



# **Red Hat Enterprise Linux OpenStack Platform 7 Command-Line Interface Reference**

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Command-line clients for the Red Hat Enterprise Linux OpenStack  
Platform

OpenStack Documentation TeamRed Hat



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## Command-line clients for the Red Hat Enterprise Linux OpenStack Platform

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## Abstract

This guide collects the help content from the OpenStack command-line clients, for reference.

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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 each OpenStack service with its package name and description.

**Table 1.1. OpenStack services and clients**

Service	Client	Package	Description
Block Storage	<b>cinder</b>	python-cinderclient	Create and manage volumes.
Compute	<b>nova</b>	python-novaclient	Create and manage images, instances, and flavors.
Database Service	<b>trove</b>	python-troveclient	Create and manage databases.
Identity	<b>keystone</b>	python-keystoneclient	Create and manage users, tenants, roles, endpoints, and credentials.
Image Service	<b>glance</b>	python-glanceclient	Create and manage images.
Networking	<b>neutron</b>	python-neutronclient	Configure networks for guest servers. This client was previously called <b>quantum</b> .
Object Storage	<b>swift</b>	python-swiftclient	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.

Service	Client	Package	Description
Orchestration	<b>heat</b>	python-heatclient	Launch stacks from templates, view details of running stacks including events and resources, and update and delete stacks.
Telemetry	<b>ceilometer</b>	python-ceilometerclient	Create and collect measurements across OpenStack.

An OpenStack **common** client is in development.

For client installation instructions, see [Section 1.2, “Install the OpenStack command-line clients”](#). For information about the OpenStack RC file, see the *Red Hat Enterprise Linux OpenStack Platform End User Guide*.

## 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**

Prerequisite	Description
Python 2.6 or later	Currently, the clients do not support Python 3.
setuptools package	Many Linux distributions provide packages to make setuptools easy to install. Search your package manager for setuptools to find an installation package. If you cannot find one, download the setuptools package directly from <a href="http://pypi.python.org/pypi/setuptools">http://pypi.python.org/pypi/setuptools</a> .

### 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 following values are valid:

- » **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
- ✧ **trove** - Database Service API

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

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

### 1.2.2.1. Installing from packages

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

```
# 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 (2.15.0 in the example) is returned.

```
2.15.0
```

## 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 **Access & Security**.
2. On the API Access tab, click **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
```

- 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.

- 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
```

- 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. PACKSTACK COMMAND-LINE CLIENT

The **packstack** client is the command-line interface (CLI) for installing single node, proof-of-concept deployments. This chapter documents **packstack** version **2015.1.dev1537.gba5183c**.

For help on a specific **packstack** command, enter:

```
$ packstack help COMMAND
```

### 2.1. PACKSTACK USAGE

```
Usage: packstack [options] [--help]
```

### 2.2. PACKSTACK OPTIONAL ARGUMENTS

#### **--version**

show program's version number and exit

#### **-h, --help**

show this help message and exit

#### **--gen-answer-file=GEN\_ANSWER\_FILE**

Generate a template of an answer file.

#### **--answer-file=ANSWER\_FILE**

Runs the configuration in non-interactive mode, extracting all information from the configuration file. using this option excludes all other options

#### **--install-hosts=INSTALL\_HOSTS**

Install on a set of hosts in a single step. The format should be a comma separated list of hosts, the first is setup as a controller, and the others are setup as compute nodes. if only a single host is supplied then it is setup as an all in one installation. An answerfile will also be generated and should be used if Packstack needs to be run a second time

#### **--allinone**

Shorthand for `--install-hosts=<local ipaddr> --novanetwork-pubif=<dev> --novacompute-privif=lo --novanetwork-privif=lo --os-swift-install=y --nagios-install=y`, this option can be used to install an all in one OpenStack on this host

#### **-t TIMEOUT, --timeout=TIMEOUT**

The timeout for puppet Exec calls

**-o, --options**

Print details on options available in answer file(rst format)

**-d, --debug**

Enable debug in logging

**-y, --dry-run**

Don't execute, just generate manifests

## 2.3. PACKSTACK GLOBAL OPTIONS

**--ssh-public-key=SSH\_PUBLIC\_KEY**

Path to a public key to install on servers. If a usable key has not been installed on the remote servers, the user is prompted for a password and this key is installed so the password will not be required again.

**--default-password=DEFAULT\_PASSWORD**

Default password to be used everywhere (overridden by passwords set for individual services or users).

**--mariadb-install=MARIADB\_INSTALL**

Specify 'y' to install MariaDB. ['y', 'n']

**--os-glance-install=OS\_GLANCE\_INSTALL**

Specify 'y' to install OpenStack Image Service (glance). ['y', 'n']

**--os-cinder-install=OS\_CINDER\_INSTALL**

Specify 'y' to install OpenStack Block Storage (cinder). ['y', 'n']

**--os-manila-install=OS\_MANILA\_INSTALL**

Specify 'y' to install OpenStack Shared File System (manila). ['y', 'n']

**--os-nova-install=OS\_NOVA\_INSTALL**

Specify 'y' to install OpenStack Compute (nova). ['y', 'n']

**--os-neutron-install=OS\_NEUTRON\_INSTALL**

Specify 'y' to install OpenStack Networking (neutron); otherwise, Compute Networking (nova) will be used. ['y', 'n']

**--os-horizon-install=OS\_HORIZON\_INSTALL**

Specify 'y' to install OpenStack Dashboard (horizon). ['y', 'n']

**--os-swift-install=OS\_SWIFT\_INSTALL**

Specify 'y' to install OpenStack Object Storage (swift). ['y', 'n']

**--os-ceilometer-install=OS\_CEILOMETER\_INSTALL**

Specify 'y' to install OpenStack Metering (ceilometer). ['y', 'n']

**--os-heat-install=OS\_HEAT\_INSTALL**

Specify 'y' to install OpenStack Orchestration (heat). ['y', 'n']

**--os-sahara-install=OS\_SAHARA\_INSTALL**

Specify 'y' to install OpenStack Data Processing (sahara). ['y', 'n']

**--os-trove-install=OS\_TROVE\_INSTALL**

Specify 'y' to install OpenStack Database (trove) ['y', 'n']

**--os-ironic-install=OS\_IRONIC\_INSTALL**

Specify 'y' to install OpenStack Bare Metal Provisioning (ironic). ['y', 'n']

**--os-client-install=OS\_CLIENT\_INSTALL**

Specify 'y' to install the OpenStack Client packages (command-line tools). An admin "rc" file will also be installed. ['y', 'n']

**--ntp-servers=NTP\_SERVERS**

Comma-separated list of NTP servers. Leave plain if Packstack should not install ntpd on instances.

**--nagios-install=NAGIOS\_INSTALL**

Specify 'y' to install Nagios to monitor OpenStack hosts. Nagios provides additional tools for monitoring the OpenStack environment. ['y', 'n']

**--exclude-servers=EXCLUDE\_SERVERS**

Comma-separated list of servers to be excluded from the installation. This is helpful if you are running Packstack a second time with the same answer file and do not want Packstack to overwrite these server's configurations. Leave empty if you do not need to exclude any servers.

**--os-debug-mode=OS\_DEBUG\_MODE**

Specify 'y' if you want to run OpenStack services in debug mode; otherwise, specify 'n'. ['y', 'n']

**--os-controller-host=OS\_CONTROLLER\_HOST**

IP address of the server on which to install OpenStack services specific to the controller role (for example, API servers or dashboard).

**--os-compute-hosts=OS\_COMPUTE\_HOSTS**

List of IP addresses of the servers on which to install the Compute service.

**--os-network-hosts=OS\_NETWORK\_HOSTS**

List of IP addresses of the server on which to install the network service such as Compute networking (nova network) or OpenStack Networking (neutron).

**--os-vmware=OS\_VMWARE**

Specify 'y' if you want to use VMware vCenter as hypervisor and storage; otherwise, specify 'n'. ['y', 'n']

**--unsupported=UNSUPPORTED**

Specify 'y' if you want to use unsupported parameters. This should be used only if you know what you are doing. Issues caused by using unsupported options will not be fixed before the next major release. ['y', 'n']

## 2.4. PACKSTACK VCENTER CONFIG PARAMETERS

**--vcenter-host=VCENTER\_HOST**

IP address of the VMware vCenter server.

**--vcenter-username=VCENTER\_USERNAME**

User name for VMware vCenter server authentication.

**--vcenter-password=VCENTER\_PASSWORD**

Password for VMware vCenter server authentication.

**--vcenter-cluster=VCENTER\_CLUSTER**

Name of the VMware vCenter cluster.

## 2.5. PACKSTACK SERVER PREPARE CONFIGS

**--use-epel=USE\_EPEL**

Specify 'y' to enable the EPEL repository (Extra Packages for Enterprise Linux). ['y', 'n']

**--additional-repo=ADDITIONAL\_REPO**

Comma-separated list of URLs for any additional yum repositories, to use for installation.

## 2.6. PACKSTACK RHEL CONFIG

**--rh-username=RH\_USERNAME**

To subscribe each server with Red Hat Subscription Manager, include this with CONFIG\_RH\_PW.

**--rhn-satellite-server=RHN\_SATELLITE\_SERVER**

To subscribe each server to receive updates from a Satellite server, provide the URL of the Satellite server. You must also provide a user name (CONFIG\_SATELLITE\_USERNAME) and password (CONFIG\_SATELLITE\_PASSWORD) or an access key (CONFIG\_SATELLITE\_AKEY) for authentication.

## 2.7. PACKSTACK RHN SATELLITE CONFIG

**--rhn-satellite-username=RHN\_SATELLITE\_USERNAME**

User name to authenticate with the RHN Satellite server; if you intend to use an access key for Satellite authentication, leave this blank.

**--rhn-satellite-password=RHN\_SATELLITE\_PASSWORD**

Password to authenticate with the RHN Satellite server; if you intend to use an access key for Satellite authentication, leave this blank.

**--rhn-satellite-activation-key=RHN\_SATELLITE\_ACTIVATION\_KEY**

Access key for the Satellite server; if you intend to use a user name and password for Satellite authentication, leave this blank.

**--rhn-satellite-cacert=RHN\_SATELLITE\_CACERT**

Certificate path or URL of the certificate authority to verify that the connection with the Satellite server is secure. If you are not using Satellite in your deployment, leave this blank.

**--rhn-satellite-profile=RHN\_SATELLITE\_PROFILE**

Profile name that should be used as an identifier for the system in RHN Satellite (if required).

**--rhn-satellite-flags=RHN\_SATELLITE\_FLAGS**

Comma-separated list of flags passed to the `rhncfg_ks` command. Valid flags are: `novirtinfo`, `norhnsd`, `nopackages` [`'novirtinfo'`, `'norhnsd'`, `'nopackages'`]

**--rhn-satellite-proxy-host=RHN\_SATELLITE\_PROXY\_HOST**

HTTP proxy to use when connecting to the RHN Satellite server (if required).

## 2.8. PACKSTACK RHN SATELLITE PROXY CONFIG

**--rhn-satellite-proxy-username=RHN\_SATELLITE\_PROXY\_USERNAME**

User name to authenticate with the Satellite-server HTTP proxy.

**--rhn-satellite-proxy-password=RHN\_SATELLITE\_PROXY\_PASSWORD**

User password to authenticate with the Satellite- server HTTP proxy.

## 2.9. PACKSTACK AMQP CONFIG PARAMETERS

**--amqp-backend=AMQP\_BACKEND**

Service to be used as the AMQP broker. Allowed values are: `qpido`, `rabbitmq` [`'qpido'`, `'rabbitmq'`]

**--amqp-host=AMQP\_HOST**

IP address of the server on which to install the AMQP service.

**--amqp-enable-ssl=AMQP\_ENABLE\_SSL**

Specify `'y'` to enable SSL for the AMQP service. [`'y'`, `'n'`]

**--amqp-enable-auth=AMQP\_ENABLE\_AUTH**



Specify 'y' to enable authentication for the AMQP service. ['y', 'n']

## 2.10. PACKSTACK AMQP CONFIG SSL PARAMETERS

**--amqp-nss-certdb-pw=AMQP\_NSS\_CERTDB\_PW**

Password for the NSS certificate database of the AMQP service.

**--amqp-ssl-port=AMQP\_SSL\_PORT**

Port on which the AMQP service listens for SSL connections.

**--amqp-ssl-cacert-file=AMQP\_SSL\_CACERT\_FILE**

File name of the CAcertificate that the AMQP service will use for verification.

**--amqp-ssl-cert-file=AMQP\_SSL\_CERT\_FILE**

File name of the certificate that the AMQP service will use for verification.

**--amqp-ssl-key-file=AMQP\_SSL\_KEY\_FILE**

File name of the private key that the AMQP service will use for verification.

**--amqp-ssl-self-signed=AMQP\_SSL\_SELF\_SIGNED**

Specify 'y' to automatically generate a self-signed SSL certificate and key. ['y', 'n']

## 2.11. PACKSTACK AMQP CONFIG AUTHENTICATION PARAMETERS

**--amqp-auth-user=AMQP\_AUTH\_USER**

User for AMQP authentication.

**--amqp-auth-password=AMQP\_AUTH\_PASSWORD**

Password for AMQP authentication.

## 2.12. PACKSTACK KEYSTONE CONFIG PARAMETERS

**--keystone-db-passwd=KEYSTONE\_DB\_PASSWD**

Password to use for the Identity service (keystone) to access the database.

**--keystone-region=KEYSTONE\_REGION**

Default region name to use when creating tenants in the Identity service.

**--keystone-admin-email=KEYSTONE\_ADMIN\_EMAIL**

Email address for the Identity service 'admin' user. Defaults to

**--keystone-admin-username=KEYSTONE\_ADMIN\_USERNAME**

User name for the Identity service 'admin' user. Defaults to 'admin'.

**--keystone-admin-passwd=KEYSTONE\_ADMIN\_PASSWD**

Password to use for the Identity service 'admin' user.

**--keystone-demo-passwd=KEYSTONE\_DEMO\_PASSWD**

Password to use for the Identity service 'demo' user.

**--keystone-service-name=KEYSTONE\_SERVICE\_NAME**

Name of service to use to run the Identity service (keystone or httpd). ['keystone', 'httpd']

**--keystone-identity-backend=KEYSTONE\_IDENTITY\_BACKEND**

Type of Identity service backend (sql or ldap). ['sql', 'ldap']

## 2.13. PACKSTACK GLANCE CONFIG PARAMETERS

**--glance-db-passwd=GLANCE\_DB\_PASSWD**

Password to use for the Image service (glance) to access the database.

**--glance-ks-passwd=GLANCE\_KS\_PASSWD**

Password to use for the Image service to authenticate with the Identity service.

**--glance-backend=GLANCE\_BACKEND**

Storage backend for the Image service (controls how the Image service stores disk images). Valid options are: file or swift (Object Storage). The Object Storage service must be enabled to use it as a working backend; otherwise, Packstack falls back to 'file'. ['file', 'swift']

## 2.14. PACKSTACK CINDER CONFIG PARAMETERS

**--cinder-db-passwd=CINDER\_DB\_PASSWD**

Password to use for the Block Storage service (cinder) to access the database.

**--cinder-ks-passwd=CINDER\_KS\_PASSWD**

Password to use for the Block Storage service to authenticate with the Identity service.

**--cinder-backend=CINDER\_BACKEND**

Storage backend to use for the Block Storage service; valid options are: lvm, gluster, nfs, vmdk, netapp. ['lvm', 'gluster', 'nfs', 'vmdk', 'netapp']

## 2.15. PACKSTACK CINDER VOLUME CREATE CONFIG PARAMETERS

**--cinder-volumes-create=CINDER\_VOLUMES\_CREATE**

Specify 'y' to create the Block Storage volumes group. That is, Packstack creates a raw disk image in /var/lib/cinder, and mounts it using a loopback device. This should only be used for testing on a proof-of-concept installation of the Block Storage service (a file-backed volume group is not suitable for production usage). ['y', 'n']

## 2.16. PACKSTACK CINDER VOLUME SIZE CONFIG PARAMETERS

**--cinder-volumes-size=CINDER\_VOLUMES\_SIZE**

Size of Block Storage volumes group. Actual volume size will be extended with 3% more space for VG metadata. Remember that the size of the volume group will restrict the amount of disk space that you can expose to Compute instances, and that the specified amount must be available on the device used for /var/lib/cinder.

## 2.17. PACKSTACK CINDER GLUSTER CONFIG PARAMETERS

**--cinder-gluster-mounts=CINDER\_GLUSTER\_MOUNTS**

A single or comma-separated list of Red Hat Storage (gluster) volume shares to mount. Example: 'ip-address :/vol-name', 'domain:/vol-name'

## 2.18. PACKSTACK CINDER NFS CONFIG PARAMETERS

**--cinder-nfs-mounts=CINDER\_NFS\_MOUNTS**

A single or comma-separated list of NFS exports to mount. Example: 'ip-address:/export-name'

## 2.19. PACKSTACK NOVA OPTIONS

**--nova-db-passwd=NOVA\_DB\_PASSWD**

Password to use for the Compute service (nova) to access the database.

**--nova-ks-passwd=NOVA\_KS\_PASSWD**

Password to use for the Compute service to authenticate with the Identity service.

**--novasched-cpu-allocation-ratio=NOVASCHED\_CPU\_ALLOCATION\_RATIO**

Overcommitment ratio for virtual to physical CPUs. Specify 1.0 to disable CPU overcommitment.

**--novasched-ram-allocation-ratio=NOVASCHED\_RAM\_ALLOCATION\_RATIO**

Overcommitment ratio for virtual to physical RAM. Specify 1.0 to disable RAM overcommitment.

**--novacompute-migrate-protocol=NOVACOMPUTE\_MIGRATE\_PROTOCOL**

Protocol used for instance migration. Valid options are: tcp and ssh. Note that by default, the Compute user is created with the /sbin/nologin shell so that the SSH protocol will not work. To make the SSH protocol work, you must configure the Compute user on compute hosts manually. ['tcp', 'ssh']

**--nova-compute-manager=NOVA\_COMPUTE\_MANAGER**

Manager that runs the Compute service.

## 2.20. PACKSTACK NOVA NETWORK OPTIONS

**--novacompute-privif=NOVACOMPUTE\_PRIVIF**

Private interface for flat DHCP on the Compute servers.

**--novanetwork-manager=NOVANETWORK\_MANAGER**

Compute Network Manager. ['^nova\.network\.manager\.w+Manager\$']

**--novanetwork-pubif=NOVANETWORK\_PUBIF**

Public interface on the Compute network server.

**--novanetwork-privif=NOVANETWORK\_PRIVIF**

Private interface for flat DHCP on the Compute network server.

**--novanetwork-fixed-range=NOVANETWORK\_FIXED\_RANGE**

IP Range for flat DHCP. [^\[:\.\lda- fA-f]+(\Vd+){0,1}\$]

**--novanetwork-floating-range=NOVANETWORK\_FLOATING\_RANGE**

IP Range for floating IP addresses. [^\[:\.\lda- fA-f]+(\Vd+){0,1}\$]

**--novanetwork-auto-assign-floating-ip=NOVANETWORK\_AUTO\_ASSIGN\_FLOATING\_IP**

Specify 'y' to automatically assign a floating IP to new instances. ['y', 'n']

## 2.21. PACKSTACK NOVA NETWORK VLAN OPTIONS

**--novanetwork-vlan-start=NOVANETWORK\_VLAN\_START**

First VLAN for private networks (Compute networking).

**--novanetwork-num-networks=NOVANETWORK\_NUM\_NETWORKS**

Number of networks to support (Compute networking).

**--novanetwork-network-size=NOVANETWORK\_NETWORK\_SIZE**

Number of addresses in each private subnet (Compute networking).

## 2.22. PACKSTACK NEUTRON CONFIG

**--os-neutron-ks-password=OS\_NEUTRON\_KS\_PASSWORD**

Password to use for OpenStack Networking (neutron) to authenticate with the Identity service.

**--os-neutron-db-password=OS\_NEUTRON\_DB\_PASSWORD**

The password to use for OpenStack Networking to access the database.

**--os-neutron-l3-ext-bridge=OS\_NEUTRON\_L3\_EXT\_BRIDGE**

The name of the Open vSwitch bridge (or empty for linuxbridge) for the OpenStack Networking L3 agent to use for external traffic. Specify 'provider' if you intend to use a provider network to handle external traffic.

**--os-neutron-metadata-pw=OS\_NEUTRON\_METADATA\_PW**

Password for the OpenStack Networking metadata agent.

**--os-neutron-lbaas-install=OS\_NEUTRON\_LBAAS\_INSTALL**

Specify 'y' to install OpenStack Networking's Load- Balancing-as-a-Service (LBaaS). ['y', 'n']

**--os-neutron-metering-agent-install=OS\_NEUTRON\_METERING\_AGENT\_INSTALL**

Specify 'y' to install OpenStack Networking's L3 Metering agent ['y', 'n']

**--neutron-fwaas=NEUTRON\_FWAAS**

Specify 'y' to configure OpenStack Networking's Firewall-as-a-Service (FWaaS). ['y', 'n']

## 2.23. PACKSTACK NEUTRON LB AGENT CONFIG

**--os-neutron-lb-interface-mappings=OS\_NEUTRON\_LB\_INTERFACE\_MAPPINGS**

Comma-separated list of interface mappings for the OpenStack Networking linuxbridge plugin. Each tuple in the list must be in the format <physical\_network>:<net\_interface>. Example: physnet1:eth1,physnet2:eth2,physnet3:eth3.

## 2.24. PACKSTACK NEUTRON OVS AGENT CONFIG

**--os-neutron-ovs-bridge-mappings=OS\_NEUTRON\_OVS\_BRIDGE\_MAPPINGS**

Comma-separated list of bridge mappings for the OpenStack Networking Open vSwitch plugin. Each tuple in the list must be in the format <physical\_network>:<ovs\_bridge>. Example: physnet1:br-eth1,physnet2:br-eth2,physnet3:br-eth3

**--os-neutron-ovs-bridge-interfaces=OS\_NEUTRON\_OVS\_BRIDGE\_INTERFACES**

Comma-separated list of colon-separated Open vSwitch <bridge>:<interface> pairs. The interface will be added to the associated bridge.

## 2.25. PACKSTACK NEUTRON OVS AGENT CONFIG FOR TUNNELS

**--os-neutron-ovs-tunnel-if=OS\_NEUTRON\_OVS\_TUNNEL\_IF**

Interface for the Open vSwitch tunnel. Packstack overrides the IP address used for tunnels on this hypervisor to the IP found on the specified interface (for example, eth1).

## 2.26. PACKSTACK NEUTRON OVS AGENT CONFIG FOR VXLAN

**--os-neutron-ovs-vxlan-udp-port=OS\_NEUTRON\_OVS\_VXLAN\_UDP\_PORT**

VXLAN UDP port.

## 2.27. PACKSTACK NOVACLIENT CONFIG PARAMETERS

## 2.28. PACKSTACK OPENSTACK HORIZON CONFIG PARAMETERS

**--os-horizon-ssl=OS\_HORIZON\_SSL**

Specify 'y' to set up Horizon communication over https. ['y', 'n']

## 2.29. PACKSTACK SSL CONFIG PARAMETERS

**--os-ssl-cert=OS\_SSL\_CERT**

PEM-encoded certificate to be used for SSL connections on the https server (the certificate should not require a passphrase). To generate a certificate, leave blank.

**--os-ssl-key=OS\_SSL\_KEY**

SSL keyfile corresponding to the certificate if one was specified.

**--os-ssl-cachain=OS\_SSL\_CACHAIN**

PEM-encoded CA certificates from which the certificate chain of the server certificate can be assembled.

## 2.30. PACKSTACK OPENSTACK SWIFT CONFIG PARAMETERS

**--os-swift-ks-passwd=OS\_SWIFT\_KS\_PASSWD**

Password to use for the Object Storage service to authenticate with the Identity service.

**--os-swift-storages=OS\_SWIFT\_STORAGES**

Comma-separated list of devices to use as storage device for Object Storage. Each entry must take the format /path/to/dev (for example, specifying /dev/vdb installs /dev/vdb as the Object Storage storage device; Packstack does not create the filesystem, you must do this first). If left empty, Packstack creates a loopback device for test setup.

**--os-swift-storage-zones=OS\_SWIFT\_STORAGE\_ZONES**

Number of Object Storage storage zones; this number MUST be no larger than the number of configured storage devices.

**--os-swift-storage-replicas=OS\_SWIFT\_STORAGE\_REPLICAS**

Number of Object Storage storage replicas; this number MUST be no larger than the number of configured storage zones.

**--os-swift-storage-fstype=OS\_SWIFT\_STORAGE\_FSTYPE**

File system type for storage nodes. ['xfs', 'ext4']

**--os-swift-storage-size=OS\_SWIFT\_STORAGE\_SIZE**

Size of the Object Storage loopback file storage device.

## 2.31. PACKSTACK HEAT CONFIG PARAMETERS

**--os-heat-mysql-password=OS\_HEAT\_MYSQL\_PASSWORD**

Password used by Orchestration service user to authenticate against the database.

**--os-heat-ks-passwd=OS\_HEAT\_KS\_PASSWD**

Password to use for the Orchestration service to authenticate with the Identity service.

**--os-heat-cloudwatch-install=OS\_HEAT\_CLOUDWATCH\_INSTALL**

Specify 'y' to install the Orchestration CloudWatch API. ['y', 'n']

**--os-heat-cfn-install=OS\_HEAT\_CFN\_INSTALL**

Specify 'y' to install the Orchestration CloudFormation API. ['y', 'n']

**--os-heat-domain=OS\_HEAT\_DOMAIN**

Name of the Identity domain for Orchestration.

**--os-heat-domain-admin=OS\_HEAT\_DOMAIN\_ADMIN**

Name of the Identity domain administrative user for Orchestration.

**--os-heat-domain-password=OS\_HEAT\_DOMAIN\_PASSWORD**

Password for the Identity domain administrative user for Orchestration.

## 2.32. PACKSTACK PROVISIONING DEMO CONFIG

**--provision-demo=PROVISION\_DEMO**

Specify 'y' to provision for demo usage and testing. ['y', 'n']

**--provision-tempest=PROVISION\_TEMPEST**



Specify 'y' to configure the OpenStack Integration Test Suite (tempest) for testing. The test suite requires OpenStack Networking to be installed. ['y', 'n']

## 2.33. PACKSTACK PROVISIONING DEMO CONFIG

**--provision-demo-floatrange=PROVISION\_DEMO\_FLOATRANGE**

CIDR network address for the floating IP subnet.

**--provision-image-name=PROVISION\_IMAGE\_NAME**

The name to be assigned to the demo image in Glance (default "cirros").

**--provision-image-url=PROVISION\_IMAGE\_URL**

A URL or local file location for an image to download and provision in Glance (defaults to a URL for a recent "cirros" image).

**--provision-image-format=PROVISION\_IMAGE\_FORMAT**

Format for the demo image (default "qcow2").

**--provision-image-ssh-user=PROVISION\_IMAGE\_SSH\_USER**

User to use when connecting to instances booted from the demo image.

## 2.34. PACKSTACK CEILOMETER CONFIG PARAMETERS

**--ceilometer-ks-passwd=CEILOMETER\_KS\_PASSWD**

Password to use for Telemetry to authenticate with the Identity service.

## 2.35. PACKSTACK MONGODB CONFIG PARAMETERS

**--mongodb-host=MONGODB\_HOST**

IP address of the server on which to install MongoDB.

## 2.36. PACKSTACK NAGIOS CONFIG PARAMETERS

**--nagios-passwd=NAGIOS\_PASSWD**

Password of the nagiosadmin user on the Nagios server.

## **2.37. PACKSTACK POSTSCRIPT CONFIG PARAMETERS**

## **2.38. PACKSTACK PUPPET CONFIG PARAMETERS**

## CHAPTER 3. CONFIGURATION FILE EDITOR

The **openstack-config** client is the command-line interface (CLI) for the and its extensions. This chapter documents **openstack-config** version **0.5**.

For help on a specific **openstack-config** command, enter:

```
$ openstack-config help COMMAND
```

### 3.1. OPENSTACK-CONFIG USAGE

```
Usage: crudini --set [OPTION]... config_file section [param] [value]
crudini --get [OPTION]... config_file [section] [param] crudini --del
[OPTION]... config_file section [param] [list value] crudini --merge
[OPTION]... config_file [section]
```

### 3.2. OPENSTACK-CONFIG OPTIONAL ARGUMENTS

#### **--existing[=WHAT]**

For --set, --del and --merge, fail if item is missing, where WHAT is 'file', 'section', or 'param', or if not specified; all specified items.

#### **--format=FMT**

For --get, select the output FMT. Formats are sh,ini,lines

#### **--inplace**

Lock and write files in place. This is not atomic but has less restrictions than the default replacement method.

#### **--list**

For --set and --del, update a list (set) of values

#### **--list-sep=STR**

Delimit list values with "STR" instead of " ,"

#### **--output=FILE**

Write output to FILE instead. '-' means stdout

#### **--verbose**

Indicate on stderr if changes were made

## CHAPTER 4. BLOCK STORAGE COMMAND-LINE CLIENT

The **cinder** client is the command-line interface (CLI) for the OpenStack Block Storage API and its extensions. This chapter documents **cinder** version **1.1.1**.

For help on a specific **cinder** command, enter:

```
$ cinder help COMMAND
```

### 4.1. CINDER USAGE

```
usage: cinder [--version] [--debug] [--os-auth-system <auth-system>]
  [--service-type <service-type>] [--service-name <service-name>] [--
  volume-service-name <volume-service-name>] [--endpoint-type <endpoint-
  type>] [--os-volume-api-version <volume-api-ver>] [--retries <retries>]
  [--os-auth-strategy <auth-strategy>] [--os-username <auth-user-name>]
  [--os-password <auth-password>] [--os-tenant-name <auth-tenant-name>]
  [--os-tenant-id <auth-tenant-id>] [--os-auth-url <auth-url>] [--os-
  user-id <auth-user-id>] [--os-user-domain-id <auth-user-domain-id>] [--
  os-user-domain-name <auth-user-domain-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-cert <certificate>] [--os-key <key>] [--os-
  region-name <region-name>] [--os-token <token>] [--os-url <url>] [--os-
  cacert <ca-certificate>] <subcommand> ...
```

#### Subcommands

##### **absolute-limits**

Lists absolute limits for a user.

##### **availability-zone-list**

Lists all availability zones.

##### **backup-create**

Creates a volume backup.

##### **backup-delete**

Removes a backup.

##### **backup-list**

Lists all backups.

**backup-restore**

Restores a backup.

**backup-show**

Show backup details.

**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 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.

**force-delete**

Attempts force-delete of volume, regardless of state.

**list**

Lists all volumes.

**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 associations.

**qos-get-association**

Gets all associations for specified qos specs.

**qos-key**

Sets or unsets specifications for a qos spec.

**qos-list**

Lists qos specs.

**qos-show**

Shows a specified qos specs.

**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.

**reset - state**

Explicitly updates the volume state.

**service - disable**

Disables the service.

**service - enable**

Enables the service.

**service - list**

Lists all services. Filter by host and service binary.

**set - bootable**

Update bootable status of a volume.

**show**

Shows volume details.

**snapshot - create**

Creates a snapshot.

**snapshot - delete**

Remove one or more snapshots.

**snapshot - list**

Lists all snapshots.

**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.

**transfer -accept**

Accepts a volume transfer.

**transfer -create**

Creates a volume transfer.

**transfer -delete**

Undoes a transfer.

**transfer -list**

Lists all transfers.

**transfer -show**

Show transfer details.

**type -create**

Creates a volume type.

**type -delete**

Deletes a specified volume type.

**type -key**

Sets or unsets extra\_spec for a volume type.

**type-list**

Lists available 'volume types'.

**upload-to-image**

Uploads volume to Image Service as an image.

**bash-completion**

Prints arguments for bash\_completion.

**help**

Shows help about this program or one of its subcommands.

**list-extensions**

Lists all available os-api extensions.

## 4.2. CINDER OPTIONAL ARGUMENTS

**--version**

show program's version number and exit

**--debug**

Shows 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>**

Service name. Default=`env[CINDER_SERVICE_NAME]`.

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

Volume service name. Default=`env[CINDER_VOLUME_SERVICE_NAME]`.

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

Endpoint type, which is publicURL or internalURL. Default=nova  
**env[CINDER\_ENDPOINT\_TYPE]** or publicURL.

**--os-volume-api-version <volume-api-ver>**

Block Storage API version. Valid values are 1 or 2.  
Default=**env[OS\_VOLUME\_API\_VERSION]**.

**--retries <retries>**

Number of retries.

**--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-cert <certificate>**

Defaults to **env[OS\_CERT]**.

**--os-key <key>**

Defaults to **env[OS\_KEY]**.

**--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]**

**--os-cacert <ca-certificate>**

Specify a CA bundle file to use in verifying a TLS (https) server certificate. Defaults to **env[OS\_CACERT]**

## 4.3. BLOCK STORAGE API V1 COMMANDS

### 4.3.1. cinder absolute-limits

```
usage: cinder absolute-limits
```

Lists absolute limits for a user.

### 4.3.2. cinder availability-zone-list

```
usage: cinder availability-zone-list
```

Lists all availability zones.

### 4.3.3. cinder backup-create

```
usage: cinder backup-create [--container <container>] [--display-name <display-name>] [--display-description <display-description>] <volume>
```

Creates a volume backup.

#### Positional arguments

##### <volume>

Name or ID of volume to back up.

#### Optional arguments

##### **--container <container>**

Backup container name. Default=None.

##### **--display-name <display-name>**

Backup name. Default=None.

##### **--display-description <display-description>**

Backup description. Default=None.

### 4.3.4. cinder backup-delete

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

Removes a backup.

#### Positional arguments

**<backup>**

Name or ID of backup to delete.

### 4.3.5. cinder backup-list

```
usage: cinder backup-list
```

Lists all backups.

### 4.3.6. cinder backup-restore

```
usage: cinder backup-restore [--volume-id <volume>] <backup>
```

Restores a backup.

#### Positional arguments

**<backup>**

ID of backup to restore.

#### Optional arguments

**--volume-id <volume> ID**

or name of backup volume to which to restore. Default=None.

### 4.3.7. cinder backup-show

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

Show backup details.

#### Positional arguments

**<backup>**

Name or ID of backup.

### 4.3.8. cinder create

```
usage: cinder create [--snapshot-id <snapshot-id>] [--source-uuid  
<source-uuid>] [--image-id <image-id>] [--display-name <display-name>]  
[--display-description <display-description>] [--volume-type <volume-  
type>] [--availability-zone <availability-zone>] [--metadata  
[<key=value> [<key=value> ...]]] <size>
```

Creates a volume.

### Positional arguments

#### **<size>**

Volume size, in GBs.

### Optional arguments

#### **--snapshot-id <snapshot-id>**

Creates volume from snapshot ID. Default=None.

#### **--source-uuid <source-uuid>**

Creates volume from volume ID. Default=None.

#### **--image-id <image-id>**

Creates volume from image ID. Default=None.

#### **--display-name <display-name>**

Volume name. Default=None.

#### **--display-description <display-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.

### 4.3.9. cinder credentials

```
usage: cinder credentials
```

Shows user credentials returned from auth.

### 4.3.10. cinder delete

```
usage: cinder delete <volume> [<volume> ...]
```

Removes one or more volumes.

#### Positional arguments

**<volume>**

Name or ID of volume to delete. Separate multiple volumes with a space.

### 4.3.11. cinder encryption-type-create

```
usage: cinder encryption-type-create [--cipher <cipher>] [--key_size
<key_size>] [--control_location <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, a volume driver class path.

#### Optional arguments

**--cipher <cipher>**

The encryption algorithm and mode. For example, aes-xts-plain64. Default=None.

**--key\_size <key\_size>**

Size of encryption key, in bits. For example, 128 or 256. 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."

### 4.3.12. 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.

### 4.3.13. cinder encryption-type-list

```
usage: cinder encryption-type-list
```

Shows encryption type details for volume types. Admin only.

### 4.3.14. cinder encryption-type-show

```
usage: cinder encryption-type-show <volume_type>
```

Shows encryption type details for volume type. Admin only.

#### Positional arguments

**<volume\_type>**

Name or ID of volume type.

### 4.3.15. cinder endpoints

```
usage: cinder endpoints
```

Discovers endpoints registered by authentication service.

### 4.3.16. 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>

Size of volume, in GBs.

### 4.3.17. cinder extra-specs-list

```
usage: cinder extra-specs-list
```

Lists current volume types and extra specs.

### 4.3.18. cinder force-delete

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

Attempts force-delete of volume, regardless of state.

#### Positional arguments

##### <volume>

Name or ID of volume to delete. Separate multiple volumes with a space.

### 4.3.19. cinder list

```
usage: cinder list [--all-tenants [<0|1>]] [--display-name <display-name>] [--status <status>] [--metadata [<key=value> [<key=value> ...]]]
```

Lists all volumes.

#### Optional arguments

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

Shows details for all tenants. Admin only.

**--display-name <display-name>**

Filters list by a volume display name. Default=None.

**--status <status>**

Filters list by a status. Default=None.

**--metadata [<key=value> [<key=value> ...]]**

Filters list by metadata key and value pair. Default=None.

### 4.3.20. cinder list-extensions

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

Lists all available os-api extensions.

### 4.3.21. 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>**

The metadata key and pair to set or unset. For unset, specify only the key. Default=[].

### 4.3.22. cinder metadata-show

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

Shows volume metadata.

#### Positional arguments

**<volume>**

ID of volume.

### 4.3.23. 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. Default=[].

### 4.3.24. cinder migrate

```
usage: cinder migrate [--force-host-copy <True|False>] <volume> <host>
```

Migrates volume to a new host.

#### Positional arguments

**<volume>**

ID of volume to migrate.

**<host>**

Destination host.

#### Optional arguments

**--force-host-copy <True|False>**

Enables or disables generic host-based force- migration, which bypasses driver optimizations. Default=False.

### 4.3.25. 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.

### 4.3.26. 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>**

Specifications for QoS.

### 4.3.27. 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.

#### Optional arguments

**--force <True|False>**

Enables or disables deletion of in-use QoS specifications. Default=False.

### 4.3.28. 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.

##### <volume\_type\_id>

ID of volume type.

### 4.3.29. cinder qos-disassociate-all

```
usage: cinder qos-disassociate-all <qos_specs>
```

Disassociates qos specs from all associations.

#### Positional arguments

##### <qos\_specs>

ID of QoS specifications.

### 4.3.30. cinder qos-get-association

```
usage: cinder qos-get-association <qos_specs>
```

Gets all associations for specified qos specs.

#### Positional arguments

##### <qos\_specs>

ID of QoS specifications.

### 4.3.31. 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.

**<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.

### 4.3.32. cinder qos-list

```
usage: cinder qos-list
```

Lists qos specs.

### 4.3.33. cinder qos-show

```
usage: cinder qos-show <qos_specs>
```

Shows a specified qos specs.

#### Positional arguments

**<qos\_specs>**

ID of QoS specifications.

### 4.3.34. 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.

### 4.3.35. cinder quota-class-update

```
usage: cinder quota-class-update [--volumes <volumes>] [--snapshots
<snapshots>] [--gigabytes <gigabytes>] [--volume-type
<volume_type_name>] <class>
```

Updates quotas for a quota class.

#### Positional arguments

##### <class>

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.

### 4.3.36. cinder quota-defaults

```
usage: cinder quota-defaults <tenant_id>
```

Lists default quotas for a tenant.

#### Positional arguments

##### <tenant\_id>

ID of the tenant for which to list default quotas.

### 4.3.37. 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.

### 4.3.38. cinder quota-show

```
usage: cinder quota-show <tenant_id>
```

Lists quotas for a tenant.

#### Positional arguments

**<tenant\_id>**

ID of the tenant for which to list quotas.

### 4.3.39. cinder quota-update

```
usage: cinder quota-update [--volumes <volumes>] [--snapshots  
<snapshots>] [--gigabytes <gigabytes>] [--volume-type  
<volume_type_name>] <tenant_id>
```

Updates quotas for a tenant.

#### Positional arguments

**<tenant\_id>**

ID of the tenant 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.

#### 4.3.40. cinder quota-usage

```
usage: cinder quota-usage <tenant_id>
```

Lists quota usage for a tenant.

##### Positional arguments

**<tenant\_id>**

ID of the tenant for which to list quota usage.

#### 4.3.41. cinder rate-limits

```
usage: cinder rate-limits
```

Lists rate limits for a user.

#### 4.3.42. 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.

#### 4.3.43. cinder rename

```
usage: cinder rename [--display-description <display-description>]
<volume> [<display-name>]
```

Renames a volume.

#### Positional arguments

##### <volume>

Name or ID of volume to rename.

##### <display-name>

New display name for volume.

#### Optional arguments

##### **--display-description <display-description>**

Volume description. Default=None.

### 4.3.44. cinder reset-state

```
usage: cinder reset-state [--state <state>] <volume> [<volume> ...]
```

Explicitly updates the volume state.

#### Positional arguments

##### <volume>

Name or ID of volume to modify. Separate multiple volumes with a space.

#### Optional arguments

##### **--state <state>**

The state to assign to the volume. Valid values are "available," "error," "creating," "deleting," or "error\_deleting." Default is "available."

### 4.3.45. 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.

### 4.3.46. cinder service-enable

```
usage: cinder service-enable <hostname> <binary>
```

Enables the service.

### Positional arguments

**<hostname>**

Host name.

**<binary>**

Service binary.

### 4.3.47. cinder service-list

```
usage: cinder service-list [--host <hostname>] [--binary <binary>]
```

Lists all services. Filter by host and service binary.

### Optional arguments

**--host <hostname>**

Host name. Default=None.

**--binary <binary>**

Service binary. Default=None.

#### 4.3.48. 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.

**<True|true|False|false>**

Flag to indicate whether volume is bootable.

#### 4.3.49. cinder show

```
usage: cinder show <volume>
```

Shows volume details.

##### Positional arguments

**<volume>**

Volume name or ID.

#### 4.3.50. cinder snapshot-create

```
usage: cinder snapshot-create [--force <True|False>] [--display-name  
<display-name>] [--display-description <display-description>] <volume>
```

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.

**--display-name <display-name>**

The snapshot name. Default=None.

**--display-description <display-description>**

The snapshot description. Default=None.

### 4.3.51. cinder snapshot-delete

```
usage: cinder snapshot-delete <snapshot> [<snapshot> ...]
```

Remove one or more snapshots.

#### Positional arguments

**<snapshot>**

Name or ID of the snapshot(s) to delete.

### 4.3.52. cinder snapshot-list

```
usage: cinder snapshot-list [--all-tenants [<0|1>]] [--display-name
<display-name>] [--status <status>] [--volume-id <volume-id>]
```

Lists all snapshots.

#### Optional arguments

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

Shows details for all tenants. Admin only.

**--display-name <display-name>**

Filters list by a display name. Default=None.

**--status <status>**

Filters list by a status. Default=None.

**--volume-id <volume-id>**

Filters list by a volume ID. Default=None.

### 4.3.53. 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>**

The metadata key and value pair to set or unset. For unset, specify only the key.

### 4.3.54. cinder snapshot-metadata-show

```
usage: cinder snapshot-metadata-show <snapshot>
```

Shows snapshot metadata.

#### Positional arguments

**<snapshot>**

ID of snapshot.

### 4.3.55. 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 or pairs to update. Default=[].

**4.3.56. cinder snapshot-rename**

```
usage: cinder snapshot-rename [--display-description <display-
description>] <snapshot> [<display-name>]
```

Renames a snapshot.

**Positional arguments****<snapshot>**

Name or ID of snapshot.

**<display-name>**

New display name for snapshot.

**Optional arguments****--display-description <display-description>**

Snapshot description. Default=None.

**4.3.57. 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," or "error\_deleting." Default is "available."

### 4.3.58. cinder snapshot-show

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

Shows snapshot details.

#### Positional arguments

**<snapshot>**

Name or ID of snapshot.

### 4.3.59. cinder transfer-accept

```
usage: cinder transfer-accept <transfer> <auth_key>
```

Accepts a volume transfer.

#### Positional arguments

**<transfer>**

ID of transfer to accept.

**<auth\_key>**

Authentication key of transfer to accept.

### 4.3.60. cinder transfer-create

```
usage: cinder transfer-create [--display-name <display-name>] <volume>
```

Creates a volume transfer.

#### Positional arguments

**<volume>**

Name or ID of volume to transfer.

### Optional arguments

**--display-name <display-name>**

Transfer name. Default=None.

### 4.3.61. cinder transfer-delete

**usage: cinder transfer-delete <transfer>**

Undoes a transfer.

### Positional arguments

**<transfer>**

Name or ID of transfer to delete.

### 4.3.62. cinder transfer-list

**usage: cinder transfer-list**

Lists all transfers.

### 4.3.63. cinder transfer-show

**usage: cinder transfer-show <transfer>**

Show transfer details.

### Positional arguments

**<transfer>**

Name or ID of transfer to accept.

### 4.3.64. cinder type-create

**usage: cinder type-create <name>**

Creates a volume type.

### Positional arguments

**<name>**

Name for the volume type.

### 4.3.65. cinder type-delete

```
usage: cinder type-delete <id>
```

Deletes a specified volume type.

#### Positional arguments

**<id>**

ID of volume type to delete.

### 4.3.66. 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.

**<action>**

The action. Valid values are 'set' or 'unset.'

**<key=value>**

The extra specs key and value pair to set or unset. For unset, specify only the key. Default=None.

### 4.3.67. cinder type-list

```
usage: cinder type-list
```

Lists available 'volume types'.

### 4.3.68. cinder upload-to-image

■

```
usage: cinder upload-to-image [--force <True|False>] [--container-
format <container-format>] [--disk-format <disk-format>] <volume>
<image-name>
```

Uploads volume to Image Service as an image.

### Positional arguments

#### <volume>

Name or ID of volume to upload to an image.

#### <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.

#### --container-format <container-format>

Container format type. Default is bare.

#### --disk-format <disk-format>

Disk format type. Default is raw.

## 4.4. BLOCK STORAGE API V2 COMMANDS

You can select an API version to use by adding the *--os-volume-api-version* option or by setting the corresponding environment variable:

```
$ export OS_VOLUME_API_VERSION=2
```

### 4.4.1. cinder absolute-limits (v2)

```
usage: cinder --os-volume-api-version 2 absolute-limits
```

Lists absolute limits for a user.

### 4.4.2. cinder availability-zone-list (v2)

```
usage: cinder --os-volume-api-version 2 availability-zone-list
```

Lists all availability zones.

#### 4.4.3. cinder backup-create (v2)

```
usage: cinder --os-volume-api-version 2 backup-create [--container <container>] [--name <name>] [--description <description>] <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.

#### 4.4.4. cinder backup-delete (v2)

```
usage: cinder --os-volume-api-version 2 backup-delete <backup>
```

Removes a backup.

##### Positional arguments

**<backup>**

Name or ID of backup to delete.

#### 4.4.5. cinder backup-export (v2)

■

```
usage: cinder --os-volume-api-version 2 backup-export <backup>
```

Export backup metadata record.

#### Positional arguments

**<backup>**

ID of the backup to export.

#### 4.4.6. cinder backup-import (v2)

```
usage: cinder --os-volume-api-version 2 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.

#### 4.4.7. cinder backup-list (v2)

```
usage: cinder --os-volume-api-version 2 backup-list
```

Lists all backups.

#### 4.4.8. cinder backup-restore (v2)

```
usage: cinder --os-volume-api-version 2 backup-restore [--volume
<volume>] <backup>
```

Restores a backup.

#### Positional arguments

**<backup>**

ID of backup to restore.

### Optional arguments

**--volume <volume>**

Name or ID of volume to which to restore. Default=None.

### 4.4.9. cinder backup-show (v2)

```
usage: cinder --os-volume-api-version 2 backup-show <backup>
```

Shows backup details.

### Positional arguments

**<backup>**

Name or ID of backup.

### 4.4.10. cinder cgsnapshot-create (v2)

```
usage: cinder --os-volume-api-version 2 cgsnapshot-create [--name <name>] [--description <description>] <consistencygroup>
```

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.

### 4.4.11. cinder cgsnapshot-delete (v2)

```
usage: cinder --os-volume-api-version 2 cgsnapshot-delete <cgsnapshot> [<cgsnapshot> ...]
```



Removes one or more cgsnapshots.

### Positional arguments

**<cgsnapshot>**

Name or ID of one or more cgsnapshots to be deleted.

### 4.4.12. cinder cgsnapshot-list (v2)

```
usage: cinder --os-volume-api-version 2 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.

### 4.4.13. cinder cgsnapshot-show (v2)

```
usage: cinder --os-volume-api-version 2 cgsnapshot-show <cgsnapshot>
```

Shows cgsnapshot details.

### Positional arguments

**<cgsnapshot>**

Name or ID of cgsnapshot.

### 4.4.14. cinder consisgroup-create (v2)

```
usage: cinder --os-volume-api-version 2 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.

### 4.4.15. cinder consisgroup-delete (v2)

```
usage: cinder --os-volume-api-version 2 consisgroup-delete [--force] <consistencygroup> [<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.

#### 4.4.16. cinder consisgroup-list (v2)

```
usage: cinder --os-volume-api-version 2 consisgroup-list [--all-tenants
[<0|1>]]
```

Lists all consistencygroups.

##### Optional arguments

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

Shows details for all tenants. Admin only.

#### 4.4.17. cinder consisgroup-show (v2)

```
usage: cinder --os-volume-api-version 2 consisgroup-show
<consistencygroup>
```

Shows details of a consistency group.

##### Positional arguments

**<consistencygroup>**

Name or ID of a consistency group.

#### 4.4.18. cinder create (v2)

```
usage: cinder --os-volume-api-version 2 create [--consisgroup-id
<consistencygroup-id>] [--snapshot-id <snapshot-id>] [--source-volid
<source-volid>] [--source-replica <source-replica>] [--image-id <image-
id>] [--name <name>] [--description <description>] [--volume-type
<volume-type>] [--availability-zone <availability-zone>] [--metadata
[<key=value> [<key=value> ...]]] [--hint <key=value>] [<size>]
```

Creates a volume.

##### Positional arguments

**<size>**

Size of volume, in GBs. (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.

**--snapshot-id <snapshot-id>**

Creates volume from snapshot ID. Default=None.

**--source-uuid <source-uuid>**

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.

**--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.

#### 4.4.19. cinder credentials (v2)

```
usage: cinder --os-volume-api-version 2 credentials
```

Shows user credentials returned from auth.

#### 4.4.20. cinder delete (v2)

```
usage: cinder --os-volume-api-version 2 delete <volume> [<volume> ...]
```

Removes one or more volumes.

##### Positional arguments

###### <volume>

Name or ID of volume or volumes to delete.

#### 4.4.21. cinder encryption-type-create (v2)

```
usage: cinder --os-volume-api-version 2 encryption-type-create [--cipher <cipher>] [--key_size <key_size>] [--control_location <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 256. 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."

#### 4.4.22. cinder encryption-type-delete (v2)

```
usage: cinder --os-volume-api-version 2 encryption-type-delete  
<volume_type>
```

Deletes encryption type for a volume type. Admin only.

##### Positional arguments

**<volume\_type>**

Name or ID of volume type.

#### 4.4.23. cinder encryption-type-list (v2)

```
usage: cinder --os-volume-api-version 2 encryption-type-list
```

Shows encryption type details for volume types. Admin only.

#### 4.4.24. cinder encryption-type-show (v2)

```
usage: cinder --os-volume-api-version 2 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.

#### 4.4.25. cinder endpoints (v2)

```
usage: cinder --os-volume-api-version 2 endpoints
```

Discovers endpoints registered by authentication service.

#### 4.4.26. cinder extend (v2)

```
usage: cinder --os-volume-api-version 2 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 GBs.

**4.4.27. cinder extra-specs-list (v2)**

```
usage: cinder --os-volume-api-version 2 extra-specs-list
```

Lists current volume types and extra specs.

**4.4.28. cinder force-delete (v2)**

```
usage: cinder --os-volume-api-version 2 force-delete <volume> [<volume>
...]
```

Attempts force-delete of volume, regardless of state.

**Positional arguments****<volume>**

Name or ID of volume or volumes to delete.

**4.4.29. cinder list (v2)**

```
usage: cinder --os-volume-api-version 2 list [--all-tenants [<0|1>]] [-
-name <name>] [--status <status>] [--metadata [<key=value> [<key=value>
...]]] [--marker <marker>] [--limit <limit>] [--sort_key <sort_key>] [-
-sort_dir <sort_dir>]
```

Lists all volumes.

**Optional arguments****--all-tenants [<0|1>]**

Shows details for all tenants. Admin only.

**--name <name>**

Filters results by a name. OPTIONAL: Default=None.

**--status <status>**

Filters results by a status. OPTIONAL: Default=None.

**--metadata [<key=value> [<key=value> ...]]**

Filters results by a metadata key and value pair. OPTIONAL: Default=None.

**--marker <marker>**

Begin returning volumes that appear later in the volume list than that represented by this volume id. OPTIONAL: Default=None.

**--limit <limit>**

Maximum number of volumes to return. OPTIONAL: Default=None.

**--sort\_key <sort\_key>**

Key to be sorted, should be (``id``, ``status``, ``size``, ``availability_zone``, ``name``, ``bootable``, ``created_at``). OPTIONAL: Default=None.

**--sort\_dir <sort\_dir>**

Sort direction, should be ``desc`` or ``asc``. OPTIONAL: Default=None.

#### 4.4.30. cinder list-extensions (v2)

```
usage: cinder --os-volume-api-version 2 list-extensions
```

Lists all available os-api extensions.

#### 4.4.31. cinder manage (v2)

```
usage: cinder --os-volume-api-version 2 manage [--source-name <source-name>] [--source-id <source-id>] [--name <name>] [--description <description>] [--volume-type <volume-type>] [--availability-zone <availability-zone>] [--metadata [<key=value> [<key=value> ...]]] [--bootable] <host> [<key=value> [<key=value> ...]]
```

Manage an existing volume.

##### Positional arguments

**<host>**



Cinder host on which the existing volume resides

**<key=value>**

Driver-specific reference to the existing volume as key=value pairs

### Optional arguments

**--source-name <source-name>**

Name of the volume to manage (Optional)

**--source-id <source-id>**

ID of the volume to manage (Optional)

**--name <name>**

Volume name (Optional, Default=None)

**--description <description>**

Volume description (Optional, Default=None)

**--volume-type <volume-type>**

Volume type (Optional, Default=None)

**--availability-zone <availability-zone>**

Availability zone for volume (Optional, Default=None)

**--metadata [<key=value> [<key=value> ...]]**

Metadata key=value pairs (Optional, Default=None)

**--bootable**

Specifies that the newly created volume should be marked as bootable

#### 4.4.32. cinder metadata (v2)

```
usage: cinder --os-volume-api-version 2 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.

**4.4.33. cinder metadata-show (v2)**

```
usage: cinder --os-volume-api-version 2 metadata-show <volume>
```

Shows volume metadata.

**Positional arguments****<volume>**

ID of volume.

**4.4.34. cinder metadata-update-all (v2)**

```
usage: cinder --os-volume-api-version 2 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.

**4.4.35. cinder migrate (v2)**

```
usage: cinder --os-volume-api-version 2 migrate [--force-host-copy
```

```
<True|False>] <volume> <host>
```

Migrates volume to a new host.

### Positional arguments

**<volume>**

ID of volume to migrate.

**<host>**

Destination host.

### Optional arguments

**--force-host-copy <True|False>**

Enables or disables generic host-based force- migration, which bypasses driver optimizations. Default=False.

## 4.4.36. cinder qos-associate (v2)

```
usage: cinder --os-volume-api-version 2 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.

## 4.4.37. cinder qos-create (v2)

```
usage: cinder --os-volume-api-version 2 qos-create <name> <key=value>
[<key=value> ...]
```

Creates a qos specs.

### Positional arguments

**<name>**

Name of new QoS specifications.

**<key=value>**

QoS specifications.

### 4.4.38. cinder qos-delete (v2)

```
usage: cinder --os-volume-api-version 2 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.

### 4.4.39. cinder qos-disassociate (v2)

```
usage: cinder --os-volume-api-version 2 qos-disassociate <qos_specs>
<volume_type_id>
```

Disassociates qos specs from specified volume type.

### Positional arguments

**<qos\_specs>**

ID of QoS specifications.

**<volume\_type\_id>**

ID of volume type with which to associate QoS specifications.

#### 4.4.40. cinder qos-disassociate-all (v2)

```
usage: cinder --os-volume-api-version 2 qos-disassociate-all
<qos_specs>
```

Disassociates qos specs from all its associations.

##### Positional arguments

**<qos\_specs>**

ID of QoS specifications on which to operate.

#### 4.4.41. cinder qos-get-association (v2)

```
usage: cinder --os-volume-api-version 2 qos-get-association <qos_specs>
```

Lists all associations for specified qos specs.

##### Positional arguments

**<qos\_specs>**

ID of QoS specifications.

#### 4.4.42. cinder qos-key (v2)

```
usage: cinder --os-volume-api-version 2 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.

**<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.

#### 4.4.43. cinder qos-list (v2)

```
usage: cinder --os-volume-api-version 2 qos-list
```

Lists qos specs.

#### 4.4.44. cinder qos-show (v2)

```
usage: cinder --os-volume-api-version 2 qos-show <qos_specs>
```

Shows qos specs details.

##### Positional arguments

**<qos\_specs>**

ID of QoS specifications to show.

#### 4.4.45. cinder quota-class-show (v2)

```
usage: cinder --os-volume-api-version 2 quota-class-show <class>
```

Lists quotas for a quota class.

##### Positional arguments

**<class>**

Name of quota class for which to list quotas.

#### 4.4.46. cinder quota-class-update (v2)

```
usage: cinder --os-volume-api-version 2 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.

**4.4.47. cinder quota-defaults (v2)**

```
usage: cinder --os-volume-api-version 2 quota-defaults <tenant_id>
```

Lists default quotas for a tenant.

**Positional arguments**

**<tenant\_id>**

ID of tenant for which to list quota defaults.

**4.4.48. cinder quota-delete (v2)**

```
usage: cinder --os-volume-api-version 2 quota-delete <tenant_id>
```

Delete the quotas for a tenant.

**Positional arguments**

**<tenant\_id>**

UUID of tenant to delete the quotas for.

**4.4.49. cinder quota-show (v2)**

```
usage: cinder --os-volume-api-version 2 quota-show <tenant_id>
```

Lists quotas for a tenant.

#### Positional arguments

**<tenant\_id>**

ID of tenant for which to list quotas.

#### 4.4.50. cinder quota-update (v2)

```
usage: cinder --os-volume-api-version 2 quota-update [--volumes <volumes>] [--snapshots <snapshots>] [--gigabytes <gigabytes>] [--volume-type <volume_type_name>] <tenant_id>
```

Updates quotas for a tenant.

#### Positional arguments

**<tenant\_id>**

ID of tenant 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.

#### 4.4.51. cinder quota-usage (v2)

```
usage: cinder --os-volume-api-version 2 quota-usage <tenant_id>
```

Lists quota usage for a tenant.



**Positional arguments****<tenant\_id>**

ID of tenant for which to list quota usage.

**4.4.52. cinder rate-limits (v2)**

```
usage: cinder --os-volume-api-version 2 rate-limits
```

Lists rate limits for a user.

**4.4.53. cinder readonly-mode-update (v2)**

```
usage: cinder --os-volume-api-version 2 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.

**4.4.54. cinder rename (v2)**

```
usage: cinder --os-volume-api-version 2 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.

### 4.4.55. cinder replication-promote (v2)

```
usage: cinder --os-volume-api-version 2 replication-promote <volume>
```

Promote a secondary volume to primary for a relationship.

### Positional arguments

**<volume>**

Name or ID of the volume to promote.

### 4.4.56. cinder replication-reenable (v2)

```
usage: cinder --os-volume-api-version 2 replication-reenable <volume>
```

Sync the secondary volume with primary for a relationship.

### Positional arguments

**<volume>**

Name or ID of the volume to reenable replication.

### 4.4.57. cinder reset-state (v2)

```
usage: cinder --os-volume-api-version 2 reset-state [--state <state>]
<volume> [<volume> ...]
```

Explicitly updates the volume 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," and "error\_deleting." Default=available.

#### 4.4.58. cinder retype (v2)

```
usage: cinder --os-volume-api-version 2 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.

#### 4.4.59. cinder service-disable (v2)

```
usage: cinder --os-volume-api-version 2 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.

#### 4.4.60. cinder service-enable (v2)

```
usage: cinder --os-volume-api-version 2 service-enable <hostname>
<binary>
```

Enables the service.

##### Positional arguments

**<hostname>**

Host name.

**<binary>**

Service binary.

#### 4.4.61. cinder service-list (v2)

```
usage: cinder --os-volume-api-version 2 service-list [--host
<hostname>] [--binary <binary>]
```

Lists all services. Filter by host and service binary.

##### Optional arguments

**--host <hostname>**

Host name. Default=None.

**--binary <binary>**

Service binary. Default=None.

#### 4.4.62. cinder set-bootable (v2)

```
usage: cinder --os-volume-api-version 2 set-bootable <volume>
<True|true|False|false>
```

Update bootable status of a volume.

**Positional arguments****<volume>**

ID of the volume to update.

**<True|true|False|false>**

Flag to indicate whether volume is bootable.

**4.4.63. cinder show (v2)**

```
usage: cinder --os-volume-api-version 2 show <volume>
```

Shows volume details.

**Positional arguments****<volume>**

Name or ID of volume.

**4.4.64. cinder snapshot-create (v2)**

```
usage: cinder --os-volume-api-version 2 snapshot-create [--force
<True|False>] [--name <name>] [--description <description>] <volume>
```

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.

#### 4.4.65. cinder snapshot-delete (v2)

```
usage: cinder --os-volume-api-version 2 snapshot-delete <snapshot>
[<snapshot> ...]
```

Removes one or more snapshots.

##### Positional arguments

**<snapshot>**

Name or ID of the snapshot(s) to delete.

#### 4.4.66. cinder snapshot-list (v2)

```
usage: cinder --os-volume-api-version 2 snapshot-list [--all-tenants
[<0|1>]] [--name <name>] [--status <status>] [--volume-id <volume-id>]
```

Lists all snapshots.

##### Optional arguments

**--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.

**--volume-id <volume-id>**

Filters results by a volume ID. Default=None.

#### 4.4.67. cinder snapshot-metadata (v2)

```
usage: cinder --os-volume-api-version 2 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.

### 4.4.68. cinder snapshot-metadata-show (v2)

```
usage: cinder --os-volume-api-version 2 snapshot-metadata-show
       <snapshot>
```

Shows snapshot metadata.

#### Positional arguments

##### <snapshot>

ID of snapshot.

### 4.4.69. cinder snapshot-metadata-update-all (v2)

```
usage: cinder --os-volume-api-version 2 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.

#### 4.4.70. cinder snapshot-rename (v2)

```
usage: cinder --os-volume-api-version 2 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.

#### 4.4.71. cinder snapshot-reset-state (v2)

```
usage: cinder --os-volume-api-version 2 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." Default is "available."

#### 4.4.72. cinder snapshot-show (v2)



```
usage: cinder --os-volume-api-version 2 snapshot-show <snapshot>
```

Shows snapshot details.

#### Positional arguments

##### <snapshot>

Name or ID of snapshot.

### 4.4.73. cinder transfer-accept (v2)

```
usage: cinder --os-volume-api-version 2 transfer-accept <transfer>  
<auth_key>
```

Accepts a volume transfer.

#### Positional arguments

##### <transfer>

ID of transfer to accept.

##### <auth\_key>

Authentication key of transfer to accept.

### 4.4.74. cinder transfer-create (v2)

```
usage: cinder --os-volume-api-version 2 transfer-create [--name <name>]  
<volume>
```

Creates a volume transfer.

#### Positional arguments

##### <volume>

Name or ID of volume to transfer.

#### Optional arguments

**--name <name>**

Transfer name. Default=None.

#### 4.4.75. cinder transfer-delete (v2)

```
usage: cinder --os-volume-api-version 2 transfer-delete <transfer>
```

Undoes a transfer.

##### Positional arguments

**<transfer>**

Name or ID of transfer to delete.

#### 4.4.76. cinder transfer-list (v2)

```
usage: cinder --os-volume-api-version 2 transfer-list
```

Lists all transfers.

#### 4.4.77. cinder transfer-show (v2)

```
usage: cinder --os-volume-api-version 2 transfer-show <transfer>
```

Shows transfer details.

##### Positional arguments

**<transfer>**

Name or ID of transfer to accept.

#### 4.4.78. cinder type-create (v2)

```
usage: cinder --os-volume-api-version 2 type-create <name>
```

Creates a volume type.

##### Positional arguments

**<name>**

Name of new volume type.

#### 4.4.79. cinder type-delete (v2)

#### 4.4.79. cinder type-delete (v2)

```
usage: cinder --os-volume-api-version 2 type-delete <id>
```

Deletes a volume type.

##### Positional arguments

**<id>**

ID of volume type to delete.

#### 4.4.80. cinder type-key (v2)

```
usage: cinder --os-volume-api-version 2 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.

**<action>**

The action. Valid values are 'set' or 'unset.'

**<key=value>**

The extra specs key and value pair to set or unset. For unset, specify only the key.

#### 4.4.81. cinder type-list (v2)

```
usage: cinder --os-volume-api-version 2 type-list
```

Lists available 'volume types'.

#### 4.4.82. cinder unmanage (v2)

```
usage: cinder --os-volume-api-version 2 unmanage <volume>
```

##### Positional arguments

**<volume>**

Name or ID of the volume to unmanage.

#### 4.4.83. cinder upload-to-image (v2)

```
usage: cinder --os-volume-api-version 2 upload-to-image [--force
<True|False>] [--container-format <container-format>] [--disk-format
<disk-format>] <volume> <image-name>
```

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.

**--container-format <container-format>**

Container format type. Default is bare.

**--disk-format <disk-format>**

Disk format type. Default is raw.

## CHAPTER 5. COMPUTE COMMAND-LINE CLIENT

The **nova** client is the command-line interface (CLI) for the OpenStack Compute API and its extensions. This chapter documents **nova** version **2.23.0**.

For help on a specific **nova** command, enter:

```
$ nova help COMMAND
```

### 5.1. NOVA USAGE

```
usage: nova [--version] [--debug] [--os-cache] [--timings] [--os-auth-
token OS_AUTH_TOKEN] [--os-tenant-name <auth-tenant-name>] [--os-
tenant-id <auth-tenant-id>] [--os-region-name <region-name>] [--os-
auth-system <auth-system>] [--service-type <service-type>] [--service-
name <service-name>] [--volume-service-name <volume-service-name>] [--
os-endpoint-type <endpoint-type>] [--os-compute-api-version <compute-
api-ver>] [--bypass-url <bypass-url>] [--insecure] [--os-cacert <ca-
certificate>] [--os-cert <certificate>] [--os-key <key>] [--timeout
<seconds>] [--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-user-id OS_USER_ID] [--os-user-name
OS_USERNAME] [--os-user-domain-id OS_USER_DOMAIN_ID] [--os-user-domain-
name OS_USER_DOMAIN_NAME] [--os-password OS_PASSWORD] <subcommand> ...
```

#### Subcommands

##### **absolute-limits**

Print a list of absolute limits for a user

##### **add-fixed-ip**

Add new IP address on a network to server.

##### **add-floating-ip**

*DEPRECATED*, use floating-ip-associate instead.

##### **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-details**

Show details of the specified 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-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.

**clear-password**

Clear the admin password for a server.

**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.

**credentials**

Show user credentials returned from auth.

**delete**

Immediately shut down and delete specified server(s).

**diagnostics**

Retrieve server diagnostics.

**dns-create**

Create a DNS entry for domain, name and IP.

**dns-create-private-domain**

Create the specified DNS domain.

**dns-create-public-domain**

Create the specified DNS domain.

**dns-delete**

Delete the specified DNS entry.

**dns-delete-domain**

Delete the specified DNS domain.

**dns-domains**

Print a list of available dns domains.

**dns-list**

List current DNS entries for domain and IP or domain and name.

**endpoints**

Discover endpoints that get returned from the authenticate services.

**evacuate**

Evacuate server from failed host.

**fixed-ip-get**

Retrieve info on a fixed IP.

**fixed-ip-reserve**

Reserve a fixed IP.

**fixed-ip-unreserve**

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**

Bulk create floating IPs by range.

**floating-ip-bulk-delete**

Bulk delete floating IPs by range.

**floating-ip-bulk-list**

List all floating IPs.

**floating-ip-create**

Allocate a floating IP for the current tenant.

**floating-ip-delete**

De-allocate a floating IP.

**floating-ip-disassociate**

Disassociate a floating IP address from a server.

**floating-ip-list**

List floating IPs.

**floating-ip-pool-list**

List all floating IP pools.

**get-password**

Get the admin password for a server.

**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-list**

List all hosts by service.

**host-update**

Update host settings.

**hypervisor-list**

List hypervisors.

**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.

**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#1236473](#).

**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**

Delete specified image(s).

**image-list**

Print a list of available images to boot from.

**image-meta**

Set or Delete metadata on an image.

**image-show**

Show details about the given image.

**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.

**keypair-list**

Print a list of keypairs for a user

**keypair-show**

Show details about the given keypair.

**list**

List active servers.

**list-secgroup**

List Security Group(s) of a server.

**live-migration**

Migrate running server to a new machine.

**lock**

Lock a server. A normal (non-admin) user will not be able to execute actions on a locked server.

server.

### **meta**

Set or Delete metadata on a server.

### **migrate**

Migrate a server. The new host will be selected by the scheduler.

### **network-associate-host**

Associate host with network.

### **network-associate-project**

Associate project with network.

### **network-create**

Create a network.

### **network-delete**

Delete network by label or id.

### **network-disassociate**

Disassociate host and/or project from the given network.

### **network-list**

Print a list of available networks.

### **network-show**

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.

### **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.

### **rate-limits**

Print a list of rate limits for a user

### **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-floating-ip**

*DEPRECATED*, use floating-ip-disassociate instead.

### **remove-secgroup**

Remove a Security Group from a server.

### **rename**

Rename 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).

**resume**

Resume a server.

**root-password**

Change the admin password for a server.

**scrub**

Delete networks and security groups associated with a project.

**secgroup-add-default-rule**

Add a rule to the set of rules that will be added to the 'default' security group for new tenants.

**secgroup-add-group-rule**

Add a source group rule to a security group.

**secgroup-add-rule**

Add a rule to a security group.

**secgroup-create**

Create a security group.

**secgroup-delete**

Delete a security group.

**secgroup-delete-default-rule**

Delete a rule from the set of rules that will be added to the 'default' security group for new tenants.

**secgroup-delete-group-rule**

Delete a source group rule from a security group.

**secgroup-delete-rule**

Delete a rule from a security group.

**secgroup-list**

List security groups for the current tenant.

**secgroup-list-default-rules**

List rules that will be added to the 'default' security group for new tenants.

**secgroup-list-rules**

List rules for a security group.

**secgroup-update**

Update a security group.

**server-group-create**

Create a new server group with the specified details.

**server-group-delete**

Delete specific server group(s)



Delete specific server group(s).

**server-group-get**

Get a specific server group.

**server-group-list**

Print a list of all server groups.

**service-delete**

Delete the service.

**service-disable**

Disable the service.

**service-enable**

Enable the service.

**service-list**

Show a list of all running services. Filter by host & binary.

**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.

**unlock**

Unlock a server.

**unpause**

Unpause a server.

**unrescue**

Restart the server from normal boot disk again.

**unshelve**

Unshelve a server.

**usage**

Show usage data for a single tenant.

**usage-list**

List usage data for all tenants.

**version-list**

List all API versions.

**volume-attach**

Attach a volume to a server.

**volume-create**

Add a new volume.

**volume-delete**

Remove volume(s).

**volume-detach**

Detach a volume from a server.

**volume-list**

List all the volumes.

**volume-show**

Show details about a volume.

**volume-snapshot-create**

Add a new snapshot.

**volume-snapshot-delete**

Remove a snapshot.

**volume-snapshot-list**

List all the snapshots.

**volume-snapshot-show**

Show details about a snapshot.

**volume-type-create**

Create a new volume type.

**volume-type-delete**

Delete a specific volume type.

**volume-type-list**

Print a list of available 'volume types'.

**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-add**

Add a network interface to a baremetal node.

### **baremetal-interface-list**

List network interfaces associated with a baremetal node.

### **baremetal-interface-remove**

Remove a network interface from a baremetal node.

### **baremetal-node-create**

Create a baremetal node.

### **baremetal-node-delete**

Remove a baremetal node and any associated interfaces.

### **baremetal-node-list**

Print list of available baremetal nodes.

### **baremetal-node-show**

Show information about a baremetal node.

### **cell-capacities**

Get cell capacities for all cells or a given cell.

### **cell-show**

Show details of a given cell.

**force-delete**

Force delete a server.

**restore**

Restore a soft-deleted server.

**host-evacuate**

Evacuate all instances from failed host.

**host-evacuate-live**

Live migrate all instances of the specified host to other available hosts.

**host-servers-migrate**

Migrate all instances of the specified host to other available hosts.

**instance-action**

Show an action.

**instance-action-list**

List actions on a server.

**list-extensions**

List all the os-api extensions that are available.

**host-meta**

Set or Delete metadata on all instances of a host.

**migration-list**

Print a list of migrations.

**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**

Create a tenant network.

**tenant-network-delete**

Delete a tenant network.

**tenant-network-list**

List tenant networks.

**tenant-network-show**

Show a tenant network.

## 5.2. 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 **env[OS\_CACHE]** is not set.

**--timings**

Print call timing info

**--os-auth-token OS\_AUTH\_TOKEN**

Defaults to **env[OS\_AUTH\_TOKEN]**

---

**--os-tenant-name** <auth-tenant-name>

Defaults to `env[OS_TENANT_NAME]`.

**--os-tenant-id** <auth-tenant-id>

Defaults to `env[OS_TENANT_ID]`.

**--os-region-name** <region-name>

Defaults to `env[OS_REGION_NAME]`.

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

Defaults to `env[OS_AUTH_SYSTEM]`.

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

Defaults to compute for most actions

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

Defaults to `env[NOVA_SERVICE_NAME]`

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

Defaults to `env[NOVA_VOLUME_SERVICE_NAME]`

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

Defaults to `env[NOVA_ENDPOINT_TYPE]`, `env[OS_ENDPOINT_TYPE]` or `publicURL`.

**--os-compute-api-version** <compute-api-ver>

Accepts 1.1 or 3, defaults to `env[OS_COMPUTE_API_VERSION]`.

**--bypass-url** <bypass-url>

Use this API endpoint instead of the Service Catalog. Defaults to `env[NOVACLIENT_BYPASS_URL]`

**--insecure**

Explicitly allow client to perform "insecure" TLS (https) requests. The server's certificate will not be verified against any certificate authorities. This option should be used with caution.

**--os-cacert** <ca-certificate>

Specify a CA bundle file to use in verifying a TLS (https) server certificate. Defaults to **env[OS\_CACERT]**.

**--os-cert <certificate>**

Defaults to **env[OS\_CERT]**.

**--os-key <key>**

Defaults to **env[OS\_KEY]**.

**--timeout <seconds>**

Set request timeout (in seconds).

**--os-auth-url OS\_AUTH\_URL**

Authentication URL

**--os-domain-id OS\_DOMAIN\_ID**

Domain ID to scope to

**--os-domain-name OS\_DOMAIN\_NAME**

Domain name to scope to

**--os-project-id OS\_PROJECT\_ID**

Project ID to scope to

**--os-project-name OS\_PROJECT\_NAME**

Project name to scope to

**--os-project-domain-id OS\_PROJECT\_DOMAIN\_ID**

Domain ID containing project

**--os-project-domain-name OS\_PROJECT\_DOMAIN\_NAME**

Domain name containing project

**--os-trust-id OS\_TRUST\_ID**

Trust ID



**--os-user-id OS\_USER\_ID**

User ID

**--os-user-name OS\_USERNAME, --os-username OS\_USERNAME**

Username

**--os-user-domain-id OS\_USER\_DOMAIN\_ID**

User's domain id

**--os-user-domain-name OS\_USER\_DOMAIN\_NAME**

User's domain name

**--os-password OS\_PASSWORD**

User's password

### 5.3. NOVA ABSOLUTE-LIMITS

```
usage: nova absolute-limits [--tenant [<tenant>]] [--reserved]
```

Print a list of absolute limits for a user

#### Optional arguments

**--tenant [<tenant>]**

Display information from single tenant (Admin only).

**--reserved**

Include reservations count.

### 5.4. 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.

## 5.5. 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 of Security Group.

## 5.6. NOVA AGENT-CREATE

```
usage: nova agent-create <os> <architecture> <version> <url> <md5hash>
<hypervisor>
```

Create new agent build.

### Positional arguments

**<os>**

type of os.

**<architecture>**

type of architecture

**<version>**

version

**<url>**

url

**<md5hash>**

md5 hash

**<hypervisor>**

type of hypervisor.

## 5.7. NOVA AGENT-DELETE

```
usage: nova agent-delete <id>
```

Delete existing agent build.

### Positional arguments

**<id>**

id of the agent-build

## 5.8. NOVA AGENT-LIST

```
usage: nova agent-list [--hypervisor <hypervisor>]
```

List all builds.

### Optional arguments

**--hypervisor <hypervisor>**

type of hypervisor.

## 5.9. NOVA AGENT-MODIFY

```
usage: nova agent-modify <id> <version> <url> <md5hash>
```

Modify existing agent build.

### Positional arguments

**<id>**

id of the agent-build

**<version>**

version

**<url>**

url

**<md5hash>**

md5hash

## 5.10. 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.

## 5.11. 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).

## 5.12. NOVA AGGREGATE-DELETE

```
usage: nova aggregate-delete <aggregate>
```

Delete the aggregate.

### Positional arguments

**<aggregate>**

Name or ID of aggregate to delete.

## 5.13. NOVA AGGREGATE-DETAILS

```
usage: nova aggregate-details <aggregate>
```

Show details of the specified aggregate.

### Positional arguments

**<aggregate>**

Name or ID of aggregate.

## 5.14. NOVA AGGREGATE-LIST

```
usage: nova aggregate-list
```

Print a list of all aggregates.

## 5.15. 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.

## 5.16. 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.

## 5.17. NOVA AGGREGATE-UPDATE

```
usage: nova aggregate-update <aggregate> <name> [<availability-zone>]
```

Update the aggregate's name and optionally availability zone.

### Positional arguments

#### <aggregate>

Name or ID of aggregate to update.

#### <name>

Name of aggregate.

#### <availability-zone>

The availability zone of the aggregate.

## 5.18. NOVA AVAILABILITY-ZONE-LIST

```
usage: nova availability-zone-list
```

List all the availability zones.

## 5.19. 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.

## 5.20. NOVA BAREMETAL-INTERFACE-ADD

```
usage: nova baremetal-interface-add [--datapath_id <datapath_id>] [--port_no <port_no>] <node> <address>
```

Add a network interface to a baremetal node.

### Positional arguments

#### <node>

ID of node

#### <address>

MAC address of interface

### Optional arguments

**--datapath\_id** <datapath\_id>

OpenFlow Datapath ID of interface

**--port\_no** <port\_no>

OpenFlow port number of interface

## 5.21. NOVA BAREMETAL-INTERFACE-LIST

```
usage: nova baremetal-interface-list <node>
```

List network interfaces associated with a baremetal node.

### Positional arguments

**<node>**

ID of node

## 5.22. NOVA BAREMETAL-INTERFACE-REMOVE

```
usage: nova baremetal-interface-remove <node> <address>
```

Remove a network interface from a baremetal node.

### Positional arguments

**<node>**

ID of node

**<address>**

MAC address of interface

## 5.23. NOVA BAREMETAL-NODE-CREATE

```
usage: nova baremetal-node-create [--pm_address <pm_address>] [--pm_user <pm_user>] [--pm_password <pm_password>] [--terminal_port <terminal_port>] <service_host> <cpus> <memory_mb> <local_gb> <prov_mac_address>
```

Create a baremetal node.

### Positional arguments



**<service\_host>**

Name of nova compute host which will control this baremetal node

**<cpus>**

Number of CPUs in the node

**<memory\_mb>**

Megabytes of RAM in the node

**<local\_gb>**

Gigabytes of local storage in the node

**<prov\_mac\_address>**

MAC address to provision the node

**Optional arguments****--pm\_address <pm\_address>**

Power management IP for the node

**--pm\_user <pm\_user>**

Username for the node's power management

**--pm\_password <pm\_password>**

Password for the node's power management

**--terminal\_port <terminal\_port>**

ShellInABox port?

## 5.24. NOVA BAREMETAL-NODE-DELETE

```
usage: nova baremetal-node-delete <node>
```

Remove a baremetal node and any associated interfaces.

**Positional arguments**

**<node>**

ID of the node to delete.

## 5.25. NOVA BAREMETAL-NODE-LIST

**usage:** nova baremetal-node-list

Print list of available baremetal nodes.

## 5.26. NOVA BAREMETAL-NODE-SHOW

**usage:** nova baremetal-node-show <node>

Show information about a baremetal node.

### Positional arguments

**<node>**

ID of node

## 5.27. 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 <net-id=net-
uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-addr,port-id=port-uuid>] [--
config-drive <value>] [--poll] <name>
```

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 'nova image-list').

**--image-with <key=value>**

Image metadata property (see 'nova 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=UUID (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, ...; if omitted, hypervisor driver chooses suitable device depending on selected bus), size=size of the block device in GB (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).

**--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 <net-id=net-uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-addr,port-id=port-uuid>**

Create a NIC on the server. Specify option multiple times to create multiple NICs. net-id: attach NIC to network with this UUID (either port-id or net-id 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 (either port-id or net-id must be provided).

**--config-drive <value>**

Enable config drive

**--poll**

Report the new server boot progress until it completes.

## 5.28. 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.

## 5.29. NOVA CELL-SHOW

usage: nova cell-show <cell-name>

Show details of a given cell.

### Positional arguments

**<cell-name>**

Name of the cell.

## 5.30. NOVA CLEAR-PASSWORD

usage: nova clear-password <server>

Clear the admin password for a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.31. 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.

## 5.32. 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.

## 5.33. NOVA CLOUDPIPE-LIST

```
usage: nova cloudpipe-list
```

Print a list of all cloudpipe instances.

## 5.34. 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.

## 5.35. NOVA CREDENTIALS

usage: nova credentials [--wrap <integer>]

Show user credentials returned from auth.

### Optional arguments

**--wrap <integer>**

wrap PKI tokens to a specified length, or 0 to disable

## 5.36. NOVA DELETE

usage: nova delete <server> [<server> ...]

Immediately shut down and delete specified server(s).

### Positional arguments

**<server>**

Name or ID of server(s).

## 5.37. NOVA DIAGNOSTICS

usage: nova diagnostics <server>

Retrieve server diagnostics.

### Positional arguments

**<server>**

Name or ID of server.

## 5.38. NOVA DNS-CREATE

usage: nova dns-create [--type <type>] <ip> <name> <domain>

Create a DNS entry for domain, name and IP.

#### Positional arguments

**<ip>**

IP address

**<name>**

DNS name

**<domain>**

DNS domain

#### Optional arguments

**--type <type>**

dns type (e.g. "A")

### 5.39. NOVA DNS-CREATE-PRIVATE-DOMAIN

```
usage: nova dns-create-private-domain [--availability-zone  
<availability-zone>] <domain>
```

Create the specified DNS domain.

#### Positional arguments

**<domain>**

DNS domain

#### Optional arguments

**--availability-zone <availability-zone>**

Limit access to this domain to servers in the specified availability zone.

### 5.40. NOVA DNS-CREATE-PUBLIC-DOMAIN

```
usage: nova dns-create-public-domain [--project <project>] <domain>
```



Create the specified DNS domain.

#### Positional arguments

**<domain>**

DNS domain

#### Optional arguments

**--project <project>**

Limit access to this domain to users of the specified project.

### 5.41. NOVA DNS-DELETE

```
usage: nova dns-delete <domain> <name>
```

Delete the specified DNS entry.

#### Positional arguments

**<domain>**

DNS domain

**<name>**

DNS name

### 5.42. NOVA DNS-DELETE-DOMAIN

```
usage: nova dns-delete-domain <domain>
```

Delete the specified DNS domain.

#### Positional arguments

**<domain>**

DNS domain

### 5.43. NOVA DNS-DOMAINS

```
usage: nova dns-domains
```

Print a list of available dns domains.

## 5.44. NOVA DNS-LIST

```
usage: nova dns-list [--ip <ip>] [--name <name>] <domain>
```

List current DNS entries for domain and IP or domain and name.

### Positional arguments

**<domain>**

DNS domain

### Optional arguments

**--ip <ip> IP**

address

**--name <name> DNS**

name

## 5.45. NOVA ENDPOINTS

```
usage: nova endpoints
```

Discover endpoints that get returned from the authenticate services.

## 5.46. NOVA EVACUATE

```
usage: nova evacuate [--password <password>] [--on-shared-storage]
<server> [<host>]
```

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 with on-shared-storage flag

**--on-shared-storage**

Specifies whether server files are located on shared storage

## 5.47. NOVA FIXED-IP-GET

```
usage: nova fixed-ip-get <fixed_ip>
```

Retrieve info on a fixed IP.

### Positional arguments

**<fixed\_ip>**

Fixed IP Address.

## 5.48. NOVA FIXED-IP-RESERVE

```
usage: nova fixed-ip-reserve <fixed_ip>
```

Reserve a fixed IP.

### Positional arguments

**<fixed\_ip>**

Fixed IP Address.

## 5.49. NOVA FIXED-IP-UNRESERVE

```
usage: nova fixed-ip-unreserve <fixed_ip>
```

Unreserve a fixed IP.

#### Positional arguments

**<fixed\_ip>**

Fixed IP Address.

## 5.50. 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.

## 5.51. 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.

## 5.52. 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.

## 5.53. 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>**

Name of the new flavor

**<id>**

Unique ID (integer or UUID) for the new flavor. If specifying 'auto', a UUID will be generated as 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)

## 5.54. NOVA FLAVOR-DELETE

**usage:** nova flavor-delete <flavor>

Delete a specific flavor

### Positional arguments

**<flavor>**

Name or ID of the flavor to delete

## 5.55. 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)

## 5.56. NOVA FLAVOR-LIST

```
usage: nova flavor-list [--extra-specs] [--all]
```

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).

## 5.57. NOVA FLAVOR-SHOW

```
usage: nova flavor-show <flavor>
```

Show details about the given flavor.

### Positional arguments

#### **<flavor>**

Name or ID of flavor

## 5.58. 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.

## 5.59. NOVA FLOATING-IP-BULK-CREATE

```
usage: nova floating-ip-bulk-create [--pool <pool>] [--interface <interface>] <range>
```

Bulk create floating IPs by range.

### Positional arguments

<range>

Address range to create

### Optional arguments

**--pool** <pool>

Pool for new Floating IPs

**--interface** <interface>

Interface for new Floating IPs

## 5.60. NOVA FLOATING-IP-BULK-DELETE

```
usage: nova floating-ip-bulk-delete <range>
```

Bulk delete floating IPs by range.

### Positional arguments

<range>

Address range to delete

## 5.61. NOVA FLOATING-IP-BULK-LIST

```
usage: nova floating-ip-bulk-list [--host <host>]
```



List all floating IPs.

### Optional arguments

**--host <host>**

Filter by host

## 5.62. NOVA FLOATING-IP-CREATE

```
usage: nova floating-ip-create [<floating-ip-pool>]
```

Allocate a floating IP for the current tenant.

### Positional arguments

**<floating-ip-pool>**

Name of Floating IP Pool. (Optional)

## 5.63. NOVA FLOATING-IP-DELETE

```
usage: nova floating-ip-delete <address>
```

De-allocate a floating IP.

### Positional arguments

**<address>**

IP of Floating IP.

## 5.64. 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.

## 5.65. NOVA FLOATING-IP-LIST

```
usage: nova floating-ip-list [--all-tenants]
```

List floating IPs.

### Optional arguments

**--all-tenants**

Display floatingips from all tenants (Admin only).

## 5.66. NOVA FLOATING-IP-POOL-LIST

```
usage: nova floating-ip-pool-list
```

List all floating IP pools.

## 5.67. NOVA FORCE-DELETE

```
usage: nova force-delete <server>
```

Force delete a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.68. NOVA GET-PASSWORD

```
usage: nova get-password <server> [<private-key>]
```

Get the admin password for a server.

### Positional arguments

**<server>**

Name or ID of server.

### <private-key>

Private key (used locally to decrypt password) (Optional). When specified, the command displays the clear (decrypted) VM password. When not specified, the ciphered VM password is displayed.

## 5.69. 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").

## 5.70. 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".

## 5.71. 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.

**<console-type>**

Type of spice console ("spice-html5").

## 5.72. 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 "xvnc").

## 5.73. 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.

## 5.74. NOVA HOST-DESCRIBE

```
usage: nova host-describe <hostname>
```

Describe a specific host.

### Positional arguments

**<hostname>**

Name of host.

## 5.75. NOVA HOST-EVACUATE

```
usage: nova host-evacuate [--target_host <target_host>] [--on-shared-storage] <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.

**--on-shared-storage**

Specifies whether all instances files are on shared storage

## 5.76. NOVA HOST-EVACUATE-LIVE

```
usage: nova host-evacuate-live [--target-host <target_host>] [--block-migrate] [--disk-over-commit] <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.

**--disk-over-commit**

Enable disk overcommit.

**5.77. 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 &lt;zone&gt;.

**5.78. 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)

## 5.79. NOVA HOST-SERVERS-MIGRATE

```
usage: nova host-servers-migrate <host>
```

Migrate all instances of the specified host to other available hosts.

### Positional arguments

**<host>**

Name of host.

## 5.80. 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.

## 5.81. NOVA HYPERVISOR-LIST

```
usage: nova hypervisor-list [--matching <hostname>]
```

List hypervisors.

#### Optional arguments

**--matching <hostname>**

List hypervisors matching the given <hostname>.

## 5.82. 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.

## 5.83. NOVA HYPERVISOR-SHOW

```
usage: nova hypervisor-show <hypervisor>
```

Display the details of the specified hypervisor.

#### Positional arguments

**<hypervisor>**

Name or ID of the hypervisor to show the details of.

## 5.84. NOVA HYPERVISOR-STATS

```
usage: nova hypervisor-stats
```

Get hypervisor statistics over all compute nodes.

## 5.85. 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.

## 5.86. NOVA IMAGE-CREATE

```
usage: nova image-create [--show] [--poll] <server> <name>
```

Create a new image by taking a snapshot of a running server.

### Positional arguments

#### <server>

Name or ID of server.

#### <name>

Name of snapshot.

### Optional arguments

#### --show

Print image info.

#### --poll

Report the snapshot progress and poll until image creation is complete.

## 5.87. NOVA IMAGE-DELETE

```
usage: nova image-delete <image> [<image> ...]
```

Delete specified image(s).

### Positional arguments

#### <image>

Name or ID of image(s).

## 5.88. NOVA IMAGE-LIST

```
usage: nova image-list [--limit <limit>]
```

Print a list of available images to boot from.

#### Optional arguments

**--limit <limit>**

Number of images to return per request.

### 5.89. NOVA IMAGE-META

```
usage: nova image-meta <image> <action> <key=value> [<key=value> ...]
```

Set or Delete metadata on an image.

#### Positional arguments

**<image>**

Name or ID of image

**<action>**

Actions: 'set' or 'delete'

**<key=value>**

Metadata to add/update or delete (only key is necessary on delete)

### 5.90. NOVA IMAGE-SHOW

```
usage: nova image-show <image>
```

Show details about the given image.

#### Positional arguments

**<image>**

Name or ID of image

### 5.91. NOVA INSTANCE-ACTION

```
usage: nova instance-action <server> <request_id>
```

Show an action.

### Positional arguments

**<server>**

Name or UUID of the server to show an action for.

**<request\_id>**

Request ID of the action to get.

## 5.92. 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.

## 5.93. NOVA INTERFACE-ATTACH

```
usage: nova interface-attach [--port-id <port_id>] [--net-id <net_id>]
[--fixed-ip <fixed_ip>] <server>
```

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.

## 5.94. 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.

## 5.95. NOVA INTERFACE-LIST

```
usage: nova interface-list <server>
```

List interfaces attached to a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.96. NOVA KEYPAIR-ADD

```
usage: nova keypair-add [--pub-key <pub-key>] <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.

### 5.97. NOVA KEYPAIR-DELETE

```
usage: nova keypair-delete <name>
```

Delete keypair given by its name.

#### Positional arguments

**<name>**

Keypair name to delete.

### 5.98. NOVA KEYPAIR-LIST

```
usage: nova keypair-list
```

Print a list of keypairs for a user

### 5.99. NOVA KEYPAIR-SHOW

```
usage: nova keypair-show <keypair>
```

Show details about the given keypair.

#### Positional arguments

**<keypair>**

Name or ID of keypair

### 5.100. 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>]] [--user  
[<user>]] [--deleted] [--fields <fields>] [--minimal] [--sort <key>[:  
<direction>]]
```

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). The --all-tenants option must also be provided.

**--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.

## 5.101. NOVA LIST-EXTENSIONS

```
usage: nova list-extensions
```

List all the os-api extensions that are available.

## 5.102. NOVA LIST-SECGROUP

```
usage: nova list-secgroup <server>
```

List Security Group(s) of a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.103. NOVA LIVE-MIGRATION

```
usage: nova live-migration [--block-migrate] [--disk-over-commit]
<server> [<host>]
```

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=False:live\_migration)

#### --disk-over-commit

Allow overcommit.(Default=False)

## 5.104. 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.

## 5.105. 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)

**5.106. 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.

**5.107. 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.

## 5.108. NOVA NET

usage: nova net <network\_id>

*DEPRECATED*, Use tenant-network-show instead.

### Positional arguments

**<network\_id>**

ID of network

## 5.109. NOVA NET-CREATE

usage: nova net-create <network\_label> <cidr>

*DEPRECATED*, use tenant-network-create instead.

### Positional arguments

**<network\_label>**

Network label (ex. my\_new\_network)

**<cidr>**

IP block to allocate from (ex. 172.16.0.0/24 or 2001:DB8::/64)

## 5.110. NOVA NET-DELETE

usage: nova net-delete <network\_id>

*DEPRECATED*, use tenant-network-delete instead.

### Positional arguments

**<network\_id>**

ID of network

### 5.111. NOVA NET-LIST

**usage:** nova net-list*DEPRECATED*, use tenant-network-list instead.

### 5.112. NOVA NETWORK-ASSOCIATE-HOST

**usage:** nova network-associate-host <network> <host>

Associate host with network.

#### Positional arguments

**<network>**

uuid of network

**<host>**

Name of host

### 5.113. NOVA NETWORK-ASSOCIATE-PROJECT

**usage:** nova network-associate-project <network>

Associate project with network.

#### Positional arguments

**<network>**

uuid of network

### 5.114. NOVA NETWORK-CREATE

**usage:** nova network-create [--fixed-range-v4 <x.x.x.x/yy>] [--fixed-range-v6 CIDR\_V6] [--vlan <vlan id>] [--vlan-start <vlan start>] [--vpn <vpn start>] [--gateway GATEWAY] [--gateway-v6 GATEWAY\_V6] [--bridge <bridge>] [--bridge-interface <bridge interface>] [--multi-host

```
<'T'/'F'>] [--dns1 <DNS Address>] [--dns2 <DNS Address>] [--uuid
<network uuid>] [--fixed-cidr <x.x.x.x/yy>] [--project-id <project id>]
[--priority <number>] [--mtu MTU] [--enable-dhcp <'T'/'F'>] [--dhcp-
server DHCP_SERVER] [--share-address <'T'/'F'>] [--allowed-start
ALLOWED_START] [--allowed-end ALLOWED_END] <network_label>
```

Create a network.

### Positional arguments

#### <network\_label>

Label for network

### Optional arguments

#### --fixed-range-v4 <x.x.x.x/yy>

IPv4 subnet (ex: 10.0.0.0/8)

#### --fixed-range-v6

CIDR\_V6 IPv6 subnet (ex: fe80::/64)

#### --vlan <vlan id>

The vlan ID to be assigned to the project.

#### --vlan-start <vlan start>

First vlan ID to be assigned to the project. Subsequent vlan IDs will be assigned incrementally.

#### --vpn <vpn start>

vpn start

#### --gateway GATEWAY

gateway

#### --gateway-v6

GATEWAY\_V6 IPv6 gateway

#### --bridge <bridge>

VIFs on this network are connected to this bridge.

**--bridge-interface <bridge interface>**

The bridge is connected to this interface.

**--multi-host <'T'|'F'>**

Multi host

**--dns1 <DNS Address>**

First DNS

**--dns2 <DNS Address>**

Second DNS

**--uuid <network uuid>**

Network UUID

**--fixed-cidr <x.x.x.x/yy>**

IPv4 subnet for fixed IPs (ex: 10.20.0.0/16)

**--project-id <project id>**

Project ID

**--priority <number>**

Network interface priority

**--mtu MTU MTU**

for network

**--enable-dhcp <'T'|'F'>**

Enable dhcp

**--dhcp-server DHCP\_SERVER**

Dhcp-server (defaults to gateway address)

**--share-address <'T'|'F'>**

Share address

**--allowed-start ALLOWED\_START**

Start of allowed addresses for instances

**--allowed-end ALLOWED\_END**

End of allowed addresses for instances

## 5.115. NOVA NETWORK-DELETE

```
usage: nova network-delete <network>
```

Delete network by label or id.

### Positional arguments

**<network>**

uuid or label of network

## 5.116. NOVA NETWORK-DISASSOCIATE

```
usage: nova network-disassociate [--host-only [<0|1>]] [--project-only  
[<0|1>]] <network>
```

Disassociate host and/or project from the given network.

### Positional arguments

**<network>**

uuid of network

### Optional arguments

**--host-only [<0|1>]**

**--project-only [<0|1>]**

## 5.117. NOVA NETWORK-LIST

```
usage: nova network-list [--fields <fields>]
```

Print a list of available networks.

### Optional arguments

**--fields <fields>**

Comma-separated list of fields to display. Use the show command to see which fields are available.

## 5.118. NOVA NETWORK-SHOW

usage: nova network-show <network>

Show details about the given network.

### Positional arguments

**<network>**

uuid or label of network

## 5.119. NOVA PAUSE

usage: nova pause <server>

Pause a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.120. 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.

## 5.121. NOVA QUOTA-CLASS-UPDATE

```
usage: nova quota-class-update [--instances <instances>] [--cores
<cores>] [--ram <ram>] [--floating-ips <floating-ips>] [--fixed-ips
<fixed-ips>] [--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>] [--security-groups <security-groups>] [--
security-group-rules <security-group-rules>] [--server-groups <server-
groups>] [--server-group-members <server-group-members>] <class>
```

Update the quotas for a quota class.

### 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.

#### --floating-ips <floating-ips>

New value for the "floating-ips" quota.

#### --fixed-ips <fixed-ips>

New value for the "fixed-ips" 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.

**--security-groups <security-groups>**

New value for the "security-groups" quota.

**--security-group-rules <security-group-rules>**

New value for the "security-group-rules" 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.

## 5.122. 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.

## 5.123. 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.

## 5.124. NOVA QUOTA-SHOW

```
usage: nova quota-show [--tenant <tenant-id>] [--user <user-id>]
```

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.

## 5.125. NOVA QUOTA-UPDATE

```
usage: nova quota-update [--user <user-id>] [--instances <instances>]
[--cores <cores>] [--ram <ram>] [--floating-ips <floating-ips>] [--
fixed-ips <fixed-ips>] [--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>] [--security-groups <security-groups>] [--
security-group-rules <security-group-rules>] [--server-groups <server-
groups>] [--server-group-members <server-group-members>] [--force]
<tenant-id>
```

Update the quotas for a tenant/user.

### 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.

**--floating-ips <floating-ips>**

New value for the "floating-ips" quota.

**--fixed-ips <fixed-ips>**

New value for the "fixed-ips" 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.

**--security-groups <security-groups>**

New value for the "security-groups" quota.

**--security-group-rules <security-group-rules>**

New value for the "security-group-rules" 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

## 5.126. NOVA RATE-LIMITS

**usage: nova rate-limits**

Print a list of rate limits for a user

## 5.127. NOVA REBOOT

**usage: nova reboot [--hard] [--poll] <server>**

Reboot a server.

### Positional arguments

**<server>**

Name or ID of server.

### Optional arguments

**--hard**

Perform a hard reboot (instead of a soft one).

**--poll**

Poll until reboot is complete.

**5.128. NOVA REBUILD**

```
usage: nova rebuild [--rebuild-password <rebuild-password>] [--poll] [-
-minimal] [--preserve-ephemeral] [--name <name>] [--meta <key=value>]
[--file <dst-path=src-path>] <server> <image>
```

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

**--meta <key=value>**

Specify arbitrary key/value metadata to (meta\_data\_key on the metadata server. Can be

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.

## 5.129. NOVA REFRESH-NETWORK

usage: nova refresh-network <server>

Refresh server network information.

### Positional arguments

**<server>**

Name or ID of a server for which the network cache should be refreshed from neutron (Admin only).

## 5.130. 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.

## 5.131. 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.

## 5.132. NOVA RENAME

```
usage: nova rename <server> <name>
```

Rename a server.

### Positional arguments

**<server>**

Name (old name) or ID of server.

**<name>**

New name for the server.

## 5.133. 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.

## 5.134. NOVA RESET-NETWORK

```
usage: nova reset-network <server>
```

Reset network of a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.135. NOVA RESET-STATE

```
usage: nova reset-state [--active] <server> [<server> ...]
```

Reset the state of a server.

### Positional arguments

**<server>**

Name or ID of server(s).

### Optional arguments

**--active**

Request the server be reset to "active" state instead of "error" state (the default).

## 5.136. 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.

### 5.137. NOVA RESIZE-CONFIRM

```
usage: nova resize-confirm <server>
```

Confirm a previous resize.

**Positional arguments**

**<server>**

Name or ID of server.

### 5.138. 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.

### 5.139. NOVA RESTORE

```
usage: nova restore <server>
```

Restore a soft-deleted server.

**Positional arguments**

**<server>**

Name or ID of server.

## 5.140. NOVA RESUME

```
usage: nova resume <server>
```

Resume a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.141. NOVA ROOT-PASSWORD

```
usage: nova root-password <server>
```

Change the admin password for a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.142. NOVA SCRUB

```
usage: nova scrub <project_id>
```

Delete networks and security groups associated with a project.

### Positional arguments

**<project\_id>**

The ID of the project.

## 5.143. NOVA SECGROUP-ADD-DEFAULT-RULE

```
usage: nova secgroup-add-default-rule <ip-proto> <from-port> <to-port>  
<cidr>
```

Add a rule to the set of rules that will be added to the 'default' security group for new tenants.

#### Positional arguments

##### <ip-proto>

IP protocol (icmp, tcp, udp).

##### <from-port>

Port at start of range.

##### <to-port>

Port at end of range.

##### <cidr>

CIDR for address range.

## 5.144. NOVA SECGRP-ADD-GROUP-RULE

```
usage: nova secgroup-add-group-rule <secgroup> <source-group> <ip-  
proto> <from-port> <to-port>
```

Add a source group rule to a security group.

#### Positional arguments

##### <secgroup>

ID or name of security group.

##### <source-group>

ID or name of source group.

##### <ip-proto>

IP protocol (icmp, tcp, udp).

##### <from-port>

Port at start of range.

##### <to-port>

Port at end of range.

## 5.145. NOVA SECGRP-ADD-RULE

```
usage: nova secgroup-add-rule <secgroup> <ip-PROTO> <from-port> <to-  
port> <cidr>
```

Add a rule to a security group.

### Positional arguments

#### <secgroup>

ID or name of security group.

#### <ip-PROTO>

IP protocol (icmp, tcp, udp).

#### <from-port>

Port at start of range.

#### <to-port>

Port at end of range.

#### <cidr>

CIDR for address range.

## 5.146. NOVA SECGRP-CREATE

```
usage: nova secgroup-create <name> <description>
```

Create a security group.

### Positional arguments

#### <name>

Name of security group.

#### <description>

Description of security group.

## 5.147. NOVA SECGROUP-DELETE

```
usage: nova secgroup-delete <secgroup>
```

Delete a security group.

### Positional arguments

**<secgroup>**

ID or name of security group.

## 5.148. NOVA SECGROUP-DELETE-DEFAULT-RULE

```
usage: nova secgroup-delete-default-rule <ip-proto> <from-port> <to-  
port> <cidr>
```

Delete a rule from the set of rules that will be added to the 'default' security group for new tenants.

### Positional arguments

**<ip-proto>**

IP protocol (icmp, tcp, udp).

**<from-port>**

Port at start of range.

**<to-port>**

Port at end of range.

**<cidr>**

CIDR for address range.

## 5.149. NOVA SECGROUP-DELETE-GROUP-RULE

```
usage: nova secgroup-delete-group-rule <secgroup> <source-group> <ip-  
proto> <from-port> <to-port>
```

Delete a source group rule from a security group.

#### Positional arguments

##### <secgroup>

ID or name of security group.

##### <source-group>

ID or name of source group.

##### <ip-proto>

IP protocol (icmp, tcp, udp).

##### <from-port>

Port at start of range.

##### <to-port>

Port at end of range.

## 5.150. NOVA SECGRP-DELETE-RULE

```
usage: nova secgroup-delete-rule <secgroup> <ip-proto> <from-port> <to-  
port> <cidr>
```

Delete a rule from a security group.

#### Positional arguments

##### <secgroup>

ID or name of security group.

##### <ip-proto>

IP protocol (icmp, tcp, udp).

##### <from-port>

Port at start of range.

##### <to-port>

Port at end of range.

**<cidr>**

CIDR for address range.

## 5.151. NOVA SECGROUP-LIST

```
usage: nova secgroup-list [--all-tenants [<0|1>]]
```

List security groups for the current tenant.

### Optional arguments

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

Display information from all tenants (Admin only).

## 5.152. NOVA SECGROUP-LIST-DEFAULT-RULES

```
usage: nova secgroup-list-default-rules
```

List rules that will be added to the 'default' security group for new tenants.

## 5.153. NOVA SECGROUP-LIST-RULES

```
usage: nova secgroup-list-rules <secgroup>
```

List rules for a security group.

### Positional arguments

**<secgroup>**

ID or name of security group.

## 5.154. NOVA SECGROUP-UPDATE

```
usage: nova secgroup-update <secgroup> <name> <description>
```

Update a security group.

### Positional arguments

**<secgroup>**

ID or name of security group.

**<name>**

Name of security group.

**<description>**

Description of security group.

## 5.155. NOVA SERVER-GROUP-CREATE

```
usage: nova server-group-create <name> [<policy> [<policy> ...]]
```

Create a new server group with the specified details.

### Positional arguments

**<name>**

Server group name.

**<policy>**

Policies for the server groups ("affinity" or "anti-affinity")

## 5.156. NOVA SERVER-GROUP-DELETE

```
usage: nova server-group-delete <id> [<id> ...]
```

Delete specific server group(s).

### Positional arguments

**<id>**

Unique ID(s) of the server group to delete

## 5.157. 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

### 5.158. NOVA SERVER-GROUP-LIST

```
usage: nova server-group-list
```

Print a list of all server groups.

### 5.159. NOVA SERVICE-DELETE

```
usage: nova service-delete <id>
```

Delete the service.

#### Positional arguments

**<id>**

Id of service.

### 5.160. 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.

## 5.161. NOVA SERVICE-ENABLE

**usage:** nova service-enable <hostname> <binary>

Enable the service.

### Positional arguments

**<hostname>**

Name of host.

**<binary>**

Service binary.

## 5.162. 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.

## 5.163. NOVA SHELVE

**usage:** nova shelve <server>

Shelve a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.164. NOVA SHELVE-OFFLOAD

**usage:** nova shelve-offload <server>

Remove a shelved server from the compute node.

### Positional arguments

**<server>**

Name or ID of server.

## 5.165. NOVA SHOW

**usage:** nova show [--minimal] <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

## 5.166. NOVA SSH

**usage:** nova ssh [--port PORT] [--address-type ADDRESS\_TYPE] [--network <network>] [--ipv6] [--login <login>] [-i IDENTITY] [--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

## 5.167. NOVA START

usage: nova start <server> [<server> ...]

Start the server(s).

#### Positional arguments

**<server>**

Name or ID of server(s).

## 5.168. NOVA STOP

```
usage: nova stop <server> [<server> ...]
```

Stop the server(s).

### Positional arguments

**<server>**

Name or ID of server(s).

## 5.169. NOVA SUSPEND

```
usage: nova suspend <server>
```

Suspend a server.

### Positional arguments

**<server>**

Name or ID of server.

## 5.170. NOVA TENANT-NETWORK-CREATE

```
usage: nova tenant-network-create <network_label> <cidr>
```

Create a tenant network.

### Positional arguments

**<network\_label>**

Network label (ex. my\_new\_network)

**<cidr>**

IP block to allocate from (ex. 172.16.0.0/24 or 2001:DB8::/64)

## 5.171. NOVA TENANT-NETWORK-DELETE

```
usage: nova tenant-network-delete <network_id>
```

Delete a tenant network.

#### Positional arguments

**<network\_id>**

ID of network

### 5.172. NOVA TENANT-NETWORK-LIST

```
usage: nova tenant-network-list
```

List tenant networks.

### 5.173. NOVA TENANT-NETWORK-SHOW

```
usage: nova tenant-network-show <network_id>
```

Show a tenant network.

#### Positional arguments

**<network\_id>**

ID of network

### 5.174. NOVA UNLOCK

```
usage: nova unlock <server>
```

Unlock a server.

#### Positional arguments

**<server>**

Name or ID of server.

### 5.175. NOVA UNPAUSE

```
usage: nova unpause <server>
```

- 

Unpause a server.

#### Positional arguments

**<server>**

Name or ID of server.

### 5.176. NOVA UNRESCUE

```
usage: nova unrescue <server>
```

Restart the server from normal boot disk again.

#### Positional arguments

**<server>**

Name or ID of server.

### 5.177. NOVA UNSHELVE

```
usage: nova unshelve <server>
```

Unshelve a server.

#### Positional arguments

**<server>**

Name or ID of server.

### 5.178. 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.

## 5.179. 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)

## 5.180. NOVA VERSION-LIST

```
usage: nova version-list
```

List all API versions.

## 5.181. 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)

**5.182. NOVA VOLUME-CREATE**

```
usage: nova volume-create [--snapshot-id <snapshot-id>] [--image-id
<image-id>] [--display-name <display-name>] [--display-description
<display-description>] [--volume-type <volume-type>] [--availability-
zone <availability-zone>] <size>
```

Add a new volume.

**Positional arguments****<size>**

Size of volume in GB

**Optional arguments****--snapshot-id <snapshot-id>**

Optional snapshot id to create the volume from. (Default=None)

**--image-id <image-id>**

Optional image id to create the volume from. (Default=None)

**--display-name <display-name>**

Optional volume name. (Default=None)

**--display-description <display-description>**

Optional volume description. (Default=None)

**--volume-type <volume-type>**

Optional volume type. (Default=None)

**--availability-zone <availability-zone>**

Optional Availability Zone for volume. (Default=None)

### 5.183. NOVA VOLUME-DELETE

```
usage: nova volume-delete <volume> [<volume> ...]
```

Remove volume(s).

#### Positional arguments

**<volume>**

Name or ID of the volume(s) to delete.

### 5.184. 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.

### 5.185. NOVA VOLUME-LIST

```
usage: nova volume-list [--all-tenants [<0|1>]]
```

List all the volumes.

#### Optional arguments

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

Display information from all tenants (Admin only).

### 5.186. NOVA VOLUME-SHOW

```
usage: nova volume-show <volume>
```

Show details about a volume.

### Positional arguments

**<volume>**

Name or ID of the volume.

## 5.187. NOVA VOLUME-SNAPSHOT-CREATE

```
usage: nova volume-snapshot-create [--force <True|False>] [--display-
name <display-name>] [--display-description <display-description>]
<volume-id>
```

Add a new snapshot.

### Positional arguments

**<volume-id>**

ID of the volume to snapshot

### Optional arguments

**--force <True|False>**

Optional flag to indicate whether to snapshot a volume even if its attached to a server.  
(Default=False)

**--display-name <display-name>**

Optional snapshot name. (Default=None)

**--display-description <display-description>**

Optional snapshot description. (Default=None)

## 5.188. NOVA VOLUME-SNAPSHOT-DELETE

```
usage: nova volume-snapshot-delete <snapshot>
```

Remove a snapshot.

**Positional arguments****<snapshot>**

Name or ID of the snapshot to delete.

**5.189. NOVA VOLUME-SNAPSHOT-LIST**

```
usage: nova volume-snapshot-list
```

List all the snapshots.

**5.190. NOVA VOLUME-SNAPSHOT-SHOW**

```
usage: nova volume-snapshot-show <snapshot>
```

Show details about a snapshot.

**Positional arguments****<snapshot>**

Name or ID of the snapshot.

**5.191. NOVA VOLUME-TYPE-CREATE**

```
usage: nova volume-type-create <name>
```

Create a new volume type.

**Positional arguments****<name>**

Name of the new volume type

**5.192. NOVA VOLUME-TYPE-DELETE**

```
usage: nova volume-type-delete <id>
```

Delete a specific volume type.

**Positional arguments**

**<id>**

Unique ID of the volume type to delete

### 5.193. NOVA VOLUME-TYPE-LIST

```
usage: nova volume-type-list
```

Print a list of available 'volume types'.

### 5.194. 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.

### 5.195. 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]

## 5.196. 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 6. IDENTITY SERVICE COMMAND-LINE CLIENT

The **keystone** client is the command-line interface (CLI) for the OpenStack Identity API and its extensions. This chapter documents **keystone** version **DeprecationWarning) 1.3.0**.

For help on a specific **keystone** command, enter:

```
$ keystone help COMMAND
```

### 6.1. KEYSTONE USAGE

```
usage: keystone [--version] [--debug] [--os-username <auth-user-name>]
  [--os-password <auth-password>] [--os-tenant-name <auth-tenant-name>]
  [--os-tenant-id <tenant-id>] [--os-auth-url <auth-url>] [--os-region-
  name <region-name>] [--os-identity-api-version <identity-api-version>]
  [--os-token <service-token>] [--os-endpoint <service-endpoint>] [--os-
  cache] [--force-new-token] [--stale-duration <seconds>] [--insecure]
  [--os-cacert <ca-certificate>] [--os-cert <certificate>] [--os-key
  <key>] [--timeout <seconds>] <subcommand> ...
```

#### Subcommands

##### catalog

List service catalog, possibly filtered by service.

##### ec2-credentials-create

Create EC2-compatible credentials for user per tenant.

##### ec2-credentials-delete

Delete EC2-compatible credentials.

##### ec2-credentials-get

Display EC2-compatible credentials.

##### ec2-credentials-list

List EC2-compatible credentials for a user.

##### endpoint-create

Create a new endpoint associated with a service.

##### endpoint-delete

Delete a service endpoint.

**endpoint-get**

Find endpoint filtered by a specific attribute or service type.

**endpoint-list**

List configured service endpoints.

**password-update**

Update own password.

**role-create**

Create new role.

**role-delete**

Delete role.

**role-get**

Display role details.

**role-list**

List all roles.

**service-create**

Add service to Service Catalog.

**service-delete**

Delete service from Service Catalog.

**service-get**

Display service from Service Catalog.

**service-list**

List all services in Service Catalog.

**tenant-create**



Create new tenant.

### **tenant-delete**

Delete tenant.

### **tenant-get**

Display tenant details.

### **tenant-list**

List all tenants.

### **tenant-update**

Update tenant name, description, enabled status.

### **token-get**

Display the current user token.

### **user-create**

Create new user.

### **user-delete**

Delete user.

### **user-get**

Display user details.

### **user-list**

List users.

### **user-password-update**

Update user password.

### **user-role-add**

Add role to user.

### **user-role-list**

List roles granted to a user.

### **user-role-remove**

Remove role from user.

### **user-update**

Update user's name, email, and enabled status.

### **discover**

Discover Keystone servers, supported API versions and extensions.

### **bootstrap**

Grants a new role to a new user on a new tenant, after creating each.

### **bash-completion**

Prints all of the commands and options to stdout.

### **help**

Display help about this program or one of its subcommands.

## **6.2. KEYSTONE OPTIONAL ARGUMENTS**

### **--version**

Shows the client version and exits.

### **--debug**

Prints debugging output onto the console, this includes the curl request and response calls. Helpful for debugging and understanding the API calls.

### **--os-username <auth-user-name>**

Name used for authentication with the OpenStack Identity service. Defaults to **env[OS\_USERNAME]**.

### **--os-password <auth-password>**

Password used for authentication with the OpenStack Identity service. Defaults to **env[OS\_PASSWORD]**.

---

**--os-tenant-name <auth-tenant-name>**

Tenant to request authorization on. Defaults to **env[OS\_TENANT\_NAME]**.

**--os-tenant-id <tenant-id>**

Tenant to request authorization on. Defaults to **env[OS\_TENANT\_ID]**.

**--os-auth-url <auth-url>**

Specify the Identity endpoint to use for authentication. Defaults to **env[OS\_AUTH\_URL]**.

**--os-region-name <region-name>**

Specify the region to use. Defaults to **env[OS\_REGION\_NAME]**.

**--os-identity-api-version <identity-api-version>**

Specify Identity API version to use. Defaults to **env[OS\_IDENTITY\_API\_VERSION]** or 2.0.

**--os-token <service-token>**

Specify an existing token to use instead of retrieving one via authentication (e.g. with username & password). Defaults to **env[OS\_SERVICE\_TOKEN]**.

**--os-endpoint <service-endpoint>**

Specify an endpoint to use instead of retrieving one from the service catalog (via authentication). Defaults to **env[OS\_SERVICE\_ENDPOINT]**.

**--os-cache**

Use the auth token cache. Defaults to **env[OS\_CACHE]**.

**--force-new-token**

If the keyring is available and in use, token will always be stored and fetched from the keyring until the token has expired. Use this option to request a new token and replace the existing one in the keyring.

**--stale-duration <seconds>**

Stale duration (in seconds) used to determine whether a token has expired when retrieving it from keyring. This is useful in mitigating process or network delays. Default is 30 seconds.

**--insecure**

Explicitly allow client to perform "insecure" TLS (https) requests. The server's certificate will

Explicitly allow client to perform insecure TLS (https) requests. The server's certificate will not be verified against any certificate authorities. This option should be used with caution.

**--os-cacert <ca-certificate>**

Specify a CA bundle file to use in verifying a TLS (https) server certificate. Defaults to `env[OS_CACERT]`.

**--os-cert <certificate>**

Defaults to `env[OS_CERT]`.

**--os-key <key>**

Defaults to `env[OS_KEY]`.

**--timeout <seconds>**

Set request timeout (in seconds).

### 6.3. KEYSTONE BOOTSTRAP

```
usage: keystone bootstrap [--user-name <user-name>] --pass <password>
      [--role-name <role-name>] [--tenant-name <tenant-name>]
```

Grants a new role to a new user on a new tenant, after creating each.

#### Arguments

**--user-name <user-name>**

The name of the user to be created (default="admin").

**--pass <password>**

The password for the new user.

**--role-name <role-name>**

The name of the role to be created and granted to the user (default="admin").

**--tenant-name <tenant-name>**

The name of the tenant to be created (default="admin").

### 6.4. KEYSTONE CATALOG

```
usage: keystone catalog [--service <service-type>]
```

List service catalog, possibly filtered by service.

### Arguments

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

Service type to return.

## 6.5. KEYSTONE DISCOVER

```
usage: keystone discover
```

Discover Keystone servers, supported API versions and extensions.

## 6.6. KEYSTONE EC2-CREDENTIALS-CREATE

```
usage: keystone ec2-credentials-create [--user-id <user-id>] [--tenant-id <tenant-id>]
```

Create EC2-compatible credentials for user per tenant.

### Arguments

**--user-id <user-id>**

User ID for which to create credentials. If not specified, the authenticated user will be used.

**--tenant-id <tenant-id>**

Tenant ID for which to create credentials. If not specified, the authenticated tenant ID will be used.

## 6.7. KEYSTONE EC2-CREDENTIALS-DELETE

```
usage: keystone ec2-credentials-delete [--user-id <user-id>] --access <access-key>
```

Delete EC2-compatible credentials.

### Arguments

**--user-id <user-id>**

User ID.

**--access <access-key>**

Access Key.

## 6.8. KEYSTONE EC2-CREDENTIALS-GET

```
usage: keystone ec2-credentials-get [--user-id <user-id>] --access
<access-key>
```

Display EC2-compatible credentials.

### Arguments

**--user-id <user-id>**

User ID.

**--access <access-key>**

Access Key.

## 6.9. KEYSTONE EC2-CREDENTIALS-LIST

```
usage: keystone ec2-credentials-list [--user-id <user-id>]
```

List EC2-compatible credentials for a user.

### Arguments

**--user-id <user-id>**

User ID.

## 6.10. KEYSTONE ENDPOINT-CREATE

```
usage: keystone endpoint-create [--region <endpoint-region>] --service
<service> --publicurl <public-url> [--adminurl <admin-url>] [--
internalurl <internal-url>]
```

Create a new endpoint associated with a service.

### Arguments

**--region <endpoint-region>**

Endpoint region.

**--service <service>, --service-id <service>, --service\_id <service>**

Name or ID of service associated with endpoint.

**--publicurl <public-url>**

Public URL endpoint.

**--adminurl <admin-url>**

Admin URL endpoint.

**--internalurl <internal-url>**

Internal URL endpoint.

## 6.11. KEYSTONE ENDPOINT-DELETE

```
usage: keystone endpoint-delete <endpoint-id>
```

Delete a service endpoint.

### Arguments

**<endpoint-id>**

ID of endpoint to delete.

## 6.12. KEYSTONE ENDPOINT-GET

```
usage: keystone endpoint-get --service <service-type> [--endpoint-type
<endpoint-type>] [--attr <service-attribute>] [--value <value>]
```

Find endpoint filtered by a specific attribute or service type.

### Arguments

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

Service type to select.

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

Endpoint type to select.

**--attr <service-attribute>**

Service attribute to match for selection.

**--value <value>**

Value of attribute to match.

## 6.13. KEYSTONE ENDPOINT-LIST

```
usage: keystone endpoint-list
```

List configured service endpoints.

## 6.14. KEYSTONE PASSWORD-UPDATE

```
usage: keystone password-update [--current-password <current-password>]
  [--new-password <new-password>]
```

Update own password.

### Arguments

**--current-password <current-password>**

Current password, Defaults to the password as set by --os-password or `env[OS_PASSWORD]`.

**--new-password <new-password>**

Desired new password.

## 6.15. KEYSTONE ROLE-CREATE

```
usage: keystone role-create --name <role-name>
```

Create new role.

### Arguments



```
--name <role-name>
```

Name of new role.

## 6.16. KEYSTONE ROLE-DELETE

```
usage: keystone role-delete <role>
```

Delete role.

### Arguments

**<role>**

Name or ID of role to delete.

## 6.17. KEYSTONE ROLE-GET

```
usage: keystone role-get <role>
```

Display role details.

### Arguments

**<role>**

Name or ID of role to display.

## 6.18. KEYSTONE ROLE-LIST

```
usage: keystone role-list
```

List all roles.

## 6.19. KEYSTONE SERVICE-CREATE

```
usage: keystone service-create --type <type> [--name <name>] [--description <service-description>]
```

Add service to Service Catalog.

### Arguments

**--type <type>**

Service type (one of: identity, compute, network, image, object-store, or other service identifier string).

**--name <name>**

Name of new service (must be unique).

**--description <service-description>**

Description of service.

## 6.20. KEYSTONE SERVICE-DELETE

```
usage: keystone service-delete <service>
```

Delete service from Service Catalog.

### Arguments

**<service>**

Name or ID of service to delete.

## 6.21. KEYSTONE SERVICE-GET

```
usage: keystone service-get <service>
```

Display service from Service Catalog.

### Arguments

**<service>**

Name or ID of service to display.

## 6.22. KEYSTONE SERVICE-LIST

```
usage: keystone service-list
```

List all services in Service Catalog.

## 6.23. KEYSTONE TENANT-CREATE

```
usage: keystone tenant-create --name <tenant-name> [--description  
<tenant-description>] [--enabled <true|false>]
```

Create new tenant.

### Arguments

**--name <tenant-name>**

New tenant name (must be unique).

**--description <tenant-description>**

Description of new tenant. Default is none.

**--enabled <true|false>**

Initial tenant enabled status. Default is true.

## 6.24. KEYSTONE TENANT-DELETE

```
usage: keystone tenant-delete <tenant>
```

Delete tenant.

### Arguments

**<tenant>**

Name or ID of tenant to delete.

## 6.25. KEYSTONE TENANT-GET

```
usage: keystone tenant-get <tenant>
```

Display tenant details.

### Arguments

**<tenant>**

Name or ID of tenant to display.

## 6.26. KEYSTONE TENANT-LIST

```
usage: keystone tenant-list
```

List all tenants.

## 6.27. KEYSTONE TENANT-UPDATE

```
usage: keystone tenant-update [--name <tenant_name>] [--description <tenant-description>] [--enabled <true|false>] <tenant>
```

Update tenant name, description, enabled status.

### Arguments

**--name <tenant\_name>**

Desired new name of tenant.

**--description <tenant-description>**

Desired new description of tenant.

**--enabled <true|false>**

Enable or disable tenant.

**<tenant>**

Name or ID of tenant to update.

## 6.28. KEYSTONE TOKEN-GET

```
usage: keystone token-get [--wrap <integer>]
```

Display the current user token.

### Arguments

**--wrap <integer>**

Wrap PKI tokens to a specified length, or 0 to disable.

## 6.29. KEYSTONE USER-CREATE

```
usage: keystone user-create --name <user-name> [--tenant <tenant>] [--pass [<pass>]] [--email <email>] [--enabled <true|false>]
```

Create new user.

### Arguments

**--name <user-name>**

New user name (must be unique).

**--tenant <tenant>, --tenant-id <tenant>**

New user default tenant.

**--pass [<pass>]**

New user password; required for some auth backends.

**--email <email>**

New user email address.

**--enabled <true|false>**

Initial user enabled status. Default is true.

## 6.30. KEYSTONE USER-DELETE

```
usage: keystone user-delete <user>
```

Delete user.

### Arguments

**<user>**

Name or ID of user to delete.

## 6.31. KEYSTONE USER-GET

```
usage: keystone user-get <user>
```

Display user details.

### Arguments

**<user>**

Name or ID of user to display.

## 6.32. KEYSTONE USER-LIST

```
usage: keystone user-list [--tenant <tenant>]
```

List users.

### Arguments

**--tenant <tenant>, --tenant-id <tenant>**

Tenant; lists all users if not specified.

## 6.33. KEYSTONE USER-PASSWORD-UPDATE

```
usage: keystone user-password-update [--pass <password>] <user>
```

Update user password.

### Arguments

**--pass <password>**

Desired new password.

**<user>**

Name or ID of user to update password.

## 6.34. KEYSTONE USER-ROLE-ADD

```
usage: keystone user-role-add --user <user> --role <role> [--tenant <tenant>]
```

Add role to user.

### Arguments

**--user <user>, --user-id <user>, --user\_id <user>**

Name or ID of user.

**--role <role>, --role-id <role>, --role\_id <role>**

Name or ID of role.

**--tenant <tenant>, --tenant-id <tenant>**

Name or ID of tenant.

## 6.35. KEYSTONE USER-ROLE-LIST

```
usage: keystone user-role-list [--user <user>] [--tenant <tenant>]
```

List roles granted to a user.

### Arguments

**--user <user>, --user-id <user>**

List roles granted to specified user.

**--tenant <tenant>, --tenant-id <tenant>**

List only roles granted on specified tenant.

## 6.36. KEYSTONE USER-ROLE-REMOVE

```
usage: keystone user-role-remove --user <user> --role <role> [--tenant <tenant>]
```

Remove role from user.

### Arguments

**--user <user>, --user-id <user>, --user\_id <user>**

Name or ID of user.

**--role <role>, --role-id <role>, --role\_id <role>**

Name or ID of role.

**--tenant <tenant>, --tenant-id <tenant>**

Name or ID of tenant.

## 6.37. KEYSTONE USER-UPDATE

```
usage: keystone user-update [--name <user-name>] [--email <email>] [--enabled <true|false>] <user>
```

Update user's name, email, and enabled status.

### Arguments

**--name <user-name>**

Desired new user name.

**--email <email>**

Desired new email address.

**--enabled <true|false>**

Enable or disable user.

**<user>**

Name or ID of user to update.



## CHAPTER 7. IMAGE SERVICE COMMAND-LINE CLIENT

The **glance** client is the command-line interface (CLI) for the OpenStack Image Service API and its extensions. This chapter documents **glance** version **0.17.0**.

For help on a specific **glance** command, enter:

```
$ glance help COMMAND
```

### 7.1. GLANCE USAGE

```
usage: glance [--version] [-d] [-v] [--get-schema] [--timeout TIMEOUT]
  [--no-ssl-compression] [-f] [--os-image-url OS_IMAGE_URL] [--os-image-
  api-version OS_IMAGE_API_VERSION] [--profile HMAC_KEY] [-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] <subcommand> ...
```

#### Subcommands

##### **image-create**

Create a new image.

##### **image-delete**

Delete specified image(s).

##### **image-download**

Download a specific image.

##### **image-list**

List images you can access.

##### **image-show**

Describe a specific image.

**image-update**

Update a specific image.

**member-create**

Share a specific image with a tenant.

**member-delete**

Remove a shared image from a tenant.

**member-list**

Describe sharing permissions by image or tenant.

**bash-completion**

Prints arguments for `bash_completion`.

**help**

Display help about this program or one of its subcommands.

## 7.2. 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.

**--timeout TIMEOUT**

Number of seconds to wait for a response

**--no-ssl-compression**

Disable SSL compression when using https.

**-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 1.

**--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.

**-k, --insecure**

Explicitly allow glanceclient 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]`.

## 7.3. IMAGE SERVICE API V1 COMMANDS

### 7.3.1. glance image-create

```
usage: glance image-create [--id <IMAGE_ID>] [--name <NAME>] [--store
<STORE>] [--disk-format <DISK_FORMAT>] [--container-format
<CONTAINER_FORMAT>] [--owner <TENANT_ID>] [--size <SIZE>] [--min-disk
<DISK_GB>] [--min-ram <DISK_RAM>] [--location <IMAGE_URL>] [--file
<FILE>] [--checksum <CHECKSUM>] [--copy-from <IMAGE_URL>] [--is-public
{True,False}] [--is-protected {True,False}] [--property <key=value>] [-
human-readable] [--progress]
```

Create a new image.

#### Optional arguments

**--id <IMAGE\_ID> ID**

of image to reserve.

**--name <NAME>**

Name of image.

**--store <STORE>**

Store to upload image to.

**--disk-format <DISK\_FORMAT>**

Disk format of image. Acceptable formats: ami, ari, aki, vhd, vmdk, raw, qcow2, vdi, and iso.

**--container-format <CONTAINER\_FORMAT>**

Container format of image. Acceptable formats: ami, ari, aki, bare, and ovf.

**--owner <TENANT\_ID>**

Tenant who should own image.

**--size <SIZE>**

Size of image data (in bytes). Only used with '--location' and '--copy\_from'.

**--min-disk <DISK\_GB>**

Minimum size of disk needed to boot image (in gigabytes).

**--min-ram <DISK\_RAM>**

Minimum amount of ram needed to boot image (in megabytes).

**--location <IMAGE\_URL>**

URL where the data for this image already resides. For example, if the image data is stored in swift, you could specify 'swift+http://tenant%3Aaccount:key@auth\_url/v2.0/container/obj'. (Note: '%3A' is ':' URL encoded.)

**--file <FILE>**

Local file that contains disk image to be uploaded during creation. Alternatively, images can be passed to the client via stdin.

**--checksum <CHECKSUM>**

Hash of image data used Glance can use for verification. Provide a md5 checksum here.

**--copy-from <IMAGE\_URL>**

Similar to '--location' in usage, but this indicates that the Glance server should immediately copy the data and store it in its configured image store.

**--is-public {True,False}**

Make image accessible to the public.

**--is-protected {True,False}**

Prevent image from being deleted.

**--property <key=value>**

Arbitrary property to associate with image. May be used multiple times.

**--human-readable**

Print image size in a human-friendly format.

**--progress**

Show upload progress bar.

### 7.3.2. glance image-delete

```
usage: glance image-delete <IMAGE> [<IMAGE> ...]
```

Delete specified image(s).

#### Positional arguments

**<IMAGE>**

Name or ID of image(s) to delete.

### 7.3.3. glance image-list

```
usage: glance image-list [--name <NAME>] [--status <STATUS>] [--
container-format <CONTAINER_FORMAT>] [--disk-format <DISK_FORMAT>] [--
size-min <SIZE>] [--size-max <SIZE>] [--property-filter <KEY=VALUE>] [-
-page-size <SIZE>] [--human-readable] [--sort-key
{name,status,container_format,disk_format,size,id,created_at,updated_at
}] [--sort-dir {asc,desc}] [--is-public {True,False}] [--owner
<TENANT_ID>] [--all-tenants]
```

List images you can access.

### Optional arguments

**--name <NAME>**

Filter images to those that have this name.

**--status <STATUS>**

Filter images to those that have this status.

**--container-format <CONTAINER\_FORMAT>**

Filter images to those that have this container format. Acceptable formats: ami, ari, aki, bare, and ovf.

**--disk-format <DISK\_FORMAT>**

Filter images to those that have this disk format. Acceptable formats: ami, ari, aki, vhd, vmdk, raw, qcow2, vdi, and iso.

**--size-min <SIZE>**

Filter images to those with a size greater than this.

**--size-max <SIZE>**

Filter images to those with a size less than this.

**--property-filter <KEY=VALUE>**

Filter images by a user-defined image property.

**--page-size <SIZE>**

Number of images to request in each paginated request.

**--human-readable**

Print image size in a human-friendly format.

**--sort-key**

**{name,status,container\_format,disk\_format,size,id,created\_at,updated\_at}**

Sort image list by specified field.

**--sort-dir {asc,desc}**



Sort image list in specified direction.

### **--is-public {True,False}**

Allows the user to select a listing of public or non public images.

### **--owner <TENANT\_ID>**

Display only images owned by this tenant id. Filtering occurs on the client side so may be inefficient. This option is mainly intended for admin use. Use an empty string (") to list images with no owner. Note: This option overrides the --is-public argument if present. Note: the v2 API supports more efficient server-side owner based filtering.

### **--all-tenants**

Allows the admin user to list all images irrespective of the image's owner or is\_public value.

## 7.3.4. glance image-show

```
usage: glance image-show [--human-readable] [--max-column-width
<integer>] <IMAGE>
```

Describe a specific image.

### Positional arguments

#### **<IMAGE>**

Name or 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.

## 7.3.5. glance image-update

```
usage: glance image-update [--name <NAME>] [--disk-format
<DISK_FORMAT>] [--container-format <CONTAINER_FORMAT>] [--owner
<TENANT_ID>] [--size <SIZE>] [--min-disk <DISK_GB>] [--min-ram
<DISK_RAM>] [--location <IMAGE_URL>] [--file <FILE>] [--checksum
<CHECKSUM>] [--copy-from <IMAGE_URL>] [--is-public {True,False}] [--is-
protected {True,False}] [--property <key=value>] [--purge-props] [--
```

```
human-readable] [--progress] <IMAGE>
```

Update a specific image.

### Positional arguments

**<IMAGE>**

Name or ID of image to modify.

### Optional arguments

**--name <NAME>**

Name of image.

**--disk-format <DISK\_FORMAT>**

Disk format of image. Acceptable formats: ami, ari, aki, vhd, vmdk, raw, qcow2, vdi, and iso.

**--container-format <CONTAINER\_FORMAT>**

Container format of image. Acceptable formats: ami, ari, aki, bare, and ovf.

**--owner <TENANT\_ID>**

Tenant who should own image.

**--size <SIZE>**

Size of image data (in bytes).

**--min-disk <DISK\_GB>**

Minimum size of disk needed to boot image (in gigabytes).

**--min-ram <DISK\_RAM>**

Minimum amount of ram needed to boot image (in megabytes).

**--location <IMAGE\_URL>**

URL where the data for this image already resides. For example, if the image data is stored in swift, you could specify 'swift+http://tenant%3Aaccount:key@auth\_url/v2.0/container/obj'. (Note: '%3A' is ':' URL encoded.)

**--file <FILE>**

Local file that contains disk image to be uploaded during update. Alternatively, images can be passed to the client via stdin.

**--checksum <CHECKSUM>**

Hash of image data used Glance can use for verification.

**--copy-from <IMAGE\_URL>**

Similar to '--location' in usage, but this indicates that the Glance server should immediately copy the data and store it in its configured image store.

**--is-public {True,False}**

Make image accessible to the public.

**--is-protected {True,False}**

Prevent image from being deleted.

**--property <key=value>**

Arbitrary property to associate with image. May be used multiple times.

**--purge-props**

If this flag is present, delete all image properties not explicitly set in the update request. Otherwise, those properties not referenced are preserved.

**--human-readable**

Print image size in a human-friendly format.

**--progress**

Show upload progress bar.

### 7.3.6. glance member-create

```
usage: glance member-create [--can-share] <IMAGE> <TENANT_ID>
```

Share a specific image with a tenant.

#### Positional arguments

**<IMAGE>**

Image to add member to.

**<TENANT\_ID>**

Tenant to add as member

### Optional arguments

**--can-share**

Allow the specified tenant to share this image.

### 7.3.7. glance member-delete

```
usage: glance member-delete <IMAGE> <TENANT_ID>
```

Remove a shared image from a tenant.

### Positional arguments

**<IMAGE>**

Image from which to remove member.

**<TENANT\_ID>**

Tenant to remove as member.

### 7.3.8. glance member-list

```
usage: glance member-list [--image-id <IMAGE_ID>] [--tenant-id <TENANT_ID>]
```

Describe sharing permissions by image or tenant.

### Optional arguments

**--image-id <IMAGE\_ID>**

Filter results by an image ID.

**--tenant-id <TENANT\_ID>**

Filter results by a tenant ID.

## 7.4 IMAGE SERVICE API V2 COMMANDS

## 7.4. IMAGE SERVICE API V2 COMMANDS

You can select an API version to use by adding the `--os-image-api-version` option or by setting the corresponding environment variable:

```
$ export OS_IMAGE_API_VERSION=2
```

### 7.4.1. glance explain (v2)

```
usage: glance --os-image-api-version 2 explain <MODEL>
```

Describe a specific model.

#### Positional arguments

**<MODEL>**

Name of model to describe.

### 7.4.2. glance image-create (v2)

```
usage: glance --os-image-api-version 2 image-create [--architecture
<ARCHITECTURE>] [--protected [True|False]] [--name <NAME>] [--instance-
uuid <INSTANCE_UUID>] [--min-disk <MIN_DISK>] [--visibility
<VISIBILITY>] [--kernel-id <KERNEL_ID>] [--tags <TAGS> [<TAGS> ...]] [-
os-version <OS_VERSION>] [--disk-format <DISK_FORMAT>] [--self <SELF>]
[--os-distro <OS_DISTRO>] [--id <ID>] [--owner <OWNER>] [--locations
<LOCATIONS> [<LOCATIONS> ...]] [--ramdisk-id <RAMDISK_ID>] [--min-ram
<MIN_RAM>] [--container-format <CONTAINER_FORMAT>] [--property
<key=value>] [--file <FILE>] [--progress]
```

Create a new image.

#### Optional arguments

**--architecture <ARCHITECTURE>**

Operating system architecture as specified in <http://docs.openstack.org/trunk/openstack-compute/admin/content/adding-images.html>

**--protected [True|False]**

If true, image will not be deletable.

**--name <NAME>**

Descriptive name for the image

**--instance-uuid <INSTANCE\_UUID>**

ID of instance used to create this image.

**--min-disk <MIN\_DISK>**

Amount of disk space (in GB) required to boot image.

**--visibility <VISIBILITY>**

Scope of image accessibility Valid values: public, private

**--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, vmdk, raw, qcow2, vdi, iso

**--self <SELF>**

(READ-ONLY)

**--os-distro <OS\_DISTRO>**

Common name of operating system distribution as specified in <http://docs.openstack.org/trunk/openstack-compute/admin/content/adding-images.html>

**--id <ID>**

An identifier for the image

**--owner <OWNER>**

Owner of the image

**--locations <LOCATIONS> [<LOCATIONS> ...]**

A set of URLs to access the image file kept in external store

**--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

**--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, images can be passed to the client via stdin.

**--progress**

Show upload progress bar.

### 7.4.3. glance image-delete (v2)

```
usage: glance --os-image-api-version 2 image-delete <IMAGE_ID>
```

Delete specified image.

#### Positional arguments

**<IMAGE\_ID>**

ID of image to delete.

### 7.4.4. glance image-download (v2)

```
usage: glance --os-image-api-version 2 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 the image data will be written to stdout.

**--progress**

Show download progress bar.

### 7.4.5. glance image-list (v2)

```
usage: glance --os-image-api-version 2 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.

**--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: Default='name:asc'.

### 7.4.6. glance image-show (v2)

```
usage: glance --os-image-api-version 2 image-show [--max-column-width
<integer>] <IMAGE_ID>
```

Describe a specific image.

#### Positional arguments

**<IMAGE\_ID>**

ID of image to describe.

#### Optional arguments

**--max-column-width <integer>**

The max column width of the printed table.

### 7.4.7. glance image-tag-delete (v2)

```
usage: glance --os-image-api-version 2 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>**

Value of the tag.

### 7.4.8. glance image-tag-update (v2)

```
usage: glance --os-image-api-version 2 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.

### 7.4.9. glance image-update (v2)

```
usage: glance --os-image-api-version 2 image-update [--architecture
<ARCHITECTURE>] [--protected [True|False]] [--name <NAME>] [--instance-
uuid <INSTANCE_UUID>] [--min-disk <MIN_DISK>] [--visibility
<VISIBILITY>] [--kernel-id <KERNEL_ID>] [--os-version <OS_VERSION>] [--
disk-format <DISK_FORMAT>] [--self <SELF>] [--os-distro <OS_DISTRO>] [--
owner <OWNER>] [--ramdisk-id <RAMDISK_ID>] [--min-ram <MIN_RAM>] [--
container-format <CONTAINER_FORMAT>] [--property <key=value>] [--
remove-property key] <IMAGE_ID>
```

Update an existing image.

## Positional arguments

**<IMAGE\_ID>**

ID of image to update.

## Optional arguments

**--architecture <ARCHITECTURE>**

Operating system architecture as specified in <http://docs.openstack.org/trunk/openstack-compute/admin/content/adding-images.html>

**--protected [True|False]**

If true, image will not be deletable.

**--name <NAME>**

Descriptive name for the image

**--instance-uuid <INSTANCE\_UUID>**

ID of instance used to create this image.

**--min-disk <MIN\_DISK>**

Amount of disk space (in GB) required to boot image.

**--visibility <VISIBILITY>**

Scope of image accessibility Valid values: public, private

**--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, vmdk, raw, qcow2, vdi, iso

**--self <SELF>**

(READ-ONLY)

**--os-distro <OS\_DISTRO>**

Common name of operating system distribution as specified in <http://docs.openstack.org/trunk/openstack-compute/admin/content/adding-images.html>

**--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

**--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.

#### 7.4.10. glance image-upload (v2)

```
usage: glance --os-image-api-version 2 image-upload [--file <FILE>] [--size <IMAGE_SIZE>] [--progress] <IMAGE_ID>
```

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.

**7.4.11. glance member-create (v2)**

```
usage: glance --os-image-api-version 2 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.

**7.4.12. glance member-delete (v2)**

```
usage: glance --os-image-api-version 2 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.

### 7.4.13. glance member-list (v2)

```
usage: glance --os-image-api-version 2 member-list --image-id <IMAGE_ID>
```

Describe sharing permissions by image.

#### Optional arguments

**--image-id <IMAGE\_ID>**

Image to display members of.

### 7.4.14. glance member-update (v2)

```
usage: glance --os-image-api-version 2 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

## CHAPTER 8. IMAGE SERVICE PROPERTY KEYS

The following keys, together with the components to which they are specific, can be used with the **property** option for both the **glance image-update** and **glance image-create** commands. For example:

```
$ glance image-update IMG-UUID --property architecture=x86_64
```



### Note

Behavior set using image properties overrides behavior set using flavors. For more information, refer to the *Red Hat Enterprise Linux OpenStack Platform Cloud Admin Guide*.

Table 8.1. Property keys

Specific to	Key	Description	Supported values
All	architecture	The CPU architecture that must be supported by the hypervisor. For example, <b>x86_64</b> , <b>arm</b> , or <b>ppc64</b> . Run <b>uname -m</b> to get the architecture of a machine. We strongly recommend using the architecture data vocabulary defined by the <a href="#">libosinfo project</a> for this purpose.	<ul style="list-style-type: none"> <li>✦ <b>alpha</b>—DEC 64-bit RISC</li> <li>✦ <b>armv7l</b>—ARM Cortex-A7 MPCore</li> <li>✦ <b>cris</b>—Ethernet, Token Ring, AXis—Code Reduced Instruction Set</li> <li>✦ <b>i686</b>—Intel sixth-generation x86 (P6 micro architecture)</li> <li>✦ <b>ia64</b>—Itanium</li> <li>✦ <b>lm32</b>—Lattice Micro32</li> <li>✦ <b>m68k</b>—Motorola 68000</li> <li>✦ <b>microblaze</b>—Xilinx 32-bit FPGA (Big Endian)</li> <li>✦ <b>microblazeel</b>—Xilinx 32-bit FPGA (Little Endian)</li> <li>✦ <b>mips</b>—MIPS 32-bit RISC (Big Endian)</li> <li>✦ <b>mipsel</b>—MIPS 32-bit RISC (Little Endian)</li> </ul>

Specific to	Key	Description	Supported values
			<ul style="list-style-type: none"> <li>✦ <b>mips64</b>—MIPS 64-bit RISC (Big Endian)</li> <li>✦ <b>mips64el</b>—MIPS 64-bit RISC (Little Endian)</li> <li>✦ <b>openrisc</b>—OpenCores RISC</li> <li>✦ <b>parisc</b>—HP Precision Architecture RISC</li> <li>✦ <b>parisc64</b>—HP Precision Architecture 64-bit RISC</li> <li>✦ <b>ppc</b>—PowerPC 32-bit</li> <li>✦ <b>ppc64</b>—PowerPC 64-bit</li> <li>✦ <b>ppcemb</b>—PowerPC (Embedded 32-bit)</li> <li>✦ <b>s390</b>—IBM Enterprise Systems Architecture/390</li> <li>✦ <b>s390x</b>—S/390 64-bit</li> <li>✦ <b>sh4</b>—SuperH SH-4 (Little Endian)</li> <li>✦ <b>sh4eb</b>—SuperH SH-4 (Big Endian)</li> <li>✦ <b>sparc</b>—Scalable Processor Architecture, 32-bit</li> <li>✦ <b>sparc64</b>—Scalable Processor Architecture, 64-bit</li> <li>✦ <b>unicore32</b>—Microprocessor Research and Development Center RISC Unicore32</li> <li>✦ <b>x86_64</b>—64-bit extension of IA-32</li> <li>✦ <b>xtensa</b>—Tensilica Xtensa configurable microprocessor core</li> <li>✦ <b>xtensaeb</b>—Tensilica Xtensa configurable microprocessor core (Big Endian)</li> </ul>
All	<b>hypervisor_type</b>	The hypervisor type.	<b>xen</b> , <b>qemu</b> , <b>kvm</b> , <b>lxc</b> , <b>uml</b> , <b>vmware</b> , or <b>hyperv</b>



Specific to	Key	Description	Supported values
All	instance_uuid	For snapshot images, this is the UUID of the server used to create this image.	Valid server UUID
All	kernel_id	The ID of an image stored in the Image Service that should be used as the kernel when booting an AMI-style image.	Valid image ID
All	os_distro	The common name of the operating system distribution in lowercase (uses the same data vocabulary as the <a href="#">libosinfo project</a> ). Specify only a recognized value for this field. Deprecated values are listed to assist you in searching for the recognized value.	<ul style="list-style-type: none"> <li>✦ <b>arch</b>—Arch Linux. Do not use <b>archlinux</b> or <b>org.archlinux</b></li> <li>✦ <b>centos</b>—Community Enterprise Operating System. Do not use <b>org.centos</b> or <b>CentOS</b></li> <li>✦ <b>debian</b>—Debian. Do not use <b>Debian</b> or <b>org.debian</b></li> <li>✦ <b>fedora</b>—Fedora. Do not use <b>Fedora</b>, <b>org.fedora</b>, or <b>org.fedoraproject</b></li> <li>✦ <b>freebsd</b>—FreeBSD. Do not use <b>org.freebsd</b>, <b>freeBSD</b>, or <b>FreeBSD</b></li> <li>✦ <b>gentoo</b>—Gentoo Linux. Do not use <b>Gentoo</b> or <b>org.gentoo</b></li> <li>✦ <b>mandrake</b>—Mandrakelinux (MandrakeSoft) distribution. Do not use <b>mandrakelinux</b> or <b>MandrakeLinux</b></li> <li>✦ <b>mandriva</b>—Mandriva Linux. Do not use <b>mandrivalinux</b></li> <li>✦ <b>mes</b>—Mandriva Enterprise Server. Do not use <b>mandrivaent</b> or <b>mandrivaES</b></li> <li>✦ <b>msdos</b>—Microsoft Disc Operating System. Do not use <b>ms-dos</b></li> <li>✦ <b>netbsd</b>—NetBSD. Do not use <b>NetBSD</b> or <b>org.netbsd</b></li> </ul>

Specific to	Key	Description	Supported values
			<ul style="list-style-type: none"> <li>✦ <b>netware</b>—Novell NetWare. Do not use <b>novell</b> or <b>NetWare</b></li> <li>✦ <b>openbsd</b>—OpenBSD. Do not use <b>OpenBSD</b> or <b>org.openbsd</b></li> <li>✦ <b>opensolaris</b>—OpenSolaris. Do not use <b>OpenSolaris</b> or <b>org.opensolaris</b></li> <li>✦ <b>opensuse</b>—openSUSE. Do not use <b>suse</b>, <b>SuSE</b>, or <b>org.opensuse</b></li> <li>✦ <b>rhel</b>—Red Hat Enterprise Linux. Do not use <b>redhat</b>, <b>RedHat</b>, or <b>com.redhat</b></li> <li>✦ <b>sled</b>—SUSE Linux Enterprise Desktop. Do not use <b>com.suse</b></li> <li>✦ <b>ubuntu</b>—Ubuntu. Do not use <b>Ubuntu</b>, <b>com.ubuntu</b>, <b>org.ubuntu</b>, or <b>canonical</b></li> <li>✦ <b>windows</b>—Microsoft Windows. Do not use <b>com.microsoft.server</b></li> </ul>
All	os_version	The operating system version as specified by the distributor.	Version number (for example, "11.10")
All	ramdisk_id	The ID of image stored in the Image Service that should be used as the ramdisk when booting an AMI-style image.	Valid image ID
All	vm_mode	The virtual machine mode. This represents the host/guest ABI (application binary interface) used for the virtual machine.	<ul style="list-style-type: none"> <li>✦ <b>hvm</b>—Fully virtualized. This is the mode used by QEMU and KVM.</li> <li>✦ <b>xen</b>—Xen 3.0 paravirtualized.</li> <li>✦ <b>uml</b>—User Mode Linux paravirtualized.</li> <li>✦ <b>exe</b>—Executables in containers. This is the mode used by LXC.</li> </ul>
libvirt API driver	hw_disk_bus	Specifies the type of disk controller to attach disk devices to.	One of <b>scsi</b> , <b>virtio</b> , <b>uml</b> , <b>xen</b> , <b>ide</b> , or <b>usb</b> .

Specific to	Key	Description	Supported values
libvirt API driver	hw_rng_model	<p>Adds a random-number generator device to the image's instances. The cloud administrator can enable and control device behavior by configuring the instance's flavor. By default:</p> <ul style="list-style-type: none"> <li>✎ The generator device is disabled.</li> <li>✎ <b>/dev/random</b> is used as the default entropy source. To specify a physical HW RNG device, use the following option in the <b>nova.conf</b> file:</li> </ul> <pre>rng_dev_path=/dev/hwrng</pre>	<b>virtio</b> , or other supported device.
libvirt API driver	hw_machine_type	<p>Enables booting an ARM system using the specified machine type. By default, if an ARM image is used and its type is not specified, Compute uses <b>vexpress-a15</b> (for ARMv7) or <b>virt</b> (for AArch64) machine types.</p>	Libvirt machine type. Valid types can be viewed by using the <b>virsh capabilities</b> command (machine types are displayed in the <b>machine</b> tag).
libvirt API driver	hw_scsi_model	<p>Enables the use of VirtIO SCSI (virtio-scsi) to provide block device access for compute instances; by default, instances use VirtIO Block (virtio-blk). VirtIO SCSI is a para-virtualized SCSI controller device that provides improved scalability and performance, and supports advanced SCSI hardware.</p>	<b>virtio-scsi</b>
libvirt API driver	hw_video_model	The video image driver used.	<b>vga, cirrus, vmvga, xen,</b> or <b>qxl</b>
libvirt API driver	hw_video_ram	<p>Maximum RAM for the video image. Used only if a <b>hw_video:ram_max_mb</b> value has been set in the flavor's <b>extra_specs</b> and that value is higher than the value set in <b>hw_video_ram</b>.</p>	Integer in MB (for example, '64')

Specific to	Key	Description	Supported values
libvirt API driver	hw_watchdog_action	Enables a virtual hardware watchdog device that carries out the specified action if the server hangs. The watchdog uses the i6300esb device (emulating a PCI Intel 6300ESB). If <b>hw_watchdog_action</b> is not specified, the watchdog is disabled.	<ul style="list-style-type: none"> <li>✦ <b>disabled</b>—(default) The device is not attached. Allows the user to disable the watchdog for the image, even if it has been enabled using the image's flavor.</li> <li>✦ <b>reset</b>—Forcefully reset the guest.</li> <li>✦ <b>poweroff</b>—Forcefully power off the guest.</li> <li>✦ <b>pause</b>—Pause the guest.</li> <li>✦ <b>none</b>—Only enable the watchdog; do nothing if the server hangs.</li> </ul>
libvirt API driver	os_command_line	The kernel command line to be used by the libvirt driver, instead of the default. For linux containers (LXC), the value is used as arguments for initialization. This key is valid only for Amazon kernel, ramdisk, or machine images (aki, ari, or ami).	
libvirt API driver and VMware API driver	hw_vif_model	Specifies the model of virtual network interface device to use.	<p>The valid options depend on the configured hypervisor.</p> <ul style="list-style-type: none"> <li>✦ KVM and QEMU: <b>e1000</b>, <b>ne2k_pci</b>, <b>pcnet</b>, <b>rtl8139</b>, and <b>virtio</b>.</li> <li>✦ VMware: <b>e1000</b>, <b>e1000e</b>, <b>VirtualE1000</b>, <b>VirtualE1000e</b>, <b>VirtualPCNet32</b>, <b>VirtualSriovEthernetCard</b>, and <b>VirtualVmxnet</b>.</li> <li>✦ Xen: <b>e1000</b>, <b>netfront</b>, <b>ne2k_pci</b>, <b>pcnet</b>, and <b>rtl8139</b>.</li> </ul>
VMware API driver	vmware_adapter_type	The virtual SCSI or IDE controller used by the hypervisor.	<b>lsiLogic</b> , <b>busLogic</b> , or <b>ide</b>

Specific to	Key	Description	Supported values
VMware API driver	vmware_ostype	A VMware GuestID which describes the operating system installed in the image. This value is passed to the hypervisor when creating a virtual machine. If not specified, the key defaults to <b>otherGuest</b> .	See <a href="http://thinkvirt.com">thinkvirt.com</a> .
VMware API driver	vmware_image_version	Currently unused.	<b>1</b>
XenAPI driver	auto_disk_config	If true, the root partition on the disk is automatically resized before the instance boots. This value is only taken into account by the Compute service when using a Xen-based hypervisor with the XenAPI driver. The Compute service will only attempt to resize if there is a single partition on the image, and only if the partition is in <b>ext3</b> or <b>ext4</b> format.	true   false
XenAPI driver	os_type	The operating system installed on the image. The XenAPI driver contains logic that takes different actions depending on the value of the <b>os_type</b> parameter of the image. For example, for <b>os_type=windows</b> images, it creates a FAT32-based swap partition instead of a Linux swap partition, and it limits the injected host name to less than 16 characters.	<b>linux</b> or <b>windows</b>

## CHAPTER 9. NETWORKING COMMAND-LINE CLIENT

The **neutron** client is the command-line interface (CLI) for the OpenStack Networking API and its extensions. This chapter documents **neutron** version **2.4.0**.

For help on a specific **neutron** command, enter:

```
$ neutron help COMMAND
```

### 9.1. NEUTRON USAGE

```
usage: neutron [--version] [-v] [-q] [-h] [-r NUM] [--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-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]
```

### 9.2. 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 `publicURL`.

**--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-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.

## 9.3. NEUTRON API V2.0 COMMANDS

**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.

**bash-completion**

Prints all of the commands and options for bash-completion.

**cisco-credential-create**

Create a credential.

**cisco-credential-delete**

Delete a given credential.

**cisco-credential-list**

List credentials that belong to a given tenant.

**cisco-credential-show**

Show information of a given credential.

**cisco-network-profile-create**

Create a network profile.

**cisco-network-profile-delete**

Delete a given network profile.

**cisco-network-profile-list**

List network profiles that belong to a given tenant.

**cisco-network-profile-show**

Show information of a given network profile.

**cisco-network-profile-update**

Update network profile's information.

**cisco-policy-profile-list**

List policy profiles that belong to a given tenant.

**cisco-policy-profile-show**

Show information of a given policy profile.

**cisco-policy-profile-update**

Update policy profile'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.

**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.

**gateway-device-create**

Create a network gateway device.

**gateway-device-delete**

Delete a given network gateway device.

**gateway-device-list**

List network gateway devices for a given tenant.

**gateway-device-show**

Show information for a given network gateway device.

**gateway-device-update**

Update a network gateway device.

**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-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.

**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-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 tenant.

**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.

**nec-packet-filter-create**

Create a packet filter for a given tenant.

**nec-packet-filter-delete**

Delete a given packet filter.

**nec-packet-filter-list**

List packet filters that belong to a given tenant.

**nec-packet-filter-show**

Show information of a given packet filter.

**nec-packet-filter-update**

Update packet filter's information.

**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-gateway-connect**

Add an internal network interface to a router.

**net-gateway-create**

Create a network gateway.

**net-gateway-delete**

Delete a given network gateway.

**net-gateway-disconnect**

Remove a network from a network gateway.

**net-gateway-list**

List network gateways for a given tenant.

**net-gateway-show**

Show information of a given network gateway.

**net-gateway-update**

Update the name for a network gateway.

**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.

**nuage-netpartition-create**

Create a netpartition for a given tenant.

**nuage-netpartition-delete**

Delete a given netpartition.

**nuage-netpartition-list**

List netpartitions that belong to a given tenant.

**nuage-netpartition-show**

Show information of a given netpartition.

**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.

**queue-create**

Create a queue.

**queue-delete**

Delete a given queue.

**queue-list**

List queues that belong to a given tenant.

**queue-show**

Show information of a given queue.

**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 of a given tenant.

**quota-update**

Define tenant's quotas not to use defaults.

**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.

**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.

## 9.4. NEUTRON AGENT-DELETE

```
usage: neutron agent-delete [-h] [--request-format {json,xml}] AGENT
```

Delete a given agent.

### Positional arguments

#### AGENT

ID of agent to delete.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

## 9.5. NEUTRON AGENT-LIST

```
usage: neutron agent-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD] [--sort-key FIELD] [--sort-dir {asc,desc}]
```

List agents.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

**-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.

## 9.6. NEUTRON AGENT-SHOW

```
usage: neutron agent-show [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-D] [-F FIELD] AGENT
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.7. NEUTRON AGENT-UPDATE

```
usage: neutron agent-update [-h] [--request-format {json,xml}] [--admin-state-down] [--description DESCRIPTION] AGENT
```

Updates the admin status and description for a specified agent.

### Positional arguments

#### AGENT

ID of agent to update.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **--admin-state-down**

Set admin state up of the agent to false.

#### **--description DESCRIPTION**

Description for the agent.

## 9.8. NEUTRON CISCO-CREDENTIAL-CREATE

```
usage: neutron cisco-credential-create [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [--tenant-id TENANT_ID] [--username USERNAME] [--password PASSWORD] credential_name credential_type
```

Create a credential.

### Positional arguments

**credential\_name**

Name/IP address for credential.

**credential\_type**

Type of the credential.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--username USERNAME**

Username for the credential.

**--password PASSWORD**

Password for the credential.

**9.9. NEUTRON CISCO-CREDENTIAL-DELETE**

```
usage: neutron cisco-credential-delete [-h] [--request-format
{json,xml}] CREDENTIAL
```

Delete a given credential.

**Positional arguments****CREDENTIAL**

ID of credential to delete.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.10. NEUTRON CISCO-CREDENTIAL-LIST

```
usage: neutron cisco-credential-list [-h] [-f {csv,table}] [-c COLUMN]
[--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-D] [-F FIELD]
```

List credentials that belong to a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.11. NEUTRON CISCO-CREDENTIAL-SHOW

```
usage: neutron cisco-credential-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] CREDENTIAL
```

Show information of a given credential.

### Positional arguments

**CREDENTIAL**

ID of credential to look up.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

**9.12. NEUTRON CISCO-NETWORK-PROFILE-CREATE**

```
usage: neutron cisco-network-profile-create [-h] [-f
{shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix
PREFIX] [--request-format {json,xml}] [--tenant-id TENANT_ID] [--
sub_type SUB_TYPE] [--segment_range SEGMENT_RANGE] [--physical_network
PHYSICAL_NETWORK] [--multicast_ip_range MULTICAST_IP_RANGE] [--add-
tenant ADD_TENANTS] name {vlan,overlay,multi-segment,trunk}
```

Create a network profile.

**Positional arguments****name**

Name for network profile.

**{vlan,overlay,multi-segment,trunk}**

Segment type.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--sub\_type SUB\_TYPE**

Sub-type for the segment. Available sub-types for overlay segments: native, enhanced; For trunk segments: vlan, overlay.

**--segment\_range SEGMENT\_RANGE**

Range for the segment.

**--physical\_network PHYSICAL\_NETWORK**

Name for the physical network.

**--multicast\_ip\_range MULTICAST\_IP\_RANGE**

Multicast IPv4 range.

**--add-tenant ADD\_TENANTS**

Add tenant to the network profile. You can repeat this option.

## 9.13. NEUTRON CISCO-NETWORK-PROFILE-DELETE

```
usage: neutron cisco-network-profile-delete [-h] [--request-format
{json,xml}] NETWORK_PROFILE
```

Delete a given network profile.

### Positional arguments

**NETWORK\_PROFILE**

ID or name of network\_profile to delete.

### Optional arguments

**-h, --help**

show this help message and exit



**--request-format {json,xml}**

The XML or JSON request format.

## 9.14. NEUTRON CISCO-NETWORK-PROFILE-LIST

```
usage: neutron cisco-network-profile-list [-h] [-f {csv,table}] [-c
COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
[--request-format {json,xml}] [-D] [-F FIELD]
```

List network profiles that belong to a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.15. NEUTRON CISCO-NETWORK-PROFILE-SHOW

```
usage: neutron cisco-network-profile-show [-h] [-f {shell,table,value}]
[-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
format {json,xml}] [-D] [-F FIELD] NETWORK_PROFILE
```

Show information of a given network profile.

### Positional arguments

**NETWORK\_PROFILE**

ID or name of network\_profile to look up.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.16. NEUTRON CISCO-NETWORK-PROFILE-UPDATE

```
usage: neutron cisco-network-profile-update [-h] [--request-format
{json,xml}] [--remove-tenant REMOVE_TENANTS] [--add-tenant ADD_TENANTS]
NETWORK_PROFILE
```

Update network profile's information.

### Positional arguments

**NETWORK\_PROFILE**

ID or name of network\_profile to update.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--remove-tenant REMOVE\_TENANTS**

Remove tenant from the network profile. You can repeat this option.

**--add-tenant ADD\_TENANTS**

Add tenant to the network profile. You can repeat this option.

## 9.17. NEUTRON CISCO-POLICY-PROFILE-LIST

```
usage: neutron cisco-policy-profile-list [-h] [-f {csv,table}] [-c
COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
[--request-format {json,xml}] [-D] [-F FIELD]
```

List policy profiles that belong to a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.18. NEUTRON CISCO-POLICY-PROFILE-SHOW

```
usage: neutron cisco-policy-profile-show [-h] [-f {shell,table,value}]
[-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
format {json,xml}] [-D] [-F FIELD] POLICY_PROFILE
```

Show information of a given policy profile.

### Positional arguments

**POLICY\_PROFILE**

ID or name of policy\_profile to look up.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.19. NEUTRON CISCO-POLICY-PROFILE-UPDATE

```
usage: neutron cisco-policy-profile-update [-h] [--request-format
{json,xml}] POLICY_PROFILE
```

Update policy profile's information.

### Positional arguments

#### **POLICY\_PROFILE**

ID or name of policy\_profile to update.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.20. NEUTRON DHCP-AGENT-LIST-HOSTING-NET

```
usage: neutron dhcp-agent-list-hosting-net [-h] [-f {csv,table}] [-c
COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
[--request-format {json,xml}] [-D] [-F FIELD] network
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

**9.21. NEUTRON DHCP-AGENT-NETWORK-ADD**

```
usage: neutron dhcp-agent-network-add [-h] [--request-format
{json,xml}] 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,xml}**

The XML or JSON request format.

## 9.22. NEUTRON DHCP-AGENT-NETWORK-REMOVE

```
usage: neutron dhcp-agent-network-remove [-h] [--request-format {json,xml}] 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,xml}**

The XML or JSON request format.

## 9.23. NEUTRON EXT-LIST

```
usage: neutron ext-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD]
```

List all extensions.

### Optional arguments

#### **-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.24. NEUTRON EXT-SHOW

```
usage: neutron ext-show [-h] [-f {shell,table,value}] [-c COLUMN] [--
max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-
D] [-F FIELD] EXTENSION
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.25. NEUTRON FIREWALL-CREATE

-

```
usage: neutron firewall-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--name NAME] [--description
DESCRIPTION] [--shared] [--admin-state-down] [--router ROUTER] POLICY
```

Create a firewall.

### Positional arguments

#### **POLICY**

Firewall policy name or ID.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **--tenant-id TENANT\_ID**

The owner tenant ID.

#### **--name NAME**

Name for the firewall.

#### **--description DESCRIPTION**

Description for the firewall rule.

#### **--shared**

Set shared to True (default is False).

#### **--admin-state-down**

Set admin state up to false.

#### **--router ROUTER**

Firewall associated router names or IDs (requires FWaaS router insertion extension, this option can be repeated)



## 9.26. NEUTRON FIREWALL-DELETE

```
usage: neutron firewall-delete [-h] [--request-format {json,xml}]
FIREWALL
```

Delete a given firewall.

### Positional arguments

#### FIREWALL

ID or name of firewall to delete.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

## 9.27. NEUTRON FIREWALL-LIST

```
usage: neutron firewall-list [-h] [-f {csv,table}] [-c COLUMN] [--max-
width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-
format {json,xml}] [-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,xml}

The XML or JSON request format.

#### -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.

## 9.28. NEUTRON FIREWALL-POLICY-CREATE

```
usage: neutron firewall-policy-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--description DESCRIPTION] [--
shared] [--firewall-rules FIREWALL_RULES] [--audited] 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,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--description DESCRIPTION**

Description for the firewall policy.

**--shared**

Create a shared policy.

**--firewall-rules FIREWALL\_RULES**

Ordered list of whitespace-delimited firewall rule names or IDs; e.g., --firewall-rules "rule1 rule2"

**--audited**

Sets audited to True.

**9.29. NEUTRON FIREWALL-POLICY-DELETE**

```
usage: neutron firewall-policy-delete [-h] [--request-format
{json,xml}] FIREWALL_POLICY
```

Delete a given firewall policy.

**Positional arguments****FIREWALL\_POLICY**

ID or name of firewall\_policy to delete.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**9.30. NEUTRON FIREWALL-POLICY-INSERT-RULE**

```
usage: neutron firewall-policy-insert-rule [-h] [--request-format
{json,xml}] [--insert-before FIREWALL_RULE] [--insert-after
FIREWALL_RULE] FIREWALL_POLICY FIREWALL_RULE
```

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,xml}**

The XML or JSON request format.

#### **--insert-before FIREWALL\_RULE**

Insert before this rule.

#### **--insert-after FIREWALL\_RULE**

Insert after this rule.

## 9.31. NEUTRON FIREWALL-POLICY-LIST

```
usage: neutron firewall-policy-list [-h] [-f {csv,table}] [-c COLUMN]
[--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD]
[--sort-dir {asc,desc}]
```

List firewall policies that belong to a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.32. NEUTRON FIREWALL-POLICY-REMOVE-RULE

```
usage: neutron firewall-policy-remove-rule [-h] [--request-format
{json,xml}] 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**

Firewall rule to remove from policy.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

### 9.33. NEUTRON FIREWALL-POLICY-SHOW

```
usage: neutron firewall-policy-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] FIREWALL_POLICY
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

### 9.34. NEUTRON FIREWALL-POLICY-UPDATE

```
usage: neutron firewall-policy-update [-h] [--request-format
{json,xml}] [--firewall-rules FIREWALL_RULES] 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,xml}**

The XML or JSON request format.

**--firewall-rules FIREWALL\_RULES**

Ordered list of whitespace-delimited firewall rule names or IDs; e.g., --firewall-rules "rule1 rule2"

**9.35. NEUTRON FIREWALL-RULE-CREATE**

```
usage: neutron firewall-rule-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--name NAME] [--description
DESCRIPTION] [--shared] [--source-ip-address SOURCE_IP_ADDRESS] [--
destination-ip-address DESTINATION_IP_ADDRESS] [--source-port
SOURCE_PORT] [--destination-port DESTINATION_PORT] [--enabled
{True,False}] --protocol {tcp,udp,icmp,any} --action {allow,deny}
```

Create a firewall rule.

**Optional arguments**

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--name NAME**

Name for the firewall rule.

**--description DESCRIPTION**

Description for the firewall rule.

**--shared**

Set shared to True (default is False).

**--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}**

Action for the firewall rule.

## 9.36. NEUTRON FIREWALL-RULE-DELETE

```
usage: neutron firewall-rule-delete [-h] [--request-format {json,xml}]
FIREWALL_RULE
```

Delete a given firewall rule.

**Positional arguments**



**FIREWALL\_RULE**

ID or name of firewall\_rule to delete.

**Optional arguments**

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**9.37. NEUTRON FIREWALL-RULE-LIST**

```
usage: neutron firewall-rule-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]
```

List firewall rules that belong to a given tenant.

**Optional arguments**

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.38. NEUTRON FIREWALL-RULE-SHOW

```
usage: neutron firewall-rule-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] FIREWALL_RULE
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.39. NEUTRON FIREWALL-RULE-UPDATE

```
usage: neutron firewall-rule-update [-h] [--request-format {json,xml}]
[--protocol {tcp,udp,icmp,any}] FIREWALL_RULE
```

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,xml}**

The XML or JSON request format.

### **--protocol {tcp,udp,icmp,any}**

Protocol for the firewall rule.

## 9.40. NEUTRON FIREWALL-SHOW

```
usage: neutron firewall-show [-h] [-f {shell,table,value}] [-c COLUMN]
[--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
[-D] [-F FIELD] FIREWALL
```

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,xml}**

The XML or JSON request format.

### **-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.41. NEUTRON FIREWALL-UPDATE

```
usage: neutron firewall-update [-h] [--request-format {json,xml}] [--policy POLICY] [--router ROUTER | --no-routers] FIREWALL
```

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,xml}**

The XML or JSON request format.

**--policy POLICY**

Firewall policy name or ID.

**--router ROUTER**

Firewall associated router names or IDs (requires FWaaS router insertion extension, this option can be repeated)

**--no-routers**

Associate no routers with the firewall (requires FWaaS router insertion extension)

## 9.42. NEUTRON FLOATINGIP-ASSOCIATE

```
usage: neutron floatingip-associate [-h] [--request-format {json,xml}] [--fixed-ip-address 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,xml}**

The XML or JSON request format.

#### **--fixed-ip-address FIXED\_IP\_ADDRESS**

IP address on the port (only required if port has multiple IPs).

## 9.43. NEUTRON FLOATINGIP-CREATE

```
usage: neutron floatingip-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--port-id PORT_ID] [--fixed-ip-
address FIXED_IP_ADDRESS] [--floating-ip-address FLOATING_IP_ADDRESS]
FLOATING_NETWORK
```

Create a floating IP for a given tenant.

### Positional arguments

#### **FLOATING\_NETWORK**

Network name or ID to allocate floating IP from.

### Optional arguments

#### **-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--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

## 9.44. NEUTRON FLOATINGIP-DELETE

```
usage: neutron floatingip-delete [-h] [--request-format {json,xml}]
FLOATINGIP
```

Delete a given floating IP.

### Positional arguments

#### **FLOATINGIP**

ID of floatingip to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.45. NEUTRON FLOATINGIP-DISASSOCIATE

```
usage: neutron floatingip-disassociate [-h] [--request-format
{json,xml}] 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**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

## 9.46. NEUTRON FLOATINGIP-LIST

```
usage: neutron floatingip-list [-h] [-f {csv,table}] [-c COLUMN] [--
max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD]
[--sort-dir {asc,desc}]
```

List floating IPs that belong to a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **-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.

## 9.47. NEUTRON FLOATINGIP-SHOW

```
usage: neutron floatingip-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.



## 9.48. NEUTRON GATEWAY-DEVICE-CREATE

```
usage: neutron gateway-device-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--connector-type
{stt,gre,ipsecgre,ipsecstt,bridge}] --connector-ip CONNECTOR_IP (--
client-certificate CERT_DATA | --client-certificate-file CERT_FILE)
NAME
```

Create a network gateway device.

### Positional arguments

#### NAME

Name of network gateway device to create.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

#### --tenant-id TENANT\_ID

The owner tenant ID.

#### --connector-type {stt,gre,ipsecgre,ipsecstt,bridge}

Type of the transport zone connector to use for this device. Valid values are gre, stt, ipsecgre, ipsecstt, and bridge. Defaults to stt.

#### --connector-ip CONNECTOR\_IP

IP address for this device's transport connector. It must correspond to the IP address of the interface used for tenant traffic on the NSX gateway node.

#### --client-certificate CERT\_DATA

PEM certificate used by the NSX gateway transport node to authenticate with the NSX controller.

#### --client-certificate-file CERT\_FILE

File containing the PEM certificate used by the NSX gateway transport node to authenticate with the NSX controller.

## 9.49. NEUTRON GATEWAY-DEVICE-DELETE

```
usage: neutron gateway-device-delete [-h] [--request-format {json,xml}]
GATEWAY_DEVICE
```

Delete a given network gateway device.

### Positional arguments

#### GATEWAY\_DEVICE

ID or name of gateway\_device to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.50. NEUTRON GATEWAY-DEVICE-LIST

```
usage: neutron gateway-device-list [-h] [-f {csv,table}] [-c COLUMN] [-
-max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-D] [-F FIELD]
```

List network gateway devices for a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.51. NEUTRON GATEWAY-DEVICE-SHOW

```
usage: neutron gateway-device-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] GATEWAY_DEVICE
```

Show information for a given network gateway device.

### Positional arguments

#### GATEWAY\_DEVICE

ID or name of gateway\_device to look up.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.52. NEUTRON GATEWAY-DEVICE-UPDATE

```
usage: neutron gateway-device-update [-h] [--request-format {json,xml}]
[--name NAME] [--connector-type {stt,gre,ipsecgre,ipsecstt,bridge}] [--
connector-ip CONNECTOR_IP] [--client-certificate CERT_DATA | --client-
certificate-file CERT_FILE] GATEWAY_DEVICE
```

Update a network gateway device.

## Positional arguments

### **GATEWAY\_DEVICE**

ID or name of gateway\_device to update.

## Optional arguments

### **-h, --help**

show this help message and exit

### **--request-format {json,xml}**

The XML or JSON request format.

### **--name NAME**

New name for network gateway device.

### **--connector-type {stt,gre,ipsecre,ipsecestt,bridge}**

Type of the transport zone connector to use for this device. Valid values are gre, stt, ipsecgre, ipsecstt, and bridge. Defaults to stt.

### **--connector-ip CONNECTOR\_IP**

IP address for this device's transport connector. It must correspond to the IP address of the interface used for tenant traffic on the NSX gateway node.

### **--client-certificate CERT\_DATA**

PEM certificate used by the NSX gateway transport node to authenticate with the NSX controller.

### **--client-certificate-file CERT\_FILE**

File containing the PEM certificate used by the NSX gateway transport node to authenticate with the NSX controller.

## 9.53. NEUTRON IPSEC-SITE-CONNECTION-CREATE

```
usage: neutron ipsec-site-connection-create [-h] [-f
{shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix
PREFIX] [--request-format {json,xml}] [--tenant-id TENANT_ID] [--admin-
state-down] [--name NAME] [--description DESCRIPTION] [--mtu MTU] [--
initiator {bi-directional,response-only}] [--dpd
```

```

action=ACTION,interval=INTERVAL,timeout=TIMEOUT] --vpnservice-id
VPNSERVICE --ikepolicy-id IKEPOLICY --ipsecpolicy-id IPSECPOLICY --
peer-address PEER_ADDRESS --peer-id PEER_ID --peer-cidr PEER_CIDRS --
psk PSK

```

Create an IPsec site connection.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--admin-state-down**

Set admin state up to false.

**--name NAME**

Set friendly name for the connection.

**--description DESCRIPTION**

Set a description for the connection.

**--mtu MTU MTU**

size for the connection, default:1500

**--initiator {bi-directional,response-only}**

Initiator state in lowercase, default:bi-directional

**--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.

**--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.

**--peer-address PEER\_ADDRESS**

Peer gateway public IPv4/IPv6 address or FQDN.

**--peer-id PEER\_ID**

Peer router identity for authentication. Can be IPv4/IPv6 address, e-mail address, key id, or FQDN.

**--peer-cidr PEER\_CIDRS**

Remote subnet(s) in CIDR format.

**--psk PSK**

Pre-shared key string.

## 9.54. NEUTRON IPSEC-SITE-CONNECTION-DELETE

```
usage: neutron ipsec-site-connection-delete [-h] [--request-format
{json,xml}] IPSEC_SITE_CONNECTION
```

Delete a given IPsec site connection.

### Positional arguments

**IPSEC\_SITE\_CONNECTION**

ID or name of ipsec\_site\_connection to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.55. NEUTRON IPSEC-SITE-CONNECTION-LIST

```
usage: neutron ipsec-site-connection-list [-h] [-f {csv,table}] [-c
COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
[--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key
FIELD] [--sort-dir {asc,desc}]
```

List IPsec site connections that belong to a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.56. NEUTRON IPSEC-SITE-CONNECTION-SHOW

```
usage: neutron ipsec-site-connection-show [-h] [-f {shell,table,value}]
      [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
      format {json,xml}] [-D] [-F FIELD] IPSEC_SITE_CONNECTION
```

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,xml}

The XML or JSON request format.

#### -D, --show-details

Show detailed information.

#### -F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

## 9.57. NEUTRON IPSEC-SITE-CONNECTION-UPDATE

```
usage: neutron ipsec-site-connection-update [-h] [--request-format
      {json,xml}] [--dpd action=ACTION,interval=INTERVAL,timeout=TIMEOUT]
      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,xml}**

The XML or JSON request format.

**--dpd**

action=ACTION,interval=INTERVAL,timeout=TIMEOUT Isec 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.

**9.58. NEUTRON L3-AGENT-LIST-HOSTING-ROUTER**

```
usage: neutron l3-agent-list-hosting-router [-h] [-f {csv,table}] [-c COLUMN]
      [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
      [--request-format {json,xml}] [-D] [-F FIELD] router
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.59. NEUTRON L3-AGENT-ROUTER-ADD

```
usage: neutron l3-agent-router-add [-h] [--request-format {json,xml}]
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,xml}**

The XML or JSON request format.

## 9.60. NEUTRON L3-AGENT-ROUTER-REMOVE

```
usage: neutron l3-agent-router-remove [-h] [--request-format
{json,xml}] l3_agent router
```

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,xml}**

The XML or JSON request format.

## 9.61. NEUTRON LB-AGENT-HOSTING-POOL

```
usage: neutron lb-agent-hosting-pool [-h] [-f {csv,table}] [-c COLUMN]
  [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
  request-format {json,xml}] [-D] [-F FIELD] pool
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.62. NEUTRON LB-HEALTHMONITOR-ASSOCIATE

```
usage: neutron lb-healthmonitor-associate [-h] [--request-format
{json,xml}] 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,xml}

The XML or JSON request format.

## 9.63. NEUTRON LB-HEALTHMONITOR-CREATE

```
usage: neutron lb-healthmonitor-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--admin-state-down] [--expected-
codes EXPECTED_CODES] [--http-method HTTP_METHOD] [--url-path URL_PATH]
--delay DELAY --max-retries MAX_RETRIES --timeout TIMEOUT --type
{PING,TCP,HTTP,HTTPS}
```

Create a health monitor.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

**--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 seconds 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 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.

**--type {PING,TCP,HTTP,HTTPS}**

One of the predefined health monitor types.

**9.64. NEUTRON LB-HEALTHMONITOR-DELETE**

```
usage: neutron lb-healthmonitor-delete [-h] [--request-format
{json,xml}] HEALTH_MONITOR
```

Delete a given health monitor.

### Positional arguments

#### **HEALTH\_MONITOR**

ID of health\_monitor to delete.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

## 9.65. NEUTRON LB-HEALTHMONITOR-DISASSOCIATE

```
usage: neutron lb-healthmonitor-disassociate [-h] [--request-format {json,xml}] HEALTH_MONITOR_ID POOL
```

Remove a mapping from a health monitor to 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,xml}**

The XML or JSON request format.

## 9.66. NEUTRON LB-HEALTHMONITOR-LIST

```
usage: neutron lb-healthmonitor-list [-h] [-f {csv,table}] [-c COLUMN]
[--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD]
[--sort-dir {asc,desc}]
```

List health monitors that belong to a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **-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.

## 9.67. NEUTRON LB-HEALTHMONITOR-SHOW

```
usage: neutron lb-healthmonitor-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] HEALTH_MONITOR
```

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,xml}**

The XML or JSON request format.

#### **-D, --show-details**

Show detailed information.

#### **-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.68. NEUTRON LB-HEALTHMONITOR-UPDATE

```
usage: neutron lb-healthmonitor-update [-h] [--request-format {json,xml}] 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,xml}**

The XML or JSON request format.



## 9.69. NEUTRON LB-MEMBER-CREATE

```
usage: neutron lb-member-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--admin-state-down] [--weight
WEIGHT] --address ADDRESS --protocol-port PROTOCOL_PORT POOL
```

Create a member.

### Positional arguments

#### POOL

Pool ID or name this vip belongs to.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

#### --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.

## 9.70. NEUTRON LB-MEMBER-DELETE

```
usage: neutron lb-member-delete [-h] [--request-format {json,xml}]
MEMBER
```

Delete a given member.

### Positional arguments

#### MEMBER

ID or name of member to delete.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

## 9.71. NEUTRON LB-MEMBER-LIST

```
usage: neutron lb-member-list [-h] [-f {csv,table}] [-c COLUMN] [--max-
width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-
format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--
sort-dir {asc,desc}]
```

List members that belong to a given tenant.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

#### -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.

## 9.72. NEUTRON LB-MEMBER-SHOW

```
usage: neutron lb-member-show [-h] [-f {shell,table,value}] [-c COLUMN]
  [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
  [-D] [-F FIELD] MEMBER
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.73. NEUTRON LB-MEMBER-UPDATE

```
usage: neutron lb-member-update [-h] [--request-format {json,xml}]
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,xml}

The XML or JSON request format.

## 9.74. NEUTRON LB-POOL-CREATE

```
usage: neutron lb-pool-create [-h] [-f {shell,table,value}] [-c COLUMN]
[--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
[--tenant-id TENANT_ID] [--admin-state-down] [--description
DESCRIPTION] --lb-method {ROUND_ROBIN,LEAST_CONNECTIONS,SOURCE_IP} --
name NAME --protocol {HTTP,HTTPS,TCP} --subnet-id SUBNET [--provider
PROVIDER]
```

Create a pool.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

#### --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 loadbalancer service.

## 9.75. NEUTRON LB-POOL-DELETE

```
usage: neutron lb-pool-delete [-h] [--request-format {json,xml}] POOL
```

Delete a given pool.

### Positional arguments

#### POOL

ID or name of pool to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.76. NEUTRON LB-POOL-LIST

```
usage: neutron lb-pool-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]
```

List pools that belong to a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.77. NEUTRON LB-POOL-LIST-ON-AGENT

```
usage: neutron lb-pool-list-on-agent [-h] [-f {csv,table}] [-c COLUMN]
  [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
  request-format {json,xml}] [-D] [-F FIELD] 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,xml}**

The XML or JSON request format.

#### **-D, --show-details**

Show detailed information.

#### **-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.78. NEUTRON LB-POOL-SHOW

```
usage: neutron lb-pool-show [-h] [-f {shell,table,value}] [-c COLUMN]
  [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
  [-D] [-F FIELD] 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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.79. NEUTRON LB-POOL-STATS

```
usage: neutron lb-pool-stats [-h] [-f {shell,table,value}] [-c COLUMN]
  [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
  [-D] [-F FIELD] POOL
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.



**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

**9.80. NEUTRON LB-POOL-UPDATE**

```
usage: neutron lb-pool-update [-h] [--request-format {json,xml}] 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,xml}**

The XML or JSON request format.

**9.81. NEUTRON LB-VIP-CREATE**

```
usage: neutron lb-vip-create [-h] [-f {shell,table,value}] [-c COLUMN]
[--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
[--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**

Pool ID or name this vip belongs to.

**Optional arguments**

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--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. Positive integer or -1 for unlimited (default).

**--description DESCRIPTION**

Description of the vip.

**--name NAME**

Name of the vip.

**--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.

## 9.82. NEUTRON LB-VIP-DELETE

■

```
usage: neutron lb-vip-delete [-h] [--request-format {json,xml}] VIP
```

Delete a given vip.

### Positional arguments

#### VIP

ID or name of vip to delete.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

## 9.83. NEUTRON LB-VIP-LIST

```
usage: neutron lb-vip-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]
```

List vips that belong to a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **-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.

## 9.84. NEUTRON LB-VIP-SHOW

```
usage: neutron lb-vip-show [-h] [-f {shell,table,value}] [-c COLUMN] [-max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-D] [-F FIELD] VIP
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.85. NEUTRON LB-VIP-UPDATE

## 9.85. NEUTRON LB-VIP-UPDATE

```
usage: neutron lb-vip-update [-h] [--request-format {json,xml}] 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,xml}

The XML or JSON request format.

## 9.86. NEUTRON LBAAS-AGENT-HOSTING-LOADBALANCER

```
usage: neutron lbaas-agent-hosting-loadbalancer [-h] [-f {csv,table}]
[-c COLUMN] [--max-width <integer>] [--quote
{all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F
FIELD] loadbalancer
```

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,xml}

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.87. NEUTRON LBAAS-HEALTHMONITOR-CREATE

```
usage: neutron lbaas-healthmonitor-create [-h] [-f {shell,table,value}]
[-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
format {json,xml}] [--tenant-id TENANT_ID] [--admin-state-down] [--
expected-codes EXPECTED_CODES] [--http-method HTTP_METHOD] [--url-path
URL_PATH] --delay DELAY --max-retries MAX_RETRIES --timeout TIMEOUT --
type {PING,TCP,HTTP,HTTPS} --pool POOL
```

LBaaS v2 Create a healthmonitor.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--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 seconds 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 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.

**--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.

## 9.88. NEUTRON LBAAS-HEALTHMONITOR-DELETE

```
usage: neutron lbaas-healthmonitor-delete [-h] [--request-format
{json,xml}] HEALTHMONITOR
```

LBaaS v2 Delete a given healthmonitor.

### Positional arguments

**HEALTHMONITOR**

ID or name of healthmonitor to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.89. NEUTRON LBAAS-HEALTHMONITOR-LIST

```
usage: neutron lbaas-healthmonitor-list [-h] [-f {csv,table}] [-c
COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
[--request-format {json,xml}] [-D] [-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,xml}**

The XML or JSON request format.

**-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.

## 9.90. NEUTRON LBAAS-HEALTHMONITOR-SHOW



```
usage: neutron lbaas-healthmonitor-show [-h] [-f {shell,table,value}]
[-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
format {json,xml}] [-D] [-F FIELD] HEALTHMONITOR
```

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,xml}

The XML or JSON request format.

#### -D, --show-details

Show detailed information.

#### -F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

## 9.91. NEUTRON LBAAS-HEALTHMONITOR-UPDATE

```
usage: neutron lbaas-healthmonitor-update [-h] [--request-format
{json,xml}] HEALTHMONITOR
```

LBaaS v2 Update a given healthmonitor.

### Positional arguments

#### HEALTHMONITOR

ID of healthmonitor to update.

### Optional arguments

#### -h, --help

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.92. NEUTRON LBAAS-LISTENER-CREATE

```
usage: neutron lbaas-listener-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--admin-state-down] [--
connection-limit CONNECTION_LIMIT] [--description DESCRIPTION] [--name
NAME] [--default-tls-container-id DEFAULT_TLS_CONTAINER_ID] [--sni-
container-ids SNI_CONTAINER_IDS [SNI_CONTAINER_IDS ...]] --loadbalancer
LOADBALANCER --protocol {TCP,HTTP,HTTPS,TERMINATED_HTTPS} --protocol-
port PORT
```

LBaaS v2 Create a listener.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--admin-state-down**

Set admin state up to false.

**--connection-limit CONNECTION\_LIMIT**

The maximum number of connections per second allowed for the vip. Positive integer or -1 for unlimited (default).

**--description DESCRIPTION**

Description of the listener.

**--name NAME**

The name of the listener.

**--default-tls-container-id DEFAULT\_TLS\_CONTAINER\_ID**

Default TLS container ID to retrieve TLS information.

**--sni-container-ids SNI\_CONTAINER\_IDS [SNI\_CONTAINER\_IDS ...]**

List of TLS container IDs 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.

### 9.93. NEUTRON LBaaS-LISTENER-DELETE

```
usage: neutron lbaas-listener-delete [-h] [--request-format {json,xml}]
LISTENER
```

LBaaS v2 Delete a given listener.

#### Positional arguments

**LISTENER**

ID or name of listener to delete.

#### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.94. NEUTRON LBAAS-LISTENER-LIST

```
usage: neutron lbaas-listener-list [-h] [-f {csv,table}] [-c COLUMN] [-
-max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD]
[--sort-dir {asc,desc}]
```

LBaaS v2 List listeners that belong to a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.95. NEUTRON LBAAS-LISTENER-SHOW

```
usage: neutron lbaas-listener-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] LISTENER
```

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,xml}**

The XML or JSON request format.

#### **-D, --show-details**

Show detailed information.

#### **-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.96. NEUTRON LBAAS-LISTENER-UPDATE

```
usage: neutron lbaas-listener-update [-h] [--request-format {json,xml}]
LISTENER
```

LBaaS v2 Update a given listener.

### Positional arguments

#### LISTENER

ID of listener to update.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

## 9.97. NEUTRON LBAAS-LOADBALANCER-CREATE

```
usage: neutron lbaas-loadbalancer-create [-h] [-f {shell,table,value}]
[-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
format {json,xml}] [--tenant-id TENANT_ID] [--description DESCRIPTION]
[--admin-state-down] [--name NAME] [--provider PROVIDER] [--vip-address
VIP_ADDRESS] VIP_SUBNET
```

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,xml}

The XML or JSON request format.

#### --tenant-id TENANT\_ID

The owner tenant ID.

#### --description DESCRIPTION

Description of the load balancer.

#### --admin-state-down

Set admin state up to false.

#### --name NAME

Name of the load balancer.

#### --provider PROVIDER

Provider name of load balancer service.

**--vip-address VIP\_ADDRESS**

VIP address for the load balancer.

## 9.98. NEUTRON LBAAS-LOADBALANCER-DELETE

```
usage: neutron lbaas-loadbalancer-delete [-h] [--request-format
{json,xml}] LOADBALANCER
```

LBaaS v2 Delete a given loadbalancer.

### Positional arguments

#### LOADBALANCER

ID or name of loadbalancer to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.99. NEUTRON LBAAS-LOADBALANCER-LIST

```
usage: neutron lbaas-loadbalancer-list [-h] [-f {csv,table}] [-c
COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
[--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key
FIELD] [--sort-dir {asc,desc}]
```

LBaaS v2 List loadbalancers that belong to a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.100. NEUTRON LBAAS-LOADBALANCER-LIST-ON-AGENT

```
usage: neutron lbaas-loadbalancer-list-on-agent [-h] [-f {csv,table}]
        [-c COLUMN] [--max-width <integer>] [--quote
        {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F
        FIELD] lbaas_agent
```

List the loadbalancers on a loadbalancer v2 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,xml}**

The XML or JSON request format.



**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

**9.101. NEUTRON LBAAS-LOADBALANCER-SHOW**

```
usage: neutron lbaas-loadbalancer-show [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-D] [-F FIELD] LOADBALANCER
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

**9.102. NEUTRON LBAAS-LOADBALANCER-UPDATE**

```
usage: neutron lbaas-loadbalancer-update [-h] [--request-format {json,xml}] 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,xml}**

The XML or JSON request format.

## 9.103. NEUTRON LBAAS-MEMBER-CREATE

```
usage: neutron lbaas-member-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--admin-state-down] [--weight
WEIGHT] --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,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--admin-state-down**

Set admin state up to false

**--weight WEIGHT**

Weight of member in the pool (default:1, [0..256]).

**--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.

## 9.104. NEUTRON LBAAS-MEMBER-DELETE

```
usage: neutron lbaas-member-delete [-h] [--request-format {json,xml}]
MEMBER POOL
```

LBaaS v2 Delete a given member.

### Positional arguments

**MEMBER**

ID or name 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,xml}**

The XML or JSON request format.

## 9.105. NEUTRON LBAAS-MEMBER-LIST

```
usage: neutron lbaas-member-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}] POOL
```

LBaaS v2 List members that belong to a given tenant.

### 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,xml}**

The XML or JSON request format.

#### **-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.

## 9.106. NEUTRON LBAAS-MEMBER-SHOW

```
usage: neutron lbaas-member-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] MEMBER 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,xml}

The XML or JSON request format.

#### -D, --show-details

Show detailed information.

#### -F FIELD, --field FIELD

Specify the field(s) to be returned by server. You can repeat this option.

## 9.107. NEUTRON LBAAS-MEMBER-UPDATE

```
usage: neutron lbaas-member-update [-h] [--request-format {json,xml}]
[--admin-state-down] [--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**

show this help message and exit

### **--request-format {json,xml}**

The XML or JSON request format.

### **--admin-state-down**

Set admin state up to false

### **--weight WEIGHT**

Weight of member in the pool (default:1, [0..256])

## 9.108. NEUTRON LBAAS-POOL-CREATE

```
usage: neutron lbaas-pool-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--admin-state-down] [--
description DESCRIPTION] [--session-persistence
type=TYPE[,cookie_name=COOKIE_NAME]] [--name NAME] --lb-algorithm
{ROUND_ROBIN,LEAST_CONNECTIONS,SOURCE_IP} --listener LISTENER --
protocol {HTTP,HTTPS,TCP}
```

LBaaS v2 Create a pool.

## Optional arguments

### **-h, --help**

show this help message and exit

### **--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--admin-state-down**

Set admin state up to false.

**--description DESCRIPTION**

Description of the pool.

**--session-persistence**

type=TYPE[,cookie\_name=COOKIE\_NAME] The type of session persistence to use and associated cookie name

**--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.

**--listener LISTENER**

The listener to associate with the pool

**--protocol {HTTP, HTTPS, TCP}**

Protocol for balancing.

## 9.109. NEUTRON LBAAS-POOL-DELETE

```
usage: neutron lbaas-pool-delete [-h] [--request-format {json,xml}]
POOL
```

LBaaS v2 Delete a given pool.

**Positional arguments**

**POOL**

ID or name of pool to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.110. NEUTRON LBAAS-POOL-LIST

```
usage: neutron lbaas-pool-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]
```

LBaaS v2 List pools that belong to a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

### 9.111. NEUTRON LBAAS-POOL-SHOW

```
usage: neutron lbaas-pool-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] POOL
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

### 9.112. NEUTRON LBAAS-POOL-UPDATE

```
usage: neutron lbaas-pool-update [-h] [--request-format {json,xml}]
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,xml}**

The XML or JSON request format.

## 9.113. NEUTRON METER-LABEL-CREATE

```
usage: neutron meter-label-create [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [--tenant-id TENANT_ID] [--description DESCRIPTION] [--shared] NAME
```

Create a metering label for a given tenant.

## Positional arguments

### NAME

Name of metering label to create.

## Optional arguments

### **-h, --help**

show this help message and exit

### **--request-format {json,xml}**

The XML or JSON request format.

### **--tenant-id TENANT\_ID**

The owner tenant ID.

### **--description DESCRIPTION**

Description of metering label to create.

### **--shared**

Set the label as shared.

## 9.114. NEUTRON METER-LABEL-DELETE

```
usage: neutron meter-label-delete [-h] [--request-format {json,xml}]
METERING_LABEL
```

Delete a given metering label.

### Positional arguments

#### **METERING\_LABEL**

ID or name of metering\_label to delete.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

## 9.115. NEUTRON METER-LABEL-LIST

```
usage: neutron meter-label-list [-h] [-f {csv,table}] [-c COLUMN] [--
max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-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,xml}**

The XML or JSON request format.

**-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.

## 9.116. NEUTRON METER-LABEL-RULE-CREATE

```
usage: neutron meter-label-rule-create [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [--tenant-id TENANT_ID] [--direction {ingress,egress}] [--excluded] LABEL REMOTE_IP_PREFIX
```

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,xml}**

The XML or JSON request format.

**--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.

## 9.117. NEUTRON METER-LABEL-RULE-DELETE

```
usage: neutron meter-label-rule-delete [-h] [--request-format
{json,xml}] METERING_LABEL_RULE
```

Delete a given metering label.

### Positional arguments

**METERING\_LABEL\_RULE**

ID or name of metering\_label\_rule to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.118. NEUTRON METER-LABEL-RULE-LIST

```
usage: neutron meter-label-rule-list [-h] [-f {csv,table}] [-c COLUMN]
[--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-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,xml}**

The XML or JSON request format.

#### **-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.

## 9.119. NEUTRON METER-LABEL-RULE-SHOW

```
usage: neutron meter-label-rule-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] METERING_LABEL_RULE
```

Show information of a given metering label rule.

**Positional arguments****METERING\_LABEL\_RULE**

ID or name of metering\_label\_rule to look up.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

**9.120. NEUTRON METER-LABEL-SHOW**

```
usage: neutron meter-label-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] METERING_LABEL
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.121. NEUTRON NEC-PACKET-FILTER-CREATE

```
usage: neutron nec-packet-filter-create [-h] [-f {shell,table,value}]
[-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
format {json,xml}] [--tenant-id TENANT_ID] [--admin-state-down] [--name
NAME] [--in-port PORT] [--src-mac SRC_MAC] [--dst-mac DST_MAC] [--eth-
type ETH_TYPE] [--protocol PROTOCOL] [--src-cidr SRC_CIDR] [--dst-cidr
DST_CIDR] [--src-port SRC_PORT] [--dst-port DST_PORT] [--priority
PRIORITY] [--action {allow,drop}] NETWORK
```

Create a packet filter for a given tenant.

### Positional arguments

**NETWORK**

network to which this packet filter is applied

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--admin-state-down**

Set Admin State Up to false

**--name NAME**



---

Name of this packet filter

**--in-port PORT**

Name or ID of the input port

**--src-mac SRC\_MAC**

Source MAC address

**--dst-mac DST\_MAC**

Destination MAC address

**--eth-type ETH\_TYPE**

Ether Type. Integer [0:65535] (hex or decimal). E.g., 0x0800 (IPv4), 0x0806 (ARP), 0x86DD (IPv6)

**--protocol PROTOCOL IP**

Protocol. Protocol name or integer. Recognized names are icmp, tcp, udp, arp (case insensitive). Integer should be [0:255] (decimal or hex).

**--src-cidr SRC\_CIDR**

Source IP address CIDR

**--dst-cidr DST\_CIDR**

Destination IP address CIDR

**--src-port SRC\_PORT**

Source port address

**--dst-port DST\_PORT**

Destination port address

**--priority PRIORITY**

Priority of the filter. Integer of [0:65535]. Default: 30000.

**--action {allow,drop}**

Action of the filter. Default: allow

## 9.122. NEUTRON NEC-PACKET-FILTER-DELETE

```
usage: neutron nec-packet-filter-delete [-h] [--request-format
{json,xml}] PACKET_FILTER
```

Delete a given packet filter.

### Positional arguments

#### PACKET\_FILTER

ID or name of packet\_filter to delete.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

## 9.123. NEUTRON NEC-PACKET-FILTER-LIST

```
usage: neutron nec-packet-filter-list [-h] [-f {csv,table}] [-c COLUMN]
[--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD]
[--sort-dir {asc,desc}]
```

List packet filters that belong to a given tenant.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

#### -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.

**9.124. NEUTRON NEC-PACKET-FILTER-SHOW**

```
usage: neutron nec-packet-filter-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] PACKET_FILTER
```

Show information of a given packet filter.

**Positional arguments****PACKET\_FILTER**

ID or name of `packet_filter` to look up.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.125. NEUTRON NEC-PACKET-FILTER-UPDATE

```
usage: neutron nec-packet-filter-update [-h] [--request-format
{json,xml}] [--admin-state {True,False}] [--name NAME] [--src-mac
SRC_MAC] [--dst-mac DST_MAC] [--eth-type ETH_TYPE] [--protocol
PROTOCOL] [--src-cidr SRC_CIDR] [--dst-cidr DST_CIDR] [--src-port
SRC_PORT] [--dst-port DST_PORT] [--priority PRIORITY] [--action
{allow,drop}] PACKET_FILTER
```

Update packet filter's information.

### Positional arguments

#### **PACKET\_FILTER**

ID or name of packet\_filter to update.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **--admin-state {True,False}**

Set a value of Admin State Up

#### **--name NAME**

Name of this packet filter

#### **--src-mac SRC\_MAC**

Source MAC address

#### **--dst-mac DST\_MAC**

Destination MAC address

#### **--eth-type ETH\_TYPE**

Ether Type. Integer [0:65535] (hex or decimal). E.g., 0x0800 (IPv4), 0x0806 (ARP), 0x86DD (IPv6)

**--protocol PROTOCOL IP**

Protocol. Protocol name or integer. Recognized names are icmp, tcp, udp, arp (case insensitive). Integer should be [0:255] (decimal or hex).

**--src-cidr SRC\_CIDR**

Source IP address CIDR

**--dst-cidr DST\_CIDR**

Destination IP address CIDR

**--src-port SRC\_PORT**

Source port address

**--dst-port DST\_PORT**

Destination port address

**--priority PRIORITY**

Priority of the filter. Integer of [0:65535].

**--action {allow,drop}**

Action of the filter.

## 9.126. NEUTRON NET-CREATE

```
usage: neutron net-create [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [--tenant-id TENANT_ID] [--admin-state-down] [--shared] [--router:external] [--provider:network_type <network_type>] [--provider:physical_network <physical_network_name>] [--provider:segmentation_id <segmentation_id>] [--vlan-transparent {True,False}] NAME
```

Create a network for a given tenant.

### Positional arguments

**NAME**

Name of network to create.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--admin-state-down**

Set admin state up to false.

**--shared**

Set the network as shared.

**--router:external**

Set network as external, it is only available for admin

**--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.

**9.127. NEUTRON NET-DELETE**

---

```
usage: neutron net-delete [-h] [--request-format {json,xml}] NETWORK
```

Delete a given network.

### Positional arguments

#### NETWORK

ID or name of network to delete.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

## 9.128. NEUTRON NET-EXTERNAL-LIST

```
usage: neutron net-external-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]
```

List external networks that belong to a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **-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.

## 9.129. NEUTRON NET-GATEWAY-CONNECT

```
usage: neutron net-gateway-connect [-h] [--request-format {json,xml}]
  [--segmentation-type SEGMENTATION_TYPE] [--segmentation-id
  SEGMENTATION_ID] NET-GATEWAY-ID NETWORK-ID
```

Add an internal network interface to a router.

### Positional arguments

#### NET-GATEWAY-ID

ID of the network gateway.

#### NETWORK-ID

ID of the internal network to connect on the gateway.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--segmentation-type SEGMENTATION\_TYPE**

L2 segmentation strategy on the external side of the gateway (e.g.: VLAN, FLAT).



**--segmentation-id SEGMENTATION\_ID**

Identifier for the L2 segment on the external side of the gateway.

## 9.130. NEUTRON NET-GATEWAY-CREATE

```
usage: neutron net-gateway-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--device
id=ID,interface_name=NAME_OR_ID] NAME
```

Create a network gateway.

### Positional arguments

#### NAME

Name of network gateway to create.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

#### --tenant-id TENANT\_ID

The owner tenant ID.

#### --device

id=ID,interface\_name=NAME\_OR\_ID Device info for this gateway. You can repeat this option for multiple devices for HA gateways.

## 9.131. NEUTRON NET-GATEWAY-DELETE

```
usage: neutron net-gateway-delete [-h] [--request-format {json,xml}]
NETWORK_GATEWAY
```

Delete a given network gateway.

## Positional arguments

### **NETWORK\_GATEWAY**

ID or name of network\_gateway to delete.

## Optional arguments

### **-h, --help**

show this help message and exit

### **--request-format {json,xml}**

The XML or JSON request format.

## 9.132. NEUTRON NET-GATEWAY-DISCONNECT

```
usage: neutron net-gateway-disconnect [-h] [--request-format
{json,xml}] [--segmentation-type SEGMENTATION_TYPE] [--segmentation-id
SEGMENTATION_ID] NET-GATEWAY-ID NETWORK-ID
```

Remove a network from a network gateway.

## Positional arguments

### **NET-GATEWAY-ID**

ID of the network gateway.

### **NETWORK-ID**

ID of the internal network to connect on the gateway.

## Optional arguments

### **-h, --help**

show this help message and exit

### **--request-format {json,xml}**

The XML or JSON request format.

### **--segmentation-type SEGMENTATION\_TYPE**

L2 segmentation strategy on the external side of the gateway (e.g.: VLAN, FLAT).

**--segmentation-id SEGMENTATION\_ID**

Identifier for the L2 segment on the external side of the gateway.

### 9.133. NEUTRON NET-GATEWAY-LIST

```
usage: neutron net-gateway-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD]
```

List network gateways for a given tenant.

#### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

### 9.134. NEUTRON NET-GATEWAY-SHOW

```
usage: neutron net-gateway-show [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-D] [-F FIELD] NETWORK_GATEWAY
```

Show information of a given network gateway.

#### Positional arguments

**NETWORK\_GATEWAY**

ID or name of network\_gateway to look up.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.135. NEUTRON NET-GATEWAY-UPDATE

```
usage: neutron net-gateway-update [-h] [--request-format {json,xml}]  
NETWORK_GATEWAY
```

Update the name for a network gateway.

### Positional arguments

**NETWORK\_GATEWAY**

ID or name of network\_gateway to update.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.136. NEUTRON NET-LIST

```
usage: neutron net-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width
<integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format
{json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir
{asc,desc}]
```

List networks that belong to a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **-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.

## 9.137. NEUTRON NET-LIST-ON-DHCP-AGENT

```
usage: neutron net-list-on-dhcp-agent [-h] [-f {csv,table}] [-c COLUMN]
[--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD]
[--sort-dir {asc,desc}] dhcp_agent
```

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,xml}**

The XML or JSON request format.

### **-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.

## 9.138. NEUTRON NET-SHOW

```
usage: neutron net-show [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-D] [-F FIELD] NETWORK
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

**9.139. NEUTRON NET-UPDATE**

```
usage: neutron net-update [-h] [--request-format {json,xml}] NETWORK
```

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,xml}**

The XML or JSON request format.

**9.140. NEUTRON NUAGE-NETPARTITION-CREATE**

```
usage: neutron nuage-netpartition-create [-h] [-f {shell,table,value}]
[-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
format {json,xml}] [--tenant-id TENANT_ID] name
```

Create a netpartition for a given tenant.

### Positional arguments

#### **name**

Name of netpartition to create.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **--tenant-id TENANT\_ID**

The owner tenant ID.

## 9.141. NEUTRON NUAGE-NETPARTITION-DELETE

```
usage: neutron nuage-netpartition-delete [-h] [--request-format
{json,xml}] NET_PARTITION
```

Delete a given netpartition.

### Positional arguments

#### **NET\_PARTITION**

ID or name of net\_partition to delete.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**



The XML or JSON request format.

## 9.142. NEUTRON NUAGE-NETPARTITION-LIST

```
usage: neutron nuage-netpartition-list [-h] [-f {csv,table}] [-c
COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
[--request-format {json,xml}] [-D] [-F FIELD]
```

List netpartitions that belong to a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **-D, --show-details**

Show detailed information.

#### **-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.143. NEUTRON NUAGE-NETPARTITION-SHOW

```
usage: neutron nuage-netpartition-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] NET_PARTITION
```

Show information of a given netpartition.

### Positional arguments

#### **NET\_PARTITION**

ID or name of net\_partition to look up.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.144. NEUTRON PORT-CREATE

```
usage: neutron port-create [-h] [-f {shell,table,value}] [-c COLUMN] [-
-max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
[--tenant-id TENANT_ID] [--name NAME] [--fixed-ip
subnet_id=SUBNET,ip_address=IP_ADDR] [--device-id DEVICE_ID] [--device-
owner DEVICE_OWNER] [--admin-state-down] [--mac-address MAC_ADDRESS] [-
-vnic-type <direct | macvtap | normal>] [--security-group
SECURITY_GROUP | --no-security-groups] [--extra-dhcp-opt
EXTRA_DHCP_OPTS] NETWORK
```

Create a port for a given tenant.

### Positional arguments

**NETWORK**

Network ID or name this port belongs to.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--name NAME**

Name 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 | macvtap | normal>**

VNIC type for this 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.

## 9.145. NEUTRON PORT-DELETE

```
usage: neutron port-delete [-h] [--request-format {json,xml}] PORT
```

Delete a given port.

### Positional arguments

#### **PORT**

ID or name of port to delete.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

## 9.146. NEUTRON PORT-LIST

```
usage: neutron port-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width
<integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format
{json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir
{asc,desc}]
```

List ports that belong to a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **-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.

## 9.147. NEUTRON PORT-SHOW

```
usage: neutron port-show [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-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,xml}**

The XML or JSON request format.

#### **-D, --show-details**

Show detailed information.

#### **-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.148. NEUTRON PORT-UPDATE

```
usage: neutron port-update [-h] [--request-format {json,xml}] [--name
NAME] [--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] 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,xml}**

The XML or JSON request format.

#### **--name NAME**

Name 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.

## 9.149. NEUTRON QUEUE-CREATE

```
usage: neutron queue-create [-h] [-f {shell,table,value}] [-c COLUMN]
  [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
  [--tenant-id TENANT_ID] [--min MIN] [--max MAX] [--qos-marking
  QOS_MARKING] [--default DEFAULT] [--dscp DSCP] NAME
```

Create a queue.

### Positional arguments

#### **NAME**

Name of queue.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **--tenant-id TENANT\_ID**

The owner tenant ID.

#### **--min MIN**

Minimum rate.

#### **--max MAX**

Maximum rate.

**--qos-marking QOS\_MARKING**

QOS marking as untrusted or trusted.

**--default DEFAULT**

If true all created ports will be the size of this queue, if queue is not specified

**--dscp DSCP**

Differentiated Services Code Point.

**9.150. NEUTRON QUEUE-DELETE**

```
usage: neutron queue-delete [-h] [--request-format {json,xml}]
QOS_QUEUE
```

Delete a given queue.

**Positional arguments****QOS\_QUEUE**

ID or name of qos\_queue to delete.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**9.151. NEUTRON QUEUE-LIST**

```
usage: neutron queue-list [-h] [-f {csv,table}] [-c COLUMN] [--max-
width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-
format {json,xml}] [-D] [-F FIELD]
```

List queues that belong to a given tenant.

**Optional arguments**



**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.152. NEUTRON QUEUE-SHOW

```
usage: neutron queue-show [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-D] [-F FIELD] QOS_QUEUE
```

Show information of a given queue.

### Positional arguments

**QOS\_QUEUE**

ID or name of qos\_queue to look up.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.153. NEUTRON QUOTA-DELETE

```
usage: neutron quota-delete [-h] [--request-format {json,xml}] [--tenant-id tenant-id]
```

Delete defined quotas of a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id**

tenant-id The owner tenant ID.

## 9.154. NEUTRON QUOTA-LIST

```
usage: neutron quota-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}]
```

List quotas of all tenants who have non-default quota values.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.155. NEUTRON QUOTA-SHOW

```
usage: neutron quota-show [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-tenant-id tenant-id]
```

Show quotas of a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **--tenant-id**

tenant-id The owner tenant ID.

## 9.156. NEUTRON QUOTA-UPDATE

```
usage: neutron quota-update [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [--tenant-id tenant-id] [--network networks] [--subnet subnets] [--port ports] [--router routers] [--floatingip floatingips] [--security-group security_groups] [--security-group-rule security_group_rules] [--vip vips] [--pool pools] [--member members] [--health-monitor health_monitors]
```

Define tenant's quotas not to use defaults.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **--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.

## 9.157. NEUTRON ROUTER-CREATE

```
usage: neutron router-create [-h] [-f {shell,table,value}] [-c COLUMN]
[--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
[--tenant-id TENANT_ID] [--admin-state-down] [--distributed
{True,False}] [--ha {True,False}] NAME
```

Create a router for a given tenant.

### Positional arguments

#### NAME

Name of router to create.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

#### --tenant-id TENANT\_ID

The owner tenant ID.

#### --admin-state-down

Set admin state up to false.

#### --distributed {True,False}

Create a distributed router.

#### --ha {True,False}

Create a highly available router.

## 9.158. NEUTRON ROUTER-DELETE

```
usage: neutron router-delete [-h] [--request-format {json,xml}] ROUTER
```

Delete a given router.

### Positional arguments

**ROUTER**

ID or name of router to delete.

**Optional arguments**

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**9.159. NEUTRON ROUTER-GATEWAY-CLEAR**

```
usage: neutron router-gateway-clear [-h] [--request-format {json,xml}]
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,xml}**

The XML or JSON request format.

**9.160. NEUTRON ROUTER-GATEWAY-SET**

```
usage: neutron router-gateway-set [-h] [--request-format {json,xml}] [-
-disable-snat] 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 of the external network for the gateway.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--disable-snat**

Disable source NAT on the router gateway.

**9.161. NEUTRON ROUTER-INTERFACE-ADD**

```
usage: neutron router-interface-add [-h] [--request-format {json,xml}]
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,xml}**

The XML or JSON request format.

## 9.162. NEUTRON ROUTER-INTERFACE-DELETE

```
usage: neutron router-interface-delete [-h] [--request-format
{json,xml}] 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,xml}**

The XML or JSON request format.

## 9.163. NEUTRON ROUTER-LIST

```
usage: neutron router-list [-h] [-f {csv,table}] [-c COLUMN] [--max-
width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-
format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--
sort-dir {asc,desc}]
```

List routers that belong to a given tenant.

### Optional arguments



**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.164. NEUTRON ROUTER-LIST-ON-L3-AGENT

```
usage: neutron router-list-on-l3-agent [-h] [-f {csv,table}] [-c
COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
[--request-format {json,xml}] [-D] [-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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.165. NEUTRON ROUTER-PORT-LIST

```
usage: neutron router-port-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-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 router to look up.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.166. NEUTRON ROUTER-SHOW

```
usage: neutron router-show [-h] [-f {shell,table,value}] [-c COLUMN] [-
-max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
[-D] [-F FIELD] ROUTER
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.167. NEUTRON ROUTER-UPDATE

```
usage: neutron router-update [-h] [--request-format {json,xml}] ROUTER
```

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,xml}**

The XML or JSON request format.

## 9.168. NEUTRON SECURITY-GROUP-CREATE

```
usage: neutron security-group-create [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [--tenant-id TENANT_ID] [--description DESCRIPTION] NAME
```

Create a security group.

### Positional arguments

#### **NAME**

Name of security group.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--description DESCRIPTION**

Description of security group.

## 9.169. NEUTRON SECURITY-GROUP-DELETE

```
usage: neutron security-group-delete [-h] [--request-format {json,xml}]
SECURITY_GROUP
```

Delete a given security group.

### Positional arguments

**SECURITY\_GROUP**

ID or name of security\_group to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.170. NEUTRON SECURITY-GROUP-LIST

```
usage: neutron security-group-list [-h] [-f {csv,table}] [-c COLUMN] [-
-max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD]
[--sort-dir {asc,desc}]
```

List security groups that belong to a given tenant.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.171. NEUTRON SECURITY-GROUP-RULE-CREATE

```
usage: neutron security-group-rule-create [-h] [-f {shell,table,value}]
[-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
format {json,xml}] [--tenant-id TENANT_ID] [--direction
{ingress,egress}] [--ethertype ETHERTYPE] [--protocol PROTOCOL] [--
port-range-min PORT_RANGE_MIN] [--port-range-max PORT_RANGE_MAX] [--
remote-ip-prefix REMOTE_IP_PREFIX] [--remote-group-id REMOTE_GROUP]
SECURITY_GROUP
```

Create a security group rule.

### Positional arguments

**SECURITY\_GROUP**

Security group name or ID to add rule.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--direction {ingress,egress}**

Direction of traffic: ingress/egress.

**--ethertype ETHERTYPE**

IPv4/IPv6

**--protocol PROTOCOL**

Protocol of packet.

**--port-range-min PORT\_RANGE\_MIN**

Starting port range.

**--port-range-max PORT\_RANGE\_MAX**

Ending port range.

**--remote-ip-prefix REMOTE\_IP\_PREFIX**

CIDR to match on.

**--remote-group-id REMOTE\_GROUP**

Remote security group name or ID to apply rule.

## 9.172. NEUTRON SECURITY-GROUP-RULE-DELETE

```
usage: neutron security-group-rule-delete [-h] [--request-format
{json,xml}] SECURITY_GROUP_RULE
```

Delete a given security group rule.

**Positional arguments**

**SECURITY\_GROUP\_RULE**

ID of security\_group\_rule to delete.

**Optional arguments**

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**9.173. NEUTRON SECURITY-GROUP-RULE-LIST**

```
usage: neutron security-group-rule-list [-h] [-f {csv,table}] [-c
COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}]
[--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key
FIELD] [--sort-dir {asc,desc}] [--no-nameconv]
```

List security group rules that belong to a given tenant.

**Optional arguments**

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-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.

## 9.174. NEUTRON SECURITY-GROUP-RULE-SHOW

```
usage: neutron security-group-rule-show [-h] [-f {shell,table,value}]
[-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-
format {json,xml}] [-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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.175. NEUTRON SECURITY-GROUP-SHOW

```
usage: neutron security-group-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-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,xml}**

The XML or JSON request format.

##### **-D, --show-details**

Show detailed information.

##### **-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.176. NEUTRON SECURITY-GROUP-UPDATE

```
usage: neutron security-group-update [-h] [--request-format {json,xml}]
[--name NAME] [--description DESCRIPTION] SECURITY_GROUP
```

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,xml}**

The XML or JSON request format.

**--name NAME**

Name of security group.

**--description DESCRIPTION**

Description of security group.

## 9.177. NEUTRON SERVICE-PROVIDER-LIST

```
usage: neutron service-provider-list [-h] [-f {csv,table}] [-c COLUMN]
  [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
  request-format {json,xml}] [-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,xml}**

The XML or JSON request format.

**-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.

**9.178. NEUTRON SUBNET-CREATE**

```
usage: neutron subnet-create [-h] [-f {shell,table,value}] [-c COLUMN]
[--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
[--tenant-id TENANT_ID] [--name NAME] [--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] [--ip-version {4,6}] [--ipv6-ra-mode
{dhcpv6-stateful,dhcpv6-stateless,slaac}] [--ipv6-address-mode {dhcpv6-
stateful,dhcpv6-stateless,slaac}] [--subnetpool SUBNETPOOL] [--
prefixlen PREFIX_LENGTH] NETWORK [CIDR]
```

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,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--name NAME**

Name of this subnet.

**--gateway GATEWAY\_IP**

Gateway IP of this subnet.

**--no-gateway**

No distribution of gateway.

**--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.

**--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

ID or name of subnetpool from which this subnet will obtain a CIDR.

**--prefixlen PREFIX\_LENGTH**

Prefix length for subnet allocation from subnetpool.

## 9.179. NEUTRON SUBNET-DELETE

```
usage: neutron subnet-delete [-h] [--request-format {json,xml}] SUBNET
```

Delete a given subnet.

### Positional arguments

#### **SUBNET**

ID or name of subnet to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.180. NEUTRON SUBNET-LIST

```
usage: neutron subnet-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--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,xml}**

The XML or JSON request format.

**-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.

**9.181. NEUTRON SUBNET-SHOW**

```
usage: neutron subnet-show [-h] [-f {shell,table,value}] [-c COLUMN] [-
-max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}]
[-D] [-F FIELD] SUBNET
```

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,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.182. NEUTRON SUBNET-UPDATE

```
usage: neutron subnet-update [-h] [--request-format {json,xml}] [--name
NAME] [--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,xml}**

The XML or JSON request format.

**--name NAME**

Name of this subnet.

**--gateway GATEWAY\_IP**

Gateway IP of this subnet.

**--no-gateway**

No distribution of gateway.

**--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.

## 9.183. NEUTRON SUBNETPOOL-CREATE

```
usage: neutron subnetpool-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--min-prefixlen MIN_PREFIXLEN] [--
max-prefixlen MAX_PREFIXLEN] [--default-prefixlen DEFAULT_PREFIXLEN] [-
-pool-prefix PREFIXES] [--shared] name
```

Create a subnetpool for a given tenant.

### Positional arguments

#### name

Name of subnetpool to create.

### Optional arguments

#### -h, --help

show this help message and exit

#### --request-format {json,xml}

The XML or JSON request format.

#### --tenant-id TENANT\_ID

The owner tenant ID.

**--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).

**--shared**

Set the subnetpool as shared.

## 9.184. NEUTRON SUBNETPOOL-DELETE

```
usage: neutron subnetpool-delete [-h] [--request-format {json,xml}]
SUBNETPOOL
```

Delete a given subnetpool.

### Positional arguments

#### **SUBNETPOOL**

ID or name of subnetpool to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.185. NEUTRON SUBNETPOOL-LIST

```
usage: neutron subnetpool-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD] [--sort-dir {asc,desc}]
```

List subnetpools that belong to a given tenant.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **-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.

## 9.186. NEUTRON SUBNETPOOL-SHOW

```
usage: neutron subnetpool-show [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-D] [-F FIELD] SUBNETPOOL
```

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,xml}**

The XML or JSON request format.

### **-D, --show-details**

Show detailed information.

### **-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.187. NEUTRON SUBNETPOOL-UPDATE

```
usage: neutron subnetpool-update [-h] [--request-format {json,xml}] [--min-prefixlen MIN_PREFIXLEN] [--max-prefixlen MAX_PREFIXLEN] [--default-prefixlen DEFAULT_PREFIXLEN] [--pool-prefix PREFIXES] [--name NAME] SUBNETPOOL
```

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,xml}**

The XML or JSON request format.

**--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).

**--name NAME**

Name of subnetpool to update.

## 9.188. NEUTRON VPN-IKEPOLICY-CREATE

```
usage: neutron vpn-ikepolicy-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--description DESCRIPTION] [--
auth-algorithm {sha1}] [--encryption-algorithm ENCRYPTION_ALGORITHM] [-
-phase1-negotiation-mode {main}] [--ike-version {v1,v2}] [--pfs
{group2,group5,group14}] [--lifetime units=UNITS,value=VALUE] NAME
```

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,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--description DESCRIPTION**

Description of the IKE policy

**--auth-algorithm {sha1}**

Authentication algorithm in lowercase. Default:sha1

**--encryption-algorithm ENCRYPTION\_ALGORITHM**

Encryption algorithm in lowercase, default:aes-128

**--phase1-negotiation-mode {main}**

IKE Phase1 negotiation mode in lowercase, default:main

**--ike-version {v1,v2}**

IKE version in lowercase, default:v1

**--pfs {group2,group5,group14}**

Perfect Forward Secrecy in lowercase, default:group5

**--lifetime**

units=UNITS,value=VALUE IKE lifetime attributes. 'units'-seconds, default:seconds. 'value'-non negative integer, default:3600.

## 9.189. NEUTRON VPN-IKEPOLICY-DELETE

```
usage: neutron vpn-ikepolicy-delete [-h] [--request-format {json,xml}]
IKEPOLICY
```

Delete a given IKE policy.

**Positional arguments**

**IKEPOLICY**

ID or name of ikepolicy to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.190. NEUTRON VPN-IKEPOLICY-LIST

```
usage: neutron vpn-ikepolicy-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-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,xml}**

The XML or JSON request format.

**-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.

## 9.191. NEUTRON VPN-IKEPOLICY-SHOW

```
usage: neutron vpn-ikepolicy-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] IKEPOLICY
```

Show information of a given IKE policy.

### Positional arguments

#### **IKEPOLICY**

ID or name of `ikepolicy` to look up.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.192. NEUTRON VPN-IKEPOLICY-UPDATE

```
usage: neutron vpn-ikepolicy-update [-h] [--request-format {json,xml}]
[--lifetime units=UNITS,value=VALUE] IKEPOLICY
```

Update a given IKE policy.



**Positional arguments****IKEPOLICY**

ID or name of ikepolicy to update.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--lifetime**

units=UNITS,value=VALUE IKE lifetime attributes. 'units'-seconds, default:seconds. 'value'-non negative integer, default:3600.

**9.193. NEUTRON VPN-IPSECPOLICY-CREATE**

```
usage: neutron vpn-ipsecpolicy-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--description DESCRIPTION] [--
transform-protocol {esp,ah,ah-esp}] [--auth-algorithm {sha1}] [--
encryption-algorithm ENCRYPTION_ALGORITHM] [--encapsulation-mode
{tunnel,transport}] [--pfs {group2,group5,group14}] [--lifetime
units=UNITS,value=VALUE] NAME
```

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,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--description DESCRIPTION**

Description of the IPsec policy.

**--transform-protocol {esp,ah,ah-esp}**

Transform protocol in lowercase, default:esp

**--auth-algorithm {sha1}**

Authentication algorithm in lowercase, default:sha1

**--encryption-algorithm ENCRYPTION\_ALGORITHM**

Encryption algorithm in lowercase, default:aes-128

**--encapsulation-mode {tunnel,transport}**

Encapsulation mode in lowercase, default:tunnel

**--pfs {group2,group5,group14}**

Perfect Forward Secrecy in lowercase, default:group5

**--lifetime**

units=UNITS,value=VALUE IPsec lifetime attributes. 'units'-seconds, default:seconds.  
'value'-non negative integer, default:3600.

## 9.194. NEUTRON VPN-IPSECPOLICY-DELETE

```
usage: neutron vpn-ipsecpolicy-delete [-h] [--request-format  
{json,xml}] IPSECPOLICY
```

Delete a given IPsec policy.

**Positional arguments**

**IPSECPOLICY**

ID or name of ipsecpolicy to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.195. NEUTRON VPN-IPSECPOLICY-LIST

```
usage: neutron vpn-ipsecpolicy-list [-h] [-f {csv,table}] [-c COLUMN]
  [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--
  request-format {json,xml}] [-D] [-F FIELD] [-P SIZE] [--sort-key FIELD]
  [--sort-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,xml}**

The XML or JSON request format.

**-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.

## 9.196. NEUTRON VPN-IPSECPOLICY-SHOW

```
usage: neutron vpn-ipsecpolicy-show [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [-D] [-F FIELD] IPSECPOLICY
```

Show information of a given IPsec policy.

### Positional arguments

#### IPSECPOLICY

ID or name of ipsecpolicy to look up.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**-D, --show-details**

Show detailed information.

**-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.197. NEUTRON VPN-IPSECPOLICY-UPDATE

```
usage: neutron vpn-ipsecpolicy-update [-h] [--request-format
{json,xml}] [--lifetime units=UNITS,value=VALUE] IPSECPOLICY
```

Update a given IPsec policy.

**Positional arguments****IPSECPOLICY**

ID or name of ipsecpolicy to update.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--lifetime**

units=UNITS,value=VALUE IPsec lifetime attributes. 'units'-seconds, default:seconds.  
'value'-non negative integer, default:3600.

**9.198. NEUTRON VPN-SERVICE-CREATE**

```
usage: neutron vpn-service-create [-h] [-f {shell,table,value}] [-c
COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format
{json,xml}] [--tenant-id TENANT_ID] [--admin-state-down] [--name NAME]
[--description DESCRIPTION] ROUTER SUBNET
```

Create a VPN service.

**Positional arguments****ROUTER**

Router unique identifier for the VPN service.

**SUBNET**

Subnet unique identifier for the VPN service deployment.

**Optional arguments****-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

**--tenant-id TENANT\_ID**

The owner tenant ID.

**--admin-state-down**

Set admin state up to false.

**--name NAME**

Set a name for the VPN service.

**--description DESCRIPTION**

Set a description for the VPN service.

## 9.199. NEUTRON VPN-SERVICE-DELETE

```
usage: neutron vpn-service-delete [-h] [--request-format {json,xml}]
VPNSERVICE
```

Delete a given VPN service.

### Positional arguments

#### VPNSERVICE

ID or name of vpnservice to delete.

### Optional arguments

**-h, --help**

show this help message and exit

**--request-format {json,xml}**

The XML or JSON request format.

## 9.200. NEUTRON VPN-SERVICE-LIST

```
usage: neutron vpn-service-list [-h] [-f {csv,table}] [-c COLUMN] [--max-width <integer>] [--quote {all,minimal,none,nonnumeric}] [--request-format {json,xml}] [-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,xml}**

The XML or JSON request format.

#### **-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.

## 9.201. NEUTRON VPN-SERVICE-SHOW

```
usage: neutron vpn-service-show [-h] [-f {shell,table,value}] [-c COLUMN] [--max-width <integer>] [--prefix PREFIX] [--request-format {json,xml}] [-D] [-F FIELD] VPNSERVICE
```

Show information of a given VPN service.

### Positional arguments

#### **VPNSERVICE**

ID or name of vpnservice to look up.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.

#### **-D, --show-details**

Show detailed information.

#### **-F FIELD, --field FIELD**

Specify the field(s) to be returned by server. You can repeat this option.

## 9.202. NEUTRON VPN-SERVICE-UPDATE

```
usage: neutron vpn-service-update [-h] [--request-format {json,xml}]
VPNSERVICE
```

Update a given VPN service.

### Positional arguments

#### **VPNSERVICE**

ID or name of vpnservice to update.

### Optional arguments

#### **-h, --help**

show this help message and exit

#### **--request-format {json,xml}**

The XML or JSON request format.



## CHAPTER 10. 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
```

### 10.1. NEUTRON-DEBUG USAGE

```
[--os-password <auth-password>] [--os-tenant-name <auth-tenant-name>]
[--os-tenant-id <auth-tenant-id>] [--os-auth-url <auth-url>] [--os-
region-name <region-name>] [--service-type <service-type>] [--service-
name <service-name>] [--volume-service-name <volume-service-name>] [--
endpoint-type <endpoint-type>] [--os-volume-api-version <volume-api-
ver>] [--os-cacert <ca-certificate>] [--retries <retries>] <subcommand>
...
```

#### 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 all-in-one command to ping all fixed IP's in a specified network.

### 10.2. NEUTRON-DEBUG OPTIONAL ARGUMENTS

**--version**

Show version number and exit.

**-v, --verbose, --debug**

Increase verbosity of output and show tracebacks on errors. Can be repeated.

**-q, --quiet**

Suppress output except warnings and errors

**-h, --help**

Show this help message and exit

**--os-auth-strategy <auth-strategy>**

Authentication strategy (Env: OS\_AUTH\_STRATEGY, default keystone). For now, any other value will disable the authentication

**--os-auth-url <auth-url>**

Authentication URL (Env: OS\_AUTH\_URL)

**--os-tenant-name <auth-tenant-name>**

Authentication tenant name (Env: OS\_TENANT\_NAME)

**--os-tenant-id <auth-tenant-id>**

Authentication tenant name (Env: OS\_TENANT\_ID)

**--os-username <auth-username>**

Authentication username (Env: OS\_USERNAME)

**--os-password <auth-password>**

Authentication password (Env: OS\_PASSWORD)

**--os-region-name <auth-region-name>**

Authentication region name (Env: OS\_REGION\_NAME)

**--os-token <token>**

Defaults to env[OS\_TOKEN]

Defaults to `env[OS_TOKEN]`

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

Defaults to `env[OS_ENDPOINT_TYPE]` or public URL.

**--os-url <url>**

Defaults to `env[OS_URL]`

**--os-cacert <ca-certificate>**

Specify a CA bundle file to use in verifying a TLS (https) server certificate. Defaults to `env[OS_CACERT]`

**--insecure**

Explicitly allow neutron-debug 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.

**--config-file CONFIG\_FILE**

Config file for interface driver (You may also use `l3_agent.ini`)

### 10.3. NEUTRON-DEBUG PROBE-CREATE COMMAND

usage: `neutron-debug probe-create NET`

Create probe port - create port and interface, then place it into the created network namespace.

#### Positional arguments

##### NET ID

ID of the network in which the probe will be created.

### 10.4. NEUTRON-DEBUG PROBE-LIST COMMAND

usage: `neutron-debug probe-list`

List probes.

### 10.5. NEUTRON-DEBUG PROBE-CLEAR COMMAND

```
usage: neutron-debug probe-clear
```

Clear all probes.

## 10.6. NEUTRON-DEBUG PROBE-DELETE COMMAND

```
usage: neutron-debug probe-delete <port-id>
```

Remove a probe.

### Positional arguments

**<port-id>**

ID of the probe to delete.

## 10.7. NEUTRON-DEBUG PROBE-EXEC COMMAND

```
usage: neutron-debug probe-exec <port-id> <command>
```

Execute commands in the namespace of the probe

## 10.8. NEUTRON-DEBUG PING-ALL COMMAND

```
usage: neutron-debug ping-all <port-id> --timeout <number>
```

All-in-one command to ping all fixed IP's in a specified network.

### Positional arguments

**<port-id>**

ID of the port to use.

### Optional arguments

**--timeout <timeout in seconds>**

Optional ping timeout.

## 10.9. 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> dhcpping <VM_MAC address> -s  
<IP of DHCP server>"
```

Ping the DHCP server for this network using dhcpping to verify it is working.

## CHAPTER 11. OBJECT STORAGE COMMAND-LINE CLIENT

The **swift** client is the command-line interface (CLI) for the OpenStack Object Storage API and its extensions. This chapter documents **swift** version **2.4.0**.

For help on a specific **swift** command, enter:

```
$ swift COMMAND --help
```

### 11.1. SWIFT USAGE

```
Usage: swift [--version] [--help] [--os-help] [--snet] [--verbose] [--
debug] [--info] [--quiet] [--auth <auth_url>] [--auth-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] [--no-ssl-compression] <subcommand> [--help]
```

#### 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.

##### **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

**11.2. SWIFT EXAMPLES**

```
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
```

**11.3. 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**

Specify a version for authentication. Defaults to 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).

**--no-ssl-compression**

This option is deprecated and not used anymore. SSL compression should be disabled by default by the system SSL library.

## 11.4. SWIFT DELETE

Usage: swift delete



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

#### **--all**

Delete all containers and objects.

#### **--leave-segments**

Do not delete segments of manifest objects.

#### **--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.

## 11.5. SWIFT DOWNLOAD

Usage: `swift download`

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

#### **--all**

Indicates that you really want to download everything in the account.

#### **--marker**

Marker to use when starting a container or account download.

#### **--prefix <prefix>**

Only download items beginning with <prefix>

#### **--output <out\_file>**

For a single file download, stream the output to <out\_file>. Specifying "-" as <out\_file> will redirect to stdout.

#### **--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.

#### **--header <header\_name:header\_value>**

Adds a customized request header to the query, like "Range" or "If-Match". This argument is repeatable. Example --header "content-type:text/plain"

#### **--skip-identical**

Skip downloading files that are identical on both sides.

## 11.6. SWIFT LIST

Usage: swift list

Lists the containers for the account or the objects for a container.

### Positional arguments

#### **[container]**

Name of container to list object in.

### Optional arguments

#### **--long**

Long listing format, similar to `ls -l`.

#### **--lh**

Report sizes in human readable format similar to `ls -lh`.

#### **--totals**

Used with `-l` or `--lh`, only report totals.

#### **--prefix**

Only list items beginning with the prefix.

#### **--delimiter**

Roll up items with the given delimiter. For containers only. See OpenStack Swift API documentation for what this means.

## 11.7. SWIFT POST

Usage: `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

#### **--read-acl <acl>**

Read ACL for containers. Quick summary of ACL syntax: .r:\*, .r:-.example.com, .r:www.example.com, account1, account2:user2

#### **--write-acl <acl>**

Write ACL for containers. Quick summary of ACL syntax: account1 account2:user2

#### **--sync-to <sync-to>**

Sync To for containers, for multi-cluster replication.

#### **--sync-key <sync-key>**

Sync Key for containers, for multi-cluster replication.

#### **--meta <name:value>**

Sets a meta data item. This option may be repeated. Example: -m Color:Blue -m Size:Large

#### **--header <header>**

Set request headers. This option may be repeated. Example -H "content-type:text/plain"

## 11.8. SWIFT STAT

Usage: swift stat

Displays information for the account, container, or object.

### Positional arguments

#### **[container]**

Name of container to stat from.

#### **[object]**

Name of object to stat.

### Optional arguments

**--lh**

Report sizes in human readable format similar to ls -lh.

## 11.9. SWIFT UPLOAD

Usage: swift upload

Uploads specified files and directories to the given container.

### 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

**--changed**

Only upload files that have changed since the last upload.

**--skip-identical**

Skip uploading files that are identical on both sides.

**--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.

**--header <header>**

Set request headers with the syntax header:value. This option may be repeated. Example -H "content-type:text/plain".

**--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 12. ORCHESTRATION COMMAND-LINE CLIENT

The **heat** client is the command-line interface (CLI) for the Orchestration API and its extensions. This chapter documents **heat** version **0.5.0**.

For help on a specific **heat** command, enter:

```
$ heat help COMMAND
```

### 12.1. HEAT USAGE

```
usage: heat [--version] [-d] [-v] [--api-timeout API_TIMEOUT] [--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 software configurations.

**config-show**

View details of a software configuration.

**deployment-create****deployment-delete**

Delete software deployments.

**deployment-metadata-show**

Get deployment configuration metadata for the specified server.

**deployment-output-show**

Show a specific stack output.

**deployment-show**

Show the details of a software deployment.

**event**

*DEPRECATED!* Use event-show instead.

**event-list**

List events for a stack.

**event-show**

Describe the event.

**hook-clear**

Clear hooks on a given stack.

**output-list**

Show available outputs.

**output-show**



Show a specific stack output.

**resource-list**

Show list of resources belonging to a stack.

**resource-metadata**

List resource metadata.

**resource-show**

Describe the resource.

**resource-signal**

Send a signal to a resource.

**resource-template**

*DEPRECATED!* Use resource-type-template instead.

**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-show**

Get the template for the specified stack.

### **template-validate**

Validate a template with parameters.

### **bash-completion**

Prints all of the commands and options to stdout.

### **help**

Display help about this program or one of its subcommands.

## **12.2. 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.

## 12.3. 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.

## 12.4. 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.

## 12.5. 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.

## 12.6. HEAT BUILD-INFO

```
usage: heat build-info
```

Retrieve build information.

## 12.7. 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.

## 12.8. HEAT CONFIG-DELETE

```
usage: heat config-delete <ID> [<ID> ...]
```

Delete software configurations.

### Positional arguments

**<ID>**

IDs of the configurations to delete.

## 12.9. 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.

## 12.10. 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>
```

### 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.

## 12.11. HEAT DEPLOYMENT-DELETE

```
usage: heat deployment-delete <ID> [<ID> ...]
```

Delete software deployments.

### Positional arguments

**<ID>**

IDs of the deployments to delete.

## 12.12. HEAT DEPLOYMENT-METADATA-SHOW

```
usage: heat deployment-metadata-show <ID>
```

Get deployment configuration metadata for the specified server.

### Positional arguments

**<ID>**

ID of the server to fetch deployments for.

## 12.13. HEAT DEPLOYMENT-OUTPUT-SHOW

```
usage: heat deployment-output-show [-a] [-F <FORMAT>] <ID> [<OUTPUT NAME>]
```

Show a specific stack 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

## 12.14. HEAT DEPLOYMENT-SHOW

```
usage: heat deployment-show <ID>
```

Show the details of a software deployment.

### Positional arguments

**<ID>**

ID of the deployment.

## 12.15. HEAT EVENT-LIST

```
usage: heat event-list [-r <RESOURCE>] [-f <KEY1=VALUE1;KEY2=VALUE2...>] [-l <LIMIT>] [-m <ID>] [-n <DEPTH>] <NAME or ID>
```

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.

## 12.16. 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.

## 12.17. HEAT HOOK-CLEAR

```
usage: heat hook-clear [--pre-create] [--pre-update] <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

**--pre-update**

Clear the pre-update hooks

## 12.18. 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.

## 12.19. HEAT OUTPUT-SHOW

```
usage: heat output-show [-a] [-F <FORMAT>] <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

**-a, --all**

Display all stack outputs.

**-F <FORMAT>, --format <FORMAT>**

The output value format, one of: json, raw

## 12.20. HEAT RESOURCE-LIST

```
usage: heat resource-list [-n <DEPTH>] <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.

## 12.21. 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.

## 12.22. HEAT RESOURCE-SHOW

```
usage: heat resource-show <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.

## 12.23. 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.

**12.24. HEAT RESOURCE-TEMPLATE**

```
usage: heat resource-template [-F <FORMAT>] <RESOURCE_TYPE>
```

*DEPRECATED!* Use resource-type-template instead.

**Positional arguments**

**<RESOURCE\_TYPE>**

Resource type to generate a template for.

**Optional arguments**

**-F <FORMAT>, --format <FORMAT>**

The template output format, one of: yaml, json.

**12.25. HEAT RESOURCE-TYPE-LIST**

```
usage: heat resource-type-list
```

List the available resource types.

**12.26. 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.

## 12.27. HEAT RESOURCE-TYPE-TEMPLATE

```
usage: heat resource-type-template [-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

**-F <FORMAT>, --format <FORMAT>**

The template output format, one of: yaml, json.

## 12.28. HEAT SERVICE-LIST

```
usage: heat service-list
```

List the Heat engines.

## 12.29. 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.

## 12.30. 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.

## 12.31. 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.

## 12.32. 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

**-o <FILE>, --output-file <FILE>**

file to output abandon result. If the option is specified, the result will be output into <FILE>.

## 12.33. 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.

## 12.34. 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.

## 12.35. 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=VALUE>] <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=VALUE>, --parameter-file <KEY=VALUE>**

Parameter values from file used to create the stack. This can be specified multiple times. Parameter value would be the content of the file

## 12.36. HEAT STACK-DELETE

```
usage: heat stack-delete <NAME or ID> [<NAME or ID> ...]
```

Delete the stack(s).

### Positional arguments

**<NAME or ID>**

Name or ID of stack(s) to delete.

## 12.37. HEAT STACK-LIST

```
usage: heat stack-list [-s] [-n] [-f <KEY1=VALUE1;KEY2=VALUE2...>] [-l <LIMIT>] [-m <ID>] [-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.

#### **-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.

#### **-l <LIMIT>, --limit <LIMIT>**

Limit the number of stacks returned.

#### **-m <ID>, --marker <ID>**

Only return stacks that appear after the given stack ID.

#### **-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.

## 12.38. 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=VALUE>] <STACK_NAME>
```

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=VALUE>, --parameter-file <KEY=VALUE>**

Parameter values from file used to create the stack. This can be specified multiple times. Parameter value would be the content of the file

## 12.39. 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.

## 12.40. HEAT STACK-SHOW

```
usage: heat stack-show <NAME or ID>
```

Describe the stack.

### Positional arguments

**<NAME or ID>**

Name or ID of stack to describe.

## 12.41. 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.

## 12.42. HEAT STACK-UPDATE

```
usage: heat stack-update [-f <FILE>] [-e <FILE or URL>] [--pre-update
<RESOURCE>] [-u <URL>] [-o <URL>] [-t <TIMEOUT>] [-r] [--rollback
<VALUE>] [-P <KEY1=VALUE1;KEY2=VALUE2...>] [-Pf <KEY=VALUE>] [-x] [-c
<PARAMETER>] <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.

**-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.

**-P *<KEY=VALUE>*, --parameter-file *<KEY=VALUE>***

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 set of parameters of the current stack. 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.

## 12.43. 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.

## 12.44. HEAT TEMPLATE-VALIDATE

```
usage: heat template-validate [-u <URL>] [-f <FILE>] [-e <FILE or
URL>] [-o <URL>]
```

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).

## CHAPTER 13. TELEMETRY COMMAND-LINE CLIENT

The **ceilometer** client is the command-line interface (CLI) for the Telemetry API and its extensions. This chapter documents **ceilometer** version **1.0.13**.

For help on a specific **ceilometer** command, enter:

```
$ ceilometer help COMMAND
```

### 13.1. CEILOMETER USAGE

```
usage: ceilometer [--version] [-d] [-v] [--timeout TIMEOUT] [--
ceilometer-url <CEILOMETER_URL>] [--ceilometer-api-version
CEILOMETER_API_VERSION] [--os-tenant-id <tenant-id>] [--os-region-name
<region-name>] [--os-auth-token <auth-token>] [--os-service-type
<service-type>] [--os-endpoint-type <endpoint-type>] [--os-cacert
<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-user-
domain-id <user-domain-id>] [--os-user-domain-name <user-domain-name>]
[--os-endpoint <endpoint>] [--os-auth-system <auth-system>] [--os-
username <username>] [--os-password <password>] [--os-tenant-name
<tenant-name>] [--os-token <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-gnocchi-metrics-threshold-create**

Create a new alarm based on computed statistics.

**alarm-gnocchi-metrics-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).

**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 - list**

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

**sample - show**

Show an 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.

## 13.2. 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-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]`.

### 13.3. CEILOMETER ALARM-COMBINATION-CREATE

```
usage: ceilometer alarm-combination-create --name <NAME> [--project-id
<PROJECT_ID>] [--user-id <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>] --alarm_ids <ALARM_IDS> [--operator <OPERATOR>] [--repeat-
actions {True|False}]
```



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 <PROJECT\_ID>**

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

**--user-id <USER\_ID>**

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

**--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)

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.

**--alarm\_ids <ALARM\_IDS>**

List of alarm IDs. Required.

**--operator <OPERATOR>**

Operator to compare with, one of: ['and', 'or'].

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

True if actions should be repeatedly notified while alarm remains in target state. Defaults to False.

## 13.4. CEILOMETER ALARM-COMBINATION-UPDATE

```
usage: ceilometer alarm-combination-update [--name <NAME>] [--project-id <PROJECT_ID>] [--user-id <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>] [--remove-time-constraint <Constraint names>] [--alarm_ids <ALARM_IDS>] [--operator <OPERATOR>] [--repeat-actions {True|False}] [<ALARM_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 <PROJECT\_ID>**

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

**--user-id <USER\_ID>**

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

**--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>;[time zone=<IANA Timezone>]] Defaults to None.

**--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'].

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

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

## 13.5. CEILOMETER ALARM-DELETE

```
usage: ceilometer alarm-delete [<ALARM_ID>]
```

Delete an alarm.

### Positional arguments

**<ALARM\_ID>**

ID of the alarm to delete.

## 13.6. CEILOMETER ALARM-GNOCCHI-METRICS-THRESHOLD-CREATE

```
usage: ceilometer alarm-gnocchi-metrics-threshold-create --name <NAME>
[--project-id <PROJECT_ID>] [--user-id <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>] [--granularity <GRANULARITY>] [--evaluation-periods
<COUNT>] [--aggregation-method <AGGREATION>] [--comparison-operator
<OPERATOR>] --threshold <THRESHOLD> [--repeat-actions {True|False}] -m
<METRICS>
```

Create a new alarm based on computed statistics.

### Optional arguments

**--name <NAME>**

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

**--project-id <PROJECT\_ID>**

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

**--user-id <USER\_ID>**

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

**--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>;[time zone=<IANA Timezone>]] Defaults to None.

**--granularity <GRANULARITY>**

Length of each period (seconds) to evaluate over.

**--evaluation-periods <COUNT>**

Number of periods to evaluate over.

**--aggregation-method <AGGREGATION>**

Aggregation method to use, 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.

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

True if actions should be repeatedly notified while alarm remains in target state. Defaults to False.

**-m <METRICS>, --metrics <METRICS>**

Metric to evaluate against. Required.

## 13.7. CEILOMETER ALARM-GNOCCHI-METRICS-THRESHOLD-UPDATE

```
usage: ceilometer alarm-gnocchi-metrics-threshold-update [--name
<NAME>] [--project-id <PROJECT_ID>] [--user-id <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>] [--granularity <GRANULARITY>] [--
evaluation-periods <COUNT>] [--aggregation-method <AGGREGATION>] [--
comparison-operator <OPERATOR>] [--threshold <THRESHOLD>] [--repeat-
actions {True|False}] [-m <METRICS>] [--remove-time-constraint
<Constraint names>] [<ALARM_ID>]
```

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 <PROJECT\_ID>**

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

**--user-id <USER\_ID>**

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

**--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>;[time zone=<IANA Timezone>]] Defaults to None.

**--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: ['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.

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

True if actions should be repeatedly notified while alarm remains in target state. Defaults to False.

**-m <METRICS>, --metrics <METRICS>**

Metric to evaluate against.

**--remove-time-constraint <Constraint names>**

Name or list of names of the time constraints to remove.

## 13.8. CEILOMETER ALARM-GNOCCHI-RESOURCES-THRESHOLD-CREATE

```
usage: ceilometer alarm-gnocchi-resources-threshold-create --name
<NAME> [--project-id <PROJECT_ID>] [--user-id <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>] [--granularity <GRANULARITY>] [--evaluation-periods
<COUNT>] [--aggregation-method <AGGREATION>] [--comparison-operator
<OPERATOR>] --threshold <THRESHOLD> [--repeat-actions {True|False}] -m
<METRIC> --resource-type <RESOURCE_TYPE> --resource-constraint
<RESOURCE_CONSTRAINT>
```

Create a new alarm based on computed statistics.

### Optional arguments

**--name <NAME>**

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



**--project-id <PROJECT\_ID>**

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

**--user-id <USER\_ID>**

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

**--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>;[time zone=<IANA Timezone>]] Defaults to None.

**--granularity <GRANULARITY>**

Length of each period (seconds) to evaluate over.

**--evaluation-periods <COUNT>**

Number of periods to evaluate over.

**--aggregation-method <AGGREGATION>**

Aggregation method to use, 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.

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

True if actions should be repeatedly notified while alarm remains in target state. Defaults to False.

**-m <METRIC>, --metric <METRIC>**

Metric to evaluate against. Required.

**--resource-type <RESOURCE\_TYPE>**

Resource\_type to evaluate against. Required.

**--resource-constraint <RESOURCE\_CONSTRAINT>**

Resources to evaluate against or a expression to select multiple resources. Required.

## 13.9. CEILOMETER ALARM-GNOCCHI-RESOURCES-THRESHOLD-UPDATE

```
usage: ceilometer alarm-gnocchi-resources-threshold-update [--name
<NAME>] [--project-id <PROJECT_ID>] [--user-id <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>] [--granularity <GRANULARITY>] [--
evaluation-periods <COUNT>] [--aggregation-method <AGGREGATION>] [--
comparison-operator <OPERATOR>] [--threshold <THRESHOLD>] [--repeat-
actions {True|False}] [-m <METRIC>] [--resource-type <RESOURCE_TYPE>]
[--resource-constraint <RESOURCE_CONSTRAINT>] [--remove-time-constraint
<Constraint names>] [<ALARM_ID>]
```

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 <PROJECT\_ID>**

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

**--user-id <USER\_ID>**

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

**--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>;[time zone=<IANA Timezone>]] Defaults to None.

**--granularity <GRANULARITY>**

Length of each period (seconds) to evaluate over.

**--evaluation-periods <COUNT>**

Number of periods to evaluate over.

**--aggregation-method <AGGREGATION>**

Aggregation method to use, 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.

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

True if actions should be repeatedly notified while alarm remains in target state. Defaults to False.

**-m <METRIC>, --metric <METRIC>**

Metric to evaluate against.

**--resource-type <RESOURCE\_TYPE>**

Resource\_type to evaluate against.

**--resource-constraint <RESOURCE\_CONSTRAINT>**

Resources to evaluate against or a expression to select multiple resources.

```
--remove-time-constraint <Constraint names>
```

Name or list of names of the time constraints to remove.

## 13.10. 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.

## 13.11. 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.

## 13.12. CEILOMETER ALARM-SHOW

```
usage: ceilometer alarm-show [<ALARM_ID>]
```

Show an alarm.

### Positional arguments

**<ALARM\_ID>**

ID of the alarm to show.

### 13.13. 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.

### 13.14. 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.

### 13.15. CEILOMETER ALARM-THRESHOLD-CREATE

**usage:** `ceilometer alarm-threshold-create --name <NAME> [--project-id <PROJECT_ID>] [--user-id <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>] -m <METRIC> [--period <PERIOD>] [--evaluation-periods <COUNT>] [--statistic <STATISTIC>] [--comparison-operator <OPERATOR>] -threshold <THRESHOLD> [-q <QUERY>] [--repeat-actions {True|False}]`

Create a new alarm based on computed statistics.

### Optional arguments

**--name <NAME>**

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

**--project-id <PROJECT\_ID>**

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

**--user-id <USER\_ID>**

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

**--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>;[time zone=<IANA Timezone>]] Defaults to None.

**-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.

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

True if actions should be repeatedly notified while alarm remains in target state. Defaults to False.

## 13.16. CEILOMETER ALARM-THRESHOLD-UPDATE

```
usage: ceilometer alarm-threshold-update [--name <NAME>] [--project-id
<PROJECT_ID>] [--user-id <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>] [--remove-time-constraint <Constraint names>] [-m
<METRIC>] [--period <PERIOD>] [--evaluation-periods <COUNT>] [--
statistic <STATISTIC>] [--comparison-operator <OPERATOR>] [--threshold
<THRESHOLD>] [-q <QUERY>] [--repeat-actions {True|False}] [<ALARM_ID>]
```

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 <PROJECT\_ID>

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

#### --user-id <USER\_ID>

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

#### --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.

**--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.

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

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

## 13.17. CEILOMETER ALARM-UPDATE

```
usage: ceilometer alarm-update [--name <NAME>] [--project-id
<PROJECT_ID>] [--user-id <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>] [--remove-time-constraint <Constraint names>] [--period
<PERIOD>] [--evaluation-periods <COUNT>] [-m <METRIC>] [--statistic
<STATISTIC>] [--comparison-operator <OPERATOR>] [--threshold
<THRESHOLD>] [--matching-metadata <Matching Metadata>] [--repeat-
actions {True|False}] [<ALARM_ID>]
```

Update an existing alarm (Deprecated).

### 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 <PROJECT\_ID>**

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

**--user-id <USER\_ID>**

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

**--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.

**--remove-time-constraint <Constraint names>**

Name or list of names of the time constraints to remove.

**--period <PERIOD>**

Length of each period (seconds) to evaluate over.

**--evaluation-periods <COUNT>**

Number of periods to evaluate over.

**-m <METRIC>, --meter-name <METRIC>**

Metric to evaluate against.

**--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.

**--matching-metadata <Matching Metadata>**

A meter should match this resource metadata (key=value) additionally to the meter\_name. Defaults to None.

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

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

## 13.18. CEILOMETER EVENT-LIST

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

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.

## 13.19. 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.

## 13.20. CEILOMETER EVENT-TYPE-LIST

```
usage: ceilometer event-type-list
```

List event types.

## 13.21. CEILOMETER METER-LIST

```
usage: ceilometer meter-list [-q <QUERY>]
```

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.

## 13.22. 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.

## 13.23. 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.

## 13.24. 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.

## 13.25. CEILOMETER RESOURCE-LIST

```
usage: ceilometer resource-list [-q <QUERY>]
```

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.

## 13.26. CEILOMETER RESOURCE-SHOW

```
usage: ceilometer resource-show <RESOURCE_ID>
```

Show the resource.

### Positional arguments

**<RESOURCE\_ID>**

ID of the resource to show.

## 13.27. CEILOMETER SAMPLE-CREATE

```
usage: ceilometer sample-create [--project-id <PROJECT_ID>] [--user-id <USER_ID>] -r <RESOURCE_ID> -m <METER_NAME> --meter-type <METER_TYPE> -meter-unit <METER_UNIT> --sample-volume <SAMPLE_VOLUME> [--resource-metadata <RESOURCE_METADATA>] [--timestamp <TIMESTAMP>]
```

Create a sample.

### Optional arguments

**--project-id <PROJECT\_ID>**

Tenant to associate with sample (only settable by admin users).

**--user-id <USER\_ID>**

User to associate with sample (only settable by admin users).

**-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.

## 13.28. 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.

## 13.29. CEILOMETER SAMPLE-SHOW

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

-

Show an sample.

### Positional arguments

**<SAMPLE\_ID>**

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

## 13.30. 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 [].

## 13.31. 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.

## 13.32. 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 14. DATA PROCESSING COMMAND-LINE CLIENT

The **sahara** client is the command-line interface (CLI) for the Data processing API and its extensions. This chapter documents **sahara** version **0.8.0**.

For help on a specific **sahara** command, enter:

```
$ sahara help COMMAND
```

### 14.1. SAHARA USAGE

```
usage: sahara [--version] [--debug] [--os-cache] [--service-type
<service-type>] [--endpoint-type <endpoint-type>] [--sahara-api-version
<sahara-api-ver>] [--bypass-url <bypass-url>] [--os-tenant-name
OS_TENANT_NAME] [--os-tenant-id OS_TENANT_ID] [--os-auth-system
OS_AUTH_SYSTEM] [--os-auth-token OS_AUTH_TOKEN] [--insecure] [--os-
cacert <ca-certificate>] [--os-cert <certificate>] [--os-key <key>] [--
timeout <seconds>] [--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-user-id
OS_USER_ID] [--os-user-name OS_USERNAME] [--os-user-domain-id
OS_USER_DOMAIN_ID] [--os-user-domain-name OS_USER_DOMAIN_NAME] [--os-
password OS_PASSWORD] <subcommand> ...
```

#### Subcommands

##### **cluster-create**

Create a cluster.

##### **cluster-delete**

Delete a cluster.

##### **cluster-list**

Print a list of available clusters.

##### **cluster-show**

Show details of a cluster.

##### **cluster-template-create**

Create a cluster template.

**cluster-template-delete**

Delete a cluster template.

**cluster-template-list**

Print a list of available cluster templates.

**cluster-template-show**

Show details of a cluster template.

**data-source-create**

Create a data source that provides job input or receives job output.

**data-source-delete**

Delete a data source.

**data-source-list**

Print a list of available data sources.

**data-source-show**

Show details of a data source.

**event-list**

Show events of a cluster.

**image-add-tag**

Add a tag to an image.

**image-list**

Print a list of available images.

**image-register**

Register an image from the Image index.

**image-remove-tag**

Remove a tag from an image.

**image-show**

Show details of an image.

**image-unregister**

Unregister an image.

**job-binary-create**

Record a job binary.

**job-binary-data-create**

Store data in the internal DB. Use 'swift upload' instead of this command. Use this command only if Swift is not available.

**job-binary-data-delete**

Delete an internally stored job binary data.

**job-binary-data-list**

Print a list of internally stored job binary data.

**job-binary-delete**

Delete a job binary.

**job-binary-list**

Print a list of job binaries.

**job-binary-show**

Show details of a job binary.

**job-create**

Create a job.

**job-delete**

Delete a job.

**job-list**

Print a list of jobs.

**job-show**

Show details of a job.

**job-template-create**

Create a job template.

**job-template-delete**

Delete a job template.

**job-template-list**

Print a list of job templates.

**job-template-show**

Show details of a job template.

**node-group-template-create**

Create a node group template.

**node-group-template-delete**

Delete a node group template.

**node-group-template-list**

Print a list of available node group templates.

**node-group-template-show**

Show details of a node group template.

**plugin-list**

Print a list of available plugins.

**plugin-show**

Show details of a plugin.

**bash-completion**

Prints arguments for bash-completion. Prints all of the commands and options to stdout so that the `sahara.bash_completion` script doesn't have to hard code them.

## help

Display help about this program or one of its subcommands.

## 14.2. SAHARA 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 `env[OS_CACHE]` is not set.

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

Defaults to data-processing for all actions.

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

Defaults to `env[SAHARA_ENDPOINT_TYPE]` or publicURL.

### **--sahara-api-version <sahara-api-ver>**

Accepts "api", defaults to `env[SAHARA_API_VERSION]`.

### **--bypass-url <bypass-url>**

Use this API endpoint instead of the Service Catalog.

### **--os-tenant-name OS\_TENANT\_NAME**

Defaults to `env[OS_TENANT_NAME]`.

### **--os-tenant-id OS\_TENANT\_ID**

Defaults to `env[OS_TENANT_ID]`.

### **--os-auth-system OS\_AUTH\_SYSTEM**



Defaults to `env[OS_AUTH_SYSTEM]`.

**--os-auth-token OS\_AUTH\_TOKEN**

Defaults to `env[OS_AUTH_TOKEN]`.

**--insecure**

Explicitly allow client to perform "insecure" TLS (https) requests. The server's certificate will not be verified against any certificate authorities. This option should be used with caution.

**--os-cacert <ca-certificate>**

Specify a CA bundle file to use in verifying a TLS (https) server certificate. Defaults to `env[OS_CACERT]`.

**--os-cert <certificate>**

Defaults to `env[OS_CERT]`.

**--os-key <key>**

Defaults to `env[OS_KEY]`.

**--timeout <seconds>**

Set request timeout (in seconds).

**--os-auth-url OS\_AUTH\_URL**

Authentication URL

**--os-domain-id OS\_DOMAIN\_ID**

Domain ID to scope to

**--os-domain-name OS\_DOMAIN\_NAME**

Domain name to scope to

**--os-project-id OS\_PROJECT\_ID**

Project ID to scope to

**--os-project-name OS\_PROJECT\_NAME**

Project name to scope to

**--os-project-domain-id OS\_PROJECT\_DOMAIN\_ID**

Domain ID containing project

**--os-project-domain-name OS\_PROJECT\_DOMAIN\_NAME**

Domain name containing project

**--os-trust-id OS\_TRUST\_ID**

Trust ID

**--os-user-id OS\_USER\_ID**

User ID

**--os-user-name OS\_USERNAME, --os-username OS\_USERNAME**

Username

**--os-user-domain-id OS\_USER\_DOMAIN\_ID**

User's domain id

**--os-user-domain-name OS\_USER\_DOMAIN\_NAME**

User's domain name

**--os-password OS\_PASSWORD**

User's password

## 14.3. SAHARA CLUSTER-CREATE

**usage: sahara cluster-create [--json JSON]**

Create a cluster.

### Optional arguments

**--json JSON JSON**

representation of cluster.

## 14.4. SAHARA CLUSTER-DELETE

```
usage: sahara cluster-delete [--name NAME] [--id <cluster_id>]
```

Delete a cluster.

### Optional arguments

**--name NAME**

Name of the cluster.

**--id <cluster\_id> ID**

of the cluster to delete.

## 14.5. SAHARA CLUSTER-LIST

```
usage: sahara cluster-list
```

Print a list of available clusters.

## 14.6. SAHARA CLUSTER-SHOW

```
usage: sahara cluster-show [--name NAME] [--id <cluster_id>] [--json]
```

Show details of a cluster.

### Optional arguments

**--name NAME**

Name of the cluster.

**--id <cluster\_id> ID**

of the cluster to show.

**--json**

Print JSON representation of the cluster.

## 14.7. SAHARA CLUSTER-TEMPLATE-CREATE

```
usage: sahara cluster-template-create [--json JSON]
```

Create a cluster template.

#### Optional arguments

**--json JSON JSON**

representation of cluster template.

## 14.8. SAHARA CLUSTER-TEMPLATE-DELETE

```
usage: sahara cluster-template-delete [--name NAME] [--id <template_id>]
```

Delete a cluster template.

#### Optional arguments

**--name NAME**

Name of the cluster template.

**--id <template\_id> ID**

of the cluster template to delete.

## 14.9. SAHARA CLUSTER-TEMPLATE-LIST

```
usage: sahara cluster-template-list
```

Print a list of available cluster templates.

## 14.10. SAHARA CLUSTER-TEMPLATE-SHOW

```
usage: sahara cluster-template-show [--name NAME] [--id <template_id>]
[--json]
```

Show details of a cluster template.

#### Optional arguments

**--name NAME**

Name of the cluster template.

**--id <template\_id> ID**

of the cluster template to show.

**--json**

Print JSON representation of cluster template.

## 14.11. SAHARA DATA-SOURCE-CREATE

```
usage: sahara data-source-create --name NAME --type TYPE --url URL [--
description DESCRIPTION] [--user USER] [--password PASSWORD]
```

Create a data source that provides job input or receives job output.

### Optional arguments

**--name NAME**

Name of the data source.

**--type TYPE**

Type of the data source.

**--url URL URL**

for the data source.

**--description DESCRIPTION**

Description of the data source.

**--user USER**

Username for accessing the data source URL.

**--password PASSWORD**

Password for accessing the data source URL.

## 14.12. SAHARA DATA-SOURCE-DELETE

```
usage: sahara data-source-delete [--name NAME] [--id ID]
```

Delete a data source.

### Optional arguments

**--name NAME**

Name of the data source.

**--id ID ID**

of data source to delete.

## 14.13. SAHARA DATA-SOURCE-LIST

```
usage: sahara data-source-list
```

Print a list of available data sources.

## 14.14. SAHARA DATA-SOURCE-SHOW

```
usage: sahara data-source-show [--name NAME] [--id ID]
```

Show details of a data source.

### Optional arguments

**--name NAME**

Name of the data source.

**--id ID ID**

of the data source.

## 14.15. SAHARA EVENT-LIST

```
usage: sahara event-list [--name <cluster_name>] [--id <cluster_id>] [-step <step_id>]
```

Show events of a cluster.

### Optional arguments

**--name <cluster\_name>**

Name of the cluster to show events.

**--id <cluster\_id> ID**

of the cluster to show events.

**--step <step\_id> ID**

of provision step to show events.

## 14.16. SAHARA IMAGE-ADD-TAG

```
usage: sahara image-add-tag [--name NAME] [--id <image_id>] --tag <tag>
```

Add a tag to an image.

### Optional arguments

**--name NAME**

Name of the image.

**--id <image\_id> ID**

of image to tag.

**--tag <tag>**

Tag to add.

## 14.17. SAHARA IMAGE-LIST

```
usage: sahara image-list
```

Print a list of available images.

## 14.18. SAHARA IMAGE-REGISTER

```
usage: sahara image-register --id <image_id> [--username <name>] [--description <desc>]
```

Register an image from the Image index.

### Optional arguments

**--id <image\_id> ID**

of image, run "glance image-list" to see all IDs.

**--username <name>**

Username of privileged user in the image.

**--description <desc>**

Description of the image.

## 14.19. SAHARA IMAGE-REMOVE-TAG

```
usage: sahara image-remove-tag [--name NAME] [--id <image_id>] --tag <tag>
```

Remove a tag from an image.

### Optional arguments

**--name NAME**

Name of the image.

**--id <image\_id>**

Image to tag.

**--tag <tag>**

Tag to remove.

## 14.20. SAHARA IMAGE-SHOW

```
usage: sahara image-show [--name NAME] [--id <image_id>]
```

Show details of an image.

### Optional arguments

**--name NAME**

Name of the image.



**--id <image\_id> ID**

of the image.

## 14.21. SAHARA IMAGE-UNREGISTER

```
usage: sahara image-unregister [--name NAME] [--id <image_id>]
```

Unregister an image.

### Optional arguments

**--name NAME**

Name of the image.

**--id <image\_id> ID**

of image to unregister.

## 14.22. SAHARA JOB-BINARY-CREATE

```
usage: sahara job-binary-create --name NAME --url URL [--description
DESCRIPTION] [--user USER] [--password PASSWORD]
```

Record a job binary.

### Optional arguments

**--name NAME**

Name of the job binary.

**--url URL URL**

for the job binary.

**--description DESCRIPTION**

Description of the job binary.

**--user USER**

Username for accessing the job binary URL.

**--password PASSWORD**

Password for accessing the job binary URL.

## 14.23. SAHARA JOB-BINARY-DATA-CREATE

```
usage: sahara job-binary-data-create [--file FILE]
```

Store data in the internal DB. Use 'swift upload' instead of this command. Use this command only if Swift is not available.

### Optional arguments

**--file FILE**

Data to store.

## 14.24. SAHARA JOB-BINARY-DATA-DELETE

```
usage: sahara job-binary-data-delete --id ID
```

Delete an internally stored job binary data.

### Optional arguments

**--id ID ID**

of internally stored job binary data.

## 14.25. SAHARA JOB-BINARY-DATA-LIST

```
usage: sahara job-binary-data-list
```

Print a list of internally stored job binary data.

## 14.26. SAHARA JOB-BINARY-DELETE

```
usage: sahara job-binary-delete [--name NAME] [--id ID]
```

Delete a job binary.

### Optional arguments

**--name NAME**

Name of the job binary.

**--id ID ID**

of the job binary to delete.

## 14.27. SAHARA JOB-BINARY-LIST

```
usage: sahara job-binary-list
```

Print a list of job binaries.

## 14.28. SAHARA JOB-BINARY-SHOW

```
usage: sahara job-binary-show [--name NAME] [--id ID]
```

Show details of a job binary.

### Optional arguments

**--name NAME**

Name of the job binary.

**--id ID ID**

of the job binary.

## 14.29. SAHARA JOB-CREATE

```
usage: sahara job-create --job-template JOB_TEMPLATE --cluster CLUSTER
 [--input-data INPUT_DATA] [--output-data OUTPUT_DATA] [--param
 name=value] [--arg ARG] [--config name=value]
```

Create a job.

### Optional arguments

**--job-template JOB\_TEMPLATE**

ID of the job template to run.

**--cluster CLUSTER ID**

of the cluster to run the job in.

**--input-data INPUT\_DATA**

ID of the input data source.

**--output-data OUTPUT\_DATA**

ID of the output data source.

**--param**

name=value Parameters to add to the job, repeatable.

**--arg ARG**

Arguments to add to the job, repeatable.

**--config**

name=value Config parameters to add to the job, repeatable.

## 14.30. SAHARA JOB-DELETE

```
usage: sahara job-delete --id ID
```

Delete a job.

### Optional arguments

**--id ID ID**

of a job.

## 14.31. SAHARA JOB-LIST

```
usage: sahara job-list
```

Print a list of jobs.

## 14.32. SAHARA JOB-SHOW

```
usage: sahara job-show --id ID
```

Show details of a job.

#### Optional arguments

```
--id ID ID
```

of the job.

### 14.33. SAHARA JOB-TEMPLATE-CREATE

```
usage: sahara job-template-create --name NAME --type TYPE [--main MAIN]
 [--lib LIB] [--description DESCRIPTION]
```

Create a job template.

#### Optional arguments

```
--name NAME
```

Name of the job template.

```
--type TYPE
```

Type of the job template.

```
--main MAIN ID
```

for job's main job-binary.

```
--lib LIB ID
```

of job's lib job-binary, repeatable.

```
--description DESCRIPTION
```

Description of the job template.

### 14.34. SAHARA JOB-TEMPLATE-DELETE

```
usage: sahara job-template-delete [--name NAME] [--id ID]
```

Delete a job template.

### Optional arguments

**--name NAME**

Name of the job template.

**--id ID ID**

of the job template.

## 14.35. SAHARA JOB-TEMPLATE-LIST

```
usage: sahara job-template-list
```

Print a list of job templates.

## 14.36. SAHARA JOB-TEMPLATE-SHOW

```
usage: sahara job-template-show [--name NAME] [--id ID]
```

Show details of a job template.

### Optional arguments

**--name NAME**

Name of the job template.

**--id ID ID**

of the job template.

## 14.37. SAHARA NODE-GROUP-TEMPLATE-CREATE

```
usage: sahara node-group-template-create [--json JSON]
```

Create a node group template.

### Optional arguments

**--json JSON JSON**

representation of node group template.

## 14.38. SAHARA NODE-GROUP-TEMPLATE-DELETE

```
usage: sahara node-group-template-delete [--name NAME] [--id <template_id>]
```

Delete a node group template.

### Optional arguments

**--name NAME**

Name of the node group template.

**--id <template\_id> ID**

of the node group template to delete.

## 14.39. SAHARA NODE-GROUP-TEMPLATE-LIST

```
usage: sahara node-group-template-list
```

Print a list of available node group templates.

## 14.40. SAHARA NODE-GROUP-TEMPLATE-SHOW

```
usage: sahara node-group-template-show [--name NAME] [--id <template_id>] [--json]
```

Show details of a node group template.

### Optional arguments

**--name NAME**

Name of the node group template.

**--id <template\_id> ID**

of the node group template to show.

**--json**

Print JSON representation of node group template.

## 14.41. SAHARA PLUGIN-LIST

```
usage: sahara plugin-list
```

Print a list of available plugins.

## 14.42. SAHARA PLUGIN-SHOW

```
usage: sahara plugin-show --name <plugin>
```

Show details of a plugin.

### Optional arguments

**--name <plugin>**

Name of the plugin.



## CHAPTER 15. DATABASE SERVICE COMMAND-LINE CLIENT

The **trove** client is the command-line interface (CLI) for the Database API and its extensions. This chapter documents **trove** version **1.0.9**.

For help on a specific **trove** command, enter:

```
$ trove help COMMAND
```

### 15.1. TROVE USAGE

```
usage: trove [--version] [--debug] [--os-auth-system <auth-system>] [-
--service-type <service-type>] [--service-name <service-name>] [--
bypass-url <bypass-url>] [--database-service-name <database-service-
name>] [--endpoint-type <endpoint-type>] [--os-database-api-version
<database-api-ver>] [--retries <retries>] [--json] [--profile HMAC_KEY]
[--insecure] [--os-cacert <ca-certificate>] [--os-cert <certificate>]
[--os-key <key>] [--timeout <seconds>] [--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-user-id
OS_USER_ID] [--os-user-name OS_USERNAME] [--os-user-domain-id
OS_USER_DOMAIN_ID] [--os-user-domain-name OS_USER_DOMAIN_NAME] [--os-
password OS_PASSWORD] [--os-tenant-name <auth-tenant-name>] [--os-
tenant-id <tenant-id>] [--os-auth-token OS_AUTH_TOKEN] [--os-region-
name <region-name>] <subcommand> ...
```

#### Subcommands

##### **backup-copy**

Creates a backup from another backup.

##### **backup-create**

Creates a backup of an instance.

##### **backup-delete**

Deletes a backup.

##### **backup-list**

Lists available backups.

##### **backup-list-instance**

Lists available backups for an instance.

**backup-show**

Shows details of a backup.

**cluster-create**

Creates a new cluster.

**cluster-delete**

Deletes a cluster.

**cluster-instances**

Lists all instances of a cluster.

**cluster-list**

Lists all the clusters.

**cluster-show**

Shows details of a cluster.

**configuration-attach**

Attaches a configuration group to an instance.

**configuration-create**

Creates a configuration group.

**configuration-default**

Shows the default configuration of an instance.

**configuration-delete**

Deletes a configuration group.

**configuration-detach**

Detaches a configuration group from an instance.

**configuration-instances**

Lists all instances associated with a configuration group.

### **configuration-list**

Lists all configuration groups.

### **configuration-parameter-list**

Lists available parameters for a configuration group.

### **configuration-parameter-show**

Shows details of a configuration parameter.

### **configuration-patch**

Patches a configuration group.

### **configuration-show**

Shows details of a configuration group.

### **configuration-update**

Updates a configuration group.

### **create**

Creates a new instance.

### **database-create**

Creates a database on an instance.

### **database-delete**

Deletes a database from an instance.

### **database-list**

Lists available databases on an instance.

### **datastore-list**

Lists available datastores.

### **datastore-show**

Shows details of a datastore.

### **datastore-version-list**

Lists available versions for a datastore.

### **datastore-version-show**

Shows details of a datastore version.

### **delete**

Deletes an instance.

### **detach-replica**

Detaches a replica instance from its replication source.

### **eject-replica-source**

Ejects a replica source from its set.

### **flavor-list**

Lists available flavors.

### **flavor-show**

Shows details of a flavor.

### **limit-list**

Lists the limits for a tenant.

### **list**

Lists all the instances.

### **metadata-create**

Creates metadata in the database for instance <id>.

### **metadata-delete**

Deletes metadata for instance <id>.

### **metadata-edit**

Replaces metadata value with a new one, this is non-destructive.

**metadata-list**

Shows all metadata for instance <id>.

**metadata-show**

Shows metadata entry for key <key> and instance <id>.

**metadata-update**

Updates metadata, this is destructive.

**promote-to-replica-source**

Promotes a replica to be the new replica source of its set.

**resize-flavor**

[DEPRECATED] Please use resize-instance instead.

**resize-instance**

Resizes an instance with a new flavor.

**resize-volume**

Resizes the volume size of an instance.

**restart**

Restarts an instance.

**root-enable**

Enables root for an instance and resets if already exists.

**root-show**

Gets status if root was ever enabled for an instance.

**secgroup-add-rule**

Creates a security group rule.

**secgroup-delete-rule**

Deletes a security group rule.

### **secgroup-list**

Lists all security groups.

### **secgroup-list-rules**

Lists all rules for a security group.

### **secgroup-show**

Shows details of a security group.

### **show**

Shows details of an instance.

### **update**

Updates an instance: Edits name, configuration, or replica source.

### **user-create**

Creates a user on an instance.

### **user-delete**

Deletes a user from an instance.

### **user-grant-access**

Grants access to a database(s) for a user.

### **user-list**

Lists the users for an instance.

### **user-revoke-access**

Revokes access to a database for a user.

### **user-show**

Shows details of a user of an instance.

### **user-show-access**

Shows access details of a user of an instance.

### **user-update-attributes**

Updates a user's attributes on an instance.

### **bash-completion**

Prints arguments for bash\_completion.

### **help**

Displays help about this program or one of its subcommands.

## **15.2. TROVE OPTIONAL ARGUMENTS**

### **--version**

show program's version number and exit

### **--debug**

Print debugging output.

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

Defaults to `env[OS_AUTH_SYSTEM]`.

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

Defaults to database for most actions.

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

Defaults to `env[TROVE_SERVICE_NAME]`.

### **--bypass-url <bypass-url>**

Defaults to `env[TROVE_BYPASS_URL]`.

### **--database-service-name <database-service-name>**

Defaults to `env[TROVE_DATABASE_SERVICE_NAME]`.

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

Defaults to `env[TROVE_ENDPOINT_TYPE]` or `publicURL`.

**--os-database-api-version <database-api-ver>**

Accepts 1, defaults to `env[OS_DATABASE_API_VERSION]`.

**--retries <retries>**

Number of retries.

**--json, --os-json-output**

Output JSON instead of prettyprint. Defaults to `env[OS_JSON_OUTPUT]`.

**--profile HMAC\_KEY HMAC**

key used to encrypt context data when profiling the performance of an operation. This key should be set to one of the HMAC keys configured in Trove (they are found in `api-paste.ini`, typically in `/etc/trove`). Without the key, profiling will not be triggered even if it is enabled on the server side. Defaults to `env[OS_PROFILE_HMACKEY]`.

**--insecure**

Explicitly allow client to perform "insecure" TLS (https) requests. The server's certificate will not be verified against any certificate authorities. This option should be used with caution.

**--os-cacert <ca-certificate>**

Specify a CA bundle file to use in verifying a TLS (https) server certificate. Defaults to `env[OS_CACERT]`.

**--os-cert <certificate>**

Defaults to `env[OS_CERT]`.

**--os-key <key>**

Defaults to `env[OS_KEY]`.

**--timeout <seconds>**

Set request timeout (in seconds).

**--os-auth-url OS\_AUTH\_URL**

Authentication URL

**--os-domain-id OS\_DOMAIN\_ID**



Domain ID to scope to

**--os-domain-name OS\_DOMAIN\_NAME**

Domain name to scope to

**--os-project-id OS\_PROJECT\_ID**

Project ID to scope to

**--os-project-name OS\_PROJECT\_NAME**

Project name to scope to

**--os-project-domain-id OS\_PROJECT\_DOMAIN\_ID**

Domain ID containing project

**--os-project-domain-name OS\_PROJECT\_DOMAIN\_NAME**

Domain name containing project

**--os-trust-id OS\_TRUST\_ID**

Trust ID

**--os-user-id OS\_USER\_ID**

User ID

**--os-user-name OS\_USERNAME, --os-username OS\_USERNAME**

Username

**--os-user-domain-id OS\_USER\_DOMAIN\_ID**

User's domain id

**--os-user-domain-name OS\_USER\_DOMAIN\_NAME**

User's domain name

**--os-password OS\_PASSWORD**

User's password

**--os-tenant-name <auth-tenant-name>**

Tenant to request authorization on. Defaults to `env[OS_TENANT_NAME]`.

**--os-tenant-id <tenant-id>**

Tenant to request authorization on. Defaults to `env[OS_TENANT_ID]`.

**--os-auth-token OS\_AUTH\_TOKEN**

Defaults to `env[OS_AUTH_TOKEN]`

**--os-region-name <region-name>**

Specify the region to use. Defaults to `env[OS_REGION_NAME]`.

## 15.3. TROVE BACKUP-COPY

```
usage: trove backup-copy <name> <backup> [--region <region>] [--description <description>]
```

Creates a backup from another backup.

### Positional arguments

**<name>**

Name of the backup.

**<backup>**

Backup ID of the source backup.

### Optional arguments

**--region <region>**

Region where the source backup resides.

**--description <description>**

An optional description for the backup.

## 15.4. TROVE BACKUP-CREATE

```
usage: trove backup-create <instance> <name> [--description <description>] [--parent <parent>]
```

Creates a backup of an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

**<name>**

Name of the backup.

### Optional arguments

**--description <description>**

An optional description for the backup.

**--parent <parent>**

Optional ID of the parent backup to perform an incremental backup from.

## 15.5. TROVE BACKUP-DELETE

```
usage: trove backup-delete <backup>
```

Deletes a backup.

### Positional arguments

**<backup>**

ID of the backup.

## 15.6. TROVE BACKUP-LIST

```
usage: trove backup-list [--limit <limit>] [--datastore <datastore>]
```

Lists available backups.

### Optional arguments

**--limit <limit>**

Return up to N number of the most recent backups.

**--datastore <datastore>**

Name or ID of the datastore to list backups for.

## 15.7. TROVE BACKUP-LIST-INSTANCE

```
usage: trove backup-list-instance [--limit <limit>] <instance>
```

Lists available backups for an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

### Optional arguments

**--limit <limit>**

Return up to N number of the most recent backups.

## 15.8. TROVE BACKUP-SHOW

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

Shows details of a backup.

### Positional arguments

**<backup>**

ID of the backup.

## 15.9. TROVE CLUSTER-CREATE

```
usage: trove cluster-create <name> <datastore> <datastore_version> [--  
instance <flavor_id=flavor_id,volume=volume>]
```

Creates a new cluster.

### Positional arguments

**<name>**

Name of the cluster.

**<datastore>**

A datastore name or UUID.

**<datastore\_version>**

A datastore version name or UUID.

**Optional arguments**

**--instance <flavor\_id=flavor\_id,volume=volume>**

Create an instance for the cluster. Specify multiple times to create multiple instances.

## 15.10. TROVE CLUSTER-DELETE

```
usage: trove cluster-delete <cluster>
```

Deletes a cluster.

**Positional arguments**

**<cluster>**

ID of the cluster.

## 15.11. TROVE CLUSTER-INSTANCES

```
usage: trove cluster-instances <cluster>
```

Lists all instances of a cluster.

**Positional arguments**

**<cluster>**

ID or name of the cluster.

## 15.12. TROVE CLUSTER-LIST

```
usage: trove cluster-list [--limit <limit>] [--marker <ID>]
```

Lists all the clusters.

### Optional arguments

**--limit <limit>**

Limit the number of results displayed.

**--marker <ID>**

Begin displaying the results for IDs greater than the specified marker. When used with --limit, set this to the last ID displayed in the previous run.

## 15.13. TROVE CLUSTER-SHOW

```
usage: trove cluster-show <cluster>
```

Shows details of a cluster.

### Positional arguments

**<cluster>**

ID or name of the cluster.

## 15.14. TROVE CONFIGURATION-ATTACH

```
usage: trove configuration-attach <instance> <configuration>
```

Attaches a configuration group to an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

**<configuration>**

ID of the configuration group to attach to the instance.

## 15.15. TROVE CONFIGURATION-CREATE

```
usage: trove configuration-create <name> <values> [--datastore
<datastore>] [--datastore_version <datastore_version>] [--description
<description>]
```

Creates a configuration group.

### Positional arguments

#### <name>

Name of the configuration group.

#### <values>

Dictionary of the values to set.

### Optional arguments

#### --datastore <datastore>

Datastore assigned to the configuration group. Required if default datastore is not configured.

#### --datastore\_version <datastore\_version>

Datastore version ID assigned to the configuration group.

#### --description <description>

An optional description for the configuration group.

## 15.16. TROVE CONFIGURATION-DEFAULT

```
usage: trove configuration-default <instance>
```

Shows the default configuration of an instance.

### Positional arguments

#### <instance>

ID or name of the instance.

## 15.17. TROVE CONFIGURATION-DELETE

```
usage: trove configuration-delete <configuration_group>
```

Deletes a configuration group.

#### Positional arguments

**<configuration\_group>**

ID of the configuration group.

## 15.18. TROVE CONFIGURATION-DETACH

```
usage: trove configuration-detach <instance>
```

Detaches a configuration group from an instance.

#### Positional arguments

**<instance>**

ID or name of the instance.

## 15.19. TROVE CONFIGURATION-INSTANCES

```
usage: trove configuration-instances <configuration_group>
```

Lists all instances associated with a configuration group.

#### Positional arguments

**<configuration\_group>**

ID of the configuration group.

## 15.20. TROVE CONFIGURATION-LIST

```
usage: trove configuration-list
```

Lists all configuration groups.

## 15.21. TROVE CONFIGURATION-PARAMETER-LIST



```
usage: trove configuration-parameter-list <datastore_version> [--
datastore <datastore>]
```

Lists available parameters for a configuration group.

#### Positional arguments

**<datastore\_version>**

Datastore version name or ID assigned to the configuration group.

#### Optional arguments

**--datastore <datastore> ID**

or name of the datastore to list configuration parameters for. Optional if the ID of the datastore\_version is provided.

## 15.22. TROVE CONFIGURATION-PARAMETER-SHOW

```
usage: trove configuration-parameter-show <datastore_version>
<parameter> [--datastore <datastore>]
```

Shows details of a configuration parameter.

#### Positional arguments

**<datastore\_version>**

Datastore version name or ID assigned to the configuration group.

**<parameter>**

Name of the configuration parameter.

#### Optional arguments

**--datastore <datastore> ID**

or name of the datastore to list configuration parameters for. Optional if the ID of the datastore\_version is provided.

## 15.23. TROVE CONFIGURATION-PATCH

```
usage: trove configuration-patch <configuration_group> <values>
```

Patches a configuration group.

#### Positional arguments

**<configuration\_group>**

ID of the configuration group.

**<values>**

Dictionary of the values to set.

## 15.24. TROVE CONFIGURATION-SHOW

```
usage: trove configuration-show <configuration_group>
```

Shows details of a configuration group.

#### Positional arguments

**<configuration\_group>**

ID of the configuration group.

## 15.25. TROVE CONFIGURATION-UPDATE

```
usage: trove configuration-update <configuration_group> <values> [--  
name <name>] [--description <description>]
```

Updates a configuration group.

#### Positional arguments

**<configuration\_group>**

ID of the configuration group.

**<values>**

Dictionary of the values to set.

#### Optional arguments

**--name <name>**

Name of the configuration group.

**--description <description>**

An optional description for the configuration group.

## 15.26. TROVE CREATE

```
usage: trove create <name> <flavor_id> [--size <size>] [--databases
<databases> [<databases> ...]] [--users <users> [<users> ...]] [--
backup <backup>] [--availability_zone <availability_zone>] [--datastore
<datastore>] [--datastore_version <datastore_version>] [--nic <net-
id=net-uuid,v4-fixed-ip=ip-addr,port-id=port-uuid>] [--configuration
<configuration>] [--replica_of <source_instance>] [--replica_count
<count>]
```

Creates a new instance.

### Positional arguments

**<name>**

Name of the instance.

**<flavor\_id>**

Flavor of the instance.

### Optional arguments

**--size <size>**

Size of the instance disk volume in GB. Required when volume support is enabled.

**--databases <databases> [<databases> ...]**

Optional list of databases.

**--users <users> [<users> ...]**

Optional list of users in the form user:password.

**--backup <backup> A**

backup ID.

**--availability\_zone <availability\_zone>**

The Zone hint to give to nova.

**--datastore <datastore> A**

datastore name or ID.

**--datastore\_version <datastore\_version>**

A datastore version name or ID.

**--nic <net-id=net-uuid,v4-fixed-ip=ip-addr,port-id=port-uuid>**

Create a NIC on the instance. Specify option multiple times to create multiple NICs. net-id: attach NIC to network with this ID (either port-id or net-id must be specified), v4-fixed-ip: IPv4 fixed address for NIC (optional), port-id: attach NIC to port with this ID (either port-id or net-id must be specified).

**--configuration <configuration>**

ID of the configuration group to attach to the instance.

**--replica\_of <source\_instance> ID**

or name of an existing instance to replicate from.

**--replica\_count <count>**

Number of replicas to create (defaults to 1).

## 15.27. TROVE DATABASE-CREATE

```
usage: trove database-create <instance> <name> [--character_set
<character_set>] [--collate <collate>]
```

Creates a database on an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

**<name>**

Name of the database.

### Optional arguments

```
--character_set <character_set>
```

Optional character set for database.

```
--collate <collate>
```

Optional collation type for database.

## 15.28. TROVE DATABASE-DELETE

```
usage: trove database-delete <instance> <database>
```

Deletes a database from an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

**<database>**

Name of the database.

## 15.29. TROVE DATABASE-LIST

```
usage: trove database-list <instance>
```

Lists available databases on an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

## 15.30. TROVE DATASTORE-LIST

```
usage: trove datastore-list
```

Lists available datastores.

## 15.31. TROVE DATASTORE-SHOW

```
usage: trove datastore-show <datastore>
```

Shows details of a datastore.

#### Positional arguments

**<datastore>**

ID of the datastore.

### 15.32. TROVE DATASTORE-VERSION-LIST

```
usage: trove datastore-version-list <datastore>
```

Lists available versions for a datastore.

#### Positional arguments

**<datastore>**

ID or name of the datastore.

### 15.33. TROVE DATASTORE-VERSION-SHOW

```
usage: trove datastore-version-show <datastore_version> [--datastore <datastore>]
```

Shows details of a datastore version.

#### Positional arguments

**<datastore\_version>**

ID or name of the datastore version.

#### Optional arguments

**--datastore <datastore> ID**

or name of the datastore. Optional if the ID of the `datastore_version` is provided.

### 15.34. TROVE DELETE

```
usage: trove delete <instance>
```

- 

Deletes an instance.

#### Positional arguments

**<instance>**

ID or name of the instance.

### 15.35. TROVE DETACH-REPLICA

```
usage: trove detach-replica <instance>
```

Detaches a replica instance from its replication source.

#### Positional arguments

**<instance>**

ID or name of the instance.

### 15.36. TROVE EJECT-REPLICA-SOURCE

```
usage: trove eject-replica-source <instance>
```

Ejects a replica source from its set.

#### Positional arguments

**<instance>**

ID or name of the instance.

### 15.37. TROVE FLAVOR-LIST

```
usage: trove flavor-list [--datastore_type <datastore_type>] [--  
datastore_version_id <datastore_version_id>]
```

Lists available flavors.

#### Optional arguments

**--datastore\_type <datastore\_type>**

Type of the datastore. For eg: mysql.

**--datastore\_version\_id <datastore\_version\_id>**

ID of the datastore version.

## 15.38. TROVE FLAVOR-SHOW

usage: trove flavor-show <flavor>

Shows details of a flavor.

### Positional arguments

**<flavor>**

ID or name of the flavor.

## 15.39. TROVE LIMIT-LIST

usage: trove limit-list

Lists the limits for a tenant.

## 15.40. TROVE LIST

usage: trove list [--limit <limit>] [--marker <ID>] [--include-clustered]

Lists all the instances.

### Optional arguments

**--limit <limit>**

Limit the number of results displayed.

**--marker <ID>**

Begin displaying the results for IDs greater than the specified marker. When used with --limit, set this to the last ID displayed in the previous run.

**--include-clustered**



Include instances that are part of a cluster (default false).

## 15.41. TROVE METADATA-CREATE

```
usage: trove metadata-create <instance_id> <key> <value>
```

Creates metadata in the database for instance <id>.

### Positional arguments

**<instance\_id>**

UUID for instance

**<key>**

Key for assignment

**<value>**

Value to assign to <key>

## 15.42. TROVE METADATA-DELETE

```
usage: trove metadata-delete <instance_id> <key>
```

Deletes metadata for instance <id>.

### Positional arguments

**<instance\_id>**

UUID for instance

**<key>**

Metadata key to delete

## 15.43. TROVE METADATA-EDIT

```
usage: trove metadata-edit <instance_id> <key> <value>
```

Replaces metadata value with a new one, this is non-destructive.

**Positional arguments****<instance\_id>**

UUID for instance

**<key>**

Key to replace

**<value>**

New value to assign to &lt;key&gt;

**15.44. TROVE METADATA-LIST****usage:** trove metadata-list <instance\_id>

Shows all metadata for instance &lt;id&gt;.

**Positional arguments****<instance\_id>**

UUID for instance

**15.45. TROVE METADATA-SHOW****usage:** trove metadata-show <instance\_id> <key>

Shows metadata entry for key &lt;key&gt; and instance &lt;id&gt;.

**Positional arguments****<instance\_id>**

UUID for instance

**<key>**

key to display

**15.46. TROVE METADATA-UPDATE****usage:** trove metadata-update <instance\_id> <key> <newkey> <value>

■

Updates metadata, this is destructive.

#### Positional arguments

**<instance\_id>**

UUID for instance

**<key>**

Key to update

**<newkey>**

New key

**<value>**

Value to assign to <newkey>

## 15.47. TROVE PROMOTE-TO-REPLICA-SOURCE

```
usage: trove promote-to-replica-source <instance>
```

Promotes a replica to be the new replica source of its set.

#### Positional arguments

**<instance>**

ID or name of the instance.

## 15.48. TROVE RESIZE-INSTANCE

```
usage: trove resize-instance <instance> <flavor_id>
```

Resizes an instance with a new flavor.

#### Positional arguments

**<instance>**

ID or name of the instance.

**<flavor\_id>**

New flavor of the instance.

## 15.49. TROVE RESIZE-VOLUME

```
usage: trove resize-volume <instance> <size>
```

Resizes the volume size of an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

**<size>**

New size of the instance disk volume in GB.

## 15.50. TROVE RESTART

```
usage: trove restart <instance>
```

Restarts an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

## 15.51. TROVE ROOT-ENABLE

```
usage: trove root-enable <instance>
```

Enables root for an instance and resets if already exists.

### Positional arguments

**<instance>**

ID or name of the instance.

## 15.52. TROVE ROOT-SHOW

```
usage: trove root-show <instance>
```

Gets status if root was ever enabled for an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

## 15.53. TROVE SECGROUP-ADD-RULE

```
usage: trove secgroup-add-rule <security_group> <cidr>
```

Creates a security group rule.

### Positional arguments

**<security\_group>**

Security group ID.

**<cidr>**

CIDR address.

## 15.54. TROVE SECGROUP-DELETE-RULE

```
usage: trove secgroup-delete-rule <security_group_rule>
```

Deletes a security group rule.

### Positional arguments

**<security\_group\_rule>**

Name of security group rule.

## 15.55. TROVE SECGROUP-LIST

```
usage: trove secgroup-list
```

Lists all security groups.

## 15.56. TROVE SECGROUP-LIST-RULES

```
usage: trove secgroup-list-rules <security_group>
```

Lists all rules for a security group.

### Positional arguments

**<security\_group>**

Security group ID.

## 15.57. TROVE SECGROUP-SHOW

```
usage: trove secgroup-show <security_group>
```

Shows details of a security group.

### Positional arguments

**<security\_group>**

Security group ID

## 15.58. TROVE SHOW

```
usage: trove show <instance>
```

Shows details of an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

## 15.59. TROVE UPDATE

```
usage: trove update <instance> [--name <name>] [--configuration  
<configuration>] [--detach-replica-source] [--remove_configuration]
```

Updates an instance: Edits name, configuration, or replica source.

### Positional arguments

**<instance>**

ID or name of the instance.

### Optional arguments

**--name <name>**

Name of the instance.

**--configuration <configuration>**

ID of the configuration reference to attach.

**--detach-replica-source**

Detach the replica instance from its replication source.

**--remove\_configuration**

Drops the current configuration reference.

## 15.60. TROVE USER-CREATE

```
usage: trove user-create <instance> <name> <password> [--host <host>]
      [--databases <databases> [<databases> ...]]
```

Creates a user on an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

**<name>**

Name of user.

**<password>**

Password of user.

### Optional arguments

**--host <host>**

Optional host of user.

**--databases <databases> [<databases> ...]**

Optional list of databases.

## 15.61. TROVE USER-DELETE

```
usage: trove user-delete [--host <host>] <instance> <name>
```

Deletes a user from an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

**<name>**

Name of user.

### Optional arguments

**--host <host>**

Optional host of user.

## 15.62. TROVE USER-GRANT-ACCESS

```
usage: trove user-grant-access <instance> <name> <databases>
[<databases> ...] [--host <host>]
```

Grants access to a database(s) for a user.

### Positional arguments

**<instance>**

ID or name of the instance.



**<name>**

Name of user.

**<databases>**

List of databases.

### Optional arguments

**--host <host>**

Optional host of user.

## 15.63. TROVE USER-LIST

```
usage: trove user-list <instance>
```

Lists the users for an instance.

### Positional arguments

**<instance>**

ID or name of the instance.

## 15.64. TROVE USER-REVOKE-ACCESS

```
usage: trove user-revoke-access [--host <host>] <instance> <name>
<database>
```

Revokes access to a database for a user.

### Positional arguments

**<instance>**

ID or name of the instance.

**<name>**

Name of user.

**<database>**

A single database.

#### Optional arguments

**--host <host>**

Optional host of user.

## 15.65. TROVE USER-SHOW

```
usage: trove user-show [--host <host>] <instance> <name>
```

Shows details of a user of an instance.

#### Positional arguments

**<instance>**

ID or name of the instance.

**<name>**

Name of user.

#### Optional arguments

**--host <host>**

Optional host of user.

## 15.66. TROVE USER-SHOW-ACCESS

```
usage: trove user-show-access [--host <host>] <instance> <name>
```

Shows access details of a user of an instance.

#### Positional arguments

**<instance>**

ID or name of the instance.

**<name>**

Name of user.

**Optional arguments****--host <host>**

Optional host of user.

**15.67. TROVE USER-UPDATE-ATTRIBUTES**

```
usage: trove user-update-attributes <instance> <name> [--host <host>]
       [--new_name <new_name>] [--new_password <new_password>] [--new_host
       <new_host>]
```

Updates a user's attributes on an instance. At least one optional argument must be provided.

**Positional arguments****<instance>**

ID or name of the instance.

**<name>**

Name of user.

**Optional arguments****--host <host>**

Optional host of user.

**--new\_name <new\_name>**

Optional new name of user.

**--new\_password <new\_password>**

Optional new password of user.

**--new\_host <new\_host>**

Optional new host of user.

## CHAPTER 16. SHARED FILE SYSTEM SERVICE COMMAND-LINE CLIENT

The **manila** client is the command-line interface (CLI) for the Filesharing API and its extensions. This chapter documents **manila** version **1.1.0**.

For help on a specific **manila** command, enter:

```
$ manila help COMMAND
```

### 16.1. MANILA USAGE

```
usage: manila [--version] [-d] [--os-cache] [--os-reset-cache] [--os-username <auth-user-name>] [--os-password <auth-password>] [--os-tenant-name <auth-tenant-name>] [--os-tenant-id <auth-tenant-id>] [--os-auth-url <auth-url>] [--os-region-name <region-name>] [--service-type <service-type>] [--service-name <service-name>] [--share-service-name <share-service-name>] [--endpoint-type <endpoint-type>] [--os-share-api-version <compute-api-ver>] [--os-cacert <ca-certificate>] [--retries <retries>] <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.

##### **create**

Creates a new share (NFS, CIFS, GlusterFS or HDFS).

##### **credentials**

Show user credentials returned from auth.

**delete**

Remove one or more shares.

**endpoints**

Discover endpoints that get returned from the authenticate services.

**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.

**list**

List NAS shares with filters.

**manage**

Manage share not handled by Manila.

**metadata**

Set or delete metadata on a share.

**metadata-show**

Show metadata of given share.

**metadata-update-all**

Update all metadata of a share.

**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.

**quota-defaults**

List the default quotas for a tenant.

**quota-delete**

Delete quota for a tenant/user. The quota will revert back to default.

**quota-show**

List the quotas for a tenant/user.

**quota-update**

Update the quotas for a tenant/user.

**rate-limits**

Print a list of rate limits for a user.

**reset-state**

Explicitly update the state of a share.

**security-service-create**

Create security service used by tenant.

**security-service-delete**

Delete security service.

**security-service-list**

Get a list of security services.

**security-service-show**

Show security service.

**security-service-update**

Update security service.

**service-list**

List all services.

**share-network-create**

Create description for network used by the tenant.

**share-network-delete**

Delete share network.

**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-server-delete**

Delete share server.

**share-server-details**

Show share server details.

**share-server-list**

List all share servers.

**share-server-show**

Show share server info.

**show**

Show details about a NAS share.

**snapshot - create**

Add a new snapshot.

**snapshot - delete**

Remove a snapshot.

**snapshot - force - delete**

Attempt force-delete of snapshot, regardless of state.

**snapshot - list**

List all the snapshots.

**snapshot - rename**

Rename a snapshot.

**snapshot - reset - state**

Explicitly update the state of a snapshot.

**snapshot - show**

Show details about a snapshot.

**type - access - add**

Adds share type access for the given project.

**type - access - list**

Print access information about the given share type.

**type - access - remove**

Removes share type access for the given project.

**type - create**

Create a new share type.



**type-delete**

Delete a specific share type.

**type-key**

Set or unset `extra_spec` for a share type.

**type-list**

Print a list of available 'share types'.

**unmanage**

Unmanage share.

**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.

## 16.2. 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-username <auth-user-name>**

Defaults to `env[OS_USERNAME]`.

**--os-password <auth-password>**

Defaults to `env[OS_PASSWORD]`.

**--os-tenant-name <auth-tenant-name>**

Defaults to `env[OS_TENANT_NAME]`.

**--os-tenant-id <auth-tenant-id>**

Defaults to `env[OS_TENANT_ID]`.

**--os-auth-url <auth-url>**

Defaults to `env[OS_AUTH_URL]`.

**--os-region-name <region-name>**

Defaults to `env[OS_REGION_NAME]`.

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

Defaults to `compute` for most actions.

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

Defaults to `env[MANILA_SERVICE_NAME]`.

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

Defaults to `env[MANILA_share_service_name]`.

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

Defaults to `env[MANILA_ENDPOINT_TYPE]` or `publicURL`.

**--os-share-api-version <compute-api-ver>**

Accepts 1 or 2. defaults 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.

### 16.3. MANILA ABSOLUTE-LIMITS

```
usage: manila absolute-limits
```

Print a list of absolute limits for a user.

### 16.4. 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), and "cert" 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 None.

### 16.5. 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.

## 16.6. MANILA ACCESS-LIST

```
usage: manila access-list <share>
```

Show access list for share.

### Positional arguments

**<share>**

Name or ID of the share.

## 16.7. 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] <share_protocol> <size>
```

Creates a new share (NFS, CIFS, GlusterFS or HDFS).

### Positional arguments

**<share\_protocol>**

Share type (NFS, CIFS, GlusterFS or HDFS).

**<size>**

Share size in GB.

## Optional arguments

**--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>**

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.

## 16.8. MANILA CREDENTIALS

```
usage: manila credentials
```

Show user credentials returned from auth.

## 16.9. MANILA DELETE

```
usage: manila delete <share> [<share> ...]
```

Remove one or more shares.

## Positional arguments

**<share>**

Name or ID of the share(s).

## 16.10. MANILA ENDPOINTS

**usage:** manila endpoints

Discover endpoints that get returned from the authenticate services.

## 16.11. MANILA EXTRA-SPECS-LIST

**usage:** manila extra-specs-list

Print a list of current 'share types and extra specs' (Admin Only).

## 16.12. MANILA FORCE-DELETE

**usage:** manila force-delete <share> [<share> ...]

Attempt force-delete of share, regardless of state.

### Positional arguments

**<share>**

Name or ID of the share(s) to force delete.

## 16.13. 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]

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.

**--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.

**--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-id <share\_type>, --volume-type-id <share\_type>, --share-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.

## 16.14. MANILA LIST-EXTENSIONS

```
usage: manila list-extensions
```

List all the os-api extensions that are available.

## 16.15. MANILA MANAGE

```
usage: manila manage [--name <name>] [--description <description>] [--share_type <share_type>] [--driver_options [<key=value> [<key=value> ...]]] <service_host> <protocol> <export_path>
```

Manage share not handled by Manila.

### 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.

**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).

**16.16. 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).

**16.17. MANILA METADATA-SHOW**

```
usage: manila metadata-show <share>
```

Show metadata of given share.

#### Positional arguments

**<share>**

Name or ID of the share.

## 16.18. 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.

## 16.19. MANILA POOL-LIST

```
usage: manila pool-list [--host <host>] [--backend <backend>] [--pool  
<pool>]
```

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.

## 16.20. 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.

## 16.21. 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.

### 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>**

New value for the "share\_networks" quota.

## 16.22. 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.

## 16.23. 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.

### Optional arguments

**--tenant <tenant-id> ID**

of tenant to delete quota for.

**--user <user-id> ID**

of user to delete quota for.

## 16.24. MANILA QUOTA-SHOW

```
usage: manila quota-show [--tenant <tenant-id>] [--user <user-id>]
```

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.

## 16.25. MANILA QUOTA-UPDATE

```
usage: manila quota-update [--user <user-id>] [--shares <shares>] [--snapshots <snapshots>] [--gigabytes <gigabytes>] [--snapshot-gigabytes <snapshot_gigabytes>] [--share-networks <share-networks>] [--force] <tenant_id>
```

Update the quotas for a tenant/user.

### 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>**

New value for the "share\_networks" quota.

**--force**

Whether force update the quota even if the already used and reserved exceeds the new quota.

## 16.26. MANILA RATE-LIMITS

```
usage: manila rate-limits
```

Print a list of rate limits for a user.

## 16.27. MANILA RESET-STATE

```
usage: manila reset-state [--state <state>] <share>
```

Explicitly update the state of a share.

### 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.

## 16.28. MANILA SECURITY-SERVICE-CREATE

```
usage: manila security-service-create [--dns-ip <dns_ip>] [--server <server>] [--domain <domain>] [--user <user>] [--password <password>] [--name <name>] [--description <description>] <type>
```

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.

**16.29. MANILA SECURITY-SERVICE-DELETE****usage:** manila security-service-delete <security-service>

Delete security service.

**Positional arguments****<security-service>**

Security service name or ID to delete.

**16.30. 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>] [--  
domain <domain>] [--detailed [<0|1>]] [--offset <offset>] [--limit  
<limit>]
```

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.

## 16.31. 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.

## 16.32. MANILA SECURITY-SERVICE-UPDATE

```
usage: manila security-service-update [--dns-ip <dns-ip>] [--server
<server>] [--domain <domain>] [--user <user>] [--password <password>]
[--name <name>] [--description <description>] <security-service>
```

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.

## 16.33. MANILA SERVICE-LIST

```
usage: manila service-list [--host <hostname>] [--binary <binary>] [--status <status>] [--state <state>] [--zone <zone>]
```

List all services.

### 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.

## 16.34. MANILA SHARE-NETWORK-CREATE

```
usage: manila share-network-create [--nova-net-id <nova-net-id>] [--neutron-net-id <neutron-net-id>] [--neutron-subnet-id <neutron-subnet-id>] [--name <name>] [--description <description>]
```

Create description for network used by the tenant.

### Optional arguments

```
--nova-net-id <nova-net-id>, --nova-net_id <nova-net-id>, --nova_net_id <nova-net-id>, --nova_net-id <nova-net-id>
```

Nova net ID. Used to set up network for share servers.

```
--neutron-net-id <neutron-net-id>, --neutron-net_id <neutron-net-id>, --neutron_net_id <neutron-net-id>, --neutron_net-id <neutron-net-id>
```

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.

## 16.35. MANILA SHARE-NETWORK-DELETE

```
usage: manila share-network-delete <share-network>
```

Delete share network.

### Positional arguments

```
<share-network>
```

Name or ID of share network to be deleted.

## 16.36. 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>] [--nova-net-id <nova_net_id>] [--neutron-net-id
<neutron_net_id>] [--neutron-subnet-id <neutron_subnet_id>] [--network-
type <network_type>] [--segmentation-id <segmentation_id>] [--cidr
<cidr>] [--ip-version <ip_version>] [--offset <offset>] [--limit
<limit>]
```

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.

**--nova-net-id <nova\_net\_id>, --nova-net-id <nova\_net\_id>, --nova-net-id <nova\_net\_id>, --nova-net-id <nova\_net\_id>**

Filter results by Nova net ID.

**--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.

## 16.37. 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.

## 16.38. MANILA SHARE-NETWORK-SECURITY-SERVICE-LIST

```
usage: manila share-network-security-service-list <share-network>
```

Get list of security services associated with a given share network.

### Positional arguments

**<share-network>**

Share network name or ID.

## 16.39. 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.

## 16.40. 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.

## 16.41. MANILA SHARE-NETWORK-UPDATE

```
usage: manila share-network-update [--nova-net-id <nova-net-id>] [--neutron-net-id <neutron-net-id>] [--neutron-subnet-id <neutron-subnet-id>] [--name <name>] [--description <description>] <share-network>
```

Update share network data.

### Positional arguments

#### <share-network>

Name or ID of share network to update.

### Optional arguments

```
--nova-net-id <nova-net-id>, --nova-net_id <nova-net-id>, --nova_net_id <nova-net-id>, --nova_net-id <nova-net-id>
```

Nova net ID. Used to set up network for share servers.

```
--neutron-net-id <neutron-net-id>, --neutron-net_id <neutron-net-id>, --neutron_net_id <neutron-net-id>, --neutron_net-id <neutron-net-id>
```

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.

## 16.42. MANILA SHARE-SERVER-DELETE

```
usage: manila share-server-delete <id>
```

Delete share server.

### Positional arguments

**<id>**

ID of share server.

## 16.43. MANILA SHARE-SERVER-DETAILS

```
usage: manila share-server-details <id>
```

Show share server details.

### Positional arguments

**<id>**

ID of share server.

## 16.44. MANILA SHARE-SERVER-LIST

```
usage: manila share-server-list [--host <hostname>] [--status <status>]
      [--share-network <share_network>] [--project-id <project_id>]
```

List all share servers.

### 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.

## 16.45. MANILA SHARE-SERVER-SHOW

```
usage: manila share-server-show <id>
```



Show share server info.

#### Positional arguments

**<id>**

ID of share server.

## 16.46. MANILA SHOW

```
usage: manila show <share>
```

Show details about a NAS share.

#### Positional arguments

**<share>**

Name or ID of the NAS share.

## 16.47. 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)

## 16.48. MANILA SNAPSHOT-DELETE

```
usage: manila snapshot-delete <snapshot>
```

Remove a snapshot.

### Positional arguments

**<snapshot>**

Name or ID of the snapshot to delete.

## 16.49. MANILA SNAPSHOT-FORCE-DELETE

```
usage: manila snapshot-force-delete <snapshot>
```

Attempt force-delete of snapshot, regardless of state.

### Positional arguments

**<snapshot>**

Name or ID of the snapshot to force delete.

## 16.50. MANILA SNAPSHOT-LIST

```
usage: manila snapshot-list [--all-tenants [<0|1>]] [--name <name>] [--status <status>] [--share-id <share_id>] [--usage [any|used|unused]] [--limit <limit>] [--offset <offset>] [--sort-key <sort_key>] [--sort-dir <sort_dir>]
```

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'). OPTIONAL: Default=None.

**--sort-dir <sort\_dir>, --sort\_dir <sort\_dir>**

Sort direction, available values are ('asc', 'desc'). OPTIONAL: Default=None.

## 16.51. 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.

**<name>**

New name for the snapshot.

### Optional arguments

**--description <description>**

Optional snapshot description. (Default=None)

## 16.52. MANILA SNAPSHOT-RESET-STATE

```
usage: manila snapshot-reset-state [--state <state>] <snapshot>
```

Explicitly update the state of a snapshot.

### 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.

## 16.53. MANILA SNAPSHOT-SHOW

```
usage: manila snapshot-show <snapshot>
```

Show details about a snapshot.

### Positional arguments

**<snapshot>**

Name or ID of the snapshot.

## 16.54. MANILA TYPE-ACCESS-ADD

```
usage: manila type-access-add <share_type> <project_id>
```

Adds share type access for the given project.

### 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.

## 16.55. MANILA TYPE-ACCESS-LIST

```
usage: manila type-access-list <share_type>
```

Print access information about the given share type.

### Positional arguments

**<share\_type>**

Filter results by share type name or ID.

## 16.56. MANILA TYPE-ACCESS-REMOVE

```
usage: manila type-access-remove <share_type> <project_id>
```

Removes share type access for the given project.

### 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.

## 16.57. MANILA TYPE-CREATE

```
usage: manila type-create [--is_public <is_public>] <name>
[<spec_driver_handles_share_servers>]
```

Create a new share type.

### Positional arguments

**<name>**

Name of the new share type.

**<spec\_driver\_handles\_share\_servers>**

Required extra specification. Valid values 'true'/'1' and 'false'/'0'

#### Optional arguments

**--is\_public <is\_public>, --is-public <is\_public>**

Make type accessible to the public (default true).

## 16.58. MANILA TYPE-DELETE

```
usage: manila type-delete <id>
```

Delete a specific share type.

#### Positional arguments

**<id>**

Name or ID of the share type to delete.

## 16.59. MANILA TYPE-KEY

```
usage: manila type-key <stype> <action> [<key=value> [<key=value> ...]]
```

Set or unset extra\_spec for a share type.

#### 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).

## 16.60. MANILA TYPE-LIST

```
usage: manila type-list [--all]
```

Print a list of available 'share types'.

### Optional arguments

**--all**

Display all share types (Admin only).

## 16.61. MANILA UNMANAGE

```
usage: manila unmanage <share>
```

Unmanage share.

### Positional arguments

**<share>**

Name or ID of the share(s).

## 16.62. 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.



## REVISION HISTORY

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**Revision 7.0.0-1****Fri Feb 06 2015****Don Domingo**

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Release for Red Hat Enterprise Linux OpenStack Platform 7.0.