [-P SIZE]
[--noindent] [--quote {all,minimal,none,nonnumeric}] [--request-format {json}] [-D] [-F FIELD] [-k FIELD] [--sort-key FIELD] [--sort-dir {asc,desc}]

List subnets that belong to a given tenant.

Optional arguments:
-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.

-F FIELD, --field FIELD
  Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
  Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
  Sorts the list in the specified direction. You can repeat this option.

10.3.222. neutron subnet-show


Show information of a given subnet.

Positional arguments:

SUBNET
  ID or name of subnet to look up.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.
-F FIELD, --field FIELD
    Specify the field(s) to be returned by server. You can repeat this option.

10.3.223. neutron subnet-update

usage: neutron subnet-update [-h] [--request-format {json}] [--name NAME]
    [--description DESCRIPTION]
    [--gateway GATEWAY_IP | --no-gateway]
    [--allocation-pool start=IP_ADDR,end=IP_ADDR]
    [--host-route destination=CIDR,nexthop=IP_ADDR]
    [--dns-nameserver DNS_NAMESERVER]
    [--disable-dhcp] [--enable-dhcp]
SUBNET

Update subnet's information.

Positional arguments:

SUBNET
    ID or name of subnet to update.

Optional arguments:

-h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--name NAME
    Name of this subnet.

--description DESCRIPTION
    Description of this subnet.

--gateway GATEWAY_IP
    Gateway IP of this subnet.

--no-gateway
    Do not configure a gateway for this subnet.

--allocation-pool
    start=IP_ADDR,end=IP_ADDR Allocation pool IP addresses for this subnet (This option can be repeated).

--host-route
destination=CIDR,nexthop=IP_ADDR Additional route (This option can be repeated).

--dns-nameserver DNS_NAMESERVER
DNS name server for this subnet (This option can be repeated).

--disable-dhcp
Disable DHCP for this subnet.

--enable-dhcp
Enable DHCP for this subnet.

10.3.224. neutron subnetpool-create


Create a subnetpool for a given tenant.

Positional arguments:

NAME
Name of the subnetpool to be created.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--description DESCRIPTION
Description of subnetpool.

--min-prefixlen MIN_PREFIXLEN
Subnetpool minimum prefix length.

--max-prefixlen MAX_PREFIXLEN
Subnetpool maximum prefix length.

--default-prefixlen DEFAULT_PREFIXLEN
Subnetpool default prefix length.

--pool-prefix PREFIXES
Subnetpool prefixes (This option can be repeated).

--is-default {True,False}
Specify whether this should be the default subnetpool (True meaning default).

--shared
Set the subnetpool as shared.

--address-scope ADDRSCOPE
ID or name of the address scope with which the subnetpool is associated. Prefixes must be unique across address scopes.

10.3.225. neutron subnetpool-delete

usage: neutron subnetpool-delete [-h] [--request-format {json}]
                     SUBNETPOOL [SUBNETPOOL ...]

Delete a given subnetpool.

Positional arguments:

SUBNETPOOL
ID(s) or name(s) of subnetpool to delete.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

10.3.226. neutron subnetpool-list

usage: neutron subnetpool-list [-h] [-f {csv,html,json,table,value,yaml}]
List subnetpools that belong to a given tenant.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.

-F FIELD, --field FIELD
  Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
  Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
  Sorts the list in the specified direction. You can repeat this option.

10.3.227. neutron subnetpool-show

usage: neutron subnetpool-show [-h] [-f {html, json, shell, table, value, yaml}]
  [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent] [-quote [all, minimal, none, nonnumeric]]
  [-request-format {json}] [-D] [-F FIELD]
  [-P SIZE] [-sort-key FIELD]
  [-sort-dir {asc,desc}]

Show information of a given subnetpool.

Positional arguments:
SUBNETPOOL

ID or name of subnetpool to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.228. neutron subnetpool-update

usage: neutron subnetpool-update [-h] [--request-format {json}]
[--description DESCRIPTION]
[--min-prefixlen MIN_PREFIXLEN]
[--max-prefixlen MAX_PREFIXLEN]
[--default-prefixlen DEFAULT_PREFIXLEN]
[--pool-prefix PREFIXES]
[--is-default {True, False}] [--name NAME]
[--address-scope ADDRSOCAPE | --no-address-scope]

Update subnetpool's information.

Positional arguments:

SUBNETPOOL
ID or name of subnetpool to update.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--description DESCRIPTION
Description of subnetpool.
--min-prefixlen MIN_PREFIXLEN
  Subnetpool minimum prefix length.

--max-prefixlen MAX_PREFIXLEN
  Subnetpool maximum prefix length.

--default-prefixlen DEFAULT_PREFIXLEN
  Subnetpool default prefix length.

--pool-prefix PREFIXES
  Subnetpool prefixes (This option can be repeated).

--is-default {True, False}
  Specify whether this should be the default subnetpool (True meaning default).

--name NAME
  Updated name of the subnetpool.

--address-scope ADDRSCOPE
  ID or name of the address scope with which the subnetpool is associated. Prefixes must be
  unique across address scopes.

--no-address-scope
  Detach subnetpool from the address scope.

10.3.229. neutron tag-add

usage: neutron tag-add [-h] [--request-format {json}] --resource-type
  {network} --resource RESOURCE --tag TAG

Add a tag into the resource.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--resource-type {network}
  Resource Type.

--resource RESOURCE
  Resource name or ID.

--tag TAG
  Tag to be added.
10.3.230. neutron tag-remove

usage: neutron tag-remove [-h] [--request-format {json}] --resource-type {network} --resource RESOURCE [--all | --tag TAG]

Remove a tag on the resource.

Optional arguments:

- -h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--resource-type {network}
  Resource Type.

--resource RESOURCE
  Resource name or ID.

--all
  Remove all tags on the resource.

--tag TAG
  Tag to be removed.

10.3.231. neutron tag-replace

usage: neutron tag-replace [-h] [--request-format {json}] --resource-type {network} --resource RESOURCE --tag TAG

Replace all tags on the resource.

Optional arguments:

- -h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--resource-type {network}
  Resource Type.

--resource RESOURCE
10.3.232. neutron vpn-endpoint-group-create

Create a VPN endpoint group.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  
  DEPRECATED! Only JSON request format is supported.

- **--tenant-id TENANT_ID**
  The owner tenant ID.

- **--name NAME**
  Set a name for the endpoint group.

- **--description DESCRIPTION**
  Set a description for the endpoint group.

- **--type TYPE**
  Type of endpoints in group (e.g. subnet, cidr, vlan).

- **--value ENDPOINTS**
  Endpoint(s) for the group. Must all be of the same type.
Delete a given VPN endpoint group.

**Positional arguments:**

**ENDPOINT_GROUP**

ID(s) or name(s) of endpoint_group to delete.

**Optional arguments:**

- **-h, --help**
  
  show this help message and exit

- **--request-format {json}**
  
  DEPRECATED! Only JSON request format is supported.

---

### 10.3.234. neutron vpn-endpoint-group-list

List VPN endpoint groups that belong to a given tenant.

**Optional arguments:**

- **-h, --help**
  
  show this help message and exit

- **--request-format {json}**
  
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  
  Show detailed information.

- **-F FIELD, --field FIELD**
  
  Specify the field(s) to be returned by server. You can repeat this option.
-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
Sorts the list in the specified direction. You can repeat this option.

10.3.235. neutron vpn-endpoint-group-show

usage: neutron vpn-endpoint-group-show [-h]
     [-f {html, json, shell, table, value, yaml}]
     [-c COLUMN] [-m max-width]
     [-p COLUMN] [-w MAX-WIDTH]
     [-p COLUMN] [-w MAX-WIDTH]
     [-F FIELD]
     ENDPOINT_GROUP

Show a specific VPN endpoint group.

Positional arguments:

ENDPOINT_GROUP
ID or name of endpoint_group to look up.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

-D, --show-details
Show detailed information.

-F FIELD, --field FIELD
Specify the field(s) to be returned by server. You can repeat this option.

10.3.236. neutron vpn-endpoint-group-update
usage: neutron vpn-endpoint-group-update [-h] [--request-format {json}]
        [--name NAME]
        [--description DESCRIPTION]
        ENDPOINT_GROUP

Update a given VPN endpoint group.

Positional arguments:

ENDPOINT_GROUP
    ID or name of endpoint_group to update.

Optional arguments:

- h, --help
    show this help message and exit

--request-format {json}
    DEPRECATED! Only JSON request format is supported.

--name NAME
    Set a name for the endpoint group.

--description DESCRIPTION
    Set a description for the endpoint group.

10.3.237. neutron vpn-ikepolicy-create

usage: neutron vpn-ikepolicy-create [-h]
                                [-f {html,json,shell,table,value,yaml}]
                                [-c COLUMN] [-max-width <integer>]
                                [-print-empty] [-noindent]
                                [-prefix PREFIX]
                                [-request-format {json}]
                                [-tenant-id TENANT_ID]
                                [-description DESCRIPTION]
                                [-auth-algorithm {sha1,sha256,sha384,sha512}]
                                [-encryption-algorithm]
                                [-phase1-negotiation-mode]
                                [-ike-version {v1,v2}]
                                [-pfs PFS]
                                [-lifetime units=UNITS,value=VALUE]

Create an IKE policy.
Positional arguments:

NAME
   Name of the IKE policy.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
   The owner tenant ID.

--description DESCRIPTION
   Description of the IKE policy.

--auth-algorithm {sha1,sha256,sha384,sha512}
   Authentication algorithm, default:sha1.

--encryption-algorithm ENCRYPTION_ALGORITHM
   Encryption algorithm, default:aes-128.

--phase1-negotiation-mode {main}
   IKE Phase1 negotiation mode, default:main.

--ike-version {v1,v2}
   IKE version for the policy, default:v1.

--pfs PFS
   Perfect Forward Secrecy, default:group5.

--lifetime
   units=UNITS,value=VALUE IKE lifetime attributes. 'units'-seconds, default:seconds. 'value'-non negative integer, default:3600.

10.3.238. neutron vpn-ikepolicy-delete

   usage: neutron vpn-ikepolicy-delete [-h] [--request-format {json}] IKEPOLICY [IKEPOLICY ...]

Delete a given IKE policy.

Positional arguments:

IKEPOLICY
ID(s) or name(s) of IKE policy to delete.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

10.3.239. neutron vpn-ikepolicy-list

```
usage: neutron vpn-ikepolicy-list [-h] [-f {csv,html,json,table, value, yaml}]
                                   [-c COLUMN] [--max-width <integer>]
                                   [--print-empty] [--noindent]
                                   [--quote {all, minimal, none, nonnumeric}]
                                   [-D] [-F FIELD]
                                   [-P SIZE] [--sort-key FIELD]
                                   [--sort-dir {asc, desc}]
```

List IKE policies that belong to a tenant.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

-D, --show-details
  Show detailed information.

-F FIELD, --field FIELD
  Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
  Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
  Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc, desc}
  Sorts the list in the specified direction. You can repeat this option.
10.3.240. neutron vpn-ikepolicy-show

```
usage: neutron vpn-ikepolicy-show [-h] [-f {html, json, shell, table, value, yaml}]
                           [-c COLUMN] [--max-width <integer>]  
                           [--print-empty] [--noindent]
                           [--prefix PREFIX] [--request-format {json}]
                           [-D] [-F FIELD]
IKEPOLICY
```

Show information of a given IKE policy.

**Positional arguments:**

IKEPOLICY

ID or name of IKE policy to look up.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  DEPRECATED! Only JSON request format is supported.

- **-D, --show-details**
  Show detailed information.

- **-F FIELD, --field FIELD**
  Specify the field(s) to be returned by server. You can repeat this option.

10.3.241. neutron vpn-ikepolicy-update

```
usage: neutron vpn-ikepolicy-update [-h] [--request-format {json}]
                           [--name NAME] [--description DESCRIPTION]
                           [--auth-algorithm {sha1, sha256, sha384, sha512}]
                           [--encryption-algorithm]
                           [--phase1-negotiation-mode {main}]
                           [--ike-version {v1, v2}] [--pfs PFS]
                           [units=UNITS, value=VALUE]
IKEPOLICY
```

Update a given IKE policy.

**Positional arguments:**
IKEPOLICY

ID or name of IKE policy to update.

Optional arguments:

-h, --help
  show this help message and exit

--request-format {json}
  DEPRECATED! Only JSON request format is supported.

--name NAME
  Updated name of the IKE policy.

--description DESCRIPTION
  Description of the IKE policy.

--auth-algorithm {sha1,sha256,sha384,sha512}
  Authentication algorithm, default:sha1.

--encryption-algorithm ENCRYPTION_ALGORITHM
  Encryption algorithm, default:aes-128.

--phase1-negotiation-mode {main}
  IKE Phase1 negotiation mode, default:main.

--ike-version {v1,v2}
  IKE version for the policy, default:v1.

--pfs PFS
  Perfect Forward Secrecy, default:group5.

--lifetime
  units=UNITS,value=VALUE IKE lifetime attributes. 'units'-seconds, default:seconds. 'value'-non negative integer, default:3600.

10.3.242. neutron vpn-ipsecpolicy-create

usage: neutron vpn-ipsecpolicy-create [-h]
    [-f]
    {html, json, shell, table, value, yaml}] [-c COLUMN] [--max-width
    <integer>]
    [--print-empty] [--noindent]
    [--prefix PREFIX]
    [--request-format {json}]
    [--tenant-id TENANT_ID]
Create an IPsec policy.

Positional arguments:

NAME
Name of the IPsec policy.

Optional arguments:

-h, --help
show this help message and exit

--request-format {json}
DEPRECATED! Only JSON request format is supported.

--tenant-id TENANT_ID
The owner tenant ID.

--auth-algorithm {sha1,sha256,sha384,sha512}
Authentication algorithm for IPsec policy, default:sha1.

--description DESCRIPTION
Description of the IPsec policy.

--encapsulation-mode {tunnel,transport}
Encapsulation mode for IPsec policy, default:tunnel.

--encryption-algorithm ENCRYPTION_ALGORITHM
Encryption algorithm for IPsec policy, default:aes-128.

--lifetime
units=UNITS,value=VALUE IPsec lifetime attributes. 'units'-seconds, default:seconds. 'value'-non negative integer, default:3600.

--pfs PFS
Perfect Forward Secrecy for IPsec policy, default:group5.
--transform-protocol {esp, ah, ah-esp}
Transform protocol for IPsec policy, default: esp.

10.3.243. neutron vpn-ipsecpolicy-delete

usage: neutron vpn-ipsecpolicy-delete [-h] [--request-format {json}]
       IPSECPOLICY [IPSECPOLICY ...]

Delete a given IPsec policy.

Positional arguments:

IPSECPOLICY
   ID(s) or name(s) of IPsec policy to delete.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.244. neutron vpn-ipsecpolicy-list

usage: neutron vpn-ipsecpolicy-list [-h] [-f {csv, html, json, table, value, yaml}]
   [-c COLUMN] [--max-width <integer>]
   [-p empty] [-n noindent]
   [-q all, minimal, none, nonnumeric]
   [-r format {json}]
   [-D] [-F FIELD]
   [-P SIZE] [-s key FIELD]
   [-s dir {asc, desc}]

List IPsec policies that belong to a given tenant connection.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.
-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
   Specify retrieve unit of each request, then split one request to several requests.

--sort-key FIELD
   Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.

--sort-dir {asc,desc}
   Sorts the list in the specified direction. You can repeat this option.

10.3.245. neutron vpn-ipsecpolicy-show

usage: neutron vpn-ipsecpolicy-show [-h]
       [-f {html, json, shell, table, value, yaml}]
       [-c COLUMN] [--max-width <integer>]
       [--print-empty] [--noindent]
       [--prefix PREFIX]
       [--request-format {json}]
       [-D] [-F FIELD]
       IPSECPOLICY

Show information of a given IPsec policy.

Positional arguments:

IPSECPOLICY
   ID or name of IPsec policy to look up.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

10.3.246. neutron vpn-ipsecpolicy-update
usage: neutron vpn-ipsecpolicy-update [-h] [--request-format {json}]
    [--name NAME]
    [--auth-algorithm {sha1,sha256,sha384,sha512}]
    [--description DESCRIPTION]
    [--encapsulation-mode {tunnel,transport}]
    [--encryption-algorithm ENCRYPTION_ALGORITHM]
    [--lifetime units=UNITS,value=VALUE]
    [--pfs PFS]
    [--transform-protocol {esp,ah,ah-esp}]

Update a given IPsec policy.

**Positional arguments:**

**IPSECPOLICY**

ID or name of IPsec policy to update.

**Optional arguments:**

- **-h, --help**
  
  show this help message and exit

- **--request-format {json}**
  
  DEPRECATED! Only JSON request format is supported.

- **--name NAME**
  
  Updated name of the IPsec policy.

- **--auth-algorithm {sha1,sha256,sha384,sha512}**
  
  Authentication algorithm for IPsec policy, default:sha1.

- **--description DESCRIPTION**
  
  Description of the IPsec policy.

- **--encapsulation-mode {tunnel,transport}**
  
  Encapsulation mode for IPsec policy, default:tunnel.

- **--encryption-algorithm ENCRYPTION_ALGORITHM**
  
  Encryption algorithm for IPsec policy, default:aes-128.

- **--lifetime**
  
  units=UNITS,value=VALUE IPsec lifetime attributes. 'units'-seconds, default:seconds. 'value'-non negative integer, default:3600.
--pfs PFS
Perfect forward secrecy for IPsec policy, default: group5.

--transform-protocol {esp, ah, ah-esp}
Transform protocol for IPsec policy, default: esp.

10.3.247. neutron vpn-service-create

```
usage: neutron vpn-service-create [-h] [-f {html, json, shell, table, value, yaml}]
       [-c COLUMN] [-max-width <integer>] [-print-empty] [-noindent]
       [-prefix PREFIX] [-request-format {json}]

Create a VPN service.

Positional arguments:

ROUTER
    Router unique identifier for the VPN service.

SUBNET
[DEPRECATED in Mitaka] Unique identifier for the local private subnet.

Optional arguments:

    -h, --help
    show this help message and exit

    --request-format {json}
    DEPRECATED! Only JSON request format is supported.

    --tenant-id TENANT_ID
    The owner tenant ID.

    --admin-state-down
    Set admin state up to false.

    --name NAME
    Name for the VPN service.

    --description DESCRIPTION
    Description for the VPN service.
```
10.3.248. neutron vpn-service-delete

usage: neutron vpn-service-delete [-h] [--request-format {json}] VPNSERVICE [VPNSERVICE ...]

Delete a given VPN service.

Positional arguments:

VPNSERVICE
   ID(s) or name(s) of VPN service to delete.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

10.3.249. neutron vpn-service-list

usage: neutron vpn-service-list [-h] [-f {csv,html,json,table,value,yaml}]
   [-c COLUMN] [--max-width <integer>]
   [--print-empty] [--noindent]
   [--quote {all,minimal,none,nonnumeric}]
   [--request-format {json}] [-D] [-F FIELD]
   [-P SIZE] [--sort-key FIELD]
   [--sort-dir {asc,desc}]

List VPN service configurations that belong to a given tenant.

Optional arguments:

-h, --help
   show this help message and exit

--request-format {json}
   DEPRECATED! Only JSON request format is supported.

-D, --show-details
   Show detailed information.

-F FIELD, --field FIELD
   Specify the field(s) to be returned by server. You can repeat this option.

-P SIZE, --page-size SIZE
Specify retrieve unit of each request, then split one request to several requests.

```plaintext
--sort-key FIELD
`Sorts the list by the specified fields in the specified directions. You can repeat this option, but you must specify an equal number of sort_dir and sort_key values. Extra sort_dir options are ignored. Missing sort_dir options use the default asc value.`

--sort-dir {asc,desc}
`Sorts the list in the specified direction. You can repeat this option.`
```

10.3.250. neutron vpn-service-show

```plaintext

Show information of a given VPN service.

Positional arguments:

VPNSERVICE
`ID or name of VPN service to look up.`

Optional arguments:

-h, --help
`show this help message and exit`

--request-format {json}
`DEPRECATED! Only JSON request format is supported.`

-D, --show-details
`Show detailed information.`

-F FIELD, --field FIELD
`Specify the field(s) to be returned by server. You can repeat this option.`
```

10.3.251. neutron vpn-service-update

```plaintext
usage: neutron vpn-service-update [-h] [-request-format {json}] [--name NAME] [--description DESCRIPTION] [--admin-state-up {True, False}]

VPNSERVICE
```


Update a given VPN service.

**Positional arguments:**

**VPNSERVICE**

ID or name of VPN service to update.

**Optional arguments:**

- **-h, --help**
  show this help message and exit

- **--request-format {json}**
  
  **DEPRECATED!** Only JSON request format is supported.

- **--name NAME**
  
  Name for the VPN service.

- **--description DESCRIPTION**
  
  Description for the VPN service.

- **--admin-state-up {True, False}**
  
  Update the admin state for the VPN Service. (True means UP)
CHAPTER 11. NEUTRON-DEBUG COMMAND-LINE CLIENT

The neutron-debug client is an extension to the neutron command-line interface (CLI) for the OpenStack neutron-debug tool.

This chapter documents neutron-debug version 2.3.0.

For help on a specific neutron-debug command, enter:

```
$ neutron-debug help COMMAND
```

11.1. NEUTRON-DEBUG USAGE

 [--os-service-type <os-service-type>]
 [--os-endpoint-type <os-endpoint-type>]
 [--service-type <service-type>]
 [--endpoint-type <endpoint-type>]
 [--os-auth-strategy <auth-strategy>] [--os-cloud <cloud>]
 [--os-auth-url <auth-url>]
 [--os-tenant-name <auth-tenant-name> | --os-project-name <auth-project-name>]
 [--os-tenant-id <auth-tenant-id> | --os-project-id <auth-project-id>]
 [--os-username <auth-username>]
 [--os-user-id <auth-user-id>]
 [--os-user-domain-id <auth-user-domain-id>]
 [--os-user-domain-name <auth-user-domain-name>]
 [--os-project-domain-id <auth-project-domain-id>]
 [--os-project-domain-name <auth-project-domain-name>]
 [--os-cert <certificate>] [--os-cacert <ca-certificate>]
 [--os-key <key>] [--os-password <auth-password>]
 [--os-region-name <auth-region-name>]
 [--os-token <token>] [--http-timeout <seconds>]
 [--os-url <url>] [--insecure] [--config-file CONFIG_FILE]
 <subcommand> ...

11.1.1. Subcommands

**probe-create**
Create probe port - create port and interface within a network namespace.

**probe-list**
List all probes.

**probe-clear**
Clear all probes.
probe-delete
Delete probe - delete port then delete the namespace.

probe-exec
Execute commands in the namespace of the probe.

ping-all
ping-all is an all-in-one command to ping all fixed IPs in a specified network.

11.2. NEUTRON-DEBUG OPTIONAL ARGUMENTS

--version
Show program's version number and exit

-v, --verbose, --debug
Increase verbosity of output and show tracebacks on errors. You can repeat this option.

-q, --quiet
Suppress output except warnings and errors.

-h, --help
Show this help message and exit

-r NUM, --retries NUM
How many times the request to the Neutron server should be retried if it fails.

--os-service-type <os-service-type>
Defaults to env[OS_NETWORK_SERVICE_TYPE] or network.

--os-endpoint-type <os-endpoint-type>
Defaults to env[OS_ENDPOINT_TYPE] or public.

--service-type <service-type>
DEPRECATED! Use --os-service-type.

--endpoint-type <endpoint-type>
DEPRECATED! Use --os-endpoint-type.

--os-auth-strategy <auth-strategy>
DEPRECATED! Only keystone is supported.

os-cloud <cloud>
Defaults to env[OS_CLOUD].

--os-auth-url <auth-url>
Authentication URL, defaults to env[OS_AUTH_URL].
--os-tenant-name <auth-tenant-name>
  Authentication tenant name, defaults to env[OS_TENANT_NAME].

--os-project-name <auth-project-name>
  Another way to specify tenant name. This option is mutually exclusive with --os-tenant-name. Defaults to env[OS_PROJECT_NAME].

--os-tenant-id <auth-tenant-id>
  Authentication tenant ID, defaults to env[OS_TENANT_ID].

--os-project-id <auth-project-id>
  Another way to specify tenant ID. This option is mutually exclusive with --os-tenant-id. Defaults to env[OS_PROJECT_ID].

--os-username <auth-username>
  Authentication username, defaults to env[OS_USERNAME].

--os-user-id <auth-user-id>
  Authentication user ID (Env: OS_USER_ID)

--os-user-domain-id <auth-user-domain-id>
  OpenStack user domain ID. Defaults to env[OS_USER_DOMAIN_ID].

--os-user-domain-name <auth-user-domain-name>
  OpenStack user domain name. Defaults to env[OS_USER_DOMAIN_NAME].

--os-project-domain-id <auth-project-domain-id>
  Defaults to env[OS_PROJECT_DOMAIN_ID].

--os-project-domain-name <auth-project-domain-name>
  Defaults to env[OS_PROJECT_DOMAIN_NAME].

--os-cert <certificate>
  Path of certificate file to use in SSL connection. This file can optionally be prepended with the private key. Defaults to env[OS_CERT].

--os-cacert <ca-certificate>
  Specify a CA bundle file to use in verifying a TLS (https) server certificate. Defaults to env[OS_CACERT].

--os-key <key>
  Path of client key to use in SSL connection. This option is not necessary if your key is prepended to your certificate file. Defaults to env[OS_KEY].

--os-password <auth-password>
  Authentication password, defaults to env[OS_PASSWORD].

--os-region-name <auth-region-name>
Authentication region name, defaults to env[OS_REGION_NAME].

\textbf{--os-token <token>}

Authentication token, defaults to env[OS_TOKEN].

\textbf{--http-timeout <seconds>}

Timeout in seconds to wait for an HTTP response. Defaults to env[OS_NETWORK_TIMEOUT] or None if not specified.

\textbf{--os-url <url>}

Defaults to env[OS_URL]

\textbf{--insecure}

Explicitly allow neutronclient to perform "insecure" SSL (https) requests. The server's certificate will not be verified against any certificate authorities. This option should be used with caution.

\textbf{--config-file CONFIG_FILE}

Config file for interface driver (You may also use l3_agent.ini)

\section*{11.3. NEUTRON-DEBUG PROBE-CREATE COMMAND}

\textbf{usage:} neutron-debug probe-create NET

Create probe port - create port and interface, then place it into the created network namespace.

\subsection*{11.3.1. Positional arguments}

\textbf{NET ID}

ID of the network in which the probe will be created.

\section*{11.4. NEUTRON-DEBUG PROBE-LIST COMMAND}

\textbf{usage:} neutron-debug probe-list

List probes.

\section*{11.5. NEUTRON-DEBUG PROBE-CLEAR COMMAND}

\textbf{usage:} neutron-debug probe-clear

Clear all probes.

\section*{11.6. NEUTRON-DEBUG PROBE-DELETE COMMAND}

\textbf{usage:} neutron-debug probe-delete <port-id>
Remove a probe.

11.6.1. Positional arguments

<port-id>
   ID of the probe to delete.

11.7. NEUTRON-DEBUG PROBE-EXEC COMMAND

usage: neutron-debug probe-exec <port-id> <command>

Execute commands in the namespace of the probe

11.8. NEUTRON-DEBUG PING-ALL COMMAND

usage: neutron-debug ping-all <port-id> --timeout <number>

All-in-one command to ping all fixed IPs in a specified network. A probe creation is not needed for this command. A new probe is created automatically. It will, however, need to be deleted manually when it is no longer needed. When there are multiple networks, the newly created probe will be attached to a random network and thus the ping will take place from within that random network.

11.8.1. Positional arguments

<port-id>
   ID of the port to use.

11.8.2. Optional arguments

--timeout <timeout in seconds>
   Optional ping timeout.

11.9. NEUTRON-DEBUG EXAMPLE

usage: neutron-debug create-probe <NET_ID>

Create a probe namespace within the network identified by NET_ID. The namespace will have the name of qprobe-<UUID of the probe port>

Note

For the following examples to function, the security group rules may need to be modified to allow the SSH (TCP port 22) or ping (ICMP) traffic into network.
usage: neutron-debug probe-exec <probe ID> "ssh <IP of instance>"

SSH to an instance within the network.

usage: neutron-debug ping-all <network ID>

Ping all instances on this network to verify they are responding.

usage: neutron-debug probe-exec <probe_ID> dhcping <VM_MAC address> -s <IP of DHCP server>

Ping the DHCP server for this network using dhcping to verify it is working.
CHAPTER 12. NEUTRON-SANITY-CHECK COMMAND-LINE CLIENT

The neutron-sanity-check client is a tool that checks various sanity about the Networking service.

This chapter documents neutron-sanity-check version 9.0.0.

12.1. NEUTRON-SANITY-CHECK USAGE

```
usage: neutron-sanity-check [-h] [--arp_header_match] [--arp_responder]
    [--config-dir DIR] [--config-file PATH]
    [--debug]
    [[--dhcp_release6] [--dibbler_version]
    [--dnsmasq_version] [--ebtables_installed]
    [--icmpv6_header_match] [--ip6tables_installed]
    [--iproute2_vxlan] [--ipset_installed]
    [--keepalived_ipv6_support]
    [--log-config-append PATH]
    [--log-date-format DATE_FORMAT]
    [--log-dir LOG_DIR] [--log-file PATH]
    [--noarp_header_match] [--nodebug]
    [--nodhcp_release6]
    [--noddibbler_version] [--nodnsmasq_version]
    [--noebtables_installed] [--noicmpv6_header_match] [--noip6tables_installed]
    [--noiproute2_vxlan]
    [--noipset_installed]
    [--nokeepalived_ipv6_support]
    [--nonova_notify]
    [--noovs_contrack] [--noovs_geneve]
    [--noovs_patch] [--noovs_vxlan]
    [--noread_netns] [--nouse-syslog]
    [--nova_notify]
    [--noverbose] [--novf_extended_management]
    [[--novf_management] [--nowatch-log-file]
    [--ovs_contrack] [--ovs_geneve]
    [--ovs_patch]
    [--ovs_vxlan] [--ovsdb_native]
    [--read_netns]
    [--state_path STATE_PATH]
    [--syslog-log-facility]
    [SYSLOG_LOG_FACILITY]
    [--use-syslog] [--verbose] [--version]
    [[--vf_extended_management]
    [--vf_management]
    [--watch-log-file]
```
12.2. NEUTRON-SANITY-CHECK OPTIONAL ARGUMENTS

- **h, --help**
  show this help message and exit

- **--arp_header_match**
  Check for ARP header match support

- **--arp_responder**
  Check for ARP responder support

- **--config-dir DIR**
  Path to a config directory to pull *.conf files from. This file set is sorted, so as to provide a predictable parse order if individual options are over-ridden. The set is parsed after the file(s) specified via previous --config-file, arguments hence over-ridden options in the directory take precedence.

- **--config-file PATH**
  Path to a config file to use. Multiple config files can be specified, with values in later files taking precedence. Dafaults to None.

- **--debug, -d**
  Print debugging output (set logging level to DEBUG instead of default INFO level).

- **--dhcp_release6**
  Check dhcp_release6 installation

- **--dibbler_version**
  Check minimal dibbler version

- **--dnsmasq_version**
  Check minimal dnsmasq version

- **--ebtables_installed**
  Check ebtables installation

- **--icmpv6_header_match**
  Check for ICMPv6 header match support

- **--ip6tables_installed**
  Check ip6tables installation

- **--iproute2_vxlan**
  Check for iproute2 vxlan support

- **--ipset_installed**
Check ipset installation

--keepalived_ipv6_support
Check keepalived IPv6 support

--log-config-append PATH, --log_config PATH
The name of a logging configuration file. This file is appended to any existing logging configuration files. For details about logging configuration files, see the Python logging module documentation. Note that when logging configuration files are used then all logging configuration is set in the configuration file and other logging configuration options are ignored (for example, logging_context_format_string).

--log-date-format DATE_FORMAT
Format string for %(asctime)s in log records. Default: None. This option is ignored if log_config_append is set.

--log-dir LOG_DIR, --logdir LOG_DIR
(Optional) The base directory used for relative log-file paths. This option is ignored if log_config_append is set.

--log-file PATH, --logfile PATH
(Optional) Name of log file to output to. If no default is set, logging will go to stderr as defined by use_stderr. This option is ignored if log_config_append is set.

--noarp_header_match
The inverse of --arp_header_match

--noarp_responder
The inverse of --arp_responder

--nodebug
The inverse of --debug

--nodhcp_release6
The inverse of --dhcp_release6

--nodibbler_version
The inverse of --dibbler_version

--nodnsmasq_version
The inverse of --dnsmasq_version

--noetables_installed
The inverse of --etables_installed

--noicmpv6_header_match
The inverse of --icmpv6_header_match
--noip6tables_installed
   The inverse of --ip6tables_installed

--noiproute2_vxlan
   The inverse of --iproute2_vxlan

--noipset_installed
   The inverse of --ipset_installed

--nokeepalived_ipv6_support
   The inverse of --keepalived_ipv6_support

--nonova_notify
   The inverse of --nova_notify

--noovs_conntrack
   The inverse of --ovs_conntrack

--noovs_geneve
   The inverse of --ovs_geneve

--noovs_patch
   The inverse of --ovs_patch

--noovs_vxlan
   The inverse of --ovs_vxlan

--noovsdb_native
   The inverse of --ovsdb_native

--noread_netns
   The inverse of --read_netns

--nouse-syslog
   The inverse of --use-syslog

--nova_notify
   Check for nova notification support

--noverbose
   The inverse of --verbose

--novf_extended_management
   The inverse of --vf_extended_management

--novf_management
   The inverse of --vf_management
--nowatch-log-file
   The inverse of --watch-log-file

--ovs_geneve
   Check for OVS Geneve support

--ovs_patch
   Check for patch port support

--ovs_vxlan
   Check for OVS vxlan support

--ovsdb_native
   Check ovsdb native interface support

--read_netns
   Check netns permission settings

--state_path STATE_PATH
   Where to store Neutron state files. This directory must be writable by the agent.

--syslog-log-facility SYSLOG_LOG_FACILITY
   Syslog facility to receive log lines. This option is ignored if log_config_append is set.

--use-syslog
   Use syslog for logging. Existing syslog format is DEPRECATED and will be changed later to honor RFC5424. This option is ignored if log_config_append is set.

--verbose, -v
   If set to false, the logging level will be set to WARNING instead of the default INFO level.

--version
   show program's version number and exit

--vf_extended_management
   Check for VF extended management support

--vf_management
   Check for VF management support

--watch-log-file
   Uses logging handler designed to watch file system. When log file is moved or removed this handler will open a new log file with specified path instantaneously. It makes sense only if log_file option is specified and Linux platform is used. This option is ignored if log_config_append is set.
CHAPTER 13. COMPUTE SERVICE (NOVA) COMMAND-LINE CLIENT

The nova client is the command-line interface (CLI) for the Compute service (nova) API and its extensions.

This chapter documents nova version 7.1.0.

For help on a specific nova command, enter:

```
$ nova help COMMAND
```

13.1. NOVA USAGE

            [--os-region-name <region-name>] [--service-type <service-type>]
            [--service-name <service-name>]
            [--os-endpoint-type <endpoint-type>]
            [--os-compute-api-version <compute-api-ver>]
            [--endpoint-override <bypass-url>] [--profile HMAC_KEY]
            [--insecure] [--os-cacert <ca-certificate>]
            [--os-cert <certificate>] [--os-key <key>] [--timeout <seconds>]
            [--os-auth-type <name>] [--os-auth-url OS_AUTH_URL]
            [--os-domain-id OS_DOMAIN_ID] [--os-domain-name OS_DOMAIN_NAME]
            [--os-project-id OS_PROJECT_ID]
            [--os-project-name OS_PROJECT_NAME]
            [--os-project-domain-id OS_PROJECT_DOMAIN_ID]
            [--os-project-domain-name OS_PROJECT_DOMAIN_NAME]
            [--os-trust-id OS_TRUST_ID]
            [--os-default-domain-id OS_DEFAULT_DOMAIN_ID]
            [--os-default-domain-name OS_DEFAULT_DOMAIN_NAME]
            [--os-user-id OS_USER_ID] [--os-username OS_USERNAME]
            [--os-user-domain-id OS_USER_DOMAIN_ID]
            [--os-user-domain-name OS_USER_DOMAIN_NAME]
            [--os-password OS_PASSWORD]
            <subcommand> ...

Subcommands:

add-fixed-ip
    Add new IP address on a network to server.

add-secgroup
    Add a Security Group to a server.

agent-create
    Create new agent build.
agent-delete
  Delete existing agent build.

agent-list
  List all builds.

agent-modify
  Modify existing agent build.

aggregate-add-host
  Add the host to the specified aggregate.

aggregate-create
  Create a new aggregate with the specified details.

aggregate-delete
  Delete the aggregate.

aggregate-list
  Print a list of all aggregates.

aggregate-remove-host
  Remove the specified host from the specified aggregate.

aggregate-set-metadata
  Update the metadata associated with the aggregate.

aggregate-show
  Show details of the specified aggregate.

aggregate-update
  Update the aggregate's name and optionally availability zone.

availability-zone-list
  List all the availability zones.

backup
  Backup a server by creating a 'backup' type snapshot.

boot
  Boot a new server.

cell-capacities
  Get cell capacities for all cells or a given cell.

cell-show
  Show details of a given cell.
clear-password
  Clear the admin password for a server from the metadata server. This action does not actually change the instance server password.

cloudpipe-configure
  Update the VPN IP/port of a cloudpipe instance.

cloudpipe-create
  Create a cloudpipe instance for the given project.

cloudpipe-list
  Print a list of all cloudpipe instances.

console-log
  Get console log output of a server.

delete
  Immediately shut down and delete specified server(s).

diagnostics
  Retrieve server diagnostics.

dns-create
  DEPRECATED: Create a DNS entry for domain, name, and IP.

dns-create-private-domain
  DEPRECATED: Create the specified DNS domain.

dns-create-public-domain
  DEPRECATED: Create the specified DNS domain.

dns-delete
  DEPRECATED: Delete the specified DNS entry.

dns-delete-domain
  DEPRECATED: Delete the specified DNS domain.

dns-domains
  DEPRECATED: Print a list of available dns domains.

dns-list
  DEPRECATED: List current DNS entries for domain and IP or domain and name.

evacuate
  Evacuate server from failed host.

fixed-ip-get
DEPRECATED: Retrieve info on a fixed IP.

fixed-ip-reserve

DEPRECATED: Reserve a fixed IP.

fixed-ip-unreserve

DEPRECATED: Unreserve a fixed IP.

flavor-access-add

Add flavor access for the given tenant.

flavor-access-list

Print access information about the given flavor.

flavor-access-remove

Remove flavor access for the given tenant.

flavor-create

Create a new flavor.

flavor-delete

Delete a specific flavor

flavor-key

Set or unset extra_spec for a flavor.

flavor-list

Print a list of available ‘flavors’ (sizes of servers).

flavor-show

Show details about the given flavor.

floating-ip-associate

Associate a floating IP address to a server.

floating-ip-bulk-create

DEPRECATED: Bulk create floating IPs by range (nova-network only).

floating-ip-bulk-delete

DEPRECATED: Bulk delete floating IPs by range (nova-network only).

floating-ip-bulk-list

DEPRECATED: List all floating IPs (nova-network only).

floating-ip-create

DEPRECATED: Allocate a floating IP for the current tenant.

floating-ip-delete
DEPRECATED: De-allocate a floating IP.

`floating-ip-disassociate`
Disassociate a floating IP address from a server.

`floating-ip-list`
DEPRECATED: List floating IPs.

`floating-ip-pool-list`
DEPRECATED: List all floating IP pools.

`force-delete`
Force delete a server.

`get-mks-console`
Get an MKS console to a server. (Supported by API versions ‘2.8’ - ‘2.latest’) [hint: use ‘--os-compute-api-version’ flag to show help message for proper version]

`get-password`
Get the admin password for a server. This operation calls the metadata service to query metadata information and does not read password information from the server itself.

`get-rdp-console`
Get a rdp console to a server.

`get-serial-console`
Get a serial console to a server.

`get-spice-console`
Get a spice console to a server.

`get-vnc-console`
Get a vnc console to a server.

`host-action`
Perform a power action on a host.

`host-describe`
Describe a specific host.

`host-evacuate`
Evacuate all instances from failed host.

`host-evacuate-live`
Live migrate all instances of the specified host to other available hosts.

`host-list`
List all hosts by service.

**host-meta**
Set or Delete metadata on all instances of a host.

**host-servers-migrate**
Cold migrate all instances off the specified host to other available hosts.

**host-update**
Update host settings.

**hypervisor-list**
List hypervisors. (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**hypervisor-servers**
List servers belonging to specific hypervisors.

**hypervisor-show**
Display the details of the specified hypervisor.

**hypervisor-stats**
Get hypervisor statistics over all compute nodes.

**hypervisor-uptime**
Display the uptime of the specified hypervisor.

**image-create**
Create a new image by taking a snapshot of a running server.

**image-delete**
DEPRECATED: Delete specified image(s).

**image-list**
DEPRECATED: Print a list of available images to boot from.

**image-meta**
DEPRECATED: Set or delete metadata on an image.

**image-show**
DEPRECATED: Show details about the given image.

**instance-action**
Show an action.

**instance-action-list**
List actions on a server.
interface-attach
    Attach a network interface to a server.

interface-detach
    Detach a network interface from a server.

interface-list
    List interfaces attached to a server.

keypair-add
    Create a new key pair for use with servers.

keypair-delete
    Delete keypair given by its name. (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

keypair-list
    Print a list of keypairs for a user (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

keypair-show
    Show details about the given keypair. (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

limits
    Print rate and absolute limits.

list
    List active servers.

list-extensions
    List all the os-api extensions that are available.

list-secgroup
    List Security Group(s) of a server.

live-migration
    Migrate running server to a new machine.

live-migration-abort
    Abort an on-going live migration. (Supported by API versions '2.24' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

live-migration-force-complete
    Force on-going live migration to complete. (Supported by API versions '2.22' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

lock
Lock a server. A normal (non-admin) user will not be able to execute actions on a locked server.

**meta**
Set or delete metadata on a server.

**migrate**
Migrate a server. The new host will be selected by the scheduler.

**migration-list**
Print a list of migrations.

**network-associate-host**
**DEPRECATED**: Associate host with network.

**network-associate-project**
**DEPRECATED**: Associate project with network.

**network-create**
**DEPRECATED**: Create a network.

**network-delete**
**DEPRECATED**: Delete network by label or id.

**network-disassociate**
**DEPRECATED**: Disassociate host and/or project from the given network.

**network-list**
**DEPRECATED**: Print a list of available networks.

**network-show**
**DEPRECATED**: Show details about the given network.

**pause**
Pause a server.

**quota-class-show**
List the quotas for a quota class.

**quota-class-update**
Update the quotas for a quota class. (Supported by API versions '2.0' - '2.latest') [hint: use '-os-compute-api-version' flag to show help message for proper version]

**quota-defaults**
List the default quotas for a tenant.

**quota-delete**
Delete quota for a tenant/user so their quota will Revert back to default.
**quota-show**
List the quotas for a tenant/user.

**quota-update**
Update the quotas for a tenant/user. (Supported by API versions '2.0' - '2.latest') [hint: use '-os-compute-api-version' flag to show help message for proper version]

**reboot**
Reboot a server.

**rebuild**
Shutdown, re-image, and re-boot a server.

**refresh-network**
Refresh server network information.

**remove-fixed-ip**
Remove an IP address from a server.

**remove-secgroup**
Remove a Security Group from a server.

**rescue**
Reboots a server into rescue mode, which starts the machine from either the initial image or a specified image, attaching the current boot disk as secondary.

**reset-network**
Reset network of a server.

**reset-state**
Reset the state of a server.

**resize**
Resize a server.

**resize-confirm**
Confirm a previous resize.

**resize-revert**
Revert a previous resize (and return to the previous VM).

**restore**
Restore a soft-deleted server.

**resume**
Resume a server.

**scrub**
DEPRECATED: Delete networks and security groups associated with a project.

`secgroup-add-default-rule`

DEPRECATED: Add a rule to the set of rules that will be added to the 'default' security group for new tenants (nova-network only).

`secgroup-add-group-rule`

DEPRECATED: Add a source group rule to a security group.

`secgroup-add-rule`

DEPRECATED: Add a rule to a security group.

`secgroup-create`

DEPRECATED: Create a security group.

`secgroup-delete`

DEPRECATED: Delete a security group.

`secgroup-delete-default-rule`

DEPRECATED: Delete a rule from the set of rules that will be added to the 'default' security group for new tenants (nova-network only).

`secgroup-delete-group-rule`

DEPRECATED: Delete a source group rule from a security group.

`secgroup-delete-rule`

DEPRECATED: Delete a rule from a security group.

`secgroup-list`

DEPRECATED: List security groups for the current tenant.

`secgroup-list-default-rules`

DEPRECATED: List rules that will be added to the 'default' security group for new tenants.

`secgroup-list-rules`

DEPRECATED: List rules for a security group.

`secgroup-update`

DEPRECATED: Update a security group.

`server-group-create`

Create a new server group with the specified details.

`server-group-delete`

Delete specific server group(s).

`server-group-get`

Get a specific server group.
server-group-list
Print a list of all server groups.

server-migration-list
Get the migrations list of specified server. (Supported by API versions '2.23' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

server-migration-show
Get the migration of specified server. (Supported by API versions '2.23' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

server-tag-add
Add one or more tags to a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

server-tag-delete
Delete one or more tags from a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

server-tag-delete-all
Delete all tags from a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

server-tag-list
Get list of tags from a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

server-tag-set
Set list of tags to a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

service-delete
Delete the service.

service-disable
Disable the service.

service-enable
Enable the service.

service-force-down
Force service to down. (Supported by API versions '2.11' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

service-list
Show a list of all running services. Filter by host & binary.

set-password
Change the admin password for a server.

**shelve**
Shelve a server.

**shelve-offload**
Remove a shelved server from the compute node.

**show**
Show details about the given server.

**ssh**
SSH into a server.

**start**
Start the server(s).

**stop**
Stop the server(s).

**suspend**
Suspend a server.

**trigger-crash-dump**
Trigger crash dump in an instance. (Supported by API versions '2.17' - '2.latest') [hint: use '-os-compute-api-version' flag to show help message for proper version]

**unlock**
Unlock a server.

**unpause**
Unpause a server.

**unrescue**
Restart the server from normal boot disk again.

**unshelve**
Unshelve a server.

**update**
Update the name or the description for a server.

**usage**
Show usage data for a single tenant.

**usage-list**
List usage data for all tenants.
version-list
   List all API versions.

virtual-interface-list
   Show virtual interface info about the given server.

volume-attach
   Attach a volume to a server.

volume-attachments
   List all the volumes attached to a server.

volume-detach
   Detach a volume from a server.

volume-update
   Update volume attachment.

x509-create-cert
   Create x509 cert for a user in tenant.

x509-get-root-cert
   Fetch the x509 root cert.

bash-completion
   Prints all of the commands and options to stdout so that the nova.bash_completion script doesn't have to hard code them.

help
   Display help about this program or one of its subcommands.

baremetal-interface-list
   DEPRECATED: List network interfaces associated with a baremetal node.

baremetal-node-list
   DEPRECATED: Print list of available baremetal nodes.

baremetal-node-show
   DEPRECATED: Show information about a baremetal node.

net
   DEPRECATED, use tenant-network-show instead.

net-create
   DEPRECATED, use tenant-network-create instead.

net-delete
DEPRECATED, use tenant-network-delete instead.

net-list
DEPRECATED, use tenant-network-list instead.

tenant-network-create
DEPRECATED: Create a tenant network.

tenant-network-delete
DEPRECATED: Delete a tenant network.

tenant-network-list
DEPRECATED: List tenant networks.

tenant-network-show
DEPRECATED: Show a tenant network.

13.2. NOVA OPTIONAL ARGUMENTS

--version
show program's version number and exit

--debug
Print debugging output.

--os-cache
Use the auth token cache. Defaults to False if \texttt{env[OS\_CACHE]} is not set.

--timings
Print call timing info.

--os-region-name <region-name>
Defaults to \texttt{env[OS\_REGION\_NAME]}.

--service-type <service-type>
Defaults to compute for most actions.

--service-name <service-name>
Defaults to \texttt{env[NOVA\_SERVICE\_NAME]}.

--os-endpoint-type <endpoint-type>
Defaults to \texttt{env[NOVA\_ENDPOINT\_TYPE], env[OS\_ENDPOINT\_TYPE]} or publicURL.

--os-compute-api-version <compute-api-ver>
Accepts X, X.Y (where X is major and Y is minor part) or "X.latest", defaults to \texttt{env[OS\_COMPUTE\_API\_VERSION]}. 
--endpoint-override <bypass-url>
Use this API endpoint instead of the Service Catalog. Defaults to
env[NOVACLIENT_ENDPOINT_OVERRIDE].

--profile HMAC_KEY
HMAC key to use for encrypting context data for performance profiling of operation. This
key should be the value of the HMAC key configured for the OSprofiler middleware in nova;
it is specified in the Nova configuration file at "/etc/nova/nova.conf". Without the key,
profiling will not be triggered even if OSprofiler is enabled on the server side.

--os-auth-type <name>, --os-auth-plugin <name>
Authentication type to use

13.2.1. nova add-fixed-ip

usage: nova add-fixed-ip <server> <network-id>
Add new IP address on a network to server.

Positional arguments:

<server>
  Name or ID of server.

<network-id>
  Network ID.

13.2.2. nova add-secgroup

usage: nova add-secgroup <server> <secgroup>
Add a Security Group to a server.

Positional arguments:

<server>
  Name or ID of server.

<secgroup>
  Name or ID of Security Group.

13.2.3. nova agent-create

usage: nova agent-create <os> <architecture> <version> <url> <md5hash>
  <hypervisor>
Create new agent build.

Positional arguments:
13.2.4. nova agent-delete

usage: nova agent-delete <id>

Delete existing agent build.

Positional arguments:

=id

ID of the agent-build.

13.2.5. nova agent-list

usage: nova agent-list [--hypervisor <hypervisor>]

List all builds.

Optional arguments:

--hypervisor <hypervisor>

Type of hypervisor.

13.2.6. nova agent-modify

usage: nova agent-modify <id> <version> <url> <md5hash>

Modify existing agent build.

Positional arguments:
13.2.7. nova aggregate-add-host

Usage: nova aggregate-add-host <aggregate> <host>

Add the host to the specified aggregate.

Positional arguments:

<aggregate>
Name or ID of aggregate.

<host>
The host to add to the aggregate.

13.2.8. nova aggregate-create

Usage: nova aggregate-create <name> [<availability-zone>]

Create a new aggregate with the specified details.

Positional arguments:

<name>
Name of aggregate.

<availability-zone>
The availability zone of the aggregate (optional).

13.2.9. nova aggregate-delete

Usage: nova aggregate-delete <aggregate>

Delete the aggregate.

Positional arguments:
<aggregate>
    Name or ID of aggregate to delete.

13.2.10. nova aggregate-list

    usage: nova aggregate-list

    Print a list of all aggregates.

13.2.11. nova aggregate-remove-host

    usage: nova aggregate-remove-host <aggregate> <host>

    Remove the specified host from the specified aggregate.

    Positional arguments:

    <aggregate>
        Name or ID of aggregate.

    <host>
        The host to remove from the aggregate.

13.2.12. nova aggregate-set-metadata

    usage: nova aggregate-set-metadata <aggregate> <key=value> [...] [key=value]...

    Update the metadata associated with the aggregate.

    Positional arguments:

    <aggregate>
        Name or ID of aggregate to update.

    <key=value>
        Metadata to add/update to aggregate. Specify only the key to delete a metadata item.

13.2.13. nova aggregate-show

    usage: nova aggregate-show <aggregate>

    Show details of the specified aggregate.

    Positional arguments:

    <aggregate>
        Name or ID of aggregate.
13.2.14. nova aggregate-update

usage: nova aggregate-update [--name NAME] [--availability-zone <availability-zone>] <aggregate>

Update the aggregate’s name and optionally availability zone.

Positional arguments:

<aggregate>
   Name or ID of aggregate to update.

Optional arguments:

--name NAME
   Name of aggregate.

--availability-zone <availability-zone>
   The availability zone of the aggregate.

13.2.15. nova availability-zone-list

usage: nova availability-zone-list

List all the availability zones.

13.2.16. nova backup

usage: nova backup <server> <name> <backup-type> <rotation>

Backup a server by creating a ‘backup’ type snapshot.

Positional arguments:

<server>
   Name or ID of server.

<name>
   Name of the backup image.

<backup-type>
   The backup type, like “daily” or “weekly”.

<rotation>
   Int parameter representing how many backups to keep around.

13.2.17. nova boot
usage: nova boot [--flavor <flavor>] [--image <image>]
                [--image-with <key=value>] [--boot-volume <volume_id>]
                [--snapshot <snapshot_id>] [--min-count <number>]
                [--max-count <number>] [--meta <key=value>]
                [--file <dst-path=src-path>] [--key-name <key-name>]
                [--user-data <user-data>]
                [--availability-zone <availability-zone>]
                [--security-groups <security-groups>]
                [--block-device-mapping <dev-name=mapping>]
                [--block-device key1=value1[,key2=value2...]]
                [--swap <swap_size>]
                [--ephemeral size=<size>[,format=<format>]]
                [--hint <key=value>]
                [--nic <auto,none,net-id=net-uuid,net-name=network-name,net-addr=port-id=port-uuid,v4-fixed-ip=ip-add,addr,v6-fixed-ip=ip-addr(tag=tag)]
                [--config-drive <value>] [--poll] [--admin-pass]
                [--access-ip-v4 <value>] [--access-ip-v6 <value>]
                [--description <description>]

Boot a new server.

Positional arguments:

  <name>

   Name for the new server.

Optional arguments:

  --flavor <flavor>

   Name or ID of flavor (see 'nova flavor-list').

  --image <image>

   Name or ID of image (see 'glance image-list').

  --image-with <key=value>

   Image metadata property (see 'glance image-show').

  --boot-volume <volume_id>

   Volume ID to boot from.

  --snapshot <snapshot_id>

   Snapshot ID to boot from (will create a volume).

  --min-count <number>

   Boot at least <number> servers (limited by quota).
--max-count <number>
    Boot up to <number> servers (limited by quota).

--meta <key=value>
    Record arbitrary key/value metadata to /meta_data.json on the metadata server. Can be
    specified multiple times.

--file <dst-path=src-path>
    Store arbitrary files from <src-path> locally to <dst-path> on the new server. Limited by the
    injected_files quota value.

--key-name <key-name>
    Key name of keypair that should be created earlier with the command keypair-add.

--user-data <user-data>
    user data file to pass to be exposed by the metadata server.

--availability-zone <availability-zone>
    The availability zone for server placement.

--security-groups <security-groups>
    Comma separated list of security group names.

--block-device-mapping <dev-name=mapping>
    Block device mapping in the format <dev-name>=<id>:<type>:<size(GB)>::<delete-on-
    terminate>.

--block-device
    key1=value1[,key2=value2…] Block device mapping with the keys: id=UTF (image_id,
    snapshot_id or volume_id only if using source image, snapshot or volume) source=source
    type (image, snapshot, volume or blank), dest=destination type of the block device (volume
    or local), bus=device's bus (e.g. uml, lxc, virtio, ...; if omitted, hypervisor driver chooses a
    suitable default, honoured only if device type is supplied) type=device type (e.g. disk,
    cdrom, ...; defaults to 'disk') device=name of the device (e.g. vda, xda, ...; tag=device
    metadata tag (optional) if omitted, hypervisor driver chooses suitable device depending on
    selected bus; note the libvirt driver always uses default device names), size=size of the
    block device in MB(for swap) and in GB(for other formats) (if omitted, hypervisor driver
    calculates size), format=device will be formatted (e.g. swap, ntfs, ...; optional),
    bootindex=integer used for ordering the boot disks (for image backed instances it is equal to
    0, for others need to be specified) and shutdown=shutdown behaviour (either preserve or
    remove, for local destination set to remove). (Supported by API versions '2.32' -'2.latest')

--swap <swap_size>
    Create and attach a local swap block device of <swap_size> MB.

--ephemeral
    size=<size>[,format=<format>] Create and attach a local ephemeral block device of <size>
    GB and format it to <format>.

--hint <key=value>
Send arbitrary key/value pairs to the scheduler for custom use.

```
--nic <auto,none,net-id=net-uuid,net-name=network-name,port-id=port-uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-addr,tag=tag>
```

Create a NIC on the server. Specify option multiple times to create multiple nics unless using the special 'auto' or 'none' values. auto: automatically allocate network resources if none are available. This cannot be specified with any other nic value and cannot be specified multiple times. none: do not attach a NIC at all. This cannot be specified with any other nic value and cannot be specified multiple times. net-id: attach NIC to network with a specific UUID. net-name: attach NIC to network with this name (either port-id or net-id or net-name must be provided), v4-fixed-ip: IPv4 fixed address for NIC (optional), v6-fixed-ip: IPv6 fixed address for NIC (optional), port-id: attach NIC to port with this UUID tag: interface metadata tag (optional) (either port-id or net-id must be provided). (Supported by API versions ‘2.37’ - ‘2.latest’)

```
--config-drive <value>
```

Enable config drive.

```
--poll
```

Report the new server boot progress until it completes.

```
--admin-pass <value>
```

Admin password for the instance.

```
--access-ip-v4 <value>
```

Alternative access IPv4 of the instance.

```
--access-ip-v6 <value>
```

Alternative access IPv6 of the instance.

```
--description <description>
```

Description for the server. (Supported by API versions ‘2.19’ - ‘2.latest’)

### 13.2.18. nova cell-capacities

```
usage: nova cell-capacities [--cell <cell-name>]
```

Get cell capacities for all cells or a given cell.

**Optional arguments:**

```
--cell <cell-name>
```

Name of the cell to get the capacities.

### 13.2.19. nova cell-show

```
usage: nova cell-show <cell-name>
```

Show details of a given cell.
Positional arguments:

<cell-name>
Name of the cell.

13.2.20. nova clear-password

usage: nova clear-password <server>
Clear the admin password for a server from the metadata server. This action does not actually change the instance server password.

Positional arguments:

<server>
Name or ID of server.

13.2.21. nova cloudpipe-configure

usage: nova cloudpipe-configure <ip address> <port>
Update the VPN IP/port of a cloudpipe instance.

Positional arguments:

<ip address>
New IP Address.

<port>
New Port.

13.2.22. nova cloudpipe-create

usage: nova cloudpipe-create <project_id>
Create a cloudpipe instance for the given project.

Positional arguments:

<project_id>
UUID of the project to create the cloudpipe for.

13.2.23. nova cloudpipe-list

usage: nova cloudpipe-list
Print a list of all cloudpipe instances.
13.2.24. nova console-log

usage: nova console-log [--length <length>] <server>

Get console log output of a server.

Positional arguments:

<server>
   Name or ID of server.

Optional arguments:

--length <length>
   Length in lines to tail.

13.2.25. nova delete

usage: nova delete [--all-tenants] <server> [<server> ...]

Immediately shut down and delete specified server(s).

Positional arguments:

<server>
   Name or ID of server(s).

Optional arguments:

--all-tenants
   Delete server(s) in another tenant by name (Admin only).

13.2.26. nova diagnostics

usage: nova diagnostics <server>

Retrieve server diagnostics.

Positional arguments:

<server>
   Name or ID of server.

13.2.27. nova evacuate

usage: nova evacuate [--password <password>] [--force] <server> [<host>]

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Evacuate server from failed host.

Positional arguments:

<server>
   Name or ID of server.

<host>
   Name or ID of the target host. If no host is specified, the scheduler will choose one.

Optional arguments:

--password <password>
   Set the provided admin password on the evacuated server. Not applicable if the server is on shared storage.

--force
   Force to not verify the scheduler if a host is provided. (Supported by API versions '2.29' - '2.latest')

13.2.28. nova flavor-access-add

usage: nova flavor-access-add <flavor> <tenant_id>

Add flavor access for the given tenant.

Positional arguments:

<flavor>
   Flavor name or ID to add access for the given tenant.

<tenant_id>
   Tenant ID to add flavor access for.

13.2.29. nova flavor-access-list

usage: nova flavor-access-list [--flavor <flavor>] [--tenant <tenant_id>]

Print access information about the given flavor.

Optional arguments:

--flavor <flavor>
   Filter results by flavor name or ID.

--tenant <tenant_id>
   Filter results by tenant ID. (Deprecated; this option is not supported, and will be removed in version 5.0.0.)
13.2.30. nova flavor-access-remove

usage: nova flavor-access-remove <flavor> <tenant_id>

Remove flavor access for the given tenant.

Positional arguments:

<flavor>
    Flavor name or ID to remove access for the given tenant.

<tenant_id>
    Tenant ID to remove flavor access for.

13.2.31. nova flavor-create

usage: nova flavor-create [--ephemeral <ephemeral>] [--swap <swap>]
    [--rxtx-factor <factor>] [--is-public <is-public>]
        <name> <id> <ram> <disk> <vcpus>

Create a new flavor.

Positional arguments:

<name>
    Unique name of the new flavor.

=id>
    Unique ID of the new flavor. Specifying 'auto' will generated a UUID for the ID.

<ram>
    Memory size in MB.

<disk>
    Disk size in GB.

<vcpus>
    Number of vcpus

Optional arguments:

--ephemeral <ephemeral>
    Ephemeral space size in GB (default 0).

--swap <swap>
    Swap space size in MB (default 0).

--rxtx-factor <factor>
RX/TX factor (default 1).

--is-public <is-public>
   Make flavor accessible to the public (default true).

13.2.32. nova flavor-delete

   usage: nova flavor-delete <flavor>

   Delete a specific flavor

   Positional arguments:

   <flavor>
      Name or ID of the flavor to delete.

13.2.33. nova flavor-key

   usage: nova flavor-key <flavor> <action> <key=value> [<key=value> ...]

   Set or unset extra_spec for a flavor.

   Positional arguments:

   <flavor>
      Name or ID of flavor.

   <action>
      Actions: 'set' or 'unset'.

   <key=value>
      Extra_specs to set/unset (only key is necessary on unset).

13.2.34. nova flavor-list

   usage: nova flavor-list [--extra-specs] [--all] [--marker <marker>]
      [--min-disk <min-disk>] [--min-ram <min-ram>]
      [--limit <limit>] [--sort-key <sort-key>]
      [--sort-dir <sort-dir>]

   Print a list of available 'flavors' (sizes of servers).

   Optional arguments:

   --extra-specs
      Get extra-specs of each flavor.

   --all
Display all flavors (Admin only).

```
--marker <marker>
    The last flavor ID of the previous page; displays list of flavors after "marker".

--min-disk <min-disk>
    Filters the flavors by a minimum disk space, in GiB.

--min-ram <min-ram>
    Filters the flavors by a minimum RAM, in MB.

--limit <limit>
    Maximum number of flavors to display. If limit is bigger than 'CONF.api.max_limit' option of Nova API, limit 'CONF.api.max_limit' will be used instead.

--sort-key <sort-key>
    Flavors list sort key.

--sort-dir <sort-dir>
    Flavors list sort direction.
```

### 13.2.35. nova flavor-show

```
usage: nova flavor-show <flavor>
```

Show details about the given flavor.

**Positional arguments:**

```
<flavor>
    Name or ID of flavor.
```

### 13.2.36. nova floating-ip-associate

```
usage: nova floating-ip-associate [--fixed-address <fixed_address>]
    <server> <address>
```

Associate a floating IP address to a server.

**Positional arguments:**

```
<server>
    Name or ID of server.

<address>
    IP Address.
```

**Optional arguments:**
--fixed-address <fixed_address>
   Fixed IP Address to associate with.

13.2.37. nova floating-ip-disassociate

   usage: nova floating-ip-disassociate <server> <address>

   Disassociate a floating IP address from a server.

   Positional arguments:

   <server>
   Name or ID of server.

   <address>
   IP Address.

13.2.38. nova force-delete

   usage: nova force-delete <server>

   Force delete a server.

   Positional arguments:

   <server>
   Name or ID of server.

13.2.39. nova get-mks-console

   usage: nova get-mks-console <server>

   Get an MKS console to a server. (Supported by API versions '2.8' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

   Positional arguments:

   <server>
   Name or ID of server.

13.2.40. nova get-password

   usage: nova get-password <server> [<private-key>]

   Get the admin password for a server. This operation calls the metadata service to query metadata information and does not read password information from the server itself.

   Positional arguments:
13.2.41. nova get-rdp-console

usage: nova get-rdp-console <server> <console-type>

Get a rdp console to a server.

Positional arguments:

<server>
    Name or ID of server.

<console-type>
    Type of rdp console ("rdp-html5").

13.2.42. nova get-serial-console

usage: nova get-serial-console [--console-type CONSOLE_TYPE] <server>

Get a serial console to a server.

Positional arguments:

<server>
    Name or ID of server.

Optional arguments:

--console-type CONSOLE_TYPE
    Type of serial console, default="serial".

13.2.43. nova get-spice-console

usage: nova get-spice-console <server> <console-type>

Get a spice console to a server.

Positional arguments:

<server>
    Name or ID of server.
Type of spice console ("spice-html5").

13.2.44. nova get-vnc-console

```
usage: nova get-vnc-console <server> <console-type>
```

Get a vnc console to a server.

**Positional arguments:**

<server>

Name or ID of server.

<console-type>

Type of vnc console ("novnc" or "xvpvnc").

13.2.45. nova host-action

```
usage: nova host-action [--action <action>] <hostname>
```

Perform a power action on a host.

**Positional arguments:**

<hostname>

Name of host.

**Optional arguments:**

--action <action>

A power action: startup, reboot, or shutdown.

13.2.46. nova host-describe

```
usage: nova host-describe <hostname>
```

Describe a specific host.

**Positional arguments:**

<hostname>

Name of host.

13.2.47. nova host-evacuate

```
usage: nova host-evacuate [--target_host <target_host>] [--force] <host>
```

Evacuate all instances from failed host.

**Positional arguments:**

```
<host>
```
Name of host.

**Optional arguments:**

```
--target_host <target_host>
```
Name of target host. If no host is specified the scheduler will select a target.

```
--force
```
Force to not verify the scheduler if a host is provided. (Supported by API versions '2.29' - '2.latest')

### 13.2.48. nova host-evacuate-live

**usage:** nova host-evacuate-live [ [--target-host <target_host>] [--block-migrate] [--max-servers <max_servers>] [--force] <host>

Live migrate all instances of the specified host to other available hosts.

**Positional arguments:**

```
<host>
```
Name of host.

**Optional arguments:**

```
--target-host <target_host>
```
Name of target host.

```
--block-migrate
```
Enable block migration. (Default=auto) (Supported by API versions '2.25' - '2.latest')

```
--max-servers <max_servers>
```
Maximum number of servers to live migrate simultaneously

```
--force
```
Force to not verify the scheduler if a host is provided. (Supported by API versions '2.30' - '2.latest')

### 13.2.49. nova host-list
usage: nova host-list [--zone <zone>]

List all hosts by service.

Optional arguments:

```
--zone <zone>
```

Filters the list, returning only those hosts in the availability zone <zone>.

13.2.50. nova host-meta

usage: nova host-meta <host> <action> <key=value> [<key=value> ...]

Set or Delete metadata on all instances of a host.

Positional arguments:

```
<host>
```

Name of host.

```
<action>
```

Actions: 'set' or 'delete'

```
<key=value>
```

Metadata to set or delete (only key is necessary on delete)

13.2.51. nova host-servers-migrate

usage: nova host-servers-migrate <host>

Cold migrate all instances off the specified host to other available hosts.

Positional arguments:

```
<host>
```

Name of host.

13.2.52. nova host-update

usage: nova host-update [--status <enable|disable>]
                     [--maintenance <enable|disable>]
                     <hostname>

Update host settings.

Positional arguments:

```
<hostname>
```

Name of host.

Optional arguments:

--status <enable|disable>
Either enable or disable a host.

--maintenance <enable|disable>
Either put or resume host to/from maintenance.

13.2.53. nova hypervisor-list

usage: nova hypervisor-list [--matching <hostname>] [--marker <marker>] [--limit <limit>]

List hypervisors. (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

Optional arguments:

--matching <hostname>
List hypervisors matching the given <hostname>. If matching is used limit and marker options will be ignored.

--marker <marker>
The last hypervisor of the previous page; displays list of hypervisors after "marker".

--limit <limit>
Maximum number of hypervisors to display. If limit is bigger than 'CONF.api.max_limit' option of Nova API, limit 'CONF.api.max_limit' will be used instead.

13.2.54. nova hypervisor-servers

usage: nova hypervisor-servers <hostname>

List servers belonging to specific hypervisors.

Positional arguments:

<hostname>
The hypervisor hostname (or pattern) to search for.

13.2.55. nova hypervisor-show

usage: nova hypervisor-show [--wrap <integer>] <hypervisor>

Display the details of the specified hypervisor.

Positional arguments:
<hypervisor>
   Name or ID of the hypervisor to show the details of.

Optional arguments:

--wrap <integer>
   Wrap the output to a specified length. Default is 40 or 0 to disable

13.2.56. nova hypervisor-stats

   usage: nova hypervisor-stats

   Get hypervisor statistics over all compute nodes.

Warning

When using Red Hat Ceph as a back end for ephemeral storage, the Compute service does not calculate the amount of available storage correctly. Specifically, Compute simply adds up the amount of available storage without factoring in replication. This results in grossly overstated available storage, which in turn could cause unexpected storage oversubscription.

To determine the correct ephemeral storage capacity, query the Ceph service directly instead. For more information, see BZ#1332165.

13.2.57. nova hypervisor-uptime

   usage: nova hypervisor-uptime <hypervisor>

   Display the uptime of the specified hypervisor.

Positional arguments:

<hypervisor>
   Name or ID of the hypervisor to show the uptime of.

13.2.58. nova image-create

   usage: nova image-create [--metadata <key=value>] [--show] [--poll] <server> <name>

   Create a new image by taking a snapshot of a running server.

Note

Images created by nova image-create are only usable by nova itself (and not glance).
Positional arguments:

<server>
    Name or ID of server.

<name>
    Name of snapshot.

Optional arguments:

--metadata <key=value>
    Record arbitrary key/value metadata to /meta_data.json on the metadata server. Can be specified multiple times.

--show
    Print image info.

--poll
    Report the snapshot progress and poll until image creation is complete.

13.2.59. nova instance-action

usage: nova instance-action <server> <request_id>

Show an action.

Positional arguments:

<server>
    Name or UUID of the server to show actions for. Only UUID can be used to show actions for a deleted server. (Supported by API versions '2.21' - '2.latest')

<request_id>
    Request ID of the action to get.

13.2.60. nova instance-action-list

usage: nova instance-action-list <server>

List actions on a server.

Positional arguments:

<server>
    Name or UUID of the server to list actions for. Only UUID can be used to list actions on a deleted server. (Supported by API versions '2.21' - '2.latest')

13.2.61. nova interface-attach

Attach a network interface to a server.

Positional arguments:

<server>
    Name or ID of server.

Optional arguments:

--port-id <port_id>
    Port ID.

--net-id <net_id>
    Network ID

--fixed-ip <fixed_ip>
    Requested fixed IP.

13.2.62. nova interface-detach

usage: nova interface-detach <server> <port_id>

Detach a network interface from a server.

Positional arguments:

<server>
    Name or ID of server.

<port_id>
    Port ID.

13.2.63. nova interface-list

usage: nova interface-list <server>

List interfaces attached to a server.

Positional arguments:

<server>
    Name or ID of server.

13.2.64. nova keypair-add
usage: nova keypair-add [--pub-key <pub-key>] [--key-type <key-type>] [--user <user-id>] <name>

Create a new key pair for use with servers.

Positional arguments:

<name>
   Name of key.

Optional arguments:

--pub-key <pub-key>
   Path to a public ssh key.

--key-type <key-type>
   Keypair type. Can be ssh or x509. (Supported by API versions '2.2' - '2.latest')

--user <user-id>
   ID of user to whom to add key-pair (Admin only). (Supported by API versions '2.10' - '2.latest')

13.2.65. nova keypair-delete

usage: nova keypair-delete [--user <user-id>] <name>

Delete keypair given by its name. (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

Positional arguments:

<name>
   Keypair name to delete.

Optional arguments:

--user <user-id>
   ID of key-pair owner (Admin only).

13.2.66. nova keypair-list

usage: nova keypair-list [--user <user-id>] [--marker <marker>] [--limit <limit>]

Print a list of keypairs for a user (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

Optional arguments:
--user <user-id>
List key-pairs of specified user ID (Admin only).

--marker <marker>
The last keypair of the previous page; displays list of keypairs after "marker".

--limit <limit>
Maximum number of keypairs to display. If limit is bigger than 'CONF.api.max_limit' option of Nova API, limit 'CONF.api.max_limit' will be used instead.

### 13.2.67. nova keypair-show

```
usage: nova keypair-show [--user <user-id>] <keypair>
```

Show details about the given keypair. (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**Positional arguments:**

- `<keypair>`
  Name of keypair.

**Optional arguments:**

- `--user <user-id>`
  ID of key-pair owner (Admin only).

### 13.2.68. nova limits

```
usage: nova limits [--tenant [<tenant>]] [--reserved]
```

Print rate and absolute limits.

**Optional arguments:**

- `--tenant [<tenant>]`
  Display information from single tenant (Admin only).
- `--reserved`
  Include reservations count.

### 13.2.69. nova list

```
usage: nova list [--reservation-id <reservation-id>] [--ip <ip-regexp>]
[--ip6 <ip6-regexp>] [--name <name-regexp>]
[--instance-name <name-regexp>] [--status <status>]
[--flavor <flavor>] [--image <image>] [--host
<hostname>]
[--all-tenants [0|1]] [--tenant [<tenant>]]
```
List active servers.

Optional arguments:

--reservation-id <reservation-id>
Only return servers that match reservation-id.

--ip <ip-regexp>
Search with regular expression match by IP address.

--ip6 <ip6-regexp>
Search with regular expression match by IPv6 address.

--name <name-regexp>
Search with regular expression match by name.

--instance-name <name-regexp>
Search with regular expression match by server name.

--status <status>
Search by server status.

--flavor <flavor>
Search by flavor name or ID.

--image <image>
Search by image name or ID.

--host <hostname>
Search servers by hostname to which they are assigned (Admin only).

--all-tenants [0|1]
Display information from all tenants (Admin only).

--tenant [<tenant>]
Display information from single tenant (Admin only).

--user [<user>]
Display information from single user (Admin only).

--deleted

Only display deleted servers (Admin only).

--fields <fields>
  Comma-separated list of fields to display. Use the show command to see which fields are available.

--minimal
  Get only UUID and name.

--sort <key>[:<direction>]
  Comma-separated list of sort keys and directions in the form of <key>[:<asc|desc>]. The direction defaults to descending if not specified.

--marker <marker>
  The last server UUID of the previous page; displays list of servers after "marker".

--limit <limit>
  Maximum number of servers to display. If limit == -1, all servers will be displayed. If limit is bigger than 'CONF.api.max_limit' option of Nova API, limit 'CONF.api.max_limit' will be used instead.

--changes-since <changes_since>
  List only servers changed after a certain point of time. The provided time should be an ISO 8061 formatted time. ex 2016-03-04T06:27:59Z.

--tags <tags>
  The given tags must all be present for a server to be included in the list result. Boolean expression in this case is 't1 AND t2'. Tags must be separated by commas: --tags <tag1,tag2> (Supported by API versions '2.26' -> '2.latest')

--tags-any <tags-any>
  If one of the given tags is present the server will be included in the list result. Boolean expression in this case is 't1 OR t2'. Tags must be separated by commas: --tags-any <tag1,tag2> (Supported by API versions '2.26' -> '2.latest')

--not-tags <not-tags>
  Only the servers that do not have any of the given tags will be included in the list results. Boolean expression in this case is 'NOT(t1 AND t2)'. Tags must be separated by commas: --not-tags <tag1,tag2> (Supported by API versions '2.26' - '2.latest')

--not-tags-any <not-tags-any>
  Only the servers that do not have at least one of the given tags will be included in the list result. Boolean expression in this case is 'NOT(t1 OR t2)'. Tags must be separated by commas: --not-tags-any <tag1,tag2> (Supported by API versions '2.26' - '2.latest')

13.2.70. nova list-extensions
usage: nova list-extensions

List all the os-api extensions that are available.

13.2.71. nova list-secgroup

usage: nova list-secgroup <server>

List Security Group(s) of a server.

Positional arguments:

<server>
    Name or ID of server.

13.2.72. nova live-migration


Migrate running server to a new machine.

Positional arguments:

<server>
    Name or ID of server.

<host>
    Destination host name.

Optional arguments:

--block-migrate
    True in case of block_migration. (Default=auto:live_migration) (Supported by API versions '2.25' - '2.latest')

--force
    Force to not verify the scheduler if a host is provided. (Supported by API versions '2.30' - '2.latest')

13.2.73. nova live-migration-abort

usage: nova live-migration-abort <server> <migration>

Abort an on-going live migration. (Supported by API versions '2.24' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

Positional arguments:
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13.2.74. nova live-migration-force-complete

usage: nova live-migration-force-complete <server> <migration>

Force on-going live migration to complete. (Supported by API versions '2.22' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

Positional arguments:

<server>
    Name or ID of server.

<migration>
    ID of migration.

13.2.75. nova lock

usage: nova lock <server>

Lock a server. A normal (non-admin) user will not be able to execute actions on a locked server.

Positional arguments:

<server>
    Name or ID of server.

13.2.76. nova meta

usage: nova meta <server> <action> <key=value> [<key=value> ...]

Set or delete metadata on a server.

Positional arguments:

<server>
    Name or ID of server.

<action>
    Actions: 'set' or 'delete'.

<key=value>
    Metadata to set or delete (only key is necessary on delete).
13.2.77. nova migrate

    usage: nova migrate [--poll] <server>

Migrate a server. The new host will be selected by the scheduler.

Positional arguments:

<server>
    Name or ID of server.

Optional arguments:

--poll
    Report the server migration progress until it completes.

13.2.78. nova migration-list

    usage: nova migration-list [--host <host>] [--status <status>] [--cell_name <cell_name>]

Print a list of migrations.

Optional arguments:

--host <host>
    Fetch migrations for the given host.

--status <status>
    Fetch migrations for the given status.

--cell_name <cell_name>
    Fetch migrations for the given cell_name.

13.2.79. nova pause

    usage: nova pause <server>

Pause a server.

Positional arguments:

<server>
    Name or ID of server.

13.2.80. nova quota-class-show

    usage: nova quota-class-show <class>
List the quotas for a quota class.

**Positional arguments:**

<class>

Name of quota class to list the quotas for.

### 13.2.81. nova quota-class-update

usage: nova quota-class-update [--instances <instances>] [--cores <cores>] [--ram <ram>]

[--metadata-items <metadata-items>]

[--injected-files <injected-files>]

[--injected-file-content-bytes <injected-file-content-bytes>]

[--injected-file-path-bytes <injected-file-path-bytes>]

[--key-pairs <key-pairs>]

[--server-groups <server-groups>]

[--server-group-members <server-group-members>]

<class>

Update the quotas for a quota class. (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**Positional arguments:**

<class>

Name of quota class to set the quotas for.

**Optional arguments:**

--instances <instances>

New value for the "instances" quota.

--cores <cores>

New value for the "cores" quota.

--ram <ram>

New value for the "ram" quota.

--metadata-items <metadata-items>

New value for the "metadata-items" quota.

--injected-files <injected-files>

New value for the "injected-files" quota.

--injected-file-content-bytes <injected-file-content-bytes>
New value for the "injected-file-content-bytes" quota.

```
--injected-file-path-bytes <injected-file-path-bytes>
```

New value for the "injected-file-path-bytes" quota.

```
--key-pairs <key-pairs>
```

New value for the "key-pairs" quota.

```
--server-groups <server-groups>
```

New value for the "server-groups" quota.

```
--server-group-members <server-group-members>
```

New value for the "server-group-members" quota.

### 13.2.82. nova quota-defaults

Usage: nova quota-defaults [-tenant <tenant-id>]

List the default quotas for a tenant.

Optional arguments:

```
--tenant <tenant-id>
```

ID of tenant to list the default quotas for.

### 13.2.83. nova quota-delete

Usage: nova quota-delete --tenant <tenant-id> [--user <user-id>]

Delete quota for a tenant/user so their quota will Revert back to default.

Optional arguments:

```
--tenant <tenant-id>
```

ID of tenant to delete quota for.

```
--user <user-id>
```

ID of user to delete quota for.

### 13.2.84. nova quota-show

Usage: nova quota-show [-tenant <tenant-id>] [---user <user-id>] [---detail]

List the quotas for a tenant/user.

Optional arguments:
--tenant <tenant-id>
    ID of tenant to list the quotas for.

--user <user-id>
    ID of user to list the quotas for.

--detail
    Show detailed info (limit, reserved, in-use).

### 13.2.85. nova quota-update

```
usage: nova quota-update [--user <user-id>] [--instances <instances>]
    [--cores <cores>] [--ram <ram>]
    [--metadata-items <metadata-items>]
    [--injected-files <injected-files>]
    [--injected-file-content-bytes <injected-file-content-bytes>]
    [--injected-file-path-bytes <injected-file-path-bytes>]
    [--key-pairs <key-pairs>]
    [--server-groups <server-groups>]
    [--server-group-members <server-group-members>]
    [--force]
    <tenant-id>
```

Update the quotas for a tenant/user. (Supported by API versions '2.0' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**Positional arguments:**

- `<tenant-id>`
    ID of tenant to set the quotas for.

**Optional arguments:**

- --user <user-id>
    ID of user to set the quotas for.

- --instances <instances>
    New value for the "instances" quota.

- --cores <cores>
    New value for the "cores" quota.

- --ram <ram>
    New value for the "ram" quota.

- --metadata-items <metadata-items>
    New value for the "metadata-items" quota.
--injected-files <injected-files>
New value for the "injected-files" quota.

--injected-file-content-bytes <injected-file-content-bytes>
New value for the "injected-file-content-bytes" quota.

--injected-file-path-bytes <injected-file-path-bytes>
New value for the "injected-file-path-bytes" quota.

--key-pairs <key-pairs>
New value for the "key-pairs" quota.

--server-groups <server-groups>
New value for the "server-groups" quota.

--server-group-members <server-group-members>
New value for the "server-group-members" quota.

--force
Whether force update the quota even if the already used and reserved exceeds the new quota.

13.2.86. nova reboot

usage: nova reboot [--hard] [--poll] <server> [<server> ...]

Reboot a server.

Positional arguments:

<server>
Name or ID of server(s).

Optional arguments:

--hard
Perform a hard reboot (instead of a soft one). Note: Ironic does not currently support soft reboot; consequently, bare metal nodes will always do a hard reboot, regardless of the use of this option.

--poll
Poll until reboot is complete.

13.2.87. nova rebuild

usage: nova rebuild [--rebuild-password <rebuild-password>] [--poll]
        [--minimal] [--preserve-ephemeral] [--name <name>]
        [--description <description>] [--meta <key=value>]

Red Hat OpenStack Platform 11 Command-Line Interface Reference
Shutdown, re-image, and re-boot a server.

Positional arguments:

<server>
   Name or ID of server.

<image>
   Name or ID of new image.

Optional arguments:

--rebuild-password <rebuild-password>
   Set the provided admin password on the rebuilt server.

--poll
   Report the server rebuild progress until it completes.

--minimal
   Skips flavor/image lookups when showing servers.

--preserve-ephemeral
   Preserve the default ephemeral storage partition on rebuild.

--name <name>
   Name for the new server.

--description <description>
   New description for the server. (Supported by API versions '2.19' - '2.latest')

--meta <key=value>
   Record arbitrary key/value metadata to /meta_data.json on the metadata server. Can be specified multiple times.

--file <dst-path=src-path>
   Store arbitrary files from <src-path> locally to <dst-path> on the new server. You may store up to 5 files.

13.2.88. nova refresh-network

usage: nova refresh-network <server>

Refresh server network information.

Positional arguments:
13.2.89. nova remove-fixed-ip

usage: nova remove-fixed-ip <server> <address>

Remove an IP address from a server.

Positional arguments:

<server>
    Name or ID of server.

<address>
    IP Address.

13.2.90. nova remove-secgroup

usage: nova remove-secgroup <server> <secgroup>

Remove a Security Group from a server.

Positional arguments:

<server>
    Name or ID of server.

<secgroup>
    Name of Security Group.

13.2.91. nova rescue

usage: nova rescue [--password <password>] [--image <image>] <server>

Reboots a server into rescue mode, which starts the machine from either the initial image or a specified image, attaching the current boot disk as secondary.

Positional arguments:

<server>
    Name or ID of server.

Optional arguments:

--password <password>
    The admin password to be set in the rescue environment.
---image <image>
   The image to rescue with.

### 13.2.92. nova reset-network

usage: nova reset-network <server>

Reset network of a server.

**Positional arguments:**

<server>
   Name or ID of server.

### 13.2.93. nova reset-state

usage: nova reset-state [--all-tenants] [--active] <server> [...]

Reset the state of a server.

**Positional arguments:**

<server>
   Name or ID of server(s).

**Optional arguments:**

--all-tenants
   Reset state server(s) in another tenant by name (Admin only).

--active
   Request the server be reset to "active" state instead of "error" state (the default).

### 13.2.94. nova resize

usage: nova resize [--poll] <server> <flavor>

Resize a server.

**Positional arguments:**

<server>
   Name or ID of server.

<flavor>
   Name or ID of new flavor.
Optional arguments:

```
-poll
```

Report the server resize progress until it completes.

13.2.95. nova resize-confirm

```
usage: nova resize-confirm <server>
```

Confirm a previous resize.

Positional arguments:

```
<server>
```

Name or ID of server.

13.2.96. nova resize-revert

```
usage: nova resize-revert <server>
```

Revert a previous resize (and return to the previous VM).

Positional arguments:

```
<server>
```

Name or ID of server.

13.2.97. nova restore

```
usage: nova restore <server>
```

Restore a soft-deleted server.

Positional arguments:

```
<server>
```

Name or ID of server.

13.2.98. nova resume

```
usage: nova resume <server>
```

Resume a server.

Positional arguments:

```
<server>
```

Name or ID of server.
13.2.99. nova server-group-create

usage: nova server-group-create <name> <policy> [...]

Create a new server group with the specified details.

Positional arguments:

<name>
    Server group name.

<policy>
    Policies for the server group.

13.2.100. nova server-group-delete

usage: nova server-group-delete <id> [...]

Delete specific server group(s).

Positional arguments:

<id>
    Unique ID(s) of the server group to delete.

13.2.101. nova server-group-get

usage: nova server-group-get <id>

Get a specific server group.

Positional arguments:

<id>
    Unique ID of the server group to get.

13.2.102. nova server-group-list

usage: nova server-group-list [--limit <limit>] [--offset <offset>]
    [--all-projects]

Print a list of all server groups.

Optional arguments:

--limit <limit>
    Maximum number of server groups to display. If limit is bigger than 'CONF.api.max_limit' option of Nova API, limit 'CONF.api.max_limit' will be used instead.
--offset <offset>
   The offset of groups list to display; use with limit to return a slice of server groups.

--all-projects
   Display server groups from all projects (Admin only).

13.2.103. nova server-migration-list

   usage: nova server-migration-list <server>

   Get the migrations list of specified server. (Supported by API versions '2.23' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

   Positional arguments:

   <server>
       Name or ID of server.

13.2.104. nova server-migration-show

   usage: nova server-migration-show <server> <migration>

   Get the migration of specified server. (Supported by API versions '2.23' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

   Positional arguments:

   <server>
       Name or ID of server.

   <migration>
       ID of migration.

13.2.105. nova server-tag-add

   usage: nova server-tag-add <server> <tag> [tag] ...

   Add one or more tags to a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

   Positional arguments:

   <server>
       Name or ID of server.

   <tag>
       Tag(s) to add.
13.2.106. nova server-tag-delete

```
usage: nova server-tag-delete <server> <tag> [<tag> ...]
```

Delete one or more tags from a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**Positional arguments:**

- `<server>`
  
  Name or ID of server.

- `<tag>`
  
  Tag(s) to delete.

13.2.107. nova server-tag-delete-all

```
usage: nova server-tag-delete-all <server>
```

Delete all tags from a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**Positional arguments:**

- `<server>`
  
  Name or ID of server.

13.2.108. nova server-tag-list

```
usage: nova server-tag-list <server>
```

Get list of tags from a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**Positional arguments:**

- `<server>`
  
  Name or ID of server.

13.2.109. nova server-tag-set

```
usage: nova server-tag-set <server> <tags> [<tags> ...]
```

Set list of tags to a server. (Supported by API versions '2.26' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**Positional arguments:**

- `<server>`
Name or ID of server.

<tags>
Tag(s) to set.

13.2.110. nova service-delete

usage: nova service-delete <id>
Delete the service.

Positional arguments:

<id>
ID of service.

13.2.111. nova service-disable

usage: nova service-disable [--reason <reason>] <hostname> <binary>
Disable the service.

Positional arguments:

<hostname>
Name of host.

<binary>
Service binary.

Optional arguments:

--reason <reason>
Reason for disabling service.

13.2.112. nova service-enable

usage: nova service-enable <hostname> <binary>
Enable the service.

Positional arguments:

<hostname>
Name of host.

<binary>
Service binary.
13.2.113. **nova service-force-down**

```
usage: nova service-force-down [--unset] <hostname> <binary>
```

Force service to down. (Supported by API versions '2.11' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**Positional arguments:**

- `<hostname>`
  Name of host.

- `<binary>`
  Service binary.

**Optional arguments:**

- `--unset`
  Unset the force state down of service.

13.2.114. **nova service-list**

```
usage: nova service-list [--host <hostname>] [--binary <binary>]
```

Show a list of all running services. Filter by host & binary.

**Optional arguments:**

- `--host <hostname>`
  Name of host.

- `--binary <binary>`
  Service binary.

13.2.115. **nova set-password**

```
usage: nova set-password <server>
```

Change the admin password for a server.

**Positional arguments:**

- `<server>`
  Name or ID of server.

13.2.116. **nova shelve**

```
usage: nova shelve <server>
```
Shelve a server.

Positional arguments:

<server>
Name or ID of server.

13.2.117. nova shelf-offload

usage: nova shelf-offload <server>

Remove a shelved server from the compute node.

Positional arguments:

<server>
Name or ID of server.

13.2.118. nova show

usage: nova show [--minimal] [--wrap <integer>] <server>

Show details about the given server.

Positional arguments:

<server>
Name or ID of server.

Optional arguments:

--minimal
Skips flavor/image lookups when showing servers.

--wrap <integer>
Wrap the output to a specified length, or 0 to disable.

13.2.119. nova ssh

usage: nova ssh [--port PORT] [--address-type ADDRESS_TYPE]
[--extra-opts EXTRA]
<server>

SSH into a server.

Positional arguments:
<server>
    Name or ID of server.

Optional arguments:

--port PORT
    Optional flag to indicate which port to use for ssh. (Default=22)

--address-type ADDRESS_TYPE
    Optional flag to indicate which IP type to use. Possible values includes fixed and floating (the Default).

--network <network>
    Network to use for the ssh.

--ipv6
    Optional flag to indicate whether to use an IPv6 address attached to a server. (Defaults to IPv4 address)

--login <login>
    Login to use.

-i IDENTITY, --identity IDENTITY
    Private key file, same as the -i option to the ssh command.

--extra-opts EXTRA
    Extra options to pass to ssh. see: man ssh.

13.2.120. nova start

usage: nova start [--all-tenants] <server> [<server> ...]

Start the server(s).

Positional arguments:

<server>
    Name or ID of server(s).

Optional arguments:

--all-tenants
    Start server(s) in another tenant by name (Admin only).

13.2.121. nova stop

usage: nova stop [--all-tenants] <server> [<server> ...]
Stop the server(s).

**Positional arguments:**

<server>
   Name or ID of server(s).

**Optional arguments:**

--all-tenants
   Stop server(s) in another tenant by name (Admin only).

### 13.2.122. nova suspend

```bash
usage: nova suspend <server>
```

Suspend a server.

**Positional arguments:**

<server>
   Name or ID of server.

### 13.2.123. nova trigger-crash-dump

```bash
usage: nova trigger-crash-dump <server>
```

Trigger crash dump in an instance. (Supported by API versions '2.17' - '2.latest') [hint: use '--os-compute-api-version' flag to show help message for proper version]

**Positional arguments:**

<server>
   Name or ID of server.

### 13.2.124. nova unlock

```bash
usage: nova unlock <server>
```

Unlock a server.

**Positional arguments:**

<server>
   Name or ID of server.

### 13.2.125. nova unpause
usage: nova unpause <server>

Unpause a server.

Positional arguments:

<server>
    Name or ID of server.

13.2.126. nova unrescue

usage: nova unrescue <server>

Restart the server from normal boot disk again.

Positional arguments:

<server>
    Name or ID of server.

13.2.127. nova unshelve

usage: nova unshelve <server>

Unshelve a server.

Positional arguments:

<server>
    Name or ID of server.

13.2.128. nova update

usage: nova update [--name <name>] [--description <description>] <server>

Update the name or the description for a server.

Positional arguments:

<server>
    Name (old name) or ID of server.

Optional arguments:

--name <name>
    New name for the server.
--description <description>

New description for the server. If it equals to empty string (i.e. ""), the server description will be removed. (Supported by API versions '2.19' - '2.latest')

13.2.129. nova usage

usage: nova usage [--start <start>] [--end <end>] [--tenant <tenant-id>]

Show usage data for a single tenant.

Optional arguments:

--start <start>

Usage range start date ex 2012-01-20. (default: 4 weeks ago)

--end <end>

Usage range end date, ex 2012-01-20. (default: tomorrow)

--tenant <tenant-id>

UUID of tenant to get usage for.

13.2.130. nova usage-list

usage: nova usage-list [--start <start>] [--end <end>]

List usage data for all tenants.

Optional arguments:

--start <start>

Usage range start date ex 2012-01-20. (default: 4 weeks ago)

--end <end>

Usage range end date, ex 2012-01-20. (default: tomorrow)

13.2.131. nova version-list

usage: nova version-list

List all API versions.

13.2.132. nova virtual-interface-list

usage: nova virtual-interface-list <server>

Show virtual interface info about the given server.
Positional arguments:

<server>
ID of server.

13.2.133. nova volume-attach

usage: nova volume-attach <server> <volume> [<device>]

Attach a volume to a server.

Positional arguments:

<server>
Name or ID of server.

<volume>
ID of the volume to attach.

<device>
Name of the device e.g. /dev/vdb. Use “auto” for autoassign (if supported). Libvirt driver will use default device name.

13.2.134. nova volume-attachments

usage: nova volume-attachments <server>

List all the volumes attached to a server.

Positional arguments:

<server>
Name or ID of server.

13.2.135. nova volume-detach

usage: nova volume-detach <server> <volume>

Detach a volume from a server.

Positional arguments:

<server>
Name or ID of server.

<volume>
ID of the volume to detach.
13.2.136. nova volume-update

usage: nova volume-update <server> <attachment> <volume>

Update volume attachment.

Positional arguments:

<server>
    Name or ID of server.

<attachment>
    Attachment ID of the volume.

<volume>
    ID of the volume to attach.

13.2.137. nova x509-create-cert

usage: nova x509-create-cert [private-key-filename] [x509-cert-filename]

Create x509 cert for a user in tenant.

Positional arguments:

private-key-filename
    Filename for the private key. [Default: pk.pem]

x509-cert-filename
    Filename for the X.509 certificate. [Default: cert.pem]

13.2.138. nova x509-get-root-cert

usage: nova x509-get-root-cert [filename]

Fetch the x509 root cert.

Positional arguments:

filename
    Filename to write the x509 root cert.
CHAPTER 14. NOVA-MANAGE COMMAND-LINE CLIENT

The nova-manage client is the command-line interface (CLI) for Compute service management utility.

This chapter documents nova-manage version 13.0.0.

For help on a specific nova-manage command, enter:

```
$ nova-manage COMMAND --help
```

14.1. NOVA-MANAGE USAGE

```
{version,bash-completion,project,account,shell,logs,
 service,cell_v2,db,vm,agent,cell,network,host,floating,
 fixed,vpn,api_db}
...
```

14.2. NOVA-MANAGE OPTIONAL ARGUMENTS

-h, --help

show this help message and exit

--config-dir DIR

Path to a config directory to pull *.conf files from. This file set is sorted, so as to provide a predictable parse order if individual options are over-ridden. The set is parsed after the file(s) specified via previous --config-file, arguments hence over-ridden options in the directory take precedence.

--config-file PATH

Path to a config file to use. Multiple config files can be specified, with values in later files taking precedence. Defaults to None.

--debug, -d

If set to true, the logging level will be set to DEBUG instead of the default INFO level.

--log-config-append PATH, --log_config PATH
The name of a logging configuration file. This file is appended to any existing logging configuration files. For details about logging configuration files, see the Python logging module documentation. Note that when logging configuration files are used then all logging configuration is set in the configuration file and other logging configuration options are ignored (for example, logging_context_format_string).

--log-date-format DATE_FORMAT
Defines the format string for %(asctime)s in log records. Default: None. This option is ignored if log_config_append is set.

--log-dir LOG_DIR, --logdir LOG_DIR
(Optional) The base directory used for relative log_file paths. This option is ignored if log_config_append is set.

--log-file PATH, --logfile PATH
(Optional) Name of log file to send logging output to. If no default is set, logging will go to stderr as defined by use_stderr. This option is ignored if log_config_append is set.

--nodebug
The inverse of --debug

--nouse-syslog
The inverse of --use-syslog

--noverbose
The inverse of --verbose

--nowatch-log-file
The inverse of --watch-log-file

--syslog-log-facility SYSLOG_LOG_FACILITY
Syslog facility to receive log lines. This option is ignored if log_config_append is set.

--use-syslog
Use syslog for logging. Existing syslog format is DEPRECATED and will be changed later to honor RFC5424. This option is ignored if log_config_append is set.

--verbose, -v
If set to false, the logging level will be set to WARNING instead of the default INFO level.

--version
show program’s version number and exit

--watch-log-file
Uses logging handler designed to watch file system. When log file is moved or removed this handler will open a new log file with specified path instantaneously. It makes sense only if log_file option is specified and Linux platform is used. This option is ignored if log_config_append is set.
14.2.1. nova-manage account

usage: nova-manage account [-h] {quota,scrub} ...

Positional arguments:
{quota, scrub}

Optional arguments:

-h, --help
    show this help message and exit

14.2.2. nova-manage agent

usage: nova-manage agent [-h] {create,delete,list,modify} ...

Positional arguments:
{create, delete, list, modify}

Optional arguments:

-h, --help
    show this help message and exit

14.2.3. nova-manage api_db

usage: nova-manage api_db [-h] {sync,version} ...

Positional arguments:
{sync, version}

Optional arguments:

-h, --help
    show this help message and exit

14.2.4. nova-manage cell

usage: nova-manage cell [-h] {create,delete,list} ...

Positional arguments:
{create, delete, list}

Optional arguments:

-h, --help
14.2.5. nova-manage cell_v2

usage: nova-manage cell_v2 [-h] {map_cell_and_hosts,map_instances} ...

Positional arguments:

{map_cell_and_hosts,map_instances}

Optional arguments:

-h, --help
    show this help message and exit

14.2.6. nova-manage db

usage: nova-manage db [-h]

{archive_deleted_rows,null_instance_uuid_scan,online_data_migrations,sync,version} ...

Positional arguments:

{archive_deleted_rows,null_instance_uuid_scan,online_data_migrations,sync,version}

Optional arguments:

-h, --help
    show this help message and exit

14.2.7. nova-manage fixed

usage: nova-manage fixed [-h] {list,reserve,unreserve} ...

Positional arguments:

{list,reserve,unreserve}

Optional arguments:

-h, --help
    show this help message and exit

14.2.8. nova-manage floating

usage: nova-manage floating [-h] {address_to_hosts,create,delete,list} ...

...
Positional arguments:
{address_to_hosts,create,delete,list}

Optional arguments:

-h, --help
    show this help message and exit

14.2.9. nova-manage host

usage: nova-manage host [-h] {list} ...

Positional arguments:
{list}

Optional arguments:

-h, --help
    show this help message and exit

14.2.10. nova-manage logs

usage: nova-manage logs [-h] {errors,syslog} ...

Positional arguments:
{errors,syslog}

Optional arguments:

-h, --help
    show this help message and exit

14.2.11. nova-manage network

usage: nova-manage network [-h] {create,delete,list,modify} ...

Positional arguments:
{create,delete,list,modify}

Optional arguments:

-h, --help
    show this help message and exit

14.2.12. nova-manage project
usage: nova-manage project [-h] {quota,scrub} ...

Positional arguments:
{quota,scrub}

Optional arguments:
-h, --help
    show this help message and exit

14.2.13. nova-manage shell

usage: nova-manage shell [-h] {bpython,ipython,python,run,script} ...

Positional arguments:
{bpython,ipython,python,run,script}

Optional arguments:
-h, --help
    show this help message and exit

14.2.14. nova-manage vm

usage: nova-manage vm [-h] {list} ...

Positional arguments:
{list}

Optional arguments:
-h, --help
    show this help message and exit

14.2.15. nova-manage vpn

usage: nova-manage vpn [-h] {change} ...

Positional arguments:
{change}

Optional arguments:
-h, --help
    show this help message and exit
CHAPTER 15. OBJECT STORAGE SERVICE (SWIFT) COMMAND-LINE CLIENT

The swift client is the command-line interface (CLI) for the Object Storage service API and its extensions.

This chapter documents swift version 3.3.0.

For help on a specific swift command, enter:

```
$ swift COMMAND --help
```

15.1. SWIFT USAGE

          [--debug] [--info] [--quiet] [--auth <auth_url>]
          [--auth-version <auth_version> | --os-identity-api-version <auth_version> ]
          [--user <username>]
          [--key <api_key>] [--retries <num_retries>]
          [--os-username <auth-user-name>] [--os-password <auth-password>]
          [--os-user-id <auth-user-id>]
          [--os-user-domain-id <auth-user-domain-id>]
          [--os-user-domain-name <auth-user-domain-name>]
          [--os-tenant-id <auth-tenant-id>]
          [--os-tenant-name <auth-tenant-name>]
          [--os-project-id <auth-project-id>]
          [--os-project-name <auth-project-name>]
          [--os-project-domain-id <auth-project-domain-id>]
          [--os-project-domain-name <auth-project-domain-name>]
          [--os-auth-url <auth-url>] [--os-auth-token <auth-token>]
          [--os-storage-url <storage-url>] [--os-region-name <region-name>]
          [--os-service-type <service-type>]
          [--os-endpoint-type <endpoint-type>]
          [--os-cacert <ca-certificate>] [--insecure]
          [--os-cert <client-certificate-file>]
          [--os-key <client-certificate-key-file>]
          [--no-ssl-compression]
          <subcommand> [--help] [<subcommand options>]

Subcommands:

delete

Delete a container or objects within a container.

download

Download objects from containers.

list
Lists the containers for the account or the objects for a container.

**post**
Updates meta information for the account, container, or object; creates containers if not present.

**copy**
Copies object, optionally adds meta

**stat**
Displays information for the account, container, or object.

**upload**
Uploads files or directories to the given container.

**capabilities**
List cluster capabilities.

**tempurl**
Create a temporary URL.

**auth**
Display auth related environment variables.

### 15.2. SWIFT EXAMPLES

```bash
swift download --help
swift -A https://auth.api.rackspacecloud.com/v1.0 -U user -K api_key
stat -v
swift --os-auth-url https://api.example.com/v2.0 \
  --os-tenant-name tenant --os-username user --os-password password
list
swift --os-auth-url https://api.example.com/v3 --auth-version 3 \
  --os-project-name project1 --os-project-domain-name domain1 \
  --os-username user --os-user-domain-name domain1 \
  --os-password password list
swift --os-auth-url https://api.example.com/v3 --auth-version 3 \
  --os-project-id 0123456789abcdef0123456789abcdef \
  --os-user-id abcdef0123456789abcdef0123456789 \
  --os-password password list
swift --os-auth-token 6ee5eb33efad4e45ab46806eac010566 \
  --os-storage-url https://10.1.5.2:8080/v1/AUTH_ced809b6a4baea7aeab61a \
  list
swift list --lh
```
15.3. SWIFT OPTIONAL ARGUMENTS

--version
  show program's version number and exit

-h, --help
  show this help message and exit

--os-help
  Show OpenStack authentication options.

-s, --snet
  Use SERVICENET internal network.

-v, --verbose
  Print more info.

--debug
  Show the curl commands and results of all http queries regardless of result status.

--info
  Show the curl commands and results of all http queries which return an error.

-q, --quiet
  Suppress status output.

-A AUTH, --auth=AUTH
  URL for obtaining an auth token.

-V AUTH_VERSION, --auth-version=AUTH_VERSION, --os-identity-api-version=AUTH_VERSION
  Specify a version for authentication. Defaults to env[ST_AUTH_VERSION],
  env[OS_AUTH_VERSION], env[OS_IDENTITY_API_VERSION] or 1.0.

-U USER, --user=USER
  User name for obtaining an auth token.

-K KEY, --key=KEY
  Key for obtaining an auth token.

-R RETRIES, --retries=RETRIES
  The number of times to retry a failed connection.

--insecure
  Allow swiftclient to access servers without having to verify the SSL certificate. Defaults to
  env[SWIFTCLIENT_INSECURE] (set to 'true' to enable).
This option is deprecated and not used anymore. SSL compression should be disabled by default by the system SSL library.

15.3.1. swift auth

Usage: swift auth

Display auth related authentication variables in shell friendly format.

Commands to run to export storage url and auth token into `OS_STORAGE_URL` and `OS_AUTH_TOKEN`:

```
$ swift auth
```

Commands to append to a runcom file (e.g. ~/.bashrc, /etc/profile) for automatic authentication:

```
$ swift auth -v -U test:tester -K testing -A http://localhost:8080/auth/v1.0
```

15.3.2. swift capabilities

Usage: swift capabilities [--json] [<proxy_url>]

Retrieve capability of the proxy.

Optional positional arguments:

<proxy_url>
Proxy URL of the cluster to retrieve capabilities.

--json
Print the cluster capabilities in JSON format.

15.3.3. swift copy


Copies object to new destination, optionally updates objects metadata. If destination is not set, will update metadata of object

Positional arguments:

<container>
Name of container to copy from.
<object>
Name of object to copy. Specify multiple times for multiple objects

Optional arguments:

-d, --destination </container[/object]>
The container and name of the destination object. Name of destination object can be omitted, then will be same as name of source object. Supplying multiple objects and destination with object name is invalid.

-M, --fresh-metadata
Copy the object without any existing metadata, If not set, metadata will be preserved or appended

-m, --meta <name:value>
Sets a meta data item. This option may be repeated.
Example: -m Color:Blue -m Size:Large

-H, --header <header:value>
Adds a customized request header. This option may be repeated.
Example: -H "content-type:text/plain" -H "Content-Length: 4000"

15.3.4. swift delete

Usage: swift delete [--all] [--leave-segments]
[--object-threads <threads>]
[--container-threads <threads>]
[--header <header:value>]
[<container> [<object>] [...]]

Delete a container or objects within a container.

Positional arguments:

[<container>]
Name of container to delete from.

[<object>]
Name of object to delete. Specify multiple times for multiple objects.

Optional arguments:

-a, --all
Delete all containers and objects.

--leave-segments
Do not delete segments of manifest objects.
-H, --header <header:value>
    Adds a custom request header to use for deleting objects or an entire container.

--object-threads <threads>
    Number of threads to use for deleting objects. Default is 10.

--container-threads <threads>
    Number of threads to use for deleting containers. Default is 10.

15.3.5. swift download

Usage: swift download [--all] [--marker <marker>] [--prefix <prefix>]
    [--output <out_file>] [--output-dir <out_directory>]
    [--object-threads <threads>] [--ignore-checksum]
    [--container-threads <threads>] [--no-download]
    [--skip-identical] [--remove-prefix]
    [--header <header:value>] [--no-shuffle]
    [<container> [<object>] [...]]

Download objects from containers.

Positional arguments:

<container>
    Name of container to download from. To download a whole account, omit this and specify --all.

<object>
    Name of object to download. Specify multiple times for multiple objects. Omit this to download all objects from the container.

Optional arguments:

-a, --all
    Indicates that you really want to download everything in the account.

-m, --marker <marker>
    Marker to use when starting a container or account download.

-p, --prefix <prefix>
    Only download items beginning with <prefix>

-r, --remove-prefix
    An optional flag for --prefix <prefix>, use this option to download items without <prefix>

-o, --output <out_file>
    For a single file download, stream the output to <out_file>. Specifying "-" as <out_file> will redirect to stdout.
-D, --output-dir <out_directory>
   An optional directory to which to store objects. By default, all objects are recreated in the
current directory.

--object-threads <threads>
   Number of threads to use for downloading objects. Default is 10.

--container-threads <threads>
   Number of threads to use for downloading containers. Default is 10.

--no-download
   Perform download(s), but don't actually write anything to disk.

-H, --header <header:value>
   Adds a customized request header to the query, like "Range" or "If-Match". This option may
be repeated.

Example: --header "content-type:text/plain"

--skip-identical
   Skip downloading files that are identical on both sides.

--ignore-checksum
   Turn off checksum validation for downloads.

--no-shuffle
   By default, when downloading a complete account or container, download order is
randomised in order to reduce the load on individual drives when multiple clients are
executed simultaneously to download the same set of objects (e.g. a nightly automated
download script to multiple servers). Enable this option to submit download jobs to the
thread pool in the order they are listed in the object store.

15.3.6. swift list

Usage: swift list [--long] [--lh] [--totals] [--prefix <prefix>]
   [-delimiter <delimiter>] [--header <header:value>] [<container>]

Lists the containers for the account or the objects for a container.

Positional arguments:

[container]
   Name of container to list object in.

Optional arguments:

-1, --long
   Long listing format, similar to ls -l.
---lh

Report sizes in human readable format similar to ls -lh.

-t, --totals

Used with -l or --lh, only report totals.

-p <prefix>, --prefix <prefix>

Only list items beginning with the prefix.

-d <delim>, --delimiter <delim>

Roll up items with the given delimiter. For containers only. See OpenStack Swift API documentation for what this means.

-H, --header <header:value>

Adds a custom request header to use for listing.

15.3.7. swift post


Updates meta information for the account, container, or object. If the container is not found, it will be created automatically.

Positional arguments:

[container]

Name of container to post to.

[object]

Name of object to post.

Optional arguments:

-r, --read-acl <acl>

Read ACL for containers. Quick summary of ACL syntax: .r:*, .r:-.example.com, .r:www.example.com, account1 (v1.0 identity API only), account1:*, account2:user2 (v2.0+ identity API).

-w, --write-acl <acl>

Write ACL for containers. Quick summary of ACL syntax: account1 (v1.0 identity API only), account1:*, account2:user2 (v2.0+ identity API).

-t, --sync-to <sync-to>

Sync To for containers, for multi-cluster replication.

-k, --sync-key <sync-key>
Sync Key for containers, for multi-cluster replication.

-\texttt{m}, \texttt{-m \texttt{<name:value>}}
  Sets a meta data item. This option may be repeated.

Example: \texttt{-m Color:Blue -m Size:Large}

-\texttt{H}, \texttt{-H \texttt{<header:value>}}
  Adds a customized request header. This option may be repeated.

Example: \texttt{-H "content-type:text/plain" -H "Content-Length: 4000"}

\subsection*{15.3.8. swift stat}

\texttt{Usage:} swift stat \texttt{[--lh]} \texttt{[--header \texttt{<header:value>}]}
\texttt{[<container> [<object>]]}

Displays information for the account, container, or object.

\textbf{Positional arguments:}

\begin{itemize}
  \item \texttt{[container]}
    Name of container to stat from.
  \item \texttt{[object]}
    Name of object to stat.
\end{itemize}

\textbf{Optional arguments:}

-\texttt{lh}
  Report sizes in human readable format similar to \texttt{ls -lh}.

-\texttt{H}, \texttt{-H \texttt{<header:value>}}
  Adds a custom request header to use for stat.

\subsection*{15.3.9. swift tempurl}

\texttt{Usage:} swift tempurl \texttt{[--absolute] [--prefix-based]}
\texttt{<method> <seconds> <path> <key>}

Generates a temporary URL for a Swift object.

\textbf{Positional arguments:}

-\texttt{<method>}
  An HTTP method to allow for this temporary URL. Usually 'GET' or 'PUT'.

-\texttt{<seconds>
The amount of time in seconds the temporary URL will be valid for; or, if --absolute is passed, the Unix timestamp when the temporary URL will expire.

<path>
The full path to the Swift object.

Example: /v1/AUTH_account/c/o or: http://saio:8080/v1/AUTH_account/c/o

$key>
The secret temporary URL key set on the Swift cluster. To set a key, run 'swift post -m "Temp-URL-Key:b3968d0207b54ece87cccc06515a89d4"'

Optional arguments:

--absolute
Interpret the <seconds> positional argument as a Unix timestamp rather than a number of seconds in the future.

--prefix-based
If present, a prefix-based tempURL will be generated.

15.3.10. swift upload


Positional arguments:

<container>
Name of container to upload to.

<file_or_directory>
Name of file or directory to upload. Specify multiple times for multiple uploads.

Optional arguments:

-c, --changed
Only upload files that have changed since the last upload.
--skip-identical
    Skip uploading files that are identical on both sides.

-S, --segment-size <size>
    Upload files in segments no larger than <size> (in Bytes) and then create a "manifest" file that will download all the segments as if it were the original file.

--segment-container <container>
    Upload the segments into the specified container. If not specified, the segments will be uploaded to a <container>_segments container to not pollute the main <container> listings.

--leave-segments
    Indicates that you want the older segments of manifest objects left alone (in the case of overwrites).

--object-threads <threads>
    Number of threads to use for uploading full objects. Default is 10.

--segment-threads <threads>
    Number of threads to use for uploading object segments. Default is 10.

-H, --header <header:value>
    Adds a customized request header. This option may be repeated. Example: -H "content-type:text/plain" -H "Content-Length: 4000".

--use-slo
    When used in conjunction with --segment-size it will create a Static Large Object instead of the default Dynamic Large Object.

--object-name <object-name>
    Upload file and name object to <object-name> or upload dir and use <object-name> as object prefix instead of folder name.

--ignore-checksum
    Turn off checksum validation for uploads.
CHAPTER 16. OPENSTACK COMMAND-LINE CLIENT

The openstack client is a common OpenStack command-line interface (CLI). This chapter documents openstack version 3.11.0.

For help on a specific openstack command, enter:

```
$ openstack help <command>
```

The following reference illustrates and explains the usage of the OpenStack command-line client.

16.1. COMMAND

Internal

Installed commands in the OSC process.

16.1.1. command list

List recognized commands by group

```
openstack command list
    [--group <group-keyword>]
```

--group <group-keyword>

Show commands filtered by a command group, for example: identity, volume, compute, image, network and other keywords

16.2. ACCESS TOKEN

Identity v3

Requires: OS-OAUTH1 extension

16.2.1. access token create

Create an access token

```
openstack access token create
    --consumer-key <consumer-key>
    --consumer-secret <consumer-secret>
    --request-key <request-key>
    --request-secret <request-secret>
    --verifier <verifier>
```

--consumer-key <consumer-key>

Consumer key (required)

--consumer-secret <consumer-secret>

Red Hat OpenStack Platform 11 Command-Line Interface Reference
Consumer secret (required)

--request-key <request-key>
Request token to exchange for access token (required)

--request-secret <request-secret>
Secret associated with <request-key> (required)

--verifier <verifier>
Verifier associated with <request-key> (required)

16.3. ADDRESS SCOPE

An address scope is a scope of IPv4 or IPv6 addresses that belongs to a given project and may be shared between projects.

Network v2

16.3.1. address scope create

Create new address scope

openstack address scope create
   [--project <project> [--project-domain <project-domain>]]
   [--ip-version <ip-version>]
   [--share | --no-share]
   <name>

--project <project>
Owner’s project (name or ID)

--project-domain <project-domain>
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

--ip-version <ip-version>
IP version (4 or 6, default is 4)

--share
Share the address scope between projects

--no-share
Do not share the address scope between projects (default)

<name>
New address scope name

16.3.2. address scope delete
Delete address scope(s)

```
openstack address scope delete
  <address-scope> [<address-scope> ...]
```

```
<address-scope>
  Address scope(s) to delete (name or ID)
```

### 16.3.3. address scope list

List address scopes

```
openstack address scope list
  [--name <name>]
  [--ip-version <ip-version>]
  [--project <project> [--project-domain <project-domain>]]
  [--share | --no-share]
```

```
--name <name>
  List only address scopes of given name in output
```

```
--ip-version <ip-version>
  List address scopes of given IP version networks (4 or 6)
```

```
--project <project>
  List address scopes according to their project (name or ID)
```

```
--project-domain <project-domain>
  Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.
```

```
--share
  List address scopes shared between projects
```

```
--no-share
  List address scopes not shared between projects
```

### 16.3.4. address scope set

Set address scope properties

```
openstack address scope set
  [--name <name>]
  [--share | --no-share]
  <address-scope>
```

```
--name <name>
  Set address scope name
```
--share
  Share the address scope between projects

--no-share
  Do not share the address scope between projects

<address-scope>
  Address scope to modify (name or ID)

16.3.5. address scope show

Display address scope details

  openstack address scope show
    <address-scope>

<address-scope>
  Address scope to display (name or ID)

16.4. AGGREGATE

Host aggregates provide a mechanism to group hosts according to certain criteria.

Compute v2

16.4.1. aggregate add host

Add host to aggregate

  openstack aggregate add host
    <aggregate>
    <host>

<aggregate>
  Aggregate (name or ID)

<host>
  Host to add to <aggregate>

16.4.2. aggregate create

Create a new aggregate

  openstack aggregate create
    [--zone <availability-zone>]
    [--property <key=value> [...]]
    <name>
--zone <availability-zone>
   Availability zone name

--property <key=value>
   Property to add to this aggregate (repeat option to set multiple properties)

<name>
   New aggregate name

16.4.3. aggregate delete

Delete existing aggregate(s)

   openstack aggregate delete
      <aggregate> [ <aggregate> ... ]

<aggregate>
   Aggregate(s) to delete (name or ID)

16.4.4. aggregate list

List all aggregates

   openstack aggregate list
      [--long]

--long
   List additional fields in output

16.4.5. aggregate remove host

Remove host from aggregate

   openstack aggregate remove host
      <aggregate>
      <host>

<aggregate>
   Aggregate (name or ID)

<host>
   Host to remove from <aggregate>

16.4.6. aggregate set

Set aggregate properties
openstack aggregate set
   [--name <new-name>]
   [--zone <availability-zone>]
   [--property <key=value> [...] ]
   [--no-property]
   <aggregate>

--name <name>
   Set aggregate name

--zone <availability-zone>
   Set availability zone name

--property <key=value>
   Property to set on <aggregate> (repeat option to set multiple properties)

--no-property
   Remove all properties from <aggregate> (specify both --property and --no-property to overwrite the current properties)

<aggregate>
   Aggregate to modify (name or ID)

16.4.7. aggregate show

Display aggregate details

openstack aggregate show
   <aggregate>

<aggregate>
   Aggregate to display (name or ID)

16.4.8. aggregate unset

Unset aggregate properties

openstack aggregate unset
   [--property <key> [...] ]
   <aggregate>

--property <key>
   Property to remove from <aggregate> (repeat option to remove multiple properties)

<aggregate>
   Aggregate to modify (name or ID)
16.5. AVAILABILITY ZONE

An **availability zone** is a logical partition of cloud block storage, compute and network services.

Block Storage v2, Compute v2, Network v2

16.5.1. availability zone list

List availability zones and their status

```
openstack availability zone list
[--compute]
[--network]
[--volume]
[--long]
```

--compute
List compute availability zones

--network
List network availability zones

--volume
List volume availability zones

--long
List additional fields in output

16.6. BACKUP

Block Storage v1, v2

16.6.1. backup create

Create new backup (Deprecated, please use `volume backup create` instead)

```
openstack backup create
[--container <container>]
[--name <name>]
[--description <description>]
[--snapshot <snapshot>]
[--force]
[--incremental]
<volume>
```

--container <container>
Optional backup container name

--name <name>
Name of the backup

--description <description>
   Description of the backup

--snapshot <snapshot>
   Snapshot to backup (name or ID) Volume version 2 only

--force
   Allow to back up an in-use volume Volume version 2 only

--incremental
   Perform an incremental backup Volume version 2 only

<volume>
   Volume to backup (name or ID)

16.6.2. backup delete

Delete backup(s) (Deprecated, please use volume backup delete instead)

openstack backup delete
   [--force]
   <backup> [<backup> ...]

--force
   Allow delete in state other than error or available Volume version 2 only

<backup>
   Backup(s) to delete (name or ID)

16.6.3. backup list

List backups (Deprecated, please use volume backup list instead)

openstack backup list

--long
   List additional fields in output

16.6.4. backup restore

Restore backup (Deprecated, please use volume backup restore instead)

openstack backup restore
   <backup>
   <volume>
16.6.5. backup show

Display backup details (Deprecated, please use volume backup show instead)

```bash
openstack backup show <backup>
```

16.7. CATALOG

Identity v2, v3

16.7.1. catalog list

List services in the service catalog

```bash
openstack catalog list
```

16.7.2. catalog show

Display service catalog details

```bash
openstack catalog show <service>
```

16.8. COMPLETE

The complete command is inherited from the python-cliff library, it can be used to generate a bash-completion script. Currently, the command will generate a script for bash versions 3 or 4. The bash-completion script is printed directly to standard out.

Typical usage for this command is:

```bash
openstack complete | sudo tee /etc/bash_completion.d/osc.bash_completion > /dev/null
```
If installing `python-openstackclient` from a package with `yum`, then this command will likely be run for you.

### 16.8.1. complete

print bash completion command

```bash
openstack complete
```

### 16.9. COMPUTE AGENT

Compute v2

#### 16.9.1. compute agent create

Create compute agent

```bash
openstack compute agent create
  <os>  <architecture>  <version>  <url>  <md5hash>
  <hypervisor>
```

- `<os>`: Type of OS
- `<architecture>`: Type of architecture
- `<version>`: Version
- `<url>`: URL
- `<md5hash>`: MD5 hash
- `<hypervisor>`: Type of hypervisor

#### 16.9.2. compute agent delete

Delete compute agent(s)

```bash
openstack compute agent delete <id> [ <id> ] ...
```

- `<id>`: ID of agent(s) to delete
16.9.3. compute agent list
List compute agents

```
openstack compute agent list [--hypervisor <hypervisor>]
```

```
--hypervisor <hypervisor>
```
Type of hypervisor

16.9.4. compute agent set
Set compute agent properties

```
openstack compute agent set
   [--agent-version <version>]
   [--url <url>]
   [--md5hash <md5hash>]
   <id>
```

```
--agent-version <version>
```
Version of the agent

```
--url <url>
```
URL of the agent

```
--md5hash <md5hash>
```
MD5 hash of the agent

```
<id>
```
Agent to modify (ID only)

16.10. COMPUTE SERVICE
Compute v2

16.10.1. compute service delete
Delete compute service(s)

```
openstack compute service delete
   <service> [<service> ...]
```

```
<service>
```
Compute service(s) to delete (ID only)

16.10.2. compute service list
List compute services
openstack compute service list
    [--host <host>]
    [--service <service>]
    [--long]

--host <host>
    List services on specified host (name only)

--service <service>
    List only specified service (name only)

--long
    List additional fields in output

16.10.3. compute service set

Set compute service properties

openstack compute service set
    [--enable | --disable]
    [--disable-reason <reason>]
    [--up | --down]
    <host> <service>

--enable
    Enable service

--disable
    Disable service

--disable-reason <reason>
    Reason for disabling the service (in quotes). Should be used with --disable option.

--up
    Force up service

--down
    Force down service

<host>
    Name of host

<service>
    Name of service (Binary name)

16.11. CONFIGURATION
Available for all services

16.11.1. configuration show

Show the current openstack client configuration. This command is a little different from other show commands because it does not take a resource name or id to show. The command line options, such as --os-cloud, can be used to show different configurations.

```
openstack configuration show
    [---mask  |  --unmask]

--mask
    Attempt to mask passwords (default)

--unmask
    Show password in clear text
```

16.12. CONSISTENCY GROUP

Block Storage v2

16.12.1. consistency group add volume

Add volume(s) to consistency group.

```
openstack consistency group add volume
    <consistency-group>
    <volume>  [<volume>  ...]
```

<consistency-group>
    Consistency group to contain <volume> (name or ID)

<volume>
    Volume(s) to add to <consistency-group> (name or ID) (repeat option to add multiple volumes)

16.12.2. consistency group create

Create new consistency group.

```
onopenstack consistency group create
    --volume-type <volume-type>  |  --consistency-group-source
    <consistency-group>  |  --consistency-group-snapshot <consistency-group-snapshot>
    [--description <description>]
    [--availability-zone <availability-zone>]
    [<name>]
```
--volume-type <volume-type>
Volume type of this consistency group (name or ID)

--consistency-group-source <consistency-group>
Existing consistency group (name or ID)

--consistency-group-snapshot <consistency-group-snapshot>
Existing consistency group snapshot (name or ID)

--description <description>
Description of this consistency group

--availability-zone <availability-zone>
Availability zone for this consistency group (not available if creating consistency group from source)

<name>
Name of new consistency group (default to None)

16.12.3. consistency group delete
Delete consistency group(s).

```
openstack consistency group delete
    [--force]
    <consistency-group> [<consistency-group> ...]
```

--force
Allow delete in state other than error or available

<consistency-group>
Consistency group(s) to delete (name or ID)

16.12.4. consistency group list
List consistency groups.

```
openstack consistency group list
    [--all-projects]
    [--long]
```

--all-projects
Show detail for all projects. Admin only. (defaults to False)

--long
List additional fields in output
16.12.5. consistency group remove volume

Remove volume(s) from consistency group.

```bash
openstack consistency group remove volume
   <consistency-group>
   <volume> [<volume> ...]
```

<consistency-group>
Consistency group containing <volume> (name or ID)

<volume>
Volume(s) to remove from <consistency-group> (name or ID) (repeat option to remove multiple volumes)

16.12.6. consistency group set

Set consistency group properties.

```bash
openstack consistency group set
   [--name <name>]
   [--description <description>]
   <consistency-group>
```

--name <name>
New consistency group name

--description <description>
New consistency group description

<consistency-group>
Consistency group to modify (name or ID)

16.12.7. consistency group show

Display consistency group details.

```bash
openstack consistency group show
   <consistency-group>
```

<consistency-group>
Consistency group to display (name or ID)

16.13. CONSISTENCY GROUP SNAPSHOT

Block Storage v2
16.13.1. consistency group snapshot create

Create new consistency group snapshot.

```
openstack consistency group snapshot create
    [--consistency-group <consistency-group>]
    [--description <description>]
    [<snapshot-name>]
```

```
--consistency-group <consistency-group>
    Consistency group to snapshot (name or ID) (default to be the same as <snapshot-name>)
```

```
--description <description>
    Description of this consistency group snapshot
```

```
<snapshot-name>
    Name of new consistency group snapshot (default to None)
```

16.13.2. consistency group snapshot delete

Delete consistency group snapshot(s)

```
openstack consistency group snapshot delete
    <consistency-group-snapshot> [ <consistency-group-snapshot> ... ]
```

```
<consistency-group-snapshot>
    Consistency group snapshot(s) to delete (name or ID)
```

16.13.3. consistency group snapshot list

List consistency group snapshots.

```
openstack consistency group snapshot list
    [--all-projects]
    [--long]
    [--status <status>]
    [--consistency-group <consistency-group>]
```

```
--all-projects
    Show detail for all projects. Admin only. (defaults to False)
```

```
--long
    List additional fields in output
```

```
--status <status>
    Filters results by a status ("available", "error", "creating", "deleting" or "error_deleting")
```

```
--consistency-group <consistency-group>
```
Filters results by a consistency group (name or ID)

16.13.4. consistency group snapshot show

Display consistency group snapshot details.

openstack consistency group snapshot show
  <consistency-group-snapshot>

<consistency-group-snapshot>
  Consistency group snapshot to display (name or ID)

16.14. CONSOLE LOG

Server console text dump

Compute v2

16.14.1. console log show

Show server's console output

openstack console log show
  [--lines <num-lines>]
  <server>

--lines <num-lines>
  Number of lines to display from the end of the log (default=all)

<server>
  Server to show log console log (name or ID)

16.15. CONSOLE URL

Server remote console URL

Compute v2

16.15.1. console url show

Show server's remote console URL

openstack console url show
  [--novnc | --xvpvnc | --spice]
  [--rdp | --serial | --mks]
  <server>

--novnc
Show noVNC console URL (default)

--xvpvnc
  Show xvpvnc console URL

--spice
  Show SPICE console URL

--rdp
  Show RDP console URL

--serial
  Show serial console URL

--mks
  Show WebMKS console URL

<server>
  Server to show URL (name or ID)

16.16. CONSUMER

Identity v3
Requires: OS-OAUTH1 extension

16.16.1. consumer create

Create new consumer

  openstack consumer create
    [--description <description>]

--description <description>
  New consumer description

16.16.2. consumer delete

Delete consumer(s)

  openstack consumer delete
    <consumer> [<consumer> ...]

<consumer>
  Consumer(s) to delete

16.16.3. consumer list
List consumers

openstack consumer list

16.16.4. consumer set

Set consumer properties

openstack consumer set

[--description <description>]
<consumer>

--description <description>

New consumer description

<consumer>

Consumer to modify

16.16.5. consumer show

Display consumer details

openstack consumer show

<consumer>

<consumer>

Consumer to display

16.17. CONTAINER

Object Storage v1

16.17.1. container create

Create new container

openstack container create

<container-name> [<container-name> ...]

<container-name>

New container name(s)

16.17.2. container delete

Delete container
openstack container delete
    [-r] | [--recursive]
    <container> [<container> ...]

--recursive, -r
    Recursively delete objects in container before container delete

<container>
    Container(s) to delete

16.17.3. container list

List containers

openstack container list
    [--prefix <prefix>]
    [--marker <marker>]
    [--end-marker <end-marker>]
    [--limit <num-containers>]
    [--long]
    [--all]

--prefix <prefix>
    Filter list using <prefix>

--marker <marker>
    Anchor for paging

--end-marker <end-marker>
    End anchor for paging

--limit <num-containers>
    Limit the number of containers returned

--long
    List additional fields in output

--all
    List all containers (default is 10000)

16.17.4. container save

Save container contents locally

openstack container save
    <container>

<container>
16.17.5. container set

Set container properties

```
openstack container set
   [--property <key=value> [...] ]
   <container>
```

```
--property <key=value>
```

Set a property on this container (repeat option to set multiple properties)

```
<container>
```

Container to modify

16.17.6. container show

Display container details

```
openstack container show
   <container>
```

```
<container>
```

Container to display

16.17.7. container unset

Unset container properties

```
openstack container unset
   [--property <key>]
   <container>
```

```
--property <key>
```

Property to remove from container (repeat option to remove multiple properties)

```
<container>
```

Container to modify

16.18. CREDENTIAL

Identity v3

16.18.1. credential create

Create new credential

-
openstack credential create
    [--type <type>]
    [--project <project>]
    <user> <data>

--type <type>
    New credential type

--project <project>
    Project which limits the scope of the credential (name or ID)

<user>
    User that owns the credential (name or ID)

<data>
    New credential data

16.18.2. credential delete

Delete credential(s)

openstack credential delete
    <credential-id> [ <credential-id> ... ]

<credential-id>
    ID(s) of credential to delete

16.18.3. credential list

List credentials

openstack credential list

16.18.4. credential set

Set credential properties

openstack credential set
    [--user <user>]
    [--type <type>]
    [--data <data>]
    [--project <project>]
    <credential-id>

--user <user>
    User that owns the credential (name or ID)
--type <type>
  New credential type

--data <data>
  New credential data

--project <project>
  Project which limits the scope of the credential (name or ID)

<credential-id>
  ID of credential to change

16.18.5. credential show

Display credential details

```
openstack credential show
  <credential-id>
```

<credential-id>
  ID of credential to display

16.19. DOMAIN

Identity v3

16.19.1. domain create

Create new domain

```
openstack domain create
  [--description <description>]
  [--enable | --disable]
  [--or-show]
  <domain-name>
```

--description <description>
  New domain description

--enable
  Enable domain (default)

--disable
  Disable domain

--or-show

600
Return existing domain If the domain already exists, return the existing domain data and do not fail.

<domain-name>
    New domain name

16.19.2. domain delete
Delete domain(s)

    openstack domain delete
        <domain> [<domain> ...]

<domain>
    Domain(s) to delete (name or ID)

16.19.3. domain list
List domains

    openstack domain list

16.19.4. domain set
Set domain properties

    openstack domain set
        [--name <name>]
        [--description <description>]
        [--enable | --disable]
        <domain>

--name <name>
    New domain name

--description <description>
    New domain description

--enable
    Enable domain

--disable
    Disable domain

<domain>
    Domain to modify (name or ID)

16.19.5. domain show
Display domain details

```bash
openstack domain show
  <domain>
```

```
<domain>
  Domain to display (name or ID)
```

## 16.20. EC2 CREDENTIALS

### Identity v2

#### 16.20.1. ec2 credentials create

Create EC2 credentials

```bash
openstack ec2 credentials create
  [--project <project>]
  [--user <user>]
  [--user-domain <user-domain>]
  [--project-domain <project-domain>]
```

**--project <project>**

Create credentials in project (name or ID; default: current authenticated project)

**--user <user>**

Create credentials for user (name or ID; default: current authenticated user)

**--user-domain <user-domain>**

Domain the user belongs to (name or ID). This can be used in case collisions between user names exist. New in version 3.

**--project-domain <project-domain>**

Domain the project belongs to (name or ID). This can be used in case collisions between user names exist. New in version 3.

The `--project` and `--user` options are typically only useful for admin users, but may be allowed for other users depending on the policy of the cloud and the roles granted to the user.

#### 16.20.2. ec2 credentials delete

Delete EC2 credentials

```bash
openstack ec2 credentials delete
  [--user <user>]
  [--user-domain <user-domain>]
  <access-key> [<access-key> ...]
```

**--user <user>**
Delete credentials for user (name or ID)

--user-domain <user-domain>
Select user from a specific domain (name or ID) This can be used in case collisions between user names exist. New in version 3.

access-key
Credentials access key(s)

The --user option is typically only useful for admin users, but may be allowed for other users depending on the policy of the cloud and the roles granted to the user.

16.20.3. ec2 credentials list
List EC2 credentials

openstack ec2 credentials list
[--user <user>]
[--user-domain <user-domain>]

--user <user>
Filter list by <user> (name or ID)

--user-domain <user-domain>
Select user from a specific domain (name or ID) This can be used in case collisions between user names exist. New in version 3.

The --user option is typically only useful for admin users, but may be allowed for other users depending on the policy of the cloud and the roles granted to the user.

16.20.4. ec2 credentials show
Display EC2 credentials details

openstack ec2 credentials show
[--user <user>]
[--user-domain <user-domain>]
<access-key>

--user <user>
Show credentials for user (name or ID)

--user-domain <user-domain>
Select user from a specific domain (name or ID) This can be used in case collisions between user names exist. New in version 3.

access-key
Credentials access key
The `--user` option is typically only useful for admin users, but may be allowed for other users depending on the policy of the cloud and the roles granted to the user.

16.21. ENDPOINT

Identity v2, v3

16.21.1. endpoint create

Create new endpoint

_Identity version 2 only_

    openstack endpoint create
        --publicurl <url>
        [--adminurl <url>]
        [--internalurl <url>]
        [--region <region-id>]
        <service>

    --publicurl <url>
        New endpoint public URL (required)

    --adminurl <url>
        New endpoint admin URL

    --internalurl <url>
        New endpoint internal URL

    --region <region-id>
        New endpoint region ID

<service>
    Service to be associated with new endpoint (name or ID)

_Identity version 3 only_

    openstack endpoint create
        [--region <region-id>]
        [--enable | --disable]
        <service>
        <interface>
        <url>

    --region <region-id>
        New endpoint region ID

    --enable
Enable endpoint (default)

--disable
Disable endpoint

<service>
Service to be associated with new endpoint (name or ID)

<interface>
New endpoint interface type (admin, public or internal)

<url>
New endpoint URL

16.21.2. endpoint delete
Delete endpoint(s)

openstack endpoint delete
   <endpoint-id> [...]  

<endpoint-id>
Endpoint(s) to delete (ID only)

16.21.3. endpoint list
List endpoints

openstack endpoint list
   [--service <service>]
   [--interface <interface>]
   [--region <region-id>]
   [--long]

--service <service>
Filter by service (type, name or ID) Identity version 3 only

--interface <interface>
Filter by interface type (admin, public or internal) Identity version 3 only

--region <region-id>
Filter by region ID Identity version 3 only

--long
List additional fields in output Identity version 2 only

16.21.4. endpoint set
Set endpoint properties

_Identity version 3 only_

openstack endpoint set
  [--region <region-id>]
  [--interface <interface>]
  [--url <url>]
  [--service <service>]
  [--enable | --disable]
  <endpoint-id>

--region <region-id>
  New endpoint region ID

--interface <interface>
  New endpoint interface type (admin, public or internal)

--url <url>
  New endpoint URL

--service <service>
  New endpoint service (name or ID)

--enable
  Enable endpoint

--disable
  Disable endpoint

<endpoint-id>
  Endpoint to modify (ID only)

16.21.5. endpoint show

Display endpoint details

openstack endpoint show
  <endpoint>

<endpoint>
  Endpoint to display (endpoint ID, service ID, service name, service type)

16.22. EXTENSION

Many OpenStack server APIs include API extensions that enable additional functionality.
16.22.1. extension list

List API extensions

```
openstack extension list
    [--compute]
    [--identity]
    [--network]
    [--volume]
    [--long]
```

`--compute`
List extensions for the Compute API

`--identity`
List extensions for the Identity API

`--network`
List extensions for the Network API

`--volume`
List extensions for the Block Storage API

`--long`
List additional fields in output

16.22.2. extension show

Show API extension

```
openstack extension show
    <extension>
```

`<extension>`
Extension to display. Currently, only network extensions are supported. (Name or Alias)

16.23. FEDERATION PROTOCOL

Identity v3

Requires: OS-FEDERATION extension

16.23.1. federation protocol create

Create new federation protocol
openstack federation protocol create
   --identity-provider <identity-provider>
   --mapping <mapping>
   <name>

--identity-provider <identity-provider>
   Identity provider that will support the new federation protocol (name or ID) (required)

--mapping <mapping>
   Mapping that is to be used (name or ID) (required)

<name>
   New federation protocol name (must be unique per identity provider)

16.23.2. federation protocol delete

Delete federation protocol(s)

openstack federation protocol delete
   --identity-provider <identity-provider>
   <federation-protocol> [<federation-protocol> ...]

--identity-provider <identity-provider>
   Identity provider that supports <federation-protocol> (name or ID) (required)

<federation-protocol>
   Federation protocol(s) to delete (name or ID)

16.23.3. federation protocol list

List federation protocols

openstack federation protocol list
   --identity-provider <identity-provider>

--identity-provider <identity-provider>
   Identity provider to list (name or ID) (required)

16.23.4. federation protocol set

Set federation protocol properties

openstack federation protocol set
   --identity-provider <identity-provider>
   [--mapping <mapping>]
   <federation-protocol>
--identity-provider <identity-provider>
    Identity provider that supports <federation-protocol> (name or ID) (required)

--mapping <mapping>
    Mapping that is to be used (name or ID)

<federation-protocol>
    Federation protocol to modify (name or ID)

16.23.5. federation protocol show

Display federation protocol details

    openstack federation protocol show
    --identity-provider <identity-provider>
    <federation-protocol>

--identity-provider <identity-provider>
    Identity provider that supports <federation-protocol> (name or ID) (required)

<federation-protocol>
    Federation protocol to display (name or ID)

16.24. FLAVOR

Compute v2

16.24.1. flavor create

Create new flavor

    openstack flavor create
    [-id <id>] [-ram <size-mb>] [-disk <size-gb>]
    [-ephemeral-disk <size-gb>] [-swap <size-mb>]
    [-vcpus <num-cpu>] [-rxtx-factor <factor>]
    [-public | --private] [-property <key=value> [...] ]
    [-project <project>] [-project-domain <project-domain>]
    <flavor-name>

--id <id>
    Unique flavor ID; 'auto' creates a UUID (default: auto)

--ram <size-mb>
Memory size in MB (default 256M)

--disk <size-gb>
Disk size in GB (default 0G)

--ephemeral-disk <size-gb>
Ephemeral disk size in GB (default 0G)

--swap <size-mb>
Swap space size in MB (default 0M)

--vcpus <num-cpu>
Number of vcpus (default 1)

--rxtx-factor <factor>
RX/TX factor (default 1.0)

--public
Flavor is available to other projects (default)

--private
Flavor is not available to other projects

--property <key=value>
Property to add for this flavor (repeat option to set multiple properties)

--project <project>
Allow <project> to access private flavor (name or ID) (Must be used with --private option)

--project-domain <project-domain>
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

<flavor-name>
New flavor name

16.24.2. flavor delete
Delete flavor(s)

    openstack flavor delete
        <flavor> [<flavor> ...]

<flavor>
Flavor(s) to delete (name or ID)

16.24.3. flavor list
List flavors

```
openstack flavor list
   [--public | --private | --all]
   [--long]
   [--marker <flavor-id>]
   [--limit <num-flavors>]
```

**--public**
List only public flavors (default)

**--private**
List only private flavors

**--all**
List all flavors, whether public or private

**--long**
List additional fields in output

**--marker <flavor-id>**
The last flavor ID of the previous page

**--limit <num-flavors>**
Maximum number of flavors to display

16.24.4. flavor set

Set flavor properties

```
openstack flavor set
   [--no-property]
   [--property <key=value> [...]]
   [--project <project>]
   [--project-domain <project-domain>]
   <flavor>
```

**--property <key=value>**
Property to add or modify for this flavor (repeat option to set multiple properties)

**--project <project>**
Set flavor access to project (name or ID) (admin only)

**--project-domain <project-domain>**
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

**--no-property**
Remove all properties from this flavor (specify both --no-property and --property to remove the current properties before setting new properties.)

`<flavor>`

Flavor to modify (name or ID)

16.24.5. flavor show

Display flavor details

```
openstack flavor show
  <flavor>
```

`<flavor>`

Flavor to display (name or ID)

16.24.6. flavor unset

Unset flavor properties

```
openstack flavor unset
  [--property <key> [...] ]
  [--project <project>]
  [--project-domain <project-domain>]
  <flavor>
```

`--property <key>`

Property to remove from flavor (repeat option to remove multiple properties)

`--project <project>`

Remove flavor access from project (name or ID) (admin only)

`--project-domain <project-domain>`

Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

`<flavor>`

Flavor to modify (name or ID)

16.25. FLOATING IP

Compute v2, Network v2

16.25.1. floating ip create

Create floating IP

```
openstack floating ip create
```
[--subnet <subnet>]
[--port <port>]
[--floating-ip-address <ip-address>]
[--fixed-ip-address <ip-address>]
[--description <description>]
[--project <project> [--project-domain <project-domain>]]

<network>

--subnet <subnet>
Subnet on which you want to create the floating IP (name or ID) Network version 2 only

--port <port>
Port to be associated with the floating IP (name or ID) Network version 2 only

--floating-ip-address <ip-address>
Floating IP address Network version 2 only

--fixed-ip-address <ip-address>
Fixed IP address mapped to the floating IP Network version 2 only

--description <description>
Set floating IP description Network version 2 only

--project <project>
Owner's project (name or ID) Network version 2 only

--project-domain <project-domain>
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. Network version 2 only

<network>
Network to allocate floating IP from (name or ID)

16.25.2. floating ip delete
Delete floating IP(s)

openstack floating ip delete <floating-ip> [<floating-ip> ...]

<floating-ip>
Floating IP(s) to delete (IP address or ID)

16.25.3. floating ip list
List floating IP(s)

openstack floating ip list
  [--network <network>]
  [--port <port>]
[--fixed-ip-address <ip-address>]
[--long]
[--status <status>]
[--project <project> [--project-domain <project-domain>]]
[--router <router>]

--network <network>
List floating IP(s) according to given network (name or ID) Network version 2 only

--port <port>
List floating IP(s) according to given port (name or ID) Network version 2 only

--fixed-ip-address <ip-address>
List floating IP(s) according to given fixed IP address Network version 2 only

--long
List additional fields in output Network version 2 only

--status <status>
List floating IP(s) according to given status (‘ACTIVE’, ‘DOWN’) Network version 2 only

--project <project>
List floating IP(s) according to given project (name or ID) Network version 2 only

--project-domain <project-domain>
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. Network version 2 only

--router <router>
List floating IP(s) according to given router (name or ID) Network version 2 only

16.25.4. floating ip set
Set floating IP properties

openstack floating ip set
  --port <port>
  [--fixed-ip-address <ip-address>]
  <floating-ip>

--port <port>
Assocaite the floating IP with port (name or ID)

--fixed-ip-address <ip-address>
Fixed IP of the port (required only if port has multiple IPs)

<floating-ip>
Floating IP to associate (IP address or ID)
16.25.5. floating ip show
Display floating IP details

```
openstack floating ip show <floating-ip>
```

<floating-ip>
Floating IP to display (IP address or ID)

16.25.6. floating ip unset
Unset floating IP Properties

```
openstack floating ip unset
   --port
   <floating-ip>
```

--port
Disassociate any port associated with the floating IP

<floating-ip>
Floating IP to disassociate (IP address or ID)

16.26. FLOATING IP POOL
Compute v2, Network v2

16.26.1. floating ip pool list
List pools of floating IP addresses

```
openstack floating ip pool list
```

16.27. GROUP
Identity v3

16.27.1. group add user
Add user to group

```
openstack group add user
   [--group-domain <group-domain>]
   [--user-domain <user-domain>]
   <group>
   <user> [<user> ...]
```
--group-domain <group-domain>
Domain the group belongs to (name or ID). This can be used in case collisions between group names exist. New in version 3.

--user-domain <user-domain>
Domain the user belongs to (name or ID). This can be used in case collisions between user names exist. New in version 3.

<group>
Group to contain <user> (name or ID)

<user>
User(s) to add to <group> (name or ID) (repeat option to add multiple users)

### 16.27.2. group contains user

Check user membership in group

```
openstack group contains user
    [--group-domain <group-domain>]
    [--user-domain <user-domain>]
<group>
<user>
```

--group-domain <group-domain>
Domain the group belongs to (name or ID). This can be used in case collisions between group names exist. New in version 3.

--user-domain <user-domain>
Domain the user belongs to (name or ID). This can be used in case collisions between user names exist. New in version 3.

<group>
Group to check (name or ID)

<user>
User to check (name or ID)

### 16.27.3. group create

Create new group

```
openstack group create
    [--domain <domain>]
    [--description <description>]
    [--or-show]
    <group-name>
```

--domain <domain>
Domain to contain new group (name or ID)

--description <description>
    New group description

--or-show
    Return existing group If the group already exists, return the existing group data and do not fail.

<group-name>
    New group name

16.27.4. group delete

Delete group

    openstack group delete
        [--domain <domain>]
        <group> [...]

--domain <domain>
    Domain containing group(s) (name or ID)

<group>
    Group(s) to delete (name or ID)

16.27.5. group list

List groups

    openstack group list
        [--domain <domain>]
        [--user <user> [--user-domain <user-domain>]]
        [-l]

--domain <domain>
    Filter group list by <domain> (name or ID)

--user <user>
    Filter group list by <user> (name or ID)

--user-domain <user-domain>
    Domain the user belongs to (name or ID). This can be used in case collisions between user names exist. New in version 3.

--long
    List additional fields in output
16.27.6. group remove user

Remove user from group

```
openstack group remove user
  [--group-domain <group-domain>]
  [--user-domain <user-domain>]
  <group>
  <user> [<user> ...]
```

``--group-domain <group-domain>``

Domain the group belongs to (name or ID). This can be used in case collisions between group names exist. New in version 3.

``--user-domain <user-domain>``

Domain the user belongs to (name or ID). This can be used in case collisions between user names exist. New in version 3.

``<group>``

Group containing <user> (name or ID)

``<user>``

User(s) to remove from <group> (name or ID) (repeat option to remove multiple users)

16.27.7. group set

Set group properties

```
openstack group set
  [--domain <domain>]
  [--name <name>]
  [--description <description>]
  <group>
```

``--domain <domain>``

Domain containing <group> (name or ID)

``--name <name>``

New group name

``--description <description>``

New group description

``<group>``

Group to modify (name or ID)

16.27.8. group show

Display group details
openstack group show
    [--domain <domain>]
    <group>

--domain <domain>
    Domain containing <group> (name or ID)

<group>
    Group to display (name or ID)

16.28. HOST

Compute v2

The physical computer running a hypervisor.

16.28.1. host list

List hosts

openstack host list
    [--zone <availability-zone>]

--zone <availability-zone>
    Only return hosts in the availability zone

16.28.2. host set

Set host properties

openstack host set
    [--enable | --disable]
    [--enable-maintenance | --disable-maintenance]
    <host>

--enable
    Enable the host

--disable
    Disable the host

--enable-maintenance
    Enable maintenance mode for the host

--disable-maintenance
    Disable maintenance mode for the host
16.28.3. host show

Display host details

```
openstack host show
  <host>
```

16.29. HYPERVISOR

Compute v2

16.29.1. hypervisor list

List hypervisors

```
openstack hypervisor list
  [--matching <hostname>]
  [--long]
```

```
--matching <hostname>
  Filter hypervisors using <hostname> substring
```

```
--long
  List additional fields in output
```

16.29.2. hypervisor show

Display hypervisor details

```
openstack hypervisor show
  <hypervisor>
```

16.30. HYPERVISOR STATS

Compute v2

16.30.1. hypervisor stats show
Display hypervisor stats details

```
openstack hypervisor stats show
```

### 16.31. Identity Provider

Identity v3

Requires: OS-FEDERATION extension

#### 16.31.1. Identity Provider Create

Create new identity provider

```
openstack identity provider create
    [--remote-id <remote-id> [...]] | --remote-id-file <file-name>]
    [--description <description>]
    [--enable | --disable]
    <name>
```

---

**--remote-id <remote-id>**

Remote IDs to associate with the Identity Provider (repeat option to provide multiple values)

---

**--remote-id-file <file-name>**

Name of a file that contains many remote IDs to associate with the identity provider, one per line

---

**--description**

New identity provider description

---

**--enable**

Enable the identity provider (default)

---

**--disable**

Disable the identity provider

---

**<name>**

New identity provider name (must be unique)

#### 16.31.2. Identity Provider Delete

Delete identity provider(s)

```
openstack identity provider delete
    <identity-provider> [<identity-provider> ...]
```

---

**<identity-provider>**

Identity provider(s) to delete
16.31.3. identity provider list

List identity providers

```
openstack identity provider list
```

16.31.4. identity provider set

Set identity provider properties

```
openstack identity provider set
   [--remote-id <remote-id> [...] | --remote-id-file <file-name>]
   [--description <description>]
   [--enable | --disable]
   <identity-provider>
```

--remote-id <remote-id>

Remote IDs to associate with the Identity Provider (repeat option to provide multiple values)

--remote-id-file <file-name>

Name of a file that contains many remote IDs to associate with the identity provider, one per line

--description

Set identity provider description

--enable

Enable the identity provider

--disable

Disable the identity provider

<identity-provider>

Identity provider to modify

16.31.5. identity provider show

Display identity provider details

```
openstack identity provider show
   <identity-provider>
```

<identity-provider>

Identity provider to display

16.32. IMAGE

Image v1, v2
16.32.1. image add project

_only supported for Image v2_

Associate project with image

openstack image add project

|--project-domain <project-domain>

<image> <project>

--project-domain <project-domain>

Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

<image>

Image to share (name or ID).

<project>

Project to associate with image (name or ID)

16.32.2. image create

_image v1, v2_

Create/upload an image

openstack image create

|--id <id>
|--store <store>
|--container-format <container-format>
|--disk-format <disk-format>
|--size <size>
|--min-disk <disk-gb>
|--min-ram <ram-mb>
|--location <image-url>
|--copy-from <image-url>
|--file <file> | --volume <volume>
|--force
|--checksum <checksum>
|--protected | --unprotected
|--public | --private
|--property <key=value> [...] ]
|--tag <tag> [...] ]
|--project <project> [|--project-domain <project-domain>]]

--id <id>

Image ID to reserve

--store <store>
Upload image to this store *Image version 1 only.*

```
--container-format <container-format>
  Image container format. The supported options are: ami, ari, aki, bare, docker, ova, ovf. The default format is: bare

--disk-format <disk-format>
  Image disk format. The supported options are: ami, ari, aki, vhd, vmdk, raw, qcow2, vhdx, vdi, iso, and ploop. The default format is: raw

--size <size>
  Image size, in bytes (only used with --location and --copy-from) *Image version 1 only.*

--min-disk <disk-gb>
  Minimum disk size needed to boot image, in gigabytes

--min-ram <ram-mb>
  Minimum RAM size needed to boot image, in megabytes

--location <image-url>
  Download image from an existing URL *Image version 1 only.*

--copy-from <image-url>
  Copy image from the data store (similar to --location) *Image version 1 only.*

--file <file>
  Upload image from local file

--volume <volume>
  Create image from a volume

--force
  Force image creation if volume is in use (only meaningful with --volume)

--checksum <checksum>
  Image hash used for verification *Image version 1 only.*

--protected
  Prevent image from being deleted

--unprotected
  Allow image to be deleted (default)

--public
  Image is accessible to the public

--private
  Image is inaccessible to the public (default)
```
--property <key=value>
  Set a property on this image (repeat for multiple values)

--tag <tag>
  Set a tag on this image (repeat for multiple values) New in version 2.

--project <project>
  Set an alternate project on this image (name or ID). Previously known as --owner.

--project-domain <project-domain>
  Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. New in version 2.

<image-name>
  New image name

16.32.3. image delete
Delete image(s)

    openstack image delete
    <image>

<image>
  Image(s) to delete (name or ID)

16.32.4. image list
List available images

    openstack image list
    [ [--public | --private | --shared]
    [ [--property <key=value>]
    [ [--long]
    [ [--sort <key>[:<direction>]]
    [ [--limit <num-images>]
    [ [--marker <image>]

--public
  List only public images

--private
  List only private images

--shared
  List only shared images Image version 2 only.

--property <key=value>
Filter output based on property

--long
List additional fields in output

--sort <key>[:<direction>]
Sort output by selected keys and directions (asc or desc) (default: name:asc), multiple keys and directions can be specified separated by comma

--limit <num-images>
Maximum number of images to display. *Image version 2 only*

--marker <image>
The last image of the previous page. Display list of images after marker. Display all images if not specified. (name or ID) *Image version 2 only*

16.32.5. image remove project

*Only supported for Image v2*

Disassociate project with image

```
openstack image remove remove
[--project-domain <project-domain>]
<image>
<project>
```

--project-domain <project-domain>
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

<image>
Image to unshare (name or ID).

<project>
Project to disassociate with image (name or ID)

16.32.6. image save

Save an image locally

```
openstack image save
  --file <filename>
  <image>
```

--file <filename>
Downloaded image save filename (default: stdout)
16.32.7. image set

Set image properties

```
openstack image set
    [--name <name>]
    [--min-disk <disk-gb>]
    [--min-ram <ram-mb>]
    [--container-format <container-format>]
    [--disk-format <disk-format>]
    [--size <size>]
    [--protected | --unprotected]
    [--public | --private]
    [--store <store>]
    [--location <image-url>]
    [--copy-from <image-url>]
    [--file <file>]
    [--volume <volume>]
    [--force]
    [--checksum <checksum>]
    [--stdin]
    [--property <key=value> [...] ]
    [--tag <tag> [...] ]
    [--architecture <architecture>]
    [--instance-id <instance-id>]
    [--kernel-id <kernel-id>]
    [--os-distro <os-distro>]
    [--os-version <os-version>]
    [--ramdisk-id <ramdisk-id>]
    [--activate|--deactivate]
    [--project <project> [--project-domain <project-domain>]]
    [--accept | --reject | --pending]

<image>
```

**--name <name>**

New image name

**--min-disk <disk-gb>**

Minimum disk size needed to boot image, in gigabytes

**--min-ram <ram-mb>**

Minimum RAM size needed to boot image, in megabytes

**--container-format <container-format>**

Image container format. The supported options are: ami, ari, aki, bare, docker, ova, ovf.

**--disk-format <disk-format>**
Image disk format. The supported options are: ami, ari, aki, vhd, vmdk, raw, qcow2, vhdx, vdi, iso, and ploop.

--size <size>
Size of image data (in bytes) Image version 1 only.

--protected
Prevent image from being deleted

--unprotected
Allow image to be deleted (default)

--public
Image is accessible to the public

--private
Image is inaccessible to the public (default)

--store <store>
Upload image to this store Image version 1 only.

--location <image-url>
Download image from an existing URL Image version 1 only.

--copy-from <image-url>
Copy image from the data store (similar to --location) Image version 1 only.

--file <file>
Upload image from local file Image version 1 only.

--volume <volume>
Update image with a volume Image version 1 only.

--force
Force image update if volume is in use (only meaningful with --volume) Image version 1 only.

--checksum <checksum>
Image hash used for verification Image version 1 only.

--stdin
Allow to read image data from standard input Image version 1 only.

--property <key=value>
Set a property on this image (repeat option to set multiple properties) New in version 2.

--tag <tag>
Set a tag on this image (repeat for multiple values) New in version 2.
--architecture <architecture>
   Operating system architecture New in version 2.

--instance-id <instance-id>
   ID of server instance used to create this image New in version 2.

--kernel-id <kernel-id>
   ID of kernel image used to boot this disk image New in version 2.

--os-distro <os-distro>
   Operating system distribution name New in version 2.

--os-version <os-version>
   Operating system distribution version New in version 2.

--ramdisk-id <ramdisk-id>
   ID of ramdisk image used to boot this disk image New in version 2.

--activate
   Activate the image. New in version 2.

--deactivate
   Deactivate the image. New in version 2.

--project <project>
   Set an alternate project on this image (name or ID). Previously known as --owner.

--project-domain <project-domain>
   Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. New in version 2.

--accept
   Accept the image membership. If --project is passed, this will update the membership status for the given project, otherwise --project will default to the project the user is authenticated to. New in version 2.

--reject
   Reject the image membership. If --project is passed, this will update the membership status for the given project, otherwise --project will default to the project the user is authenticated to. New in version 2.

--pending
   Reset the image membership to 'pending'. If --project is passed, this will update the membership status for the given project, otherwise --project will default to the project the user is authenticated to. New in version 2.

<image>
   Image to modify (name or ID)
16.32.8. image show

Display image details

```
openstack image show
  <image>
```

```
<image>
  Image to display (name or ID)
```

16.32.9. image unset

```
openstack image unset
  [--tag <tag>]
  [--property <property>]
  <image>
```

```
--tag <tag>
  Unset a tag on this image (repeat option to unset multiple tags)
```

```
--property <property>
  Unset a property on this image (repeat option to unset multiple properties)
```

```
<image>
  Image to modify (name or ID)
```

16.33. IP AVAILABILITY

Network v2

16.33.1. ip availability list

List IP availability for network

This command retrieves information about IP availability. Useful for admins who need a quick way to check the IP availability for all associated networks. List specifically returns total IP capacity and the number of allocated IP addresses from that pool.

```
openstack ip availability list
  [--ip-version {4,6}]
  [--project <project>]
```

```
--ip-version {4,6}
  List IP availability of given IP version networks (default is 4)
```
--project <project>
  List IP availability of given project (name or ID)

16.33.2. ip availability show

Show network IP availability details

This command retrieves information about IP availability. Useful for admins who need a quick way to check the IP availability and details for a specific network.

This command will return information about IP availability for the network as a whole, and return availability information for each individual subnet within the network as well.

openstack ip availability show
  <network>

<network>
  Show IP availability for a specific network (name or ID)

16.34. IP FIXED

Compute v2

16.34.1. ip fixed add

Add fixed IP address to server (Deprecated, please use server add fixed ip instead)

openstack ip fixed add
  <network>
  <server>

<network>
  Network to fetch an IP address from (name or ID)

<server>
  Server to receive the IP address (name or ID)

16.34.2. ip fixed remove

Remove fixed IP address from server (Deprecated, please use server remove fixed ip instead)

openstack ip fixed remove
  <ip-address>
  <server>

<ip-address>
  IP address to remove from server (name only)
16.35. IP FLOATING

Compute v2, Network v2

16.35.1. ip floating add

Add floating IP address to server (Deprecated, please use `server add floating ip` instead)

```
openstack ip floating add
   <ip-address>
   <server>
```

---

16.35.2. ip floating create

Create new floating IP address (Deprecated, please use `floating ip create` instead)

```
openstack ip floating create
   [--subnet <subnet>]
   [--port <port>]
   [--floating-ip-address <floating-ip-address>]
   [--fixed-ip-address <fixed-ip-address>]
   <network>
```

---

```
--subnet <subnet>
    Subnet on which you want to create the floating IP (name or ID) (Network v2 only)

--port <port>
    Port to be associated with the floating IP (name or ID) (Network v2 only)

--floating-ip-address <floating-ip-address>
    Floating IP address (Network v2 only)

--fixed-ip-address <fixed-ip-address>
    Fixed IP address mapped to the floating IP (Network v2 only)
```

---

```
<network>
    Network to allocate floating IP from (name or ID)
```
16.35.3. ip floating delete
Delete floating IP(s) (Deprecated, please use `floating ip delete` instead)

```
openstack ip floating delete
   <floating-ip> [<floating-ip> ...]
```

<floating-ip>
Floating IP(s) to delete (IP address or ID)

16.35.4. ip floating list
List floating IP addresses (Deprecated, please use `floating ip list` instead)

```
openstack ip floating list
```

16.35.5. ip floating remove
Remove floating IP address from server (Deprecated, please use `server remove floating ip` instead)

```
openstack ip floating remove
   <ip-address>
   <server>
```

<ip-address>
IP address to remove from server (name only)

<server>
Server to remove the IP address from (name or ID)

16.35.6. ip floating show
Display floating IP details (Deprecated, please use `floating ip show` instead)

```
openstack ip floating show <floating-ip>
```

<floating-ip>
Floating IP to display (IP address or ID)

16.36. IP FLOATING POOL
Compute v2

16.36.1. ip floating pool list
List pools of floating IP addresses (Deprecated, please use `floating ip pool list` instead)
The badly named keypair is really the public key of an OpenSSH key pair to be used for access to created servers. You can also create a private key for access to a created server by not passing any argument to the keypair create command.

Compute v2

16.37.1. keypair create

Create new public or private key for server ssh access

```
openstack keypair create
    [--public-key <file> | --private-key <file>]
    <name>
```

```
--public-key <file>
    Filename for public key to add. If not used, creates a private key.

--private-key <file>
    Filename for private key to save. If not used, print private key in console.

<name>
    New public or private key name
```

16.37.2. keypair delete

Delete public or private key(s)

```
openstack keypair delete
    <key> [<key> ...]
```

```
<key>
    Name of key(s) to delete (name only)
```

16.37.3. keypair list

List key fingerprints

```
openstack keypair list
```

16.37.4. keypair show

Display key details
openstack keypair show
    [--public-key]
    <key>

--public-key
    Show only bare public key paired with the generated key

<key>
    Public or private key to display (name only)

16.38. LIMITS

The Compute and Block Storage APIs have resource usage limits.
Compute v2, Block Storage v1

16.38.1. limits show

Show compute and block storage limits

openstack limits show
    --absolute | --rate
    [--reserved]
    [--project <project>]
    [--domain <domain>]

--absolute
    Show absolute limits

--rate
    Show rate limits

--reserved
    Include reservations count [only valid with --absolute]

--project <project>
    Show limits for a specific project (name or ID) [only valid with --absolute]

--domain <domain>
    Domain the project belongs to (name or ID) [only valid with --absolute]

16.39. MAPPING

Identity v3

Requires: OS-FEDERATION extension

16.39.1. mapping create
Create new mapping

    openstack mapping create
      --rules <filename>
      <name>

--rules <filename>
    Filename that contains a set of mapping rules (required)

<name>
    New mapping name (must be unique)

16.39.2. mapping delete

Delete mapping(s)

    openstack mapping delete
      <mapping> [...]
openstack mapping show

<mapping>
  Mapping to display

16.40. MODULE

Internal

Installed Python modules in the OSC process.

16.40.1. module list

List module versions

openstack module list
  [--all]

--all
  Show all modules that have version information

16.41. NETWORK

A network is an isolated Layer 2 networking segment. There are two types of networks, project and provider networks. Project networks are fully isolated and are not shared with other projects. Provider networks map to existing physical networks in the data center and provide external network access for servers and other resources. Only an OpenStack administrator can create provider networks. Networks can be connected via routers.

Compute v2, Network v2

16.41.1. network create

Create new network

openstack network create
  [--project <project> [--project-domain <project-domain>]]
  [--enable | --disable]
  [--share | --no-share]
  [--description <description>]
  [--availability-zone-hint <availability-zone>]
  [--enable-port-security | --disable-port-security]
  [--external [--default | --no-default] | --internal]
  [--provider-network-type <provider-network-type>]
  [--provider-physical-network <provider-physical-network>]
  [--provider-segment <provider-segment>]
  [--qos-policy <qos-policy>]
  [--transparent-vlan | --no-transparent-vlan]
  <name>
--project <project>
Owner's project (name or ID) Network version 2 only

--project-domain <project-domain>
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. Network version 2 only

--enable
Enable network (default) Network version 2 only

--disable
Disable network Network version 2 only

--share
Share the network between projects

--no-share
Do not share the network between projects

--description <description>
Set network description Network version 2 only

--availability-zone-hint <availability-zone>
Availability Zone in which to create this network (Network Availability Zone extension required, repeat option to set multiple availability zones) Network version 2 only

--enable-port-security
Enable port security by default for ports created on this network (default) Network version 2 only

--disable-port-security
Disable port security by default for ports created on this network Network version 2 only

--subnet <subnet>
IPv4 subnet for fixed IPs (in CIDR notation) Compute version 2 only

--external
Set this network as an external network (external-net extension required) Network version 2 only

--internal
Set this network as an internal network (default) Network version 2 only

--default
Specify if this network should be used as the default external network Network version 2 only

--no-default
Do not use the network as the default external network (default) Network version 2 only
--provider-network-type <provider-network-type>
   The physical mechanism by which the virtual network is implemented. The supported options are: flat, geneve, gre, local, vlan, vxlan. Network version 2 only

--provider-physical-network <provider-physical-network>
   Name of the physical network over which the virtual network is implemented Network version 2 only

--provider-segment <provider-segment>
   VLAN ID for VLAN networks or Tunnel ID for GENEVE/GRE/VXLAN networks Network version 2 only

--qos-policy <qos-policy>
   QoS policy to attach to this network (name or ID) Network version 2 only

--transparent-vlan
   Make the network VLAN transparent Network version 2 only

--no-transparent-vlan
   Do not make the network VLAN transparent Network version 2 only

<name>
   New network name

16.41.2. network delete

Delete network(s)

   openstack network delete
   <network> [ <network> ... ]

<network>
   Network(s) to delete (name or ID)

16.41.3. network list

List networks

   openstack network list
   [- --external | --internal]
   [- --long]
   [- --name <name>]
   [- --enable | --disable]
   [- --project <project> [- --project-domain <project-domain>]]
   [- --share | --no-share]
   [- --status <status>]
   [- --provider-network-type <provider-network-type>]
   [- --provider-physical-network <provider-physical-network>]
   [- --provider-segment <provider-segment>]
   [- --agent <agent-id>]
List external networks

List internal networks

List additional fields in output

List networks according to their name

List enabled networks

List disabled networks

List networks according to their project (name or ID)

Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

List networks shared between projects

List networks not shared between projects

List networks according to their status ('ACTIVE', 'BUILD', 'DOWN', 'ERROR')

List networks according to their physical mechanisms. The supported options are: flat, geneve, gre, local, vlan, vxlan.

List networks according to name of the physical network

List networks according to VLAN ID for VLAN networks or Tunnel ID for GENEVE/GRE/VXLAN networks

List networks hosted by agent (ID only)
16.41.4. network set

Set network properties

**_Network version 2 only_**

```
openstack network set
    [--name <name>]
    [--enable | --disable]
    [--share | --no-share]
    [--description <description>]
    [--enable-port-security | --disable-port-security]
    [--external [--default | --no-default] | --internal]
    [--provider-network-type <provider-network-type>]
    [--provider-physical-network <provider-physical-network>]
    [--provider-segment <provider-segment>]
    [--qos-policy <qos-policy> | --no-qos-policy]
    [--transparent-vlan | --no-transparent-vlan]
<network>
```

**--name <name>**
Set network name

**--enable**
Enable network

**--disable**
Disable network

**--share**
Share the network between projects

**--no-share**
Do not share the network between projects

**--description <description>**
Set network description

**--enable-port-security**
Enable port security by default for ports created on this network

**--disable-port-security**
Disable port security by default for ports created on this network

**--external**
Set this network as an external network. (external-net extension required)

**--internal**
Set this network as an internal network
--default  
Set the network as the default external network

--no-default  
Do not use the network as the default external network.

--provider-network-type <provider-network-type>  
The physical mechanism by which the virtual network is implemented. The supported options are: flat, gre, local, vlan, vxlan.

--provider-physical-network <provider-physical-network>  
Name of the physical network over which the virtual network is implemented.

--provider-segment <provider-segment>  
VLAN ID for VLAN networks or Tunnel ID for GRE/VXLAN networks.

--qos-policy <qos-policy>  
QoS policy to attach to this network (name or ID)

--no-qos-policy  
Remove the QoS policy attached to this network.

--transparent-vlan  
Make the network VLAN transparent

--no-transparent-vlan  
Do not make the network VLAN transparent

<network>  
Network to modify (name or ID)

16.41.5. network show  
Display network details

```
openstack network show <network>
```

<network>  
Network to display (name or ID)

16.42. NETWORK AGENT  

A network agent is an agent that handles various tasks used to implement virtual networks. These agents include neutron-dhcp-agent, neutron-l3-agent, neutron-metering-agent, and neutron-lbaas-agent, among others. The agent is available when the alive status of the agent is “True”.

Network v2
16.42.1. network agent add network

Add network to an agent

```
openstack network agent add network
    [--dhcp]
    <agent-id>
    <network>
```

--dhcp

Add a network to DHCP agent

<agent-id>

Agent to which a network is added (ID only)

<network>

Network to be added to an agent (ID or name)

16.42.2. network agent delete

Delete network agent(s)

```
openstack network agent delete
    <network-agent> [<network-agent> ...]
```

<network-agent>

Network agent(s) to delete (ID only)

16.42.3. network agent list

List network agents

```
openstack network agent list
    [--agent-type <agent-type>]
    [--host <host>]
    [--network <network>]
```

--agent-type <agent-type>

List only agents with the specified agent type. The supported agent types are: dhcp, openvswitch, linux-bridge, ofa, i3, loadbalancer, metering, metadata, macvtap, nic.

--host <host>

List only agents running on the specified host

--network <network>

List agents hosting a network (ID or name)

16.42.4. network agent set
Set network agent properties

openstack network agent set
   [--description <description>]
   [--enable | --disable]
   <network-agent>

--description <description>
   Set network agent description

--enable
   Enable network agent

--disable
   Disable network agent

<network-agent>
   Network agent to modify (ID only)

16.42.5. network agent show

Display network agent details

openstack network agent show
   <network-agent>

<network-agent>
   Network agent to display (ID only)

16.42.6. network agent remove network

Remove network from an agent

openstack network agent remove network
   [--dhcp]
   <agent-id>
   <network>

--dhcp
   Remove network from DHCP agent.

<agent-id>
   Agent to which a network is removed (ID only)

<network>
   Network to be removed from an agent (ID or name)
16.43. NETWORK AUTO ALLOCATED TOPOLOGY

An auto allocated topology allows admins to quickly set up external connectivity for end-users. Only one auto allocated topology is allowed per project.

Network v2

16.43.1. network auto allocated topology create

Create the auto allocated topology for project

```
openstack network auto allocated topology create
    [--or-show]
    [--check-resources]
    [--project <project> [--project-domain <project-domain>]]
```

--or-show

If topology exists returns the topologies information (Default).

--check-resources

Validate the requirements for auto allocated topology. Does not return a topology.

--project <project>

Return the auto allocated topology for a given project. Default is current project.

--project-domain <project-domain>

Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

16.43.2. network auto allocated topology delete

Delete auto allocated topology for project

```
openstack network auto allocated topology delete
    [--project <project> [--project-domain <project-domain>]]
```

--project <project>

Delete auto allocated topology for a given project. Default is the current project.

--project-domain <project-domain>

Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

16.44. NETWORK FLAVOR

A network flavor extension allows the user selection of operator-curated flavors during resource creations. It allows administrators to create network service flavors.

Network v2
16.44.1. network flavor add profile

Add network flavor to service profile

```
openstack network flavor add profile
  <flavor>
  <service-profile-id>
```

<flavor>
Flavor to which service profile is added. (Name or ID)

<service-profile-id>
Service profile to be added to flavor. (ID only)

16.44.2. network flavor create

Create network flavor

```
openstack network flavor create
  --service-type <service-type>
  [--description <description>]
  [--enable | --disable]
  [--project <project> [--project-domain <project-domain>]]
  <name>
```

--service-type <service-type>
Service type to which the flavor applies to: e.g. VPN (required)

--description <description>
Description for the flavor

--enable
Enable the flavor (default)

--disable
Disable the flavor

--project <project>
Owner's project (name or ID)

--project-domain <project-domain>
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

<name>
Name for the flavor

16.44.3. network flavor delete
Delete network flavor(s)

```
openstack network flavor delete
   <flavor> [<flavor> ...]
```

```
<flavor>
   Flavor(s) to delete (name or ID)
```

**16.44.4. network flavor list**

List network flavors

```
openstack network flavor list
```

**16.44.5. network flavor remove profile**

Remove network flavor from service profile

```
openstack network flavor remove profile
   <flavor>
   <service-profile-id>
```

```
<flavor>
   Flavor from which service profile is removed. (Name or ID)
```

```
<service-profile-id>
   Service profile to be removed from flavor. (ID only)
```

**16.44.6. network flavor set**

Set network flavor properties

```
openstack network flavor set
   [--name <name>]
   [--description <description>]
   [--enable | --disable]
   <flavor>
```

```
--name <name>
   Set flavor name
```

```
--description <description>
   Set network flavor description
```

```
--enable
   Enable network flavor
```

```
--disable
   Disable network flavor
```
Disable network flavor

<flavor>
Flavor to update (name or ID)

16.44.7. network flavor show

Show network flavor

    openstack network flavor show
      <flavor>

<flavor>
Flavor to display (name or ID)

16.45. NETWORK FLAVOR PROFILE

A network flavor profile allows administrators to create, delete, list, show and update network service profile, which details a framework to enable operators to configure and users to select from different abstract representations of a service implementation in the Networking service. It decouples the logical configuration from its instantiation enabling operators to create user options according to deployment needs.

Network v2

16.45.1. network flavor profile create

Create a new network flavor profile

    openstack network flavor profile create
      [--project <project> [--project-domain <project-domain>]]
      [--description <description>]
      [--enable | --disable]
      (---driver <driver> | --metainfo <metainfo> | --driver <driver> --
       metainfo <metainfo>)

--project <project>
   Owner's project (name or ID) Network version 2 only

--project-domain <project-domain>
   Domain the project belongs to (name or ID). This can be used in case collisions between project names exist

--description <description>
   Description for the flavor profile Network version 2 only

--enable
   Enable the flavor profile (default)
--disable
Disables the flavor profile.

--driver <driver>
Python module path to driver. Network version 2 only.

--metainfo <metainfo>
Metainfo for the flavor profile. Network version 2 only.

16.45.2. network flavor profile delete
Delete network flavor profile

```
openstack network flavor profile delete
   <flavor-profile-id> [<flavor-profile-id> ...]
```

--flavor-profile-id
Flavor profile(s) to delete (ID only).

16.45.3. network flavor profile list
List network flavor profiles

```
openstack network flavor profile list
```

16.45.4. network flavor profile set
Set network flavor profile properties

```
openstack network flavor profile set
   [--description <description>]
   [--driver <driver>]
   [--enable | --disable]
   [--metainfo <metainfo>]
   <flavor-profile-id>
```

--description <description>
Description of the flavor profile.

--driver <driver>
Python module path to driver.

--enable (Default)
Enable the flavor profile.

--disable
Disable the flavor profile.
--metainfo <metainfo>
Metainfo for the flavor profile

<flavor-profile-id>
Flavor profile to update (ID only)

16.45.5. network flavor profile show

Show network flavor profile

openstack network flavor profile show
<flavor-profile-id>

<flavor-profile-id>
Flavor profile to display (ID only)

16.46. NETWORK METER

A network meter allows operators to measure traffic for a specific IP range. The following commands are specific to the L3 metering extension.

Network v2

16.46.1. network meter create

Create network meter

openstack network meter create
    [--project <project> [--project-domain <project-domain>]]
    [--description <description>]
    [--share | --no-share]
    <name>

--project <project>
Owner's project (name of ID) Network version 2 only

--description <description>
Description of meter Network version 2 only

--share
Share the meter between projects

--no-share
Do not share the meter between projects (Default)

<name>
New meter name
16.46.2. network meter delete

Delete network meter(s)

```
openstack network meter delete
<meter> [<meter> ...]
```

<meter>
Meter(s) to delete (name or ID)

16.46.3. network meter list

List network meters

```
openstack network meter list
```

16.46.4. network meter show

Show network meter

```
openstack network meter show
<meter>
```

<meter>
Meter to display (name or ID)

16.47. NETWORK METER RULE

A meter rule sets the rule for a meter to measure traffic for a specific IP range. The following uses meter and requires the L3 metering extension.

Network v2

16.47.1. network meter rule create

Create meter rule

```
openstack network meter rule create
    --remote-ip-prefix <remote-ip-prefix>
    [--ingress | --egress]
    [--exclude | --include]
    [--project <project> [--project-domain <project-domain>]]
    <meter>
```

--project <project>
Owner's project (name or ID)

--project-domain <project-domain>
Domain the project belongs to (name of ID). This can be used in case collisions between project names exist.

--ingress
Rule is applied to incoming traffic (default)

--egress
Rule is applied to outgoing traffic

--exclude
Exclude remote_ip_prefix from count of the traffic of IP addresses

--include
Include remote_ip_prefix into count of the traffic of IP addresses (default)

--remote-ip-prefix <remote-ip-prefix>
The remote IP prefix to associate with this metering rule packet

<meter>
Meter to associate with this meter rule (name or ID)

16.47.2. network meter rule delete
Delete meter rule(s)

    openstack network meter rule delete <id> [<id> ...]

<meter-rule-id>
ID of meter rule(s) to delete

16.47.3. network meter rule list
List meter rules

    openstack network meter rule list

16.47.4. network meter rule show
Show meter rule

    openstack network meter rule show <meter-rule-id>

<meter-rule-id>
Meter rule to display (ID only)

16.48. NETWORK QOS POLICY
A **Network QoS policy** groups a number of Network QoS rules, applied to a network or a port.

Network v2

### 16.48.1. network qos policy create

Create new Network QoS policy

```bash
openstack network qos policy create
   [--description <description>]
   [--share | --no-share]
   [--project <project>]
   [--project-domain <project-domain>]
   <name>
```

---

**--description <description>**

Description of the QoS policy

**--share**

Make the QoS policy accessible by other projects

**--no-share**

Make the QoS policy not accessible by other projects (default)

**--project <project>**

Owner’s project (name or ID)

**--project-domain <project-domain>**

Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

**<name>**

New QoS policy specification name

### 16.48.2. network qos policy delete

Delete Network QoS policy

```bash
openstack network qos policy delete
   <qos-policy> [<qos-policy> ...]
```

---

**<qos-policy>**

Network QoS policy(s) to delete (name or ID)

### 16.48.3. network qos policy list

List Network QoS policies

```bash
openstack network qos policy list
```
[--project <project> [--project-domain <project-domain>]]
[--share | --no-share]

--project <project>
  List qos policies according to their project (name or ID)

--project-domain <project-domain>
  Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

--share
  List qos policies shared between projects

--no-share
  List qos policies not shared between projects

16.48.4. network qos policy set

Set Network QoS policy properties

openstack network qos policy set
  [--name <name>]
  [--description <description>]
  [--share | --no-share]
  <qos-policy>

--name <name>
  Name of the QoS policy

--description <description>
  Description of the QoS policy

--share
  Make the QoS policy accessible by other projects

--no-share
  Make the QoS policy not accessible by other projects

<qos-policy>
  Network QoS policy to modify (name or ID)

16.48.5. network qos policy show

Display Network QoS policy details

openstack network qos policy show
  <qos-policy>
Network QoS policy to display (name or ID)

16.49. NETWORK QoS RULE

A Network QoS rule specifies a rule defined in a Network QoS policy; its type is defined by the parameter 'type'. Can be assigned, within a Network QoS policy, to a port or a network. Each Network QoS policy can contain several rules, each of them

Network v2

16.49.1. network qos rule create

Create new Network QoS rule

```bash
openstack network qos rule create
  --type <type>
  [--max-kbps <max-kbps>]
  [--max-burst-kbits <max-burst-kbits>]
  [--dscp-marks <dscp-marks>]
  [--min-kbps <min-kbps>]
  [--ingress | --egress]
  <qos-policy>
```

--type <type>
    QoS rule type (minimum-bandwidth, dscp-marking, bandwidth-limit)

--max-kbps <min-kbps>
    Maximum bandwidth in kbps

--max-burst-kbits <max-burst-kbits>
    Maximum burst in kilobits, 0 means automatic

--dscp-mark <dscp-mark>
    DSCP mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54

--min-kbps <min-kbps>
    Minimum guaranteed bandwidth in kbps

--ingress
    Ingress traffic direction from the project point of view

--egress
    Egress traffic direction from the project point of view

<qos-policy>
    QoS policy that contains the rule (name or ID)

16.49.2. network qos rule delete
Delete Network QoS rule

openstack network qos rule delete
    <qos-policy>
    <rule-id>

$qqos-policy$
QoS policy that contains the rule (name or ID)

$rule-id$
Network QoS rule to delete (ID)

16.49.3. network qos rule list

List Network QoS rules

openstack network qos rule list
    <qos-policy>

$qqos-policy$
QoS policy that contains the rule (name or ID)

16.49.4. network qos rule set

Set Network QoS rule properties

openstack network qos rule set
    [--max-kbps <max-kbps>]
    [--max-burst-kbits <max-burst-kbits>]
    [--dscp-marks <dscp-marks>]
    [--min-kbps <min-kbps>]
    [--ingress | --egress]
    <qos-policy>
    <rule-id>

--max-kbps <min-kbps>
Maximum bandwidth in kbps

--max-burst-kbits <max-burst-kbits>
Maximum burst in kilobits, 0 means automatic

--dscp-mark <dscp-mark>
DSCP mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54

--min-kbps <min-kbps>
Minimum guaranteed bandwidth in kbps

--ingress
Ingress traffic direction from the project point of view

--egress
Egress traffic direction from the project point of view

<qos-policy>
QoS policy that contains the rule (name or ID)

<rule-id>
Network QoS rule to delete (ID)

16.49.5. network qos rule show

Display Network QoS rule details

openstack network qos rule show
<qos-policy>
<rule-id>

<qos-policy>
QoS policy that contains the rule (name or ID)

<rule-id>
Network QoS rule to delete (ID)

16.50. NETWORK QOS RULE TYPE

A Network QoS rule type is a specific Network QoS rule type available to be used.

Network v2

16.50.1. network qos rule type list

List Network QoS rule types

openstack network qos rule type list

16.51. NETWORK RBAC

A network rbac is a Role-Based Access Control (RBAC) policy for network resources. It enables both operators and users to grant access to network resources for specific projects.

Network v2

16.51.1. network rbac create

Create network RBAC policy

openstack network rbac create
--type <type>
--- Type of the object that RBAC policy affects ("qos_policy" or "network") (required)

--action <action>
--- Action for the RBAC policy ("access_as_external" or "access_as_shared") (required)

--target-project <target-project>
--- The project to which the RBAC policy will be enforced (name or ID) (required)

--target-project-domain <target-project-domain>
--- Domain the target project belongs to (name or ID). This can be used in case collisions between project names exist.

--project <project>
--- The owner project (name or ID)

--project-domain <project-domain>
--- Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

<rbac-object>
--- The object to which this RBAC policy affects (name or ID)

16.51.2. network rbac delete

Delete network RBAC policy(s)

openstack network rbac delete
    <rbac-policy> [<rbac-policy> ...]

<rbac-policy>
--- RBAC policy(s) to delete (ID only)

16.51.3. network rbac list

List network RBAC policies

openstack network rbac list
    [--type <type>]
    [--action <action>]
    [--long]
--type <type>
List network RBAC policies according to given object type ("qos_policy" or "network")

--action <action>
List network RBAC policies according to given action ("access_as_external" or "access_as_shared")

--long
List additional fields in output

16.51.4. network rbac set
Set network RBAC policy properties

openstack network rbac set
[--target-project <target-project> [--target-project-domain <target-project-domain>]]
<rbac-policy>

--target-project <target-project>
The project to which the RBAC policy will be enforced (name or ID)

--target-project-domain <target-project-domain>
Domain the target project belongs to (name or ID). This can be used in case collisions between project names exist.

<rbac-policy>
RBAC policy to be modified (ID only)

16.51.5. network rbac show
Display network RBAC policy details

openstack network rbac show
<rbac-policy>

<rbac-policy>
RBAC policy (ID only)

16.52. NETWORK SEGMENT

A network segment is an isolated Layer 2 segment within a network. A network may contain multiple network segments. Depending on the network configuration, Layer 2 connectivity between network segments within a network may not be guaranteed.

Network v2

16.52.1. network segment create
Create new network segment

```bash
openstack network segment create
    [--description <description>]
    [--physical-network <physical-network>]
    [--segment <segment>]
    --network <network>
    --network-type <network-type>
    <name>
```

---

**--description <description>**

Network segment description

---

**--physical-network <physical-network>**

Physical network name of this network segment

---

**--segment <segment>**

Segment identifier for this network segment which is based on the network type, VLAN ID for vlan network type and tunnel ID for geneve, gre and vxlan network types

---

**--network <network>**

Network this network segment belongs to (name or ID)

---

**--network-type <network-type>**

Network type of this network segment (flat, geneve, gre, local, vlan or vxlan)

---

**<name>**

New network segment name

---

**16.52.2. network segment delete**

Delete network segment(s)

```bash
openstack network segment delete
    <network-segment> [<network-segment> ...]
```

---

**<network-segment>**

Network segment(s) to delete (name or ID)

---

**16.52.3. network segment list**

List network segments

```bash
openstack network segment list
    [--long]
    [--network <network>]
```

---

**--long**
List additional fields in output

--network <network>

List network segments that belong to this network (name or ID)

### 16.52.4. network segment set

Set network segment properties

```
openstack network segment set
    [--description <description>]
    [--name <name>]
    <network-segment>
```

--description <description>

Set network segment description

--name <name>

Set network segment name

<network-segment>

Network segment to modify (name or ID)

### 16.52.5. network segment show

Display network segment details

```
openstack network segment show
    <network-segment>
```

<network-segment>

Network segment to display (name or ID)

### 16.53. NETWORK SERVICE PROVIDER

A network service provider is a particular driver that implements a networking service

Network v2

#### 16.53.1. network service provider list

List service providers

```
openstack network service provider list
```

### 16.54. OBJECT
Object Storage v1

16.54.1. object create

Upload object to container

```
openstack object create
    [--name <name>]
    <container>
    <filename> [<filename> ...]
```

--name <name>
Upload a file and rename it. Can only be used when uploading a single object

<container>
Container for new object

<filename>
Local filename(s) to upload

16.54.2. object delete

Delete object from container

```
openstack object delete
    <container>
    <object> [<object> ...]
```

<container>
Delete object(s) from <container>

<object>
Object(s) to delete

16.54.3. object list

List objects

```
openstack object list
    [--prefix <prefix>]
    [--delimiter <delimiter>]
    [--marker <marker>]
    [--end-marker <end-marker>]
    [--limit <num-objects>]
    [--long]
    [--all]
    <container>
```

--prefix <prefix>
Filter list using <prefix>

--delimiter <delimiter>
Roll up items with <delimiter>

--marker <marker>
Anchor for paging

--end-marker <end-marker>
End anchor for paging

--limit <num-objects>
Limit number of objects returned

--long
List additional fields in output

--all
List all objects in <container> (default is 10000)

<container>
Container to list

16.54.4. object save
Save object locally

    openstack object save
        [--file <filename>]
        <container>
        <object>

--file <filename>
Destination filename (defaults to object name)

<container>
Download <object> from <container>

<object>
Object to save

16.54.5. object set
Set object properties

    openstack object set
        [--property <key=value> [...] ]
        <container>
        <object>
--property <key=value>
  Set a property on this object (repeat option to set multiple properties)

<container>
  Modify <object> from <container>

<object>
  Object to modify

16.54.6. object show

Display object details

  openstack object show
      <container>
      <object>

<container>
  Display <object> from <container>

<object>
  Object to display

16.54.7. object unset

Unset object properties

  openstack object unset
      [--property <key>]
      <container>
      <object>

--property <key>
  Property to remove from object (repeat option to remove multiple properties)

<container>
  Modify <object> from <container>

<object>
  Object to modify

16.55. OBJECT STORE ACCOUNT

Object Storage v1

16.55.1. object store account set

Set account properties
openstack object store account set
   [--property <key=value> [...]]

--property <key=value>
   Set a property on this account (repeat option to set multiple properties)

16.55.2. object store account show

Display account details
openstack object store account show

16.55.3. object store account unset

Unset account properties
openstack object store account unset
   [--property <key>]

--property <key>
   Property to remove from account (repeat option to remove multiple properties)

16.56. POLICY

Identity v3

16.56.1. policy create

Create new policy
openstack policy create
   [--type <type>]
   <filename>

--type <type>
   New MIME type of the policy rules file (defaults to application/json)

<filename>
   New serialized policy rules file

16.56.2. policy delete

Delete policy(s)
openstack policy delete
   <policy> [<policy> ...]
Policy(s) to delete

16.56.3. policy list

List policies

```
openstack policy list
    [--long]
```

```
--long
```

List additional fields in output

16.56.4. policy set

Set policy properties

```
openstack policy set
    [--type <type>]
    [--rules <filename>]
```

```
--type <type>
```

New MIME type of the policy rules file

```
--rules <filename>
```

New serialized policy rules file

Policy to modify

16.56.5. policy show

Display policy details

```
openstack policy show
```

Policy to display

16.57. PORT

A port is a connection point for attaching a single device, such as the NIC of a server, to a network. The port also describes the associated network configuration, such as the MAC and IP addresses to be used on that port.

Network v2
16.57.1. port create

Create new port

```bash
openstack port create
   --network <network>
   [--description <description>]
   [--fixed-ip subnet=<subnet>,ip-address=<ip-address>]
   [--device <device-id>]
   [--device-owner <device-owner>]
   [--vnic-type <vnic-type>]
   [--binding-profile <binding-profile>]
   [--host <host-id>]
   [--enable | --disable]
   [--mac-address <mac-address>]
   [--security-group <security-group> | --no-security-group]
   [--dns-name <dns-name>]
   [--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]]
   [--qos-policy <qos-policy>]
   [--project <project> [--project-domain <project-domain>]]
   [--enable-port-security | --disable-port-security]
   <name>
```

**--network <network>**

Network this port belongs to (name or ID)

**--description <description>**

Description of this port

**--fixed-ip subnet=<subnet>,ip-address=<ip-address>**

Desired IP and/or subnet for this port (name or ID): subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)

**--device <device-id>**

Port device ID

**--device-owner <device-owner>**

Device owner of this port. This is the entity that uses the port (for example, network:dhcp).

**--vnic-type <vnic-type>**

VNIC type for this port (direct | direct-physical | macvtap | normal | baremetal, default: normal)

**--binding-profile <binding-profile>**

Custom data to be passed as binding:profile. Data may be passed as <key>=<value> or JSON. (repeat option to set multiple binding:profile data)

**--host <host-id>**

Allocate port on host `<host-id>` (ID only)
--enable
  Enable port (default)

--disable
  Disable port

--mac-address <mac-address>
  MAC address of this port

--security-group <security-group>
  Security group to associate with this port (name or ID) (repeat option to set multiple security groups)

--no-security-group
  Associate no security groups with this port

--dns-name <dns-name>
  Set DNS name to this port (requires DNS integration extension)

--allowed-address ip-address=<ip-address>,mac-address=<mac-address>
  Add allowed-address pair associated with this port: ip-address=<ip-address>,mac-address=<mac-address> (repeat option to set multiple allowed-address pairs)

--qos-policy <qos-policy>
  Attach QoS policy to this port (name or ID)

--project <project>
  Owner's project (name or ID)

--project-domain <project-domain>
  Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

--enable-port-security
  Enable port security for this port (Default)

--disable-port-security
  Disable port security for this port

<name>
  Name of this port

16.57.2. port delete

Delete port(s)

openstack port delete
  <port> [<port> ...]
Port(s) to delete (name or ID)

16.57.3. port list

List ports

```
openstack port list
    [-device-owner <device-owner>]
    [-router <router> | --server <server>]
    [-network <network>]
    [-mac-address <mac-address>]
    [-fixed-ip subnet=<subnet>,ip-address=<ip-address>]
    [-long]
    [-project <project> [--project-domain <project-domain>]]
```

--device-owner <device-owner>
    List only ports with the specified device owner. This is the entity that uses the port (for example, network:dhcp).

--router <router>
    List only ports attached to this router (name or ID)

--server <server>
    List only ports attached to this server (name or ID)

--network <network>
    List only ports attached to this network (name or ID)

--mac-address <mac-address>
    List only ports with this MAC address

--fixed-ip subnet=<subnet>,ip-address=<ip-address>
    Desired IP and/or subnet for filtering ports (name or ID): subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)

--long
    List additional fields in output

--project <project>
    List ports according to their project (name or ID)

--project-domain <project-domain>
    Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

16.57.4. port set

Set port properties
openstack port set
[--description <description>]
[--fixed-ip subnet=<subnet>,ip-address=<ip-address>]
[--no-fixed-ip]
[--device <device-id>]
[--device-owner <device-owner>]
[--vnic-type <vnic-type>]
[--binding-profile <binding-profile>]
[no-binding-profile]
[--host <host-id>]
[--qos-policy <qos-policy>]
[--enable | --disable]
[--name <name>]
[--mac-address <mac-address>]
[--security-group <security-group>]
[no-security-group]
[--enable-port-security | --disable-port-security]
[--dns-name <dns-name>]
[allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]]
[no-allowed-address]
<port>

--description <description>
Description of this port

--fixed-ip subnet=<subnet>,ip-address=<ip-address>
Desired IP and/or subnet for this port (name or ID): subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)

--no-fixed-ip
Clear existing information of fixed IP addresses. Specify both --fixed-ip and --no-fixed-ip to overwrite the current fixed IP addresses.

--device <device-id>
Port device ID

--device-owner <device-owner>
Device owner of this port. This is the entity that uses the port (for example, network:dhcp).

--vnic-type <vnic-type>
VNIC type for this port (direct | direct-physical | macvtap | normal | baremetal, default: normal)

--binding-profile <binding-profile>
Custom data to be passed as binding:profile. Data may be passed as <key>=<value> or JSON. (repeat option to set multiple binding:profile data)

--no-binding-profile
Clear existing information of binding:profile. Specify both --binding-profile and --no-binding-profile to overwrite the current binding:profile information.
--host <host-id>
    Allocate port on host <host-id> (ID only)

--qos-policy <qos-policy>
    Attach QoS policy to this port (name or ID)

--enable
    Enable port

--disable
    Disable port

--name
    Set port name

--mac-address
    Set port’s MAC address (admin only)

--security-group <security-group>
    Security group to associate with this port (name or ID) (repeat option to set multiple security groups)

--no-security-group
    Clear existing security groups associated with this port

--enable-port-security
    Enable port security for this port

--disable-port-security
    Disable port security for this port

--dns-name <dns-name>
    Set DNS name to this port (requires DNS integration extension)

--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]
    Add allowed-address pair associated with this port: ip-address=<ip-address>[,mac-address=<mac-address>] (repeat option to set multiple allowed-address pairs)

--no-allowed-address
    Clear existing allowed-address pairs associated with this port. (Specify both --allowed-address and --no-allowed-address to overwrite the current allowed-address pairs)

<port>
    Port to modify (name or ID)

16.57.5. port show

Display port details
openstack port show
  <port>

<port>
  Port to display (name or ID)

16.57.6. port unset

Unset port properties

openstack port unset
  [--fixed-ip subnet=<subnet>,ip-address=<ip-address> [...]]
  [--binding-profile <binding-profile-key> [...]]
  [--security-group <security-group> [...]]
  [--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>] [...]]
  [--qos-policy]
  <port>

--fixed-ip subnet=<subnet>,ip-address=<ip-address>
  Desired IP and/or subnet which should be removed from this port (name or ID): subnet=<subnet>,ip-address=<ip-address> (repeat option to unset multiple fixed IP addresses)

--binding-profile <binding-profile-key>
  Desired key which should be removed from binding-profile (repeat option to unset multiple binding:profile data)

--security-group <security-group>
  Security group which should be removed from this port (name or ID) (repeat option to unset multiple security groups)

--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]
  Desired allowed-address pair which should be removed from this port: ip-address=<ip-address>[,mac-address=<mac-address>] (repeat option to unset multiple allowed-address pairs)

--qos-policy
  Remove the QoS policy attached to the port

<port>
  Port to modify (name or ID)

16.58. PROJECT

Identity v2, v3

16.58.1. project create
Create new project

```
openstack project create
    [--domain <domain>]
    [--parent <project>]
    [--description <description>]
    [--enable | --disable]
    [--property <key=value>]
    [--or-show]
    <name>
```

---domain <domain>
Domain owning the project (name or ID) New in version 3.

--parent <project>
Parent of the project (name or ID) New in version 3.

--description <description>
Project description

--enable
Enable project (default)

--disable
Disable project

--property <key=value>
Add a property to <name> (repeat option to set multiple properties)

--or-show
Return existing project If the project already exists return the existing project data and do not fail.

<name>
New project name

16.58.2. project delete

Delete project(s)

```
openstack project delete
    [--domain <domain>]
    <project> [<!--project> ...]
```

--domain <domain>
Domain owning <project> (name or ID) New in version 3.

<project>
16.58.3. project list

List projects

```
openstack project list
    [--domain <domain>]
    [--user <user>]
    [--my-projects]
    [--long]
    [--sort <key>[::<direction>,<key>::<direction>,..]]
```

--domain <domain>
Filter projects by <domain> (name or ID) New in version 3.

--user <user>
Filter projects by <user> (name or ID) New in version 3.

--my-projects
List projects for the authenticated user. Supersedes other filters. New in version 3.

--long
List additional fields in output

--sort <key>[::<direction>,<key>::<direction>,..]
Sort output by selected keys and directions (asc or desc) (default: asc), multiple keys and
directions can be specified --sort <key>[::<direction>,<key>::<direction>,..]

16.58.4. project set

Set project properties

```
openstack project set
    [--name <name>]
    [--domain <domain>]
    [--description <description>]
    [--enable | --disable]
    [--property <key=value>]
    <project>
```

--name <name>
Set project name

--domain <domain>
Domain owning <project> (name or ID) New in version 3.

--description <description>
Set project description
--enable
   Enable project (default)

--disable
   Disable project

--property <key=value>
   Set a property on <project> (repeat option to set multiple properties) Identity version 2 only

<project>
   Project to modify (name or ID)

16.58.5. project show

Display project details

   openstack project show
   [--domain <domain>]
   <project>

--domain <domain>
   Domain owning <project> (name or ID) New in version 3.

--parents
   Show the project's parents as a list New in version 3.

--children
   Show project's subtree (children) as a list New in version 3.

<project>
   Project to display (name or ID)

16.58.6. project unset

Unset project properties

   _Identity version 2 only_

   openstack project unset
   --property <key> [--property <key> ...]
   <project>

--property <key>
   Property key to remove from project (repeat option to remove multiple properties)

<project>
   Project to modify (name or ID)
16.59. QUOTA

Resource quotas appear in multiple APIs, OpenStackClient presents them as a single object with multiple properties.

Block Storage v1, v2, Compute v2, Network v2

16.59.1. quota list

List quotas for all projects with non-default quota values

```
openstack quota list
     --compute | --network | --volume

--network
     List network quotas

--compute
     List compute quotas

--volume
     List volume quotas
```

16.59.2. quota set

Set quotas for project

```
openstack quota set
  # Compute settings
  [--cores <num-cores>]
  [--fixed-ips <num-fixed-ips>]
  [--floating-ips <num-floating-ips>]
  [--injected-file-size <injected-file-bytes>]
  [--injected-files <num-injected-files>]
  [--instances <num-instances>]
  [--key-pairs <num-key-pairs>]
  [--properties <num-properties>]
  [--ram <ram-md>]
  [--server-groups <num-server-groups>]
  [--server-group-members <num-server-group-members>]

  # Block Storage settings
  [--backups <new-backups>]
  [--backup-gigabytes <new-backup-gigabytes>]
  [--gigabytes <new-gigabytes>]
  [--per-volume-gigabytes <new-per-volume-gigabytes>]
  [--snapshots <new-snapshots>]
  [--volumes <new-volumes>]
  [--volume-type <volume-type>]

  # Network settings
  [--floating-ips <num-floatingips>]
```
Set quotas for class

openstack quota set
    --class
    # Compute settings
    [--cores <num-cores>]
    [--fixed-ips <num-fixed-ips>]
    [--floating-ips <num-floating-ips>]
    [--injected-file-size <injected-file-bytes>]
    [--injected-files <num-injected-files>]
    [--instances <num-instances>]
    [--key-pairs <num-key-pairs>]
    [--properties <num-properties>]
    [--ram <ram-mb>]
    [--server-groups <num-server-groups>]
    [--server-group-members <num-server-group-members>]

    # Block Storage settings
    [--backups <new-backups>]
    [--backup-gigabytes <new-backup-gigabytes>]
    [--gigabytes <new-gigabytes>]
    [--per-volume-gigabytes <new-per-volume-gigabytes>]
    [--snapshots <new-snapshots>]
    [--volumes <new-volumes>]
    <class>

    --class
    Set quotas for <class>

    --properties <new-properties>
    New value for the properties quota

    --ram <new-ram>
    New value for the ram quota

    --secgroup-rules <new-secgroup-rules>
    New value for the secgroup-rules quota
--instances <new-instances>
  New value for the instances quota

--key-pairs <new-key-pairs>
  New value for the key-pairs quota

--fixed-ips <new-fixed-ips>
  New value for the fixed-ips quota

--secgroups <new-secgrousp>
  New value for the secgroups quota

--injected-file-size <new-injected-file-size>
  New value for the injected-file-size quota

--server-groups <new-server-groups>
  New value for the server-groups quota

--server-group-members <new-server-group-members>
  New value for the server-group-members quota

--floating-ips <new-floating-ips>
  New value for the floating-ips quota

--injected-files <new-injected-files>
  New value for the injected-files quota

--cores <new-cores>
  New value for the cores quota

--injected-path-size <new-injected-path-size>
  New value for the injected-path-size quota

--backups <new-backups>
  New value for the backups quota

--backup-gigabytes <new-backup-gigabytes>
  New value for the backup gigabytes quota

--gigabytes <new-gigabytes>
  New value for the gigabytes quota

--per-volume-gigabytes <new-per-volume-gigabytes>
  New value for the gigabytes quota of per volume

--volumes <new-volumes>
  New value for the volumes quota
--snapshots <new-snapshots>
New value for the snapshots quota

--volume-type <volume-type>
Set quotas for a specific <volume-type>. The supported quotas are: gigabytes, snapshots, volumes.

--networks <num-networks>
New value for the networks quota

--subnets <num-subnets>
New value for the subnets quota

--ports <num-ports>
New value for the ports quota

--routers <num-routers>
New value for the routers quota

--rbac-policies <num-rbac-policies>
New value for the rbac-policies quota

--vips <num-vips>
New value for the vips quota

--subnetpools <num-subnetpools>
New value for the subnetpools quota

--members <num-members>
New value for the members quota

--health-monitors <num-health-monitors>
New value for the health-monitors quota

16.59.3. quota show
Show quotas for project or class

    openstack quota show
        [--default]
        [<project>]

--default
Show default quotas for <project>

<project>
Show quotas for this project (name or ID)
openstack quota show
   --class
    [<class>]

--class
   Show quotas for <class>

<class>
   Show quotas for this class (name or ID)

16.60. REGION

Identity v3

16.60.1. region create

Create new region

    openstack region create
     [--parent-region <region-id>]
     [--description <description>]
    <region-id>

--parent-region <region-id>
   Parent region ID

--description <description>
   New region description

<region-id>
   New region ID

16.60.2. region delete

Delete region(s)

    openstack region delete
       <region-id> [<region-id> ...]

<region-id>
   Region ID(s) to delete

16.60.3. region list

List regions
openstack region list
  [--parent-region <region-id>]

--parent-region <region-id>
    Filter by parent region ID

16.60.4. region set
Set region properties

openstack region set
  [--parent-region <region-id>]
  [--description <description>]
  <region-id>

--parent-region <region-id>
    New parent region ID

--description <description>
    New region description

<region-id>
    Region to modify

16.60.5. region show
Display region details

openstack region show
  <region-id>

<region-id>
    Region to display

16.61. REQUEST TOKEN
Identity v3
Requires: OS-OAUTH1 extension

16.61.1. request token authorize
Authorize a request token

openstack request token authorize
  --request-key <consumer-key>
  --role <role>
--request-key <request-key>
    Request token to authorize (ID only) (required)

--role <role>
    Roles to authorize (name or ID) (repeat option to set multiple values) (required)

16.61.2. request token create

Create a request token

    openstack request token create
        --consumer-key <consumer-key>
        --consumer-secret <consumer-secret>
        --project <project>
        [--domain <domain>]

--consumer-key <consumer-key>
    Consumer key (required)

--description <description>
    Consumer secret (required)

--project <project>
    Project that consumer wants to access (name or ID) (required)

--domain <domain>
    Domain owning <project> (name or ID)

16.62. ROLE

Identity v2, v3

16.62.1. role add

Add role assignment to a user or group in a project or domain

    openstack role add
        --domain <domain> | --project <project> [--project-domain <project-domain>]
        --user <user> [--user-domain <user-domain>] | --group <group> [--group-domain <group-domain>]
        --role-domain <role-domain>
        --inherited
        <role>

--domain <domain>
    Include <domain> (name or ID) New in version 3.

--project <project>
Include `<project>` (name or ID)

--user `<user>`
Include `<user>` (name or ID)

--group `<group>`
Include `<group>` (name or ID) New in version 3.

--user-domain `<user-domain>`
Domain the user belongs to (name or ID). This can be used in case collisions between user names exist. New in version 3.

--group-domain `<group-domain>`
Domain the group belongs to (name or ID). This can be used in case collisions between group names exist. New in version 3.

--project-domain `<project-domain>`
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. New in version 3.

--inherited
Specifies if the role grant is inheritable to the sub projects. New in version 3.

--role-domain `<role-domain>`
Domain the role belongs to (name or ID). This must be specified when the name of a domain specific role is used. New in version 3.

`<role>`
Role to add to `<project>`:`<user>` (name or ID)

16.62.2. role create

Create new role

```
openstack role create
    [--or-show]
    [--domain `<domain>`]
    `<name>`
```

--domain `<domain>`
Domain the role belongs to (name or ID). New in version 3.

--or-show
Return existing role If the role already exists return the existing role data and do not fail.

`<name>`
New role name

16.62.3. role delete
Delete role(s)

openstack role delete
  
  <role> [ <role> ... ]
  [- --domain <domain> ]

<role>
  Role to delete (name or ID)

--domain <domain>
  Domain the role belongs to (name or ID). New in version 3.

16.62.4. role list

List roles

openstack role list
  
  --domain <domain> | --project <project> [ --project-domain <project-domain>]
  --user <user> [ --user-domain <user-domain> ] | --group <group> [ --group-domain <group-domain>]
  --inherited

--domain <domain>
  Filter roles by <domain> (name or ID) (Deprecated if being used to list assignments in conjunction with the --user <user>, option, please use role assignment list instead)

--project <project>
  Filter roles by <project> (name or ID) (Deprecated, please use role assignment list instead)

--user <user>
  Filter roles by <user> (name or ID) (Deprecated, please use role assignment list instead)

--group <group>
  Filter roles by <group> (name or ID) (Deprecated, please use role assignment list instead)

--user-domain <user-domain>
  Domain the user belongs to (name or ID). This can be used in case collisions between user names exist. (Deprecated, please use role assignment list instead) New in version 3.

--group-domain <group-domain>
Domain the group belongs to (name or ID). This can be used in case collisions between group names exist. (Deprecated, please use role assignment list instead) New in version 3.

--project-domain <project-domain>

Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. (Deprecated, please use role assignment list instead) New in version 3.

--inherited

Specifies if the role grant is inheritable to the sub projects. (Deprecated, please use role assignment list instead) New in version 3.

16.62.5. role remove

Remove role assignment from domain/project : user/group

openstack role remove
   --domain <domain> | --project <project> [--project-domain <project-domain>]
   --user <user> [--user-domain <user-domain>] | --group <group> [--group-domain <group-domain>]
   --role-domain <role-domain>
   --inherited
   <role>

--domain <domain>

Include <domain> (name or ID) New in version 3.

--project <project>

Include <project> (name or ID)

--user <user>

Include <user> (name or ID)

--group <group>

Include <group> (name or ID) New in version 3.

--user-domain <user-domain>

Domain the user belongs to (name or ID). This can be used in case collisions between user names exist. New in version 3.

--group-domain <group-domain>

Domain the group belongs to (name or ID). This can be used in case collisions between group names exist. New in version 3.

--project-domain <project-domain>

Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. New in version 3.
--inherited
  Specifies if the role grant is inheritable to the sub projects. New in version 3.

--role-domain <role-domain>
  Domain the role belongs to (name or ID). This must be specified when the name of a
  domain specific role is used. New in version 3.

<role>
  Role to remove (name or ID)

16.62.6. role set

Set role properties

New in version 3.

    openstack role set
        [--name <name>]
        [--domain <domain>]
        <role>

--name <name>
  Set role name

--domain <domain>
  Domain the role belongs to (name or ID). New in version 3.

<role>
  Role to modify (name or ID)

16.62.7. role show

Display role details

    openstack role show
        [--domain <domain>]
        <role>

--domain <domain>
  Domain the role belongs to (name or ID). New in version 3.

<role>
  Role to display (name or ID)

16.63. ROLE ASSIGNMENT

Identity v2, v3
16.63.1. role assignment list

List role assignments

openstack role assignment list
    [--role <role>]
    [--role-domain <role-domain>]
    [--user <user>]
    [--user-domain <user-domain>]
    [--group <group>]
    [--group-domain <group-domain>]
    [--domain <domain>]
    [--project <project>]
    [--project-domain <project-domain>]
    [--effective]
    [--inherited]
    [--names]

--role <role>
    Role to filter (name or ID) New in version 3.

--role-domain <role-domain>
    Domain the role belongs to (name or ID). This can be used in case collisions between role names exist. New in version 3.

--user <user>
    User to filter (name or ID)

--user-domain <user-domain>
    Domain the user belongs to (name or ID). This can be used in case collisions between user names exist. New in version 3.

--group <group>
    Group to filter (name or ID) New in version 3.

--group-domain <group-domain>
    Domain the group belongs to (name or ID). This can be used in case collisions between group names exist. New in version 3.

--domain <domain>
    Domain to filter (name or ID) New in version 3.

--project <project>
    Project to filter (name or ID)

--project-domain <project-domain>
    Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. New in version 3.

--effective
Returns only effective role assignments (defaults to False) New in version 3.

--inherited
Specifies if the role grant is inheritable to the sub projects New in version 3.

--names
Returns role assignments with names instead of IDs

--auth-user
Returns role assignments for the authenticated user.

--auth-project
Returns role assignments for the project to which the authenticated user is scoped.

16.64. ROUTER

A router is a logical component that forwards data packets between networks. It also provides Layer 3 and NAT forwarding to provide external network access for servers on project networks.

Network v2

16.64.1. router add port
Add a port to a router

code
openstack router add port
  <router>
  <port>

<router>
Router to which port will be added (name or ID)

<port>
Port to be added (name or ID)

16.64.2. router add subnet
Add a subnet to a router

code
openstack router add subnet
  <router>
  <subnet>

<router>
Router to which subnet will be added (name or ID)

<subnet>
Subnet to be added (name or ID)
16.64.3. router create

Create new router

```
openstack router create
    [--project <project> [--project-domain <project-domain>]]
    [--enable | --disable]
    [--distributed | --centralized]
    [--ha | --no-ha]
    [--description <description>]
    [--availability-zone-hint <availability-zone>]
<name>
```

--project <project>
Owner's project (name or ID)

--project-domain <project-domain>
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

--enable
Enable router (default)

--disable
Disable router

--distributed
Create a distributed router The default router type (distributed vs centralized) is determined by a configuration setting in the OpenStack deployment. Since we are unable to know that default without attempting to actually create a router it is suggested to use either --distributed or --centralized in situations where multiple cloud deployments may be used.

--centralized
Create a centralized router See the note in --distributed regarding the default used when creating a new router.

--ha
Create a highly available router

--no-ha
Create a legacy router

--description <description>
Set router description

--availability-zone-hint <availability-zone>
Availability Zone in which to create this router (Router Availability Zone extension required, repeat option to set multiple availability zones)
<name>
    New router name

16.64.4. router delete

Delete router(s)

    openstack router delete
        <router> [<router> ...]

<router>
    Router(s) to delete (name or ID)

16.64.5. router list

List routers

    openstack router list
        [--name <name>]
        [--enable | --disable]
        [--long]
        [--project <project> [--project-domain <project-domain>]]

--long
    List additional fields in output

--name <name>
    List routers according to their name

--enable
    List enabled routers

--disable
    List disabled routers

--project <project>
    List routers according to their project (name or ID)

--project-domain <project-domain>
    Domain the project belongs to (name or ID). This can be used in case collisions between project names exist.

16.64.6. router remove port

Remove a port from a router

    openstack router remove port
        <router>
        <port>
16.64.7. router remove subnet

Remove a subnet from a router

```
openstack router remove subnet
  <router>
  <subnet>
```

16.64.8. router set

Set router properties

```
openstack router set
  [--name <name>]
  [--enable | --disable]
  [--distributed | --centralized]
  [--description <description>]
  [--route destination=<subnet>,gateway=<ip-address> | --no-route]
  [--ha | --no-ha]
  [--external-gateway <network> [--enable-snat|--disable-snat] [--
    fixed-ip subnet=<subnet>,ip-address=<ip-address>]]
  <router>
```

--name <name>
Set router name

--enable
Enable router

--disable
Disable router

--distributed
Set router to distributed mode (disabled router only)
--centralized
    Set router to centralized mode (disabled router only)

--description <description>
    Set router description

--route destination=<subnet>,gateway=<ip-address>
    Routes associated with the router destination: destination subnet (in CIDR notation)
    gateway: nexthop IP address (repeat option to set multiple routes)

--no-route
    Clear routes associated with the router. Specify both --route and --no-route to overwrite
    current value of route.

--ha
    Set the router as highly available (disabled router only)

--no-ha
    Clear high availability attribute of the router (disabled router only)

--external-gateway <network>
    External Network used as router’s gateway (name or ID)

--enable-snat
    Enable Source NAT on external gateway

--disable-snat
    Disable Source NAT on external gateway

--fixed-ip subnet=<subnet>,ip-address=<ip-address>
    Desired IP and/or subnet (name or ID) on external gateway: subnet=<subnet>,ip-address=
    <ip-address> (repeat option to set multiple fixed IP addresses)

<router>
    Router to modify (name or ID)

16.64.9. router show

Display router details

    openstack router show
      <router>

<router>
    Router to display (name or ID)

16.64.10. router unset
Unset router properties

```
openstack router unset
    [--route destination=<subnet>,gateway=<ip-address>]
    [--external-gateway]
    <router>
```

```
--route destination=<subnet>,gateway=<ip-address>
    Routes to be removed from the router destination: destination subnet (in CIDR notation)
    gateway: nexthop IP address (repeat option to unset multiple routes)
```

```
--external-gateway
    Remove external gateway information from the router
```

```
<router>
    Router to modify (name or ID)
```

16.65. SECURITY GROUP

A security group acts as a virtual firewall for servers and other resources on a network. It is a container for security group rules which specify the network access rules.

Compute v2, Network v2

16.65.1. security group create

Create a new security group

```
openstack security group create
    [--description <description>]
    [--project <project> [--project-domain <project-domain>]]
    <name>
```

```
--description <description>
    Security group description
```

```
--project <project>
    Owner's project (name or ID) Network version 2 only
```

```
--project-domain <project-domain>
    Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. Network version 2 only
```

```
<name>
    New security group name
```

16.65.2. security group delete
Delete security group(s)

openstack security group delete
    <group> [<group> ...]

<group>
    Security group(s) to delete (name or ID)

16.65.3. security group list

List security groups

openstack security group list
    [--all-projects]
    [--project <project> [--project-domain <project-domain>]]

--all-projects
    Display information from all projects (admin only) Network version 2 ignores this option and will always display information for all projects (admin only).

--project <project>
    List security groups according to the project (name or ID) Network version 2 only

--project-domain <project-domain>
    Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. Network version 2 only

16.65.4. security group set

Set security group properties

openstack security group set
    [--name <new-name>]
    [--description <description>]
    <group>

--name <new-name>
    New security group name

--description <description>
    New security group description

<group>
    Security group to modify (name or ID)

16.65.5. security group show

Display security group details
openstack security group show
  <group>

<group>
  Security group to display (name or ID)

16.66. SECURITY GROUP RULE

A security group rule specifies the network access rules for servers and other resources on the network.

Compute v2, Network v2

16.66.1. security group rule create

Create a new security group rule

openstack security group rule create
  [--remote-ip <ip-address> | --remote-group <group>]
  [--dst-port <port-range> | [--icmp-type <icmp-type> [--icmp-code <icmp-code>]]]
  [--protocol <protocol>]
  [--ingress | --egress]
  [--ethertype <ethertype>]
  [--project <project> [--project-domain <project-domain>]]
  [--description <description>]
  <group>

--remote-ip <ip-address>
  Remote IP address block (may use CIDR notation; default for IPv4 rule: 0.0.0.0/0)

--remote-group <group>
  Remote security group (name or ID)

--dst-port <port-range>
  Destination port, may be a single port or a starting and ending port range: 137:139.
  Required for IP protocols TCP and UDP. Ignored for ICMP IP protocols.

--icmp-type <icmp-type>
  ICMP type for ICMP IP protocols Network version 2 only

--icmp-code <icmp-code>
  ICMP code for ICMP IP protocols Network version 2 only

--protocol <protocol>
  IP protocol (icmp, tcp, udp; default: tcp) Compute version 2 IP protocol (ah, dcmp, egp, esp, gre, icmp, igmp, ipv6-encap, ipv6-frag, ipv6-icmp, ipv6-nonxt, ipv6-opts, ipv6-route, ospf, pgm, rsvp, scpf, tcp, udp, udplite, vrrp and integer representations [0-255]; default: tcp) Network version 2
--ingress
Rule applies to incoming network traffic (default) *Network version 2 only*

--egress
Rule applies to outgoing network traffic *Network version 2 only*

--ethertype <ethertype>
Ethertype of network traffic (IPv4, IPv6; default: based on IP protocol) *Network version 2 only*

--project <project>
Owner’s project (name or ID) *Network version 2 only*

--project-domain <project-domain>
Domain the project belongs to (name or ID). This can be used in case collisions between project names exist. *Network version 2 only*

--description <description>
Set security group rule description *Network version 2 only*

<group>
Create rule in this security group (name or ID)

16.66.2. security group rule delete
Delete security group rule(s)
```
openstack security group rule delete
    <rule> [<rule> ...]
```

<rule>
Security group rule(s) to delete (ID only)

16.66.3. security group rule list
List security group rules
```
openstack security group rule list
    [--all-projects]
    [--protocol <protocol>]
    [--ingress | --egress]
    [--long]
    [<group>]
```

--all-projects
Display information from all projects (admin only) *Network version 2 ignores this option and will always display information for all projects (admin only).*

--long
List additional fields in output *Compute version 2 does not have additional fields to display.*

**--protocol**

List rules by the IP protocol (ah, dhcp, egp, esp, gre, icmp, igmp, ipv6-encap, ipv6-frag, ipv6-icmp, ipv6-nonxt, ipv6-opt, ipv6-route, ospf, pgm, rsvp, sctp, tcp, udp, udplite, vrrp and integer representations [0-255]) *Network version 2 only*

**--ingress**

List rules applied to incoming network traffic *Network version 2 only*

**--egress**

List rules applied to outgoing network traffic *Network version 2 only*

**<group>**

List all rules in this security group (name or ID)

### 16.66.4. security group rule show

Display security group rule details

```
openstack security group rule show
<rule>
```

**<rule>**

Security group rule to display (ID only)

### 16.67. SERVER

Compute v2

#### 16.67.1. server add fixed ip

Add fixed IP address to server

```
openstack server add fixed ip
  [--fixed-ip-address <ip-address>]
  <server>
  <network>
```

**--fixed-ip-address <ip-address>**

Requested fixed IP address

**<server>**

Server to receive the fixed IP address (name or ID)

**<network>**

Network to allocate the fixed IP address from (name or ID)
16.67.2. server add floating ip

Add floating IP address to server

openstack server add floating ip
   [--fixed-ip-address <ip-address>]
   <server>
   <ip-address>

--fixed-ip-address <ip-address>
   Fixed IP address to associate with this floating IP address

<server>
   Server to receive the floating IP address (name or ID)

<ip-address>
   Floating IP address to assign to server (IP only)

16.67.3. server add port

Add port to server

openstack server add port
   <server>
   <port>

<server>
   Server to add the port to (name or ID)

<port>
   Port to add to the server (name or ID)

16.67.4. server add security group

Add security group to server

openstack server add security group
   <server>
   <group>

<server>
   Server (name or ID)

<group>
   Security group to add (name or ID)

16.67.5. server add volume
Add volume to server

```bash
openstack server add volume
    [--device <device>]
    <server>
    <volume>
```

```bash
--device <device>
    Server internal device name for volume
```

```bash
<server>
    Server (name or ID)
```

```bash
<volume>
    Volume to add (name or ID)
```

### 16.67.6. server create

Create a new server

```bash
openstack server create
    --image <image> | --volume <volume>
    --flavor <flavor>
    [--security-group <security-group-name> [...] ]
    [--key-name <key-name>]
    [--property <key=value> [...] ]
    [--file <dest-filename=source-filename>] [...] ]
    [--user-data <user-data>]
    [--availability-zone <zone-name>]
    [--block-device-mapping <dev-name=mapping>] [...] ]
    [-nic <net-id=net-uuid, v4-fixed-ip=ip-addr, v6-fixed-ip=ip-addr, port-id=port-uuid, auto, none>] [...] ]
    [--network <network>]
    [--port <port>]
    [--hint <key=value>] [...] ]
    [--config-drive <value>]=True ]
    [--min <count>]
    [--max <count>]
    [--wait]
    <server-name>
```

```bash
--image <image>
    Create server boot disk from this image (name or ID)
```

```bash
--volume <volume>
    Create server using this volume as the boot disk (name or ID) This option automatically creates a block device mapping with a boot index of 0. On many hypervisors (libvirt/kvm for example) this will be device vda. Do not create a duplicate mapping using --block-device-mapping for this volume.
```

```bash
--flavor <flavor>
```
Create server with this flavor (name or ID)

--security-group <security-group-name>

Security group to assign to this server (name or ID) (repeat option to set multiple groups)

--key-name <key-name>

Keypair to inject into this server (optional extension)

--property <key=value>

Set a property on this server (repeat option to set multiple values)

--file <dest-filename=source-filename>

File to inject into image before boot (repeat option to set multiple files)

--user-data <user-data>

User data file to serve from the metadata server

--availability-zone <zone-name>

Select an availability zone for the server

--block-device-mapping <dev-name=mapping>

Map block devices; map is <id>:<type>:<size(GB)>:<delete_on_terminate> (optional extension)

--nic <net-id=net-uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-addr,port-id=port-uuid,auto,none>

Create a NIC on the server. Specify option multiple times to create multiple NICs. Either net-id or port-id must be provided, but not both. net-id: attach NIC to network with this UUID, port-id: attach NIC to port with this UUID, v4-fixed-ip: IPv4 fixed address for NIC (optional), v6-fixed-ip: IPv6 fixed address for NIC (optional), none: (v2.37+) no network is attached. auto: (v2.37+) the compute service will automatically allocate a network. Specifying a --nic of auto or none cannot be used with any other --nic value.

--network <network>

Create a NIC on the server and connect it to network. Specify option multiple times to create multiple NICs. For more options on NICs see --nic parameter. network: attach NIC to this network

--port <port>

Create a NIC on the server and connect it to port. Specify option multiple times to create multiple NICs. For more options on NICs see --nic parameter. port: attach NIC to this port

--hint <key=value>

Hints for the scheduler (optional extension)

--config-drive <config-drive-volume>|True

Use specified volume as the config drive, or 'True' to use an ephemeral drive

--min <count>

Minimum number of servers to launch (default=1)
--max <count>
    Maximum number of servers to launch (default=1)

--wait
    Wait for build to complete

<server-name>
    New server name