



# Red Hat OpenStack Platform 13

## Command Line Interface Reference

Command-line clients for Red Hat OpenStack Platform



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## Abstract

A reference to the commands available to the unified OpenStack command-line client.

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74.29. ZONE TRANSFER REQUEST SHOW	1098





## PREFACE

A reference to the commands available for the unified OpenStack command-line client.

# CHAPTER 1. THE OPENSTACK CLIENT

The **openstack** client is a common OpenStack command-line interface (CLI). This chapter documents the main options for **openstack** version 3.14.3. `leveloffset: +1`

Command-line interface to the OpenStack APIs

## Usage:

```
openstack [--version] [-v | -q] [--log-file LOG_FILE] [-h] [--debug]
  [--os-cloud <cloud-config-name>]
  [--os-region-name <auth-region-name>]
  [--os-cacert <ca-bundle-file>] [--os-cert <certificate-file>]
  [--os-key <key-file>] [--verify | --insecure]
  [--os-default-domain <auth-domain>]
  [--os-interface <interface>]
  [--os-service-provider <service_provider>]
  [--os-remote-project-name <remote_project_name> | --os-remote-project-id
<remote_project_id>]
  [--os-remote-project-domain-name <remote_project_domain_name> | --os-remote-project-
domain-id <remote_project_domain_id>]
  [--timing] [--os-beta-command] [--os-profile hmac-key]
  [--os-compute-api-version <compute-api-version>]
  [--os-network-api-version <network-api-version>]
  [--os-image-api-version <image-api-version>]
  [--os-volume-api-version <volume-api-version>]
  [--os-identity-api-version <identity-api-version>]
  [--os-object-api-version <object-api-version>]
  [--os-queues-api-version <queues-api-version>]
  [--os-tripleoclient-api-version <tripleoclient-api-version>]
  [--os-key-manager-api-version <key-manager-api-version>]
  [--os-loadbalancer-api-version <loadbalancer-api-version>]
  [--os-metrics-api-version <metrics-api-version>]
  [--os-workflow-api-version <workflow-api-version>]
  [--os-baremetal-api-version <baremetal-api-version>]
  [--os-dns-api-version <dns-api-version>]
  [--os-alarming-api-version <alarming-api-version>]
  [--os-orchestration-api-version <orchestration-api-version>]
  [--os-data-processing-api-version <data-processing-api-version>]
  [--os-data-processing-url OS_DATA_PROCESSING_URL]
  [--os-container-infra-api-version <container-infra-api-version>]
  [--inspector-api-version INSPECTOR_API_VERSION]
  [--inspector-url INSPECTOR_URL]
  [--os-database-api-version <database-api-version>]
  [--os-auth-type <auth-type>]
  [--os-project-domain-id <auth-project-domain-id>]
  [--os-protocol <auth-protocol>]
  [--os-project-name <auth-project-name>]
  [--os-trust-id <auth-trust-id>]
  [--os-consumer-key <auth-consumer-key>]
  [--os-domain-name <auth-domain-name>]
  [--os-access-secret <auth-access-secret>]
  [--os-user-domain-id <auth-user-domain-id>]
  [--os-access-token-type <auth-access-token-type>]
  [--os-code <auth-code>]
  [--os-application-credential-name <auth-application-credential-name>]
```

```

[--os-identity-provider-url <auth-identity-provider-url>]
[--os-aodh-endpoint <auth-aodh-endpoint>]
[--os-service-provider-endpoint <auth-service-provider-endpoint>]
[--os-access-token <auth-access-token>]
[--os-domain-id <auth-domain-id>]
[--os-user-domain-name <auth-user-domain-name>]
[--os-openid-scope <auth-openid-scope>]
[--os-user-id <auth-user-id>]
[--os-application-credential-secret <auth-application-credential-secret>]
[--os-identity-provider <auth-identity-provider>]
[--os-username <auth-username>]
[--os-auth-url <auth-auth-url>]
[--os-client-secret <auth-client-secret>]
[--os-access-token-endpoint <auth-access-token-endpoint>]
[--os-default-domain-id <auth-default-domain-id>]
[--os-discovery-endpoint <auth-discovery-endpoint>]
[--os-client-id <auth-client-id>]
[--os-default-domain-name <auth-default-domain-name>]
[--os-project-domain-name <auth-project-domain-name>]
[--os-service-provider-entity-id <auth-service-provider-entity-id>]
[--os-access-key <auth-access-key>]
[--os-password <auth-password>]
[--os-redirect-uri <auth-redirect-uri>]
[--os-endpoint <auth-endpoint>] [--os-roles <auth-roles>]
[--os-url <auth-url>]
[--os-consumer-secret <auth-consumer-secret>]
[--os-token <auth-token>]
[--os-application-credential-id <auth-application-credential-id>]
[--os-passcode <auth-passcode>]
[--os-system-scope <auth-system-scope>]
[--os-project-id <auth-project-id>] [--os-user <auth-user>]

```

Table 1.1. Optional Arguments

Value	Summary
--inspector-url INSPECTOR_URL	Inspector url, defaults to localhost (env: INSPECTOR_URL).
--os-cacert <ca-bundle-file>	Ca certificate bundle file (env: os_cacert)
--os-baremetal-api-version <baremetal-api-version>	Bare metal api version, default="latest" (the maximum version supported by both the client and the server). (Env: OS_BAREMETAL_API_VERSION)
--inspector-api-version INSPECTOR_API_VERSION	Inspector api version, only 1 is supported now (env: INSPECTOR_VERSION).
--os-redirect-uri <auth-redirect-uri>	With v3oidcauthcode: openid connect redirect url (env: OS_REDIRECT_URI)
--os-cloud <cloud-config-name>	Cloud name in clouds.yaml (env: os_cloud)

Value	Summary
<code>--os-container-infra-api-version &lt;container-infra-api-version&gt;</code>	Container-infra api version, default=1 (env: OS_CONTAINER_INFRA_API_VERSION)
<code>--os-alarming-api-version &lt;alarming-api-version&gt;</code>	Queues api version, default=2 (env: OS_ALARMING_API_VERSION)
<code>--os-user-id &lt;auth-user-id&gt;</code>	With v2password: user id to login with with v3password: User ID With noauth: User ID With v3totp: User ID With aodh-noauth: User ID With gnocchi-noauth: User ID With password: User id With v3applicationcredential: User ID (Env: OS_USER_ID)
<code>-h, --help</code>	Show help message and exit.
<code>--os-project-name &lt;auth-project-name&gt;</code>	With v3adfspassword: project name to scope to with v3password: Project name to scope to With v3token: Project name to scope to With v3oidcauthcode: Project name to scope to With v3samlpassword: Project name to scope to With v1password: Swift account to use With v3totp: Project name to scope to With v3tokenlessauth: Project name to scope to With v3oidcclientcredentials: Project name to scope to With password: Project name to scope to With v3oidcaccess token: Project name to scope to With v3oidcpassword: Project name to scope to With token: Project name to scope to With v3applicationcredential: Project name to scope to (Env: OS_PROJECT_NAME)
<code>--os-trust-id &lt;auth-trust-id&gt;</code>	With v2token: trust id with v3adfspassword: trust id With v2password: Trust ID With v3password: Trust ID With v3token: Trust ID With v3oidcauthcode: Trust ID With v3samlpassword: Trust ID With v3totp: Trust ID With v3oidcclientcredentials: Trust ID With password: Trust ID With v3oidcaccess token: Trust ID With v3oidcpassword: Trust ID With token: Trust ID With v3applicationcredential: Trust ID (Env: OS_TRUST_ID)
<code>--os-identity-api-version &lt;identity-api-version&gt;</code>	Identity api version, default=3 (env: OS_IDENTITY_API_VERSION)
<code>--os-remote-project-name &lt;remote_project_name&gt;</code>	Project name when authenticating to a service provider if using Keystone-to-Keystone federation.
<code>--verify</code>	Verify server certificate (default)

Value	Summary
<code>--os-remote-project-domain-id</code> <code>&lt;remote_project_domain_id&gt;</code>	Domain id of the project when authenticating to a service provider if using Keystone-to-Keystone federation.
<code>--os-system-scope &lt;auth-system-scope&gt;</code>	With v3adfspassword: scope for system operations With v3password: Scope for system operations With v3token: Scope for system operations With v3oidcauthcode: Scope for system operations With v3samlpasword: Scope for system operations With v3totp: Scope for system operations With v3oidcclientcredentials: Scope for system operations With password: Scope for system operations With v3oidcaccessstoken: Scope for system operations With v3oidcpasword: Scope for system operations With token: Scope for system operations With v3applicationcredential: Scope for system operations (Env: OS_SYSTEM_SCOPE)
<code>--os-auth-type &lt;auth-type&gt;</code>	Select an authentication type. available types: v2token, v3adfspassword, admin_token, v2password, v3password, noauth, v3token, v3oauth1, v3oidcauthcode, v3samlpasword, token_endpoint, v1password, v3totp, aodh-noauth, v3tokenlessauth, v3oidcclientcredentials, gnocchi-basic, gnocchi- noauth, password, none, v3oidcaccessstoken, v3oidcpasword, token, v3applicationcredential. Default: selected based on --os-username/--os- token (Env: OS_AUTH_TYPE)
<code>--os-remote-project-domain-name</code> <code>&lt;remote_project_domain_name&gt;</code>	Domain name of the project when authenticating to a service provider if using Keystone-to-Keystone federation.

Value	Summary
<code>--os-project-domain-name &lt;auth-project-domain-name&gt;</code>	With v3adfspassword: domain name containing project With v3password: Domain name containing project With v3token: Domain name containing project With v3oidcauthcode: Domain name containing project With v3samlpassword: Domain name containing project With v3totp: Domain name containing project With v3tokenlessauth: Domain name containing project With v3oidcclientcredentials: Domain name containing project With password: Domain name containing project With v3oidcaccess token: Domain name containing project With v3oidcpassword: Domain name containing project With token: Domain name containing project With v3applicationcredential: Domain name containing project (Env: OS_PROJECT_DOMAIN_NAME)
<code>--os-endpoint &lt;auth-endpoint&gt;</code>	With admin_token: the endpoint that will always be used With noauth: Cinder endpoint With gnocchi-basic: Gnocchi endpoint With gnocchi-noauth: Gnocchi endpoint With none: The endpoint that will always be used (Env: OS_ENDPOINT)
<code>--os-default-domain-name &lt;auth-default-domain-name&gt;</code>	With password: optional domain name to use with v3 api and v2 parameters. It will be used for both the user and project domain in v3 and ignored in v2 authentication. With token: Optional domain name to use with v3 API and v2 parameters. It will be used for both the user and project domain in v3 and ignored in v2 authentication. (Env: OS_DEFAULT_DOMAIN_NAME)
<code>--os-aodh-endpoint &lt;auth-aodh-endpoint&gt;</code>	With aodh-noauth: aodh endpoint (env: OS_AODH_ENDPOINT)
<code>--os-roles &lt;auth-roles&gt;</code>	With aodh-noauth: roles with gnocchi-noauth: roles (Env: OS_ROLES)
<code>--os-application-credential-name &lt;auth-application-credential-name&gt;</code>	With v3applicationcredential: application credential name (Env: OS_APPLICATION_CREDENTIAL_NAME)
<code>--os-dns-api-version &lt;dns-api-version&gt;</code>	Dns api version, default=2 (env: os_dns_api_version)
<code>--os-key-manager-api-version &lt;key-manager-api-version&gt;</code>	Barbican api version, default=1 (env: OS_KEY_MANAGER_API_VERSION)
<code>--os-data-processing-api-version &lt;data-processing-api-version&gt;</code>	Data processing api version, default=1.1 (env: OS_DATA_PROCESSING_API_VERSION)

Value	Summary
--os-service-provider-entity-id <auth-service-provider-entity-id>	With v3adfspassword: service provider's saml entity id (Env: OS_SERVICE_PROVIDER_ENTITY_ID)
--os-access-secret <auth-access-secret>	With v3oauth1: oauth access secret (env: OS_ACCESS_SECRET)
--os-beta-command	Enable beta commands which are subject to change
--os-orchestration-api-version <orchestration-api-version>	Orchestration api version, default=1 (env: OS_ORCHESTRATION_API_VERSION)
--os-service-provider-endpoint <auth-service-provider-endpoint>	With v3adfspassword: service provider's endpoint (env: OS_SERVICE_PROVIDER_ENDPOINT)
--timing	Print api call timing info
--os-tripleoclient-api-version <tripleoclient-api-version>	Tripleo client api version, default=1 (env: OS_TRIPLEOCLIENT_API_VERSION)
--os-loadbalancer-api-version <loadbalancer-api-version>	Osc plugin api version, default=2.0 (env: OS_LOADBALANCER_API_VERSION)
--os-protocol <auth-protocol>	With v3adfspassword: protocol for federated plugin With v3oidcauthcode: Protocol for federated plugin With v3samlpasword: Protocol for federated plugin With v3oidcclientcredentials: Protocol for federated plugin With v3oidcaccessstoken: Protocol for federated plugin With v3oidcpasword: Protocol for federated plugin (Env: OS_PROTOCOL)
--os-auth-url <auth-auth-url>	With v2token: authentication url with v3adfspassword: Authentication URL With v2password: Authentication URL With v3password: Authentication URL With v3token: Authentication URL With v3oauth1: Authentication URL With v3oidcauthcode: Authentication URL With v3samlpasword: Authentication URL With v1password: Authentication URL With v3totp: Authentication URL With v3tokenlessauth: Authentication URL With v3oidcclientcredentials: Authentication URL With password: Authentication URL With v3oidcaccessstoken: Authentication URL With v3oidcpasword: Authentication URL With token: Authentication URL With v3applicationcredential: Authentication URL (Env: OS_AUTH_URL)
--os-user <auth-user>	With gnocchi-basic: user (env: os_user)



Value	Summary
<code>--os-client-secret &lt;auth-client-secret&gt;</code>	With v3oidcauthcode: oauth 2.0 client secret with v3oidcclientcredentials: OAuth 2.0 Client Secret With v3oidcpassword: OAuth 2.0 Client Secret (Env: OS_CLIENT_SECRET)
<code>--os-project-domain-id &lt;auth-project-domain-id&gt;</code>	With v3adfspassword: domain id containing project with v3password: Domain ID containing project With v3token: Domain ID containing project With v3oidcauthcode: Domain ID containing project With v3samlpasword: Domain ID containing project With v3totp: Domain ID containing project With v3tokenlessauth: Domain ID containing project With v3oidcclientcredentials: Domain ID containing project With password: Domain ID containing project With v3oidcaccessstoken: Domain ID containing project With v3oidcpassword: Domain ID containing project With token: Domain ID containing project With v3applicationcredential: Domain ID containing project (Env: OS_PROJECT_DOMAIN_ID)
<code>--insecure</code>	Disable server certificate verification
<code>--os-network-api-version &lt;network-api-version&gt;</code>	Network api version, default=2.0 (env: OS_NETWORK_API_VERSION)
<code>--os-password &lt;auth-password&gt;</code>	With v3adfspassword: password with v2password: Password to use With v3password: User's password With v3samlpasword: Password With v1password: Password to use With password: User's password With v3oidcpassword: Password (Env: OS_PASSWORD)
<code>--os-cert &lt;certificate-file&gt;</code>	Client certificate bundle file (env: os_cert)
<code>--os-code &lt;auth-code&gt;</code>	With v3oidcauthcode: oauth 2.0 authorization code (Env: OS_CODE)
<code>--os-consumer-secret &lt;auth-consumer-secret&gt;</code>	With v3oauth1: oauth consumer secret (env: OS_CONSUMER_SECRET)
<code>--os-compute-api-version &lt;compute-api-version&gt;</code>	Compute api version, default=2.1 (env: OS_COMPUTE_API_VERSION)

Value	Summary
<code>--os-default-domain-id &lt;auth-default-domain-id&gt;</code>	With password: optional domain id to use with v3 and v2 parameters. It will be used for both the user and project domain in v3 and ignored in v2 authentication. With token: Optional domain ID to use with v3 and v2 parameters. It will be used for both the user and project domain in v3 and ignored in v2 authentication. (Env: OS_DEFAULT_DOMAIN_ID)
<code>--os-access-token &lt;auth-access-token&gt;</code>	With v3oidcaccess token: oauth 2.0 access token (env: OS_ACCESS_TOKEN)
<code>--os-region-name &lt;auth-region-name&gt;</code>	Authentication region name (env: os_region_name)
<code>--os-queues-api-version &lt;queues-api-version&gt;</code>	Queues api version, default=2 (env: OS_QUEUES_API_VERSION)
<code>--os-identity-provider-url &lt;auth-identity-provider-url&gt;</code>	With v3adfspassword: an identity provider url, where the SAML authentication request will be sent. With v3samlpassword: An Identity Provider URL, where the SAML2 authentication request will be sent. (Env: OS_IDENTITY_PROVIDER_URL)
<code>--os-application-credential-secret &lt;auth-application-credential-secret&gt;</code>	With v3applicationcredential: application credential auth secret (Env: OS_APPLICATION_CREDENTIAL_SECRET)
<code>--os-passcode &lt;auth-passcode&gt;</code>	With v3totp: user's totp passcode (env: os_passcode)
<code>--os-profile hmac-key</code>	Hmac key for encrypting profiling context data
<code>--os-domain-id &lt;auth-domain-id&gt;</code>	With v3adfspassword: domain id to scope to with v3password: Domain ID to scope to With v3token: Domain ID to scope to With v3oidcauthcode: Domain ID to scope to With v3samlpassword: Domain ID to scope to With v3totp: Domain ID to scope to With v3tokenlessauth: Domain ID to scope to With v3oidcclientcredentials: Domain ID to scope to With password: Domain ID to scope to With v3oidcaccess token: Domain ID to scope to With v3oidcpassword: Domain ID to scope to With token: Domain ID to scope to With v3applicationcredential: Domain ID to scope to (Env: OS_DOMAIN_ID)

Value	Summary
--os-discovery-endpoint <auth-discovery-endpoint>	<p>With v3oidcauthcode: openid connect discovery document URL. The discovery document will be used to obtain the values of the access token endpoint and the authentication endpoint. This URL should look like <a href="https://idp.example.org/.well-known/openid-configuration">https://idp.example.org/.well-known/openid-configuration</a> With v3oidcclientcredentials: OpenID Connect Discovery Document URL. The discovery document will be used to obtain the values of the access token endpoint and the authentication endpoint. This URL should look like <a href="https://idp.example.org/.well-known/openid-configuration">https://idp.example.org/.well-known/openid-configuration</a> With v3oidcpassword: OpenID Connect Discovery Document URL. The discovery document will be used to obtain the values of the access token endpoint and the authentication endpoint. This URL should look like <a href="https://idp.example.org/.well-known/openid-configuration">https://idp.example.org/.well-known/openid-configuration</a> (Env: OS_DISCOVERY_ENDPOINT)</p>
--os-access-token-type <auth-access-token-type>	<p>With v3oidcauthcode: oauth 2.0 authorization server Introspection token type, it is used to decide which type of token will be used when processing token introspection. Valid values are: "access_token" or "id_token" With v3oidcclientcredentials: OAuth 2.0 Authorization Server Introspection token type, it is used to decide which type of token will be used when processing token introspection. Valid values are: "access_token" or "id_token" With v3oidcpassword: OAuth 2.0 Authorization Server Introspection token type, it is used to decide which type of token will be used when processing token introspection. Valid values are: "access_token" or "id_token" (Env: OS_ACCESS_TOKEN_TYPE)</p>
-v, --verbose	Increase verbosity of output. can be repeated.
--os-workflow-api-version <workflow-api-version>	Workflow api version, default=2 (env: OS_WORKFLOW_API_VERSION)
--os-application-credential-id <auth-application-credential-id>	With v3applicationcredential: application credential ID (Env: OS_APPLICATION_CREDENTIAL_ID)
--os-data-processing-url OS_DATA_PROCESSING_URL	Data processing api url, (env: OS_DATA_PROCESSING_API_URL)
--os-service-provider <service_provider>	Authenticate with and perform the command on a service provider using Keystone-to-keystone federation. Must also specify the remote project option.

Value	Summary
<code>--os-image-api-version &lt;image-api-version&gt;</code>	Image api version, default=2 (env: OS_IMAGE_API_VERSION)
<code>--os-user-domain-name &lt;auth-user-domain-name&gt;</code>	With v3password: user's domain name with v3totp: User's domain name With password: User's domain name With v3applicationcredential: User's domain name (Env: OS_USER_DOMAIN_NAME)
<code>--os-remote-project-id &lt;remote_project_id&gt;</code>	Project id when authenticating to a service provider if using Keystone-to-Keystone federation.
<code>--os-key &lt;key-file&gt;</code>	Client certificate key file (env: os_key)
<code>--os-identity-provider &lt;auth-identity-provider&gt;</code>	With v3adfspassword: identity provider's name with v3oidcauthcode: Identity Provider's name With v3samlpassword: Identity Provider's name With v3oidcclientcredentials: Identity Provider's name With v3oidcaccess token: Identity Provider's name With v3oidcpassword: Identity Provider's name (Env: OS_IDENTITY_PROVIDER)
<code>--os-user-domain-id &lt;auth-user-domain-id&gt;</code>	With v3password: user's domain id with v3totp: user's domain id With password: User's domain id With v3applicationcredential: User's domain id (Env: OS_USER_DOMAIN_ID)
<code>--os-default-domain &lt;auth-domain&gt;</code>	Default domain id, default=default. (env: OS_DEFAULT_DOMAIN)
<code>--os-volume-api-version &lt;volume-api-version&gt;</code>	Volume api version, default=2 (env: OS_VOLUME_API_VERSION)
<code>--log-file LOG_FILE</code>	Specify a file to log output. disabled by default.
<code>--os-access-key &lt;auth-access-key&gt;</code>	With v3oauth1: oauth access key (env: os_access_key)
<code>--debug</code>	Show tracebacks on errors.

Value	Summary
<code>--os-access-token-endpoint &lt;auth-access-token-endpoint&gt;</code>	<p>With <code>v3oidcauthcode</code>: openid connect provider token Endpoint. Note that if a discovery document is being passed this option will override the endpoint provided by the server in the discovery document. With <code>v3oidcclientcredentials</code>: OpenID Connect Provider Token Endpoint. Note that if a discovery document is being passed this option will override the endpoint provided by the server in the discovery document. With <code>v3oidcpassword</code>: OpenID Connect Provider Token Endpoint. Note that if a discovery document is being passed this option will override the endpoint provided by the server in the discovery document. (Env: <code>OS_ACCESS_TOKEN_ENDPOINT</code>)</p>
<code>--os-domain-name &lt;auth-domain-name&gt;</code>	<p>With <code>v3adfspassword</code>: domain name to scope to with <code>v3password</code>: Domain name to scope to With <code>v3token</code>: Domain name to scope to With <code>v3oidcauthcode</code>: Domain name to scope to With <code>v3samlpasword</code>: Domain name to scope to With <code>v3totp</code>: Domain name to scope to With <code>v3tokenlessauth</code>: Domain name to scope to With <code>v3oidcclientcredentials</code>: Domain name to scope to With <code>password</code>: Domain name to scope to With <code>v3oidcacesstoken</code>: Domain name to scope to With <code>v3oidcpassword</code>: Domain name to scope to With <code>token</code>: Domain name to scope to With <code>v3applicationcredential</code>: Domain name to scope to (Env: <code>OS_DOMAIN_NAME</code>)</p>
<code>--os-project-id &lt;auth-project-id&gt;</code>	<p>With <code>v3adfspassword</code>: project id to scope to with <code>v3password</code>: Project ID to scope to With <code>noauth</code>: Project ID With <code>v3token</code>: Project ID to scope to With <code>v3oidcauthcode</code>: Project ID to scope to With <code>v3samlpasword</code>: Project ID to scope to With <code>v3totp</code>: Project ID to scope to With <code>aodh-noauth</code>: Project ID With <code>v3tokenlessauth</code>: Project ID to scope to With <code>v3oidcclientcredentials</code>: Project ID to scope to With <code>gnocchi-noauth</code>: Project ID With <code>password</code>: Project ID to scope to With <code>v3oidcacesstoken</code>: Project ID to scope to With <code>v3oidcpassword</code>: Project ID to scope to With <code>token</code>: Project ID to scope to With <code>v3applicationcredential</code>: Project ID to scope to (Env: <code>OS_PROJECT_ID</code>)</p>
<code>-q, --quiet</code>	<p>Suppress output except warnings and errors.</p>
<code>--version</code>	<p>Show program's version number and exit</p>
<code>--os-metrics-api-version &lt;metrics-api-version&gt;</code>	<p>Metrics api version, default=1 (env: <code>OS_METRICS_API_VERSION</code>)</p>

Value	Summary
<code>--os-interface &lt;interface&gt;</code>	Select an interface type. valid interface types: [admin, public, internal]. (Env: OS_INTERFACE)
<code>--os-client-id &lt;auth-client-id&gt;</code>	With v3oidcauthcode: oauth 2.0 client id with v3oidcclientcredentials: OAuth 2.0 Client ID With v3oidcpassword: OAuth 2.0 Client ID (Env: OS_CLIENT_ID)
<code>--os-token &lt;auth-token&gt;</code>	With v2token: token with admin_token: the token that will always be used With v3token: Token to authenticate with With token_endpoint: Authentication token to use With token: Token to authenticate with (Env: OS_TOKEN)
<code>--os-object-api-version &lt;object-api-version&gt;</code>	Object api version, default=1 (env: OS_OBJECT_API_VERSION)
<code>--os-database-api-version &lt;database-api-version&gt;</code>	Database api version, default=1 (env: OS_DATABASE_API_VERSION)
<code>--os-consumer-key &lt;auth-consumer-key&gt;</code>	With v3oauth1: oauth consumer id/key (env: OS_CONSUMER_KEY)
<code>--os-url &lt;auth-url&gt;</code>	With token_endpoint: specific service endpoint to use (Env: OS_URL)
<code>--os-openid-scope &lt;auth-openid-scope&gt;</code>	With v3oidcauthcode: openid connect scope that is requested from authorization server. Note that the OpenID Connect specification states that "openid" must be always specified. With v3oidcclientcredentials: OpenID Connect scope that is requested from authorization server. Note that the OpenID Connect specification states that "openid" must be always specified. With v3oidcpassword: OpenID Connect scope that is requested from authorization server. Note that the OpenID Connect specification states that "openid" must be always specified. (Env: OS_OPENID_SCOPE)
<code>--os-username &lt;auth-username&gt;</code>	With v3adfpassword: username with v2password: Username to login with With v3password: Username With v3samlpayload: Username With v1password: Username to login with With v3totp: Username With password: Username With v3oidcpassword: Username With v3applicationcredential: Username (Env: OS_USERNAME)

## CHAPTER 2. ACL

This chapter describes the commands under the **acl** command.

### 2.1. ACL DELETE

Delete ACLs for a secret or container as identified by its href.

#### Usage:

```
openstack acl delete [-h] URI
```

Table 2.1. Positional Arguments

Value	Summary
URI	The uri reference for the secret or container.

Table 2.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 2.2. ACL GET

Retrieve ACLs for a secret or container by providing its href.

#### Usage:

```
openstack acl get [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
  [--max-width <integer>] [--fit-width] [--print-empty]
  [--noindent] [--quote {all,minimal,none,nonnumeric}]
  [--sort-column SORT_COLUMN]
  URI
```

Table 2.3. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 2.4. Positional Arguments

Value	Summary
URI	The uri reference for the secret or container.

Table 2.5. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 2.6. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 2.7. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 2.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 2.3. ACL SUBMIT

Submit ACL on a secret or container as identified by its href.

### Usage:

```
openstack acl submit [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
```



```

[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN] [--user [USERS]]
[--project-access | --no-project-access]
[--operation-type {read}]
URI

```

Table 2.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 2.10. Positional Arguments

Value	Summary
URI	The uri reference for the secret or container.

Table 2.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 2.12. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 2.13. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 2.14. Optional Arguments

Value	Summary
--project-access	Flag to enable project access behavior.
-h, --help	Show this help message and exit
--user [USERS], -u [USERS]	Keystone userid(s) for acl.
--operation-type {read}, -o {read}	Type of barbican operation acl is set for
--no-project-access	Flag to disable project access behavior.

## 2.4. ACL USER ADD

Add ACL users to a secret or container as identified by its href.

### Usage:

```

openstack acl user add [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--user [USERS]]
                        [--project-access | --no-project-access]
                        [--operation-type {read}]
                        URI

```

Table 2.15. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 2.16. Positional Arguments

Value	Summary
URI	The uri reference for the secret or container.

Table 2.17. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 2.18. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 2.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 2.20. Optional Arguments

Value	Summary
--project-access	Flag to enable project access behavior.
-h, --help	Show this help message and exit
--user [USERS], -u [USERS]	Keystone userid(s) for acl.
--operation-type {read}, -o {read}	Type of barbican operation acl is set for
--no-project-access	Flag to disable project access behavior.

## 2.5. ACL USER REMOVE

Remove ACL users from a secret or container as identified by its href.

### Usage:

```
openstack acl user remove [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN] [--user [USERS]]
                          [--project-access | --no-project-access]
                          [--operation-type {read}]
                          URI
```

**Table 2.21. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 2.22. Positional Arguments**

Value	Summary
URI	The uri reference for the secret or container.

**Table 2.23. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 2.24. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 2.25. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 2.26. Optional Arguments

Value	Summary
<code>--project-access</code>	Flag to enable project access behavior.
<code>-h, --help</code>	Show this help message and exit
<code>--user [USERS], -u [USERS]</code>	Keystone userid(s) for acl.
<code>--operation-type {read}, -o {read}</code>	Type of barbican operation acl is set for
<code>--no-project-access</code>	Flag to disable project access behavior.

## CHAPTER 3. ACTION

This chapter describes the commands under the **action** command.

### 3.1. ACTION DEFINITION CREATE

Create new action.

#### Usage:

```
openstack action definition create [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--public]
                                definition
```

Table 3.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 3.2. Positional Arguments

Value	Summary
definition	Action definition file

Table 3.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 3.4. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 3.5. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 3.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--public	With this flag action will be marked as "public".

## 3.2. ACTION DEFINITION DEFINITION SHOW

Show action definition.

### Usage:

```
openstack action definition definition show [-h] name
```

Table 3.7. Positional Arguments

Value	Summary
name	Action name

Table 3.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 3.3. ACTION DEFINITION DELETE

Delete action.

#### Usage:

```
openstack action definition delete [-h] action [action ...]
```

Table 3.9. Positional Arguments

Value	Summary
action	Name or id of action(s).

Table 3.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 3.4. ACTION DEFINITION LIST

List all actions.

#### Usage:

```
openstack action definition list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN]
    [--filter FILTERS]
```

Table 3.11. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 3.12. CSV Formatter



Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 3.13. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 3.14. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 3.15. Optional Arguments

Value	Summary
<code>--filter FILTERS</code>	Filters. can be repeated.
<code>-h, --help</code>	Show this help message and exit

## 3.5. ACTION DEFINITION SHOW

Show specific action.

### Usage:

```
openstack action definition show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                action
```

Table 3.16. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 3.17. Positional Arguments

Value	Summary
<code>action</code>	Action (name or id)

Table 3.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 3.19. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 3.20. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 3.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 3.6. ACTION DEFINITION UPDATE

Update action.

### Usage:

```
openstack action definition update [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--id ID] [--public]
                                definition
```

Table 3.22. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 3.23. Positional Arguments

Value	Summary
definition	Action definition file

Table 3.24. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 3.25. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 3.26. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 3.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--id ID	Action id.
--public	With this flag action will be marked as "public".

## 3.7. ACTION EXECUTION DELETE

Delete action execution.

### Usage:

```
openstack action execution delete [-h]
                                action_execution
                                [action_execution ...]
```

Table 3.28. Positional Arguments

Value	Summary
action_execution	Id of action execution identifier(s).

Table 3.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 3.8. ACTION EXECUTION INPUT SHOW

Show Action execution input data.

### Usage:

```
openstack action execution input show [-h] id
```

Table 3.30. Positional Arguments

Value	Summary
id	Action execution id.

Table 3.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 3.9. ACTION EXECUTION LIST

List all Action executions.

### Usage:

```
openstack action execution list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--limit [LIMIT]]
                                [task_execution_id]
```

Table 3.32. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 3.33. Positional Arguments

Value	Summary
task_execution_id	Task execution id.

Table 3.34. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 3.35. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 3.36. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 3.37. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit [LIMIT]	Maximum number of action-executions to return in a single result. limit is set to 100 by default. Use --limit -1 to fetch the full result set.

## 3.10. ACTION EXECUTION OUTPUT SHOW

Show Action execution output data.

**Usage:**

```
openstack action execution output show [-h] id
```

Table 3.38. Positional Arguments

Value	Summary
id	Action execution id.

Table 3.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 3.11. ACTION EXECUTION RUN

Create new Action execution or just run specific action.

### Usage:

```
openstack action execution run [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX] [-s]
                               [--run-sync] [-t TARGET]
                               name [input]
```

Table 3.40. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 3.41. Positional Arguments

Value	Summary
input	Action input.
name	Action name to execute.

**Table 3.42. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 3.43. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 3.44. Optional Arguments**

Value	Summary
-s, --save-result	Save the result into db.
-t TARGET, --target TARGET	Action will be executed on <target> executor.
-h, --help	Show this help message and exit
--run-sync	Run the action synchronously.

**Table 3.45. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 3.12. ACTION EXECUTION SHOW

Show specific Action execution.

### Usage:

```

openstack action execution show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                action_execution

```

**Table 3.46. Table Formatter**



Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 3.47. Positional Arguments

Value	Summary
<code>action_execution</code>	Action execution id.

Table 3.48. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 3.49. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 3.50. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 3.51. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

### 3.13. ACTION EXECUTION UPDATE

Update specific Action execution.

#### Usage:

```
openstack action execution update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--state {IDLE,RUNNING,SUCCESS,ERROR,CANCELLED}]
                                [--output OUTPUT]
                                id
```

Table 3.52. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 3.53. Positional Arguments

Value	Summary
id	Action execution id.

Table 3.54. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 3.55. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 3.56. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--output OUTPUT</code>	Action execution output
<code>--state</code> {IDLE,RUNNING,SUCCESS,ERROR,CANCELLED}	Action execution state

Table 3.57. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--</code> <code>prefix PREFIX</code>	Add a prefix to all variable names

## CHAPTER 4. ADDRESS

This chapter describes the commands under the **address** command.

### 4.1. ADDRESS SCOPE CREATE

Create a new Address Scope

#### Usage:

```
openstack address scope create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--ip-version {4,6}]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               [--share | --no-share]
                               <name>
```

Table 4.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 4.2. Positional Arguments

Value	Summary
<name>	New address scope name

Table 4.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 4.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 4.5. Optional Arguments

Value	Summary
<code>--share</code>	Share the address scope between projects
<code>--ip-version {4,6}</code>	Ip version (default is 4)
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--no-share</code>	Do not share the address scope between projects (default)
<code>-h, --help</code>	Show this help message and exit
<code>--project &lt;project&gt;</code>	Owner's project (name or id)

Table 4.6. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 4.2. ADDRESS SCOPE DELETE

Delete address scope(s)

### Usage:

```
openstack address scope delete [-h]
                               <address-scope> [<address-scope> ...]
```

Table 4.7. Positional Arguments

Value	Summary
<code>&lt;address-scope&gt;</code>	Address scope(s) to delete (name or id)

Table 4.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 4.3. ADDRESS SCOPE LIST

List address scopes

#### Usage:

```

openstack address scope list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--name <name>]
                             [--ip-version <ip-version>]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             [--share | --no-share]

```

Table 4.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 4.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 4.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 4.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.13. Optional Arguments

Value	Summary
--share	List address scopes shared between projects
--ip-version <ip-version>	List address scopes of given ip version networks (4 or 6)
--name <name>	List only address scopes of given name in output
--project <project>	List address scopes according to their project (name or ID)
--no-share	List address scopes not shared between projects
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

## 4.4. ADDRESS SCOPE SET

Set address scope properties

### Usage:

```
openstack address scope set [-h] [--name <name>] [--share | --no-share]
                             <address-scope>
```

-

Table 4.14. Positional Arguments

Value	Summary
<address-scope>	Address scope to modify (name or id)

Table 4.15. Optional Arguments

Value	Summary
--share	Share the address scope between projects
--name <name>	Set address scope name
-h, --help	Show this help message and exit
--no-share	Do not share the address scope between projects

## 4.5. ADDRESS SCOPE SHOW

Display address scope details

### Usage:

```
openstack address scope show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <address-scope>
```

Table 4.16. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 4.17. Positional Arguments



Value	Summary
<address-scope>	Address scope to display (name or id)

**Table 4.18. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 4.19. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 4.20. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 4.21. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 5. AGGREGATE

This chapter describes the commands under the **aggregate** command.

### 5.1. AGGREGATE ADD HOST

Add host to aggregate

#### Usage:

```
openstack aggregate add host [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <aggregate> <host>
```

Table 5.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 5.2. Positional Arguments

Value	Summary
<aggregate>	Aggregate (name or id)
<host>	Host to add to <aggregate>

Table 5.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 5.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 5.5. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 5.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 5.2. AGGREGATE CREATE

Create a new aggregate

### Usage:

```
openstack aggregate create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          [--zone <availability-zone>]
                          [--property <key=value>]
                          <name>
```

Table 5.7. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 5.8. Positional Arguments

Value	Summary
<name>	New aggregate name

**Table 5.9. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 5.10. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 5.11. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--zone <availability-zone>	Availability zone name
--property <key=value>	Property to add to this aggregate (repeat option to set multiple properties)

**Table 5.12. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 5.3. AGGREGATE DELETE

Delete existing aggregate(s)

### Usage:

```
openstack aggregate delete [-h] <aggregate> [<aggregate> ...]
```

Table 5.13. Positional Arguments

Value	Summary
<aggregate>	Aggregate(s) to delete (name or id)

Table 5.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 5.4. AGGREGATE LIST

List all aggregates

### Usage:

```
openstack aggregate list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--long]
```

Table 5.15. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 5.16. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 5.17. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 5.18. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 5.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

## 5.5. AGGREGATE REMOVE HOST

Remove host from aggregate

### Usage:

```
openstack aggregate remove host [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <aggregate> <host>
```

Table 5.20. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 5.21. Positional Arguments

Value	Summary
<code>&lt;aggregate&gt;</code>	Aggregate (name or id)
<code>&lt;host&gt;</code>	Host to remove from <code>&lt;aggregate&gt;</code>

Table 5.22. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 5.23. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 5.24. Optional Arguments

Value	Summary
<code>-h</code> , <code>--help</code>	Show this help message and exit

Table 5.25. Shell Formatter

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## 5.6. AGGREGATE SET

Set aggregate properties

**Usage:**

```
openstack aggregate set [-h] [--name <name>]
                        [--zone <availability-zone>]
                        [--property <key=value>] [--no-property]
                        <aggregate>
```

**Table 5.26. Positional Arguments**

Value	Summary
<aggregate>	Aggregate to modify (name or id)

**Table 5.27. Optional Arguments**

Value	Summary
--name <name>	Set aggregate name
-h, --help	Show this help message and exit
--zone <availability-zone>	Set availability zone name
--no-property	Remove all properties from <aggregate> (specify both --property and --no-property to overwrite the current properties)
--property <key=value>	Property to set on <aggregate> (repeat option to set multiple properties)

## 5.7. AGGREGATE SHOW

Display aggregate details

**Usage:**

```
openstack aggregate show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        <aggregate>
```

**Table 5.28. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.



Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 5.29. Positional Arguments

Value	Summary
<code>&lt;aggregate&gt;</code>	Aggregate to display (name or id)

Table 5.30. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 5.31. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 5.32. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 5.33. Shell Formatter

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## 5.8. AGGREGATE UNSET

Unset aggregate properties

### Usage:

```
openstack aggregate unset [-h] [--property <key>] <aggregate>
```

Table 5.34. Positional Arguments

Value	Summary
<aggregate>	Aggregate to modify (name or id)

Table 5.35. Optional Arguments

Value	Summary
--property <key>	Property to remove from aggregate (repeat option to remove multiple properties)
-h, --help	Show this help message and exit

## CHAPTER 6. ALARM

This chapter describes the commands under the **alarm** command.

### 6.1. ALARM CREATE

Create an alarm

#### Usage:

```
openstack alarm create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] --name <NAME> -t <TYPE>
                        [--project-id <PROJECT_ID>]
                        [--user-id <USER_ID>]
                        [--description <DESCRIPTION>] [--state <STATE>]
                        [--severity <SEVERITY>] [--enabled {True|False}]
                        [--alarm-action <Webhook URL>]
                        [--ok-action <Webhook URL>]
                        [--insufficient-data-action <Webhook URL>]
                        [--time-constraint <Time Constraint>]
                        [--repeat-actions {True|False}]
                        [--query <QUERY>]
                        [--comparison-operator <OPERATOR>]
                        [--evaluation-periods <EVAL_PERIODS>]
                        [--threshold <THRESHOLD>] [--metric <METRIC>]
                        [--event-type <EVENT_TYPE>]
                        [--granularity <GRANULARITY>]
                        [--aggregation-method <AGGR_METHOD>]
                        [--resource-type <RESOURCE_TYPE>]
                        [--resource-id <RESOURCE_ID>]
                        [--metrics <METRICS>]
                        [--composite-rule <COMPOSITE_RULE>]
```

Table 6.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 6.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 6.3. common gnocchi alarm rules**

Value	Summary
--aggregation-method <AGGR_METHOD>	The aggregation_method to compare to the threshold.
--granularity <GRANULARITY>	The time range in seconds over which to query.

**Table 6.4. event alarm**

Value	Summary
--event-type <EVENT_TYPE>	Event type to evaluate against

**Table 6.5. gnocchi resource threshold alarm**

Value	Summary
--resource-id <RESOURCE_ID>	The id of a resource.
--resource-type <RESOURCE_TYPE>	The type of resource.

**Table 6.6. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 6.7. composite alarm**

Value	Summary
--composite-rule <COMPOSITE_RULE>	Composite threshold rule with json format, the form can be a nested dict which combine gnocchi rules by "and", "or". For example, the form is like: {"or": [RULE1, RULE2, {"and": [RULE3, RULE4]}]}.

Table 6.8. Optional Arguments

Value	Summary
--ok-action <Webhook URL>	Url to invoke when state transitions to ok. may be used multiple times
--user-id <USER_ID>	User to associate with alarm (configurable by admin users only)
--name <NAME>	Name of the alarm
-t <TYPE>, --type <TYPE>	Type of alarm, should be one of: event, composite, gnocchi_resources_threshold, gnocchi_aggregation_by_metrics_threshold, gnocchi_aggregation_by_resources_threshold.
--repeat-actions {True	False}
True if actions should be repeatedly notified while alarm remains in target state	--state <STATE>
State of the alarm, one of: [ <i>ok, alarm, insufficient data</i> ]	--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>]]	--project-id <PROJECT_ID>
Project to associate with alarm (configurable by admin users only)	--insufficient-data-action <Webhook URL>
Url to invoke when state transitions to insufficient data. May be used multiple times	--severity <SEVERITY>
Severity of the alarm, one of: [ <i>low, moderate, critical</i> ]	--alarm-action <Webhook URL>
Url to invoke when state transitions to alarm. may be used multiple times	-h, --help
Show this help message and exit	--description <DESCRIPTION>
Free text description of the alarm	--enabled {True
False}	True if alarm evaluation is enabled

Table 6.9. common alarm rules

Value	Summary
<code>--evaluation-periods &lt;EVAL_PERIODS&gt;</code>	Number of periods to evaluate over
<code>--query &lt;QUERY&gt;</code>	For alarms of type event: <code>key[op]data_type::value;</code> list. <code>data_type</code> is optional, but if supplied must be string, integer, float, or boolean. For alarms of type <code>gnocchi_aggregation_by_resources_threshold</code> : need to specify a complex query json string, like: <code>{"and": [{"=": {"ended_at": null}}, ...]}</code> .
<code>--comparison-operator &lt;OPERATOR&gt;</code>	Operator to compare with, one of: <code>[lt, le, eq, ne, ge, gt]</code>
<code>--metric &lt;METRIC&gt;</code>	Metric to evaluate against.
<code>--threshold &lt;THRESHOLD&gt;</code>	Threshold to evaluate against.

Table 6.10. gnocchi aggregation by metrics alarm

Value	Summary
<code>--metrics &lt;METRICS&gt;</code>	The list of metric ids.

Table 6.11. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

## 6.2. ALARM DELETE

Delete an alarm

### Usage:

```
openstack alarm delete [-h] [--name <NAME>] [<ALARM ID or NAME>]
```

Table 6.12. Positional Arguments

Value	Summary
<code>&lt;ALARM ID or NAME&gt;</code>	Id or name of an alarm.

Table 6.13. Optional Arguments

Value	Summary
<code>--name &lt;NAME&gt;</code>	Name of the alarm
<code>-h, --help</code>	Show this help message and exit

### 6.3. ALARM-HISTORY SEARCH

Show history for all alarms based on query

#### Usage:

```
openstack alarm-history search [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]
                               [--query QUERY]
```

Table 6.14. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 6.15. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 6.16. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format</code> <code>{csv,json,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 6.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--query QUERY	Rich query supported by aodh, e.g. project_id!=my-id user_id=foo or user_id=bar

## 6.4. ALARM-HISTORY SHOW

Show history for an alarm

### Usage:

```

openstack alarm-history show [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--limit <LIMIT>] [--marker <MARKER>]
                             [--sort <SORT_KEY:SORT_DIR>]
alarm_id

```

Table 6.19. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.



Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 6.20. Positional Arguments

Value	Summary
<code>alarm_id</code>	Id of an alarm

Table 6.21. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 6.22. Output Formatters

Value	Summary
output formatter options- <code>{csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 6.23. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 6.24. Optional Arguments

Value	Summary
<code>--sort &lt;SORT_KEY:SORT_DIR&gt;</code>	Sort of resource attribute. e.g. timestamp:desc
<code>--limit &lt;LIMIT&gt;</code>	Number of resources to return (default is server default)

Value	Summary
-h, --help	Show this help message and exit
--marker <MARKER>	Last item of the previous listing. return the next results after this value,the supported marker is event_id.

## 6.5. ALARM LIST

List alarms

### Usage:

```
openstack alarm list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN]
                    [--query QUERY | --filter <KEY1=VALUE1;KEY2=VALUE2...>]
                    [--limit <LIMIT>] [--marker <MARKER>]
                    [--sort <SORT_KEY:SORT_DIR>]
```

Table 6.25. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 6.26. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 6.27. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 6.28. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.29. Optional Arguments

Value	Summary
--sort <SORT_KEY:SORT_DIR>	Sort of resource attribute, e.g. name:asc
--filter <KEY1=VALUE1;KEY2=VALUE2...>	Filter parameters to apply on returned alarms.
--query QUERY	Rich query supported by aodh, e.g. project_id!=my-id user_id=foo or user_id=bar
--marker <MARKER>	Last item of the previous listing. return the next results after this value,the supported marker is alarm_id.
--limit <LIMIT>	Number of resources to return (default is server default)
-h, --help	Show this help message and exit

## 6.6. ALARM SHOW

Show an alarm

### Usage:

```
openstack alarm show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
```

```

[--print-empty] [--noindent] [--prefix PREFIX]
[--name <NAME>]
[<ALARM ID or NAME>]

```

**Table 6.30. Table Formatter**

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 6.31. Positional Arguments**

Value	Summary
<code>&lt;ALARM ID or NAME&gt;</code>	Id or name of an alarm.

**Table 6.32. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 6.33. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 6.34. Optional Arguments**

Value	Summary
<code>--name &lt;NAME&gt;</code>	Name of the alarm
<code>-h, --help</code>	Show this help message and exit

Table 6.35. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 6.7. ALARM STATE GET

Get state of an alarm

### Usage:

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

Table 6.36. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 6.37. Positional Arguments

Value	Summary
<ALARM ID or NAME>	Id or name of an alarm.

Table 6.38. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 6.39. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.40. Optional Arguments

Value	Summary
--name <NAME>	Name of the alarm
-h, --help	Show this help message and exit

Table 6.41. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 6.8. ALARM STATE SET

Set state of an alarm

### Usage:

```

openstack alarm state set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--name <NAME>] --state
                        <STATE>
                        [<ALARM ID or NAME>]

```

Table 6.42. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 6.43. Positional Arguments

Value	Summary
<ALARM ID or NAME>	Id or name of an alarm.

Table 6.44. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 6.45. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.46. Optional Arguments

Value	Summary
--name <NAME>	Name of the alarm
-h, --help	Show this help message and exit
--state <STATE>	State of the alarm, one of: [ <i>ok, alarm, insufficient data</i> ]

Table 6.47. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 6.9. ALARM UPDATE

Update an alarm

**Usage:**

```
openstack alarm update [-h] [-f {json,shell,table,value,yaml}]
```

```

[-c COLUMN] [--max-width <integer>]
[--fit-width] [--print-empty] [--noindent]
[--prefix PREFIX] [--name <NAME>] [-t <TYPE>]
[--project-id <PROJECT_ID>]
[--user-id <USER_ID>]
[--description <DESCRIPTION>] [--state <STATE>]
[--severity <SEVERITY>] [--enabled {True|False}]
[--alarm-action <Webhook URL>]
[--ok-action <Webhook URL>]
[--insufficient-data-action <Webhook URL>]
[--time-constraint <Time Constraint>]
[--repeat-actions {True|False}]
[--query <QUERY>]
[--comparison-operator <OPERATOR>]
[--evaluation-periods <EVAL_PERIODS>]
[--threshold <THRESHOLD>] [--metric <METRIC>]
[--event-type <EVENT_TYPE>]
[--granularity <GRANULARITY>]
[--aggregation-method <AGGR_METHOD>]
[--resource-type <RESOURCE_TYPE>]
[--resource-id <RESOURCE_ID>]
[--metrics <METRICS>]
[--composite-rule <COMPOSITE_RULE>]
[<ALARM ID or NAME>]

```

Table 6.48. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 6.49. Positional Arguments

Value	Summary
<ALARM ID or NAME>	Id or name of an alarm.

Table 6.50. Output Formatters



Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 6.51. common gnocchi alarm rules**

Value	Summary
--aggregation-method <AGGR_METHOD>	The aggregation_method to compare to the threshold.
--granularity <GRANULARITY>	The time range in seconds over which to query.

**Table 6.52. event alarm**

Value	Summary
--event-type <EVENT_TYPE>	Event type to evaluate against

**Table 6.53. gnocchi resource threshold alarm**

Value	Summary
--resource-id <RESOURCE_ID>	The id of a resource.
--resource-type <RESOURCE_TYPE>	The type of resource.

**Table 6.54. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 6.55. composite alarm**

Value	Summary
-------	---------

Value	Summary
<code>--composite-rule &lt;COMPOSITE_RULE&gt;</code>	Composite threshold rule with json format, the form can be a nested dict which combine gnocchi rules by "and", "or". For example, the form is like: {"or": [RULE1, RULE2, {"and": [RULE3, RULE4]}]}.

Table 6.56. Optional Arguments

Value	Summary
<code>--ok-action &lt;Webhook URL&gt;</code>	Url to invoke when state transitions to ok. may be used multiple times
<code>--user-id &lt;USER_ID&gt;</code>	User to associate with alarm (configurable by admin users only)
<code>--name &lt;NAME&gt;</code>	Name of the alarm
<code>-t &lt;TYPE&gt;, --type &lt;TYPE&gt;</code>	Type of alarm, should be one of: event, composite, gnocchi_resources_threshold, gnocchi_aggregation_by_metrics_threshold, gnocchi_aggregation_by_resources_threshold.
<code>--repeat-actions {True</code>	False}
True if actions should be repeatedly notified while alarm remains in target state	<code>--state &lt;STATE&gt;</code>
State of the alarm, one of: [ <i>ok, alarm, insufficient data</i> ]	<code>--time-constraint &lt;Time Constraint&gt;</code>
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>]]	<code>--project-id &lt;PROJECT_ID&gt;</code>
Project to associate with alarm (configurable by admin users only)	<code>--insufficient-data-action &lt;Webhook URL&gt;</code>
Url to invoke when state transitions to insufficient data. May be used multiple times	<code>--severity &lt;SEVERITY&gt;</code>
Severity of the alarm, one of: [ <i>low, moderate, critical</i> ]	<code>--alarm-action &lt;Webhook URL&gt;</code>

Value	Summary
Url to invoke when state transitions to alarm. may be used multiple times	-h, --help
Show this help message and exit	--description <DESCRIPTION>
Free text description of the alarm	--enabled {True
False}	True if alarm evaluation is enabled

Table 6.57. common alarm rules

Value	Summary
--evaluation-periods <EVAL_PERIODS>	Number of periods to evaluate over
--query <QUERY>	For alarms of type event: key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean. For alarms of type gnocchi_aggregation_by_resources_threshold: need to specify a complex query json string, like: {"and": [{"=": {"ended_at": null}}, ...]}.
--comparison-operator <OPERATOR>	Operator to compare with, one of: [ <i>lt, le, eq, ne, ge, gt</i> ]
--metric <METRIC>	Metric to evaluate against.
--threshold <THRESHOLD>	Threshold to evaluate against.

Table 6.58. gnocchi aggregation by metrics alarm

Value	Summary
--metrics <METRICS>	The list of metric ids.

Table 6.59. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")--prefix PREFIX	Add a prefix to all variable names

## CHAPTER 7. ALARMING

This chapter describes the commands under the **alarming** command.

### 7.1. ALARMING CAPABILITIES LIST

List capabilities of alarming service

#### Usage:

```
openstack alarming capabilities list [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent] [--prefix PREFIX]
```

**Table 7.1. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 7.2. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 7.3. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 7.4. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 7.5. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 8. AVAILABILITY

This chapter describes the commands under the **availability** command.

### 8.1. AVAILABILITY ZONE LIST

List availability zones and their status

#### Usage:

```
openstack availability zone list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--compute] [--network] [--volume]
                                [--long]
```

Table 8.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 8.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 8.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 8.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 8.5. Optional Arguments

Value	Summary
<code>--compute</code>	List compute availability zones
<code>--volume</code>	List volume availability zones
<code>-h, --help</code>	Show this help message and exit
<code>--network</code>	List network availability zones
<code>--long</code>	List additional fields in output

## CHAPTER 9. BAREMETAL

This chapter describes the commands under the **baremetal** command.

### 9.1. BAREMETAL CHASSIS CREATE

Create a new chassis.

#### Usage:

```
openstack baremetal chassis create [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--noindent] [--prefix PREFIX]
                                  [--description <description>]
                                  [--extra <key=value>]
                                  [--uuid <uuid>]
```

Table 9.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json



Table 9.4. Optional Arguments

Value	Summary
--uuid <uuid>	Unique uuid of the chassis
-h, --help	Show this help message and exit
--description <description>	Description for the chassis
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.

Table 9.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.2. BAREMETAL CHASSIS DELETE

Delete a chassis.

### Usage:

```
openstack baremetal chassis delete [-h] <chassis> [<chassis> ...]
```

Table 9.6. Positional Arguments

Value	Summary
<chassis>	Uids of chassis to delete

Table 9.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.3. BAREMETAL CHASSIS LIST

List the chassis.

### Usage:

```
openstack baremetal chassis list [-h] [-f {csv,json,table,value,yaml}]
```

```

[-c COLUMN] [--max-width <integer>]
[--fit-width] [--print-empty]
[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
[--fields <field> [<field> ...]]
[--limit <limit>] [--long]
[--marker <chassis>]
[--sort <key>[:<direction>]]

```

Table 9.8. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.9. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.11. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.12. Optional Arguments

Value	Summary
<code>--marker &lt;chassis&gt;</code>	Chassis uuid (for example, of the last chassis in the list from a previous request). Returns the list of chassis after this UUID.
<code>--long</code>	Show detailed information about the chassis
<code>--limit &lt;limit&gt;</code>	Maximum number of chassis to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
<code>--fields &lt;field&gt; [&lt;field&gt; ...]</code>	One or more chassis fields. only these fields will be fetched from the server. Cannot be used when <code>--long</code> is specified.
<code>--sort &lt;key&gt;[:&lt;direction&gt;]</code>	Sort output by specified chassis fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
<code>-h, --help</code>	Show this help message and exit

## 9.4. BAREMETAL CHASSIS SET

Set chassis properties.

### Usage:

```
openstack baremetal chassis set [-h] [--description <description>]
                               [--extra <key=value>]
                               <chassis>
```

Table 9.13. Positional Arguments

Value	Summary
<code>&lt;chassis&gt;</code>	Uuid of the chassis

Table 9.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Set the description of the chassis
--extra <key=value>	Extra to set on this chassis (repeat option to set multiple extras)

## 9.5. BAREMETAL CHASSIS SHOW

Show chassis details.

### Usage:

```
openstack baremetal chassis show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--fields <field> [<field> ...]]
                                <chassis>
```

Table 9.15. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.16. Positional Arguments

Value	Summary
<chassis>	Uuid of the chassis

Table 9.17. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.18. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	One or more chassis fields. only these fields will be fetched from the server.

Table 9.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.6. BAREMETAL CHASSIS UNSET

Unset chassis properties.

### Usage:

```
openstack baremetal chassis unset [-h] [--description] [--extra <key>]
                                <chassis>
```

Table 9.21. Positional Arguments

Value	Summary
<chassis>	Uuid of the chassis

Table 9.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--extra <key>	Extra to unset on this chassis (repeat option to unset multiple extras)
--description	Clear the chassis description

## 9.7. BAREMETAL CREATE

Create resources from files

### Usage:

```
openstack baremetal create [-h] <file> [<file> ...]
```

Table 9.23. Positional Arguments

Value	Summary
<file>	File (.yaml or .json) containing descriptions of the resources to create. Can be specified multiple times.

Table 9.24. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.8. BAREMETAL DRIVER LIST

List the enabled drivers.

### Usage:

```
openstack baremetal driver list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--type <type>] [--long]
```

Table 9.25. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 9.26. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 9.27. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.28. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.29. Optional Arguments

Value	Summary
<code>--type &lt;type&gt;</code>	Type of driver ("classic" or "dynamic"). the default is to list all of them.
<code>-h, --help</code>	Show this help message and exit

Value	Summary
--long	Show detailed information about the drivers.

## 9.9. BAREMETAL DRIVER PASSTHRU CALL

Call a vendor passthru method for a driver.

### Usage:

```
openstack baremetal driver passthru call [-h]
      [-f {json,shell,table,value,yaml}]
      [-c COLUMN]
      [--max-width <integer>]
      [--fit-width] [--print-empty]
      [--noindent] [--prefix PREFIX]
      [--arg <key=value>]
      [--http-method <http-method>]
      <driver> <method>
```

**Table 9.30. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 9.31. Positional Arguments**

Value	Summary
<method>	Vendor passthru method to be called.
<driver>	Name of the driver.

**Table 9.32. Output Formatters**



Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.33. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.34. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--http-method <http-method>	The http method to use in the passthru request. one of DELETE, GET, PATCH, POST, PUT. Defaults to <i>POST</i> .
--arg <key=value>	Argument to pass to the passthru method (repeat option to specify multiple arguments).

Table 9.35. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.10. BAREMETAL DRIVER PASSTHRU LIST

List available vendor passthru methods for a driver.

### Usage:

```
openstack baremetal driver passthru list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
```

```

[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
<driver>

```

Table 9.36. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.37. Positional Arguments

Value	Summary
<driver>	Name of the driver.

Table 9.38. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.39. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.40. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.41. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.11. BAREMETAL DRIVER PROPERTY LIST

List the driver properties.

### Usage:

```
openstack baremetal driver property list [-h]
      [-f {csv,json,table,value,yaml}]
      [-c COLUMN]
      [--max-width <integer>]
      [--fit-width] [--print-empty]
      [--noindent]
      [--quote {all,minimal,none,nonnumeric}]
      [--sort-column SORT_COLUMN]
      <driver>
```

Table 9.42. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.43. Positional Arguments

Value	Summary
<driver>	Name of the driver.

Table 9.44. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 9.45. Output Formatters**

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 9.46. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 9.47. Optional Arguments**

Value	Summary
<code>-h</code> , <code>--help</code>	Show this help message and exit

## 9.12. BAREMETAL DRIVER RAID PROPERTY LIST

List a driver's RAID logical disk properties.

### Usage:

```

openstack baremetal driver raid property list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--noindent]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--sort-column SORT_COLUMN]
                                         <driver>

```

**Table 9.48. Table Formatter**

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 9.49. Positional Arguments

Value	Summary
<code>&lt;driver&gt;</code>	Name of the driver.

Table 9.50. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 9.51. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.52. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.53. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.13. BAREMETAL DRIVER SHOW

Show information about a driver.

### Usage:

```
openstack baremetal driver show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <driver>
```

Table 9.54. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.55. Positional Arguments

Value	Summary
<driver>	Name of the driver.

Table 9.56. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.57. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.58. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 9.59. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.14. BAREMETAL INTROSPECTION ABORT

Abort running introspection for node.

### Usage:

```
openstack baremetal introspection abort [-h] node
```

Table 9.60. Positional Arguments

Value	Summary
node	Baremetal node uuid or name

Table 9.61. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.15. BAREMETAL INTROSPECTION DATA SAVE

Save or display raw introspection data.

### Usage:

```
openstack baremetal introspection data save [-h] [--file <filename>]
node
```

Table 9.62. Positional Arguments

Value	Summary
node	Baremetal node uuid or name

Table 9.63. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--file <filename>	Downloaded introspection data filename (default: stdout)

## 9.16. BAREMETAL INTROSPECTION INTERFACE LIST

List interface data including attached switch port information.

### Usage:

```

openstack baremetal introspection interface list [-h]
          [-f {csv,json,table,value,yaml}]
          [-c COLUMN]
          [--max-width <integer>]
          [--fit-width]
          [--print-empty]
          [--noindent]
          [--quote {all,minimal,none,nonnumeric}]
          [--sort-column SORT_COLUMN]
          [--vlan VLAN]
          [--long | --fields <field> [<field> ...]]
          node_id
  
```

Table 9.64. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.65. Positional Arguments



Value	Summary
node_ident	Baremetal node uuid or name

Table 9.66. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.67. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.68. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.69. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--vlan VLAN	List only interfaces configured for this vlan id, can be repeated
--long	Show detailed information about interfaces.
--fields <field> [<field> ...]	Display one or more fields. can not be used when --long is specified

## 9.17. BAREMETAL INTROSPECTION INTERFACE SHOW

Show interface data including attached switch port information.

### Usage:

```
openstack baremetal introspection interface show [-h]
          [-f {json,shell,table,value,yaml}]
          [-c COLUMN]
          [--max-width <integer>]
          [--fit-width]
          [--print-empty]
          [--noindent]
          [--prefix PREFIX]
          [--fields <field> [<field> ...]]
node_id interface
```

**Table 9.70. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 9.71. Positional Arguments**

Value	Summary
interface	Interface name
node_id	Baremetal node uuid or name

**Table 9.72. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 9.73. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.74. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	Display one or more fields.

Table 9.75. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.18. BAREMETAL INTROSPECTION LIST

List introspection statuses

Usage:

```

openstack baremetal introspection list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--marker MARKER]
                                     [--limit LIMIT]

```

Table 9.76. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 9.77. CSV Formatter**

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 9.78. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 9.79. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 9.80. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--limit LIMIT</code>	The amount of items to return
<code>--marker MARKER</code>	Uuid of the last item on the previous page

## 9.19. BAREMETAL INTROSPECTION REPROCESS

Reprocess stored introspection data

**Usage:**

```
openstack baremetal introspection reprocess [-h] node
```

**Table 9.81. Positional Arguments**

Value	Summary
node	Baremetal node uuid or name

**Table 9.82. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**9.20. BAREMETAL INTROSPECTION RULE DELETE**

Delete an introspection rule.

**Usage:**

```
openstack baremetal introspection rule delete [-h] uuid
```

**Table 9.83. Positional Arguments**

Value	Summary
uuid	Rule uuid

**Table 9.84. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**9.21. BAREMETAL INTROSPECTION RULE IMPORT**

Import one or several introspection rules from a json file.

**Usage:**

```
openstack baremetal introspection rule import [-h]
                                             [-f {csv,json,table,value,yaml}]
                                             [-c COLUMN]
                                             [--max-width <integer>]
                                             [--fit-width]
                                             [--print-empty]
```

```

[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
file

```

Table 9.85. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.86. Positional Arguments

Value	Summary
file	Json file to import, may contain one or several rules

Table 9.87. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.88. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.89. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.90. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.22. BAREMETAL INTROSPECTION RULE LIST

List all introspection rules.

### Usage:

```

openstack baremetal introspection rule list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--noindent]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--sort-column SORT_COLUMN]

```

Table 9.91. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.92. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.93. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.94. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.95. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.23. BAREMETAL INTROSPECTION RULE PURGE

Drop all introspection rules.

### Usage:

```
openstack baremetal introspection rule purge [-h]
```

Table 9.96. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.24. BAREMETAL INTROSPECTION RULE SHOW

Show an introspection rule.

### Usage:

```
openstack baremetal introspection rule show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
```



```

[--max-width <integer>]
[--fit-width]
[--print-empty]
[--noindent]
[--prefix PREFIX]
uuid

```

**Table 9.97. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 9.98. Positional Arguments**

Value	Summary
uuid	Rule uuid

**Table 9.99. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 9.100. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 9.101. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

Table 9.102. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.25. BAREMETAL INTROSPECTION START

Start the introspection.

### Usage:

```

openstack baremetal introspection start [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--wait]
                                     node [node ...]

```

Table 9.103. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.104. Positional Arguments

Value	Summary
node	Baremetal node uuid(s) or name(s)

Table 9.105. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.106. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.107. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.108. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for introspection to finish; the result will be displayed in the end

## 9.26. BAREMETAL INTROSPECTION STATUS

Get introspection status.

### Usage:

```
openstack baremetal introspection status [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
node
```

Table 9.109. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 9.110. Positional Arguments**

Value	Summary
<code>node</code>	Baremetal node uuid or name

**Table 9.111. Output Formatters**

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 9.112. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 9.113. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

**Table 9.114. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 9.27. BAREMETAL NODE ABORT

Set provision state of baremetal node to *abort*

### Usage:

```
openstack baremetal node abort [-h] <node>
```

Table 9.115. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.116. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.28. BAREMETAL NODE ADD TRAIT

Add traits to a node.

### Usage:

```
openstack baremetal node add trait [-h] <node> <trait> [<trait> ...]
```

Table 9.117. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<trait>	Trait(s) to add

Table 9.118. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.29. BAREMETAL NODE ADOPT

Set provision state of baremetal node to *adopt*

### Usage:

■

```
openstack baremetal node adopt [-h] [--wait [<time-out>]] <node>
```

Table 9.119. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.120. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, active. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

## 9.30. BAREMETAL NODE BOOT DEVICE SET

Set the boot device for a node

### Usage:

```
openstack baremetal node boot device set [-h] [--persistent]
      <node> <device>
```

Table 9.121. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<device>	One of bios, cdrom, disk, pxe, safe, wanboot

Table 9.122. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--persistent	Make changes persistent for all future boots

## 9.31. BAREMETAL NODE BOOT DEVICE SHOW

Show the boot device information for a node

### Usage:

```

openstack baremetal node boot device show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--prefix PREFIX]
                                         [--supported]
                                         <node>

```

Table 9.123. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.124. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 9.125. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.126. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.127. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--supported	Show the supported boot devices

Table 9.128. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.32. BAREMETAL NODE CLEAN

Set provision state of baremetal node to *clean*

### Usage:

```
openstack baremetal node clean [-h] [--wait [<time-out>]] --clean-steps
    <clean-steps>
    <node>
```

Table 9.129. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.130. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, manageable. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.
--clean-steps <clean-steps>	The clean steps in json format. may be the path to a file containing the clean steps; OR -, with the clean steps being read from standard input; OR a string. The value should be a list of clean-step dictionaries; each dictionary should have keys <i>interface</i> and <i>step</i> , and optional key <i>args</i> .



## 9.33. BAREMETAL NODE CONSOLE DISABLE

Disable console access for a node

### Usage:

```
openstack baremetal node console disable [-h] <node>
```

Table 9.131. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 9.132. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.34. BAREMETAL NODE CONSOLE ENABLE

Enable console access for a node

### Usage:

```
openstack baremetal node console enable [-h] <node>
```

Table 9.133. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 9.134. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.35. BAREMETAL NODE CONSOLE SHOW

Show console information for a node

### Usage:

```
openstack baremetal node console show [-h]
[-f {json,shell,table,value,yaml}]
```

```
[-c COLUMN]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--noindent] [--prefix PREFIX]
<node>
```

Table 9.135. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.136. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 9.137. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.138. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.139. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 9.140. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.36. BAREMETAL NODE CREATE

Register a new node with the baremetal service

### Usage:

```
openstack baremetal node create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--chassis-uuid <chassis>] --driver
                                <driver> [--driver-info <key=value>]
                                [--property <key=value>]
                                [--extra <key=value>] [--uuid <uuid>]
                                [--name <name>]
                                [--boot-interface <boot_interface>]
                                [--console-interface <console_interface>]
                                [--deploy-interface <deploy_interface>]
                                [--inspect-interface <inspect_interface>]
                                [--management-interface <management_interface>]
                                [--network-interface <network_interface>]
                                [--power-interface <power_interface>]
                                [--raid-interface <raid_interface>]
                                [--storage-interface <storage_interface>]
                                [--vendor-interface <vendor_interface>]
                                [--resource-class <resource_class>]
```

Table 9.141. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.142. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.143. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.144. Optional Arguments

Value	Summary
--inspect-interface <inspect_interface>	Inspect interface used by the node's driver. this is only applicable when the specified --driver is a hardware type.
--boot-interface <boot_interface>	Boot interface used by the node's driver. this is only applicable when the specified --driver is a hardware type.
--management-interface <management_interface>	Management interface used by the node's driver. this is only applicable when the specified --driver is a hardware type.
--driver <driver>	Driver used to control the node [required].
--deploy-interface <deploy_interface>	Deploy interface used by the node's driver. this is only applicable when the specified --driver is a hardware type.
--uuid <uuid>	Unique uuid for the node.
--console-interface <console_interface>	Console interface used by the node's driver. this is only applicable when the specified --driver is a hardware type.
--chassis-uuid <chassis>	Uuid of the chassis that this node belongs to.
--network-interface <network_interface>	Network interface used for switching node to cleaning/provisioning networks.

Value	Summary
<code>--property &lt;key=value&gt;</code>	Key/value pair describing the physical characteristics of the node. This is exported to Nova and used by the scheduler. Can be specified multiple times.
<code>--vendor-interface &lt;vendor_interface&gt;</code>	Vendor interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--resource-class &lt;resource_class&gt;</code>	Resource class for mapping nodes to nova flavors
<code>--raid-interface &lt;raid_interface&gt;</code>	Raid interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--storage-interface &lt;storage_interface&gt;</code>	Storage interface used by the node's driver.
<code>--power-interface &lt;power_interface&gt;</code>	Power interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--name &lt;name&gt;</code>	Unique name for the node.
<code>--driver-info &lt;key=value&gt;</code>	Key/value pair used by the driver, such as out-of-band management credentials. Can be specified multiple times.
<code>--extra &lt;key=value&gt;</code>	Record arbitrary key/value metadata. can be specified multiple times.
<code>-h, --help</code>	Show this help message and exit

Table 9.145. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 9.37. BAREMETAL NODE DELETE

Unregister baremetal node(s)

### Usage:

```
openstack baremetal node delete [-h] <node> [<node> ...]
```

-

Table 9.146. Positional Arguments

Value	Summary
<node>	Node(s) to delete (name or uuid)

Table 9.147. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.38. BAREMETAL NODE DEPLOY

Set provision state of baremetal node to *deploy*

### Usage:

```
openstack baremetal node deploy [-h] [--wait [<time-out>]]
                                [--config-drive <config-drive>]
                                <node>
```

Table 9.148. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.149. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, active. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.
--config-drive <config-drive>	A gzipped, base64-encoded configuration drive string OR the path to the configuration drive file OR the path to a directory containing the config drive files. In case it's a directory, a config drive will be generated from it.

## 9.39. BAREMETAL NODE INJECT NMI

Inject NMI to baremetal node

**Usage:**

```
openstack baremetal node inject nmi [-h] <node>
```

**Table 9.150. Positional Arguments**

Value	Summary
<node>	Name or uuid of the node.

**Table 9.151. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 9.40. BAREMETAL NODE INSPECT

Set provision state of baremetal node to *inspect*

**Usage:**

```
openstack baremetal node inspect [-h] [--wait [<time-out>]] <node>
```

**Table 9.152. Positional Arguments**

Value	Summary
<node>	Name or uuid of the node.

**Table 9.153. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, manageable. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

## 9.41. BAREMETAL NODE LIST

List baremetal nodes

**Usage:**

```
openstack baremetal node list [-h] [-f {csv,json,table,value,yaml}]
```

```

[-c COLUMN] [--max-width <integer>]
[--fit-width] [--print-empty]
[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
[--limit <limit>] [--marker <node>]
[--sort <key>[:<direction>]]
[--maintenance | --no-maintenance]
[--associated | --unassociated]
[--provision-state <provision state>]
[--driver <driver>]
[--resource-class <resource class>]
[--chassis <chassis UUID>]
[--long | --fields <field> [<field> ...]]

```

Table 9.154. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.155. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.156. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.157. JSON Formatter



Value	Summary
--noindent	Whether to disable indenting the json

Table 9.158. Optional Arguments

Value	Summary
--sort <key>[:<direction>]	Sort output by specified node fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
--chassis <chassis UUID>	Limit list to nodes of this chassis
--resource-class <resource class>	Limit list to nodes with resource class <resource class>
--marker <node>	Node uuid (for example, of the last node in the list from a previous request). Returns the list of nodes after this UUID.
--long	Show detailed information about the nodes.
--provision-state <provision state>	List nodes in specified provision state.
--limit <limit>	Maximum number of nodes to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--fields <field> [<field> ...]	One or more node fields. only these fields will be fetched from the server. Can not be used when <i>--long</i> is specified.
--maintenance	Limit list to nodes in maintenance mode
--unassociated	List only nodes not associated with an instance.
-h, --help	Show this help message and exit
--associated	List only nodes associated with an instance.
--no-maintenance	Limit list to nodes not in maintenance mode
--driver <driver>	Limit list to nodes with driver <driver>

## 9.42. BAREMETAL NODE MAINTENANCE SET

Set baremetal node to maintenance mode

**Usage:**

```
openstack baremetal node maintenance set [-h] [--reason <reason>]
<node>
```

**Table 9.159. Positional Arguments**

Value	Summary
<node>	Name or uuid of the node.

**Table 9.160. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--reason <reason>	Reason for setting maintenance mode.

## 9.43. BAREMETAL NODE MAINTENANCE UNSET

Unset baremetal node from maintenance mode

**Usage:**

```
openstack baremetal node maintenance unset [-h] <node>
```

**Table 9.161. Positional Arguments**

Value	Summary
<node>	Name or uuid of the node.

**Table 9.162. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 9.44. BAREMETAL NODE MANAGE

Set provision state of baremetal node to *manage*

**Usage:**

```
openstack baremetal node manage [-h] [--wait [<time-out>]] <node>
```

Table 9.163. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.164. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, manageable. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

## 9.45. BAREMETAL NODE PASSTHRU CALL

Call a vendor passthru method for a node

### Usage:

```
openstack baremetal node passthru call [-h] [--arg <key=value>]
    [--http-method <http-method>]
    <node> <method>
```

Table 9.165. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<method>	Vendor passthru method to be executed

Table 9.166. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--http-method <http-method>	The http method to use in the passthru request. one of DELETE, GET, PATCH, POST, PUT. Defaults to POST.
--arg <key=value>	Argument to pass to the passthru method (repeat option to specify multiple arguments)

## 9.46. BAREMETAL NODE PASSTHRU LIST

List vendor passthru methods for a node

### Usage:

```
openstack baremetal node passthru list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     <node>
```

Table 9.167. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.168. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 9.169. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.170. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.171. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.172. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.47. BAREMETAL NODE POWER OFF

Power off a node

### Usage:

```
openstack baremetal node power off [-h]
                                   [--power-timeout <power-timeout>]
                                   [--soft]
                                   <node>
```

Table 9.173. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.174. Optional Arguments

Value	Summary
--soft	Request graceful power-off.
-h, --help	Show this help message and exit
--power-timeout <power-timeout>	Timeout (in seconds, positive integer) to wait for the target power state before erroring out.

Value	Summary
-------	---------

## 9.48. BAREMETAL NODE POWER ON

Power on a node

### Usage:

```
openstack baremetal node power on [-h]
                                [--power-timeout <power-timeout>]
                                <node>
```

Table 9.175. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.176. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--power-timeout <power-timeout>	Timeout (in seconds, positive integer) to wait for the target power state before erroring out.

## 9.49. BAREMETAL NODE PROVIDE

Set provision state of baremetal node to *provide*

### Usage:

```
openstack baremetal node provide [-h] [--wait [<time-out>]] <node>
```

Table 9.177. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.178. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, available. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

## 9.50. BAREMETAL NODE REBOOT

Reboot baremetal node

### Usage:

```
openstack baremetal node reboot [-h] [--soft]
                                [--power-timeout <power-timeout>]
                                <node>
```

Table 9.179. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.180. Optional Arguments

Value	Summary
--soft	Request graceful reboot.
-h, --help	Show this help message and exit
--power-timeout <power-timeout>	Timeout (in seconds, positive integer) to wait for the target power state before erroring out.

## 9.51. BAREMETAL NODE REBUILD

Set provision state of baremetal node to *rebuild*

### Usage:

```
openstack baremetal node rebuild [-h] [--wait [<time-out>]]
                                [--config-drive <config-drive>]
                                <node>
```

Table 9.181. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.182. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, active. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.
--config-drive <config-drive>	A gzipped, base64-encoded configuration drive string OR the path to the configuration drive file OR the path to a directory containing the config drive files. In case it's a directory, a config drive will be generated from it.

## 9.52. BAREMETAL NODE REMOVE TRAIT

Remove trait(s) from a node.

### Usage:

```
openstack baremetal node remove trait [-h] [--all]
    <node> [<trait> [<trait> ...]]
```

Table 9.183. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<trait>	Trait(s) to remove

Table 9.184. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Remove all traits

## 9.53. BAREMETAL NODE SET



## Set baremetal properties

## Usage:

```

openstack baremetal node set [-h] [--instance-uuid <uuid>]
                             [--name <name>]
                             [--chassis-uuid <chassis UUID>]
                             [--driver <driver>]
                             [--boot-interface <boot_interface>]
                             [--console-interface <console_interface>]
                             [--deploy-interface <deploy_interface>]
                             [--inspect-interface <inspect_interface>]
                             [--management-interface <management_interface>]
                             [--network-interface <network_interface>]
                             [--power-interface <power_interface>]
                             [--raid-interface <raid_interface>]
                             [--storage-interface <storage_interface>]
                             [--vendor-interface <vendor_interface>]
                             [--resource-class <resource_class>]
                             [--target-raid-config <target_raid_config>]
                             [--property <key=value>]
                             [--extra <key=value>]
                             [--driver-info <key=value>]
                             [--instance-info <key=value>]
                             <node>

```

Table 9.185. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.186. Optional Arguments

Value	Summary
--instance-uuid <uuid>	Set instance uuid of node to <uuid>
--inspect-interface <inspect_interface>	Set the inspect interface for the node
--boot-interface <boot_interface>	Set the boot interface for the node
--management-interface <management_interface>	Set the management interface for the node
--driver <driver>	Set the driver for the node
--extra <key=value>	Extra to set on this baremetal node (repeat option to set multiple extras)
--deploy-interface <deploy_interface>	Set the deploy interface for the node

Value	Summary
<code>--name &lt;name&gt;</code>	Set the name of the node
<code>--console-interface &lt;console_interface&gt;</code>	Set the console interface for the node
<code>--power-interface &lt;power_interface&gt;</code>	Set the power interface for the node
<code>--network-interface &lt;network_interface&gt;</code>	Set the network interface for the node
<code>--property &lt;key=value&gt;</code>	Property to set on this baremetal node (repeat option to set multiple properties)
<code>--vendor-interface &lt;vendor_interface&gt;</code>	Set the vendor interface for the node
<code>--resource-class &lt;resource_class&gt;</code>	Set the resource class for the node
<code>--chassis-uuid &lt;chassis UUID&gt;</code>	Set the chassis for the node
<code>--raid-interface &lt;raid_interface&gt;</code>	Set the raid interface for the node
<code>--storage-interface &lt;storage_interface&gt;</code>	Set the storage interface for the node
<code>--instance-info &lt;key=value&gt;</code>	Instance information to set on this baremetal node (repeat option to set multiple instance infos)
<code>--driver-info &lt;key=value&gt;</code>	Driver information to set on this baremetal node (repeat option to set multiple driver infos)
<code>-h, --help</code>	Show this help message and exit
<code>--target-raid-config &lt;target_raid_config&gt;</code>	Set the target raid configuration (json) for the node. This can be one of: 1. a file containing JSON data of the RAID configuration; 2. "-" to read the contents from standard input; or 3. a valid JSON string.

## 9.54. BAREMETAL NODE SHOW

Show baremetal node details

### Usage:

```
openstack baremetal node show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent] [--prefix PREFIX]
```

```

[--instance]
[--fields <field> [<field> ...]]
<node>

```

Table 9.187. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.188. Positional Arguments

Value	Summary
<node>	Name or uuid of the node (or instance uuid if --instance is specified)

Table 9.189. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.190. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.191. Optional Arguments

Value	Summary
--instance	<node> is an instance uuid.

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	One or more node fields. only these fields will be fetched from the server.

Table 9.192. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.55. BAREMETAL NODE TRAIT LIST

List a node's traits.

### Usage:

```

openstack baremetal node trait list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     <node>

```

Table 9.193. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.194. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 9.195. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 9.196. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.197. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.198. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 9.56. BAREMETAL NODE UNDEPLOY

Set provision state of baremetal node to *deleted*

### Usage:

```
openstack baremetal node undeploy [-h] [--wait [<time-out>]] <node>
```

Table 9.199. Positional Arguments

Value	Summary
<code>&lt;node&gt;</code>	Name or uuid of the node.

Table 9.200. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, available. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

## 9.57. BAREMETAL NODE UNSET

Unset baremetal properties

### Usage:

```

openstack baremetal node unset [-h] [--instance-uuid] [--name]
                                [--resource-class]
                                [--target-raid-config]
                                [--property <key>] [--extra <key>]
                                [--driver-info <key>]
                                [--instance-info <key>] [--chassis-uuid]
                                [--boot-interface] [--console-interface]
                                [--deploy-interface]
                                [--inspect-interface]
                                [--management-interface]
                                [--network-interface]
                                [--power-interface] [--raid-interface]
                                [--storage-interface]
                                [--vendor-interface]
                                <node>

```

Table 9.201. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 9.202. Optional Arguments

Value	Summary
--property <key>	Property to unset on this baremetal node (repeat option to unset multiple properties)
--storage-interface	Unset storage interface on this baremetal node
--instance-uuid	Unset instance uuid on this baremetal node
--deploy-interface	Unset deploy interface on this baremetal node

Value	Summary
--vendor-interface	Unset vendor interface on this baremetal node
--network-interface	Unset network interface on this baremetal node
--instance-info <key>	Instance information to unset on this baremetal node (repeat option to unset multiple instance informations)
--driver-info <key>	Driver information to unset on this baremetal node (repeat option to unset multiple driver informations)
--extra <key>	Extra to unset on this baremetal node (repeat option to unset multiple extras)
--resource-class	Unset the resource class of the node
--management-interface	Unset management interface on this baremetal node
--boot-interface	Unset boot interface on this baremetal node
--raid-interface	Unset raid interface on this baremetal node
--console-interface	Unset console interface on this baremetal node
--target-raid-config	Unset the target raid configuration of the node
--name	Unset the name of the node
-h, --help	Show this help message and exit
--inspect-interface	Unset inspect interface on this baremetal node
--chassis-uuid	Unset chassis uuid on this baremetal node
--power-interface	Unset power interface on this baremetal node

## 9.58. BAREMETAL NODE VALIDATE

Validate a node's driver interfaces

### Usage:

```
openstack baremetal node validate [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
<node>

```

**Table 9.203. Table Formatter**

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width</code> <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 9.204. Positional Arguments**

Value	Summary
<node>	Name or uuid of the node

**Table 9.205. CSV Formatter**

Value	Summary
<code>--quote</code> {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 9.206. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, <code>--format</code> {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c</code> COLUMN, <code>--column</code> COLUMN	Specify the column(s) to include, can be repeated
<code>--sort-column</code> SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 9.207. JSON Formatter**



Value	Summary
--noindent	Whether to disable indenting the json

Table 9.208. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.59. BAREMETAL NODE VIF ATTACH

Attach VIF to a given node

### Usage:

```
openstack baremetal node vif attach [-h] [--vif-info <key=value>]
                                     <node> <vif-id>
```

Table 9.209. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<vif-id>	Name or uuid of the vif to attach to a node.

Table 9.210. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--vif-info <key=value>	Record arbitrary key/value metadata. can be specified multiple times. The mandatory <i>id</i> parameter cannot be specified as a key.

## 9.60. BAREMETAL NODE VIF DETACH

Detach VIF from a given node

### Usage:

```
openstack baremetal node vif detach [-h] <node> <vif-id>
```

Table 9.211. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<vif-id>	Name or uuid of the vif to detach from a node.

Table 9.212. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.61. BAREMETAL NODE VIF LIST

Show attached VIFs for a node

### Usage:

```

openstack baremetal node vif list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                <node>

```

Table 9.213. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.214. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 9.215. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 9.216. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.217. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.218. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 9.62. BAREMETAL PORT CREATE

Create a new port

### Usage:

```
openstack baremetal port create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX] --node
                                <uuid> [--uuid <uuid>]
                                [--extra <key=value>]
                                [--local-link-connection <key=value>]
                                [-l <key=value>]
                                [--pxe-enabled <boolean>]
                                [--port-group <uuid>]
                                [--physical-network <physical network>]
                                <address>
```

Table 9.219. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 9.220. Positional Arguments

Value	Summary
<code>&lt;address&gt;</code>	Mac address for this port.

Table 9.221. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 9.222. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.223. Optional Arguments

Value	Summary
<code>--extra &lt;key=value&gt;</code>	Record arbitrary key/value metadata. can be specified multiple times.
<code>--physical-network &lt;physical network&gt;</code>	Name of the physical network to which this port is connected.
<code>--uuid &lt;uuid&gt;</code>	Uuid of the port.

Value	Summary
<code>--port-group &lt;uuid&gt;</code>	Uuid of the port group that this port belongs to.
<code>--local-link-connection &lt;key=value&gt;</code>	Key/value metadata describing local link connection information. Valid keys are <i>switch_info</i> , <i>switch_id</i> , and <i>port_id</i> . The keys <i>switch_id</i> and <i>port_id</i> are required. Can be specified multiple times.
<code>--pxe-enabled &lt;boolean&gt;</code>	Indicates whether this port should be used when pxe booting this Node.
<code>-l &lt;key=value&gt;</code>	Deprecated. please use <code>--local-link-connection</code> instead. Key/value metadata describing Local link connection information. Valid keys are <i>switch_info</i> , <i>switch_id</i> , and <i>port_id</i> . The keys <i>switch_id</i> and <i>port_id</i> are required. Can be specified multiple times.
<code>-h, --help</code>	Show this help message and exit
<code>--node &lt;uuid&gt;</code>	Uuid of the node that this port belongs to.

Table 9.224. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 9.63. BAREMETAL PORT DELETE

Delete port(s).

### Usage:

```
openstack baremetal port delete [-h] <port> [<port> ...]
```

Table 9.225. Positional Arguments

Value	Summary
<code>&lt;port&gt;</code>	Uuid(s) of the port(s) to delete.

Table 9.226. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.64. BAREMETAL PORT GROUP CREATE

Create a new baremetal port group.

### Usage:

```
openstack baremetal port group create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     --node <uuid>
                                     [--address <mac-address>]
                                     [--name NAME] [--uuid UUID]
                                     [--extra <key=value>]
                                     [--mode MODE]
                                     [--property <key=value>]
                                     [--support-standalone-ports | --unsupport-standalone-ports]
```

Table 9.227. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.228. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.229. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.230. Optional Arguments

Value	Summary
<code>--support-standalone-ports</code>	Ports that are members of this port group can be used as stand-alone ports. (default)
<code>--extra &lt;key=value&gt;</code>	Record arbitrary key/value metadata. can be specified multiple times.
<code>--address &lt;mac-address&gt;</code>	Mac address for this port group.
<code>--unsupport-standalone-ports</code>	Ports that are members of this port group cannot be used as stand-alone ports.
<code>--property &lt;key=value&gt;</code>	Key/value property related to this port group's configuration. Can be specified multiple times.
<code>--mode MODE</code>	Mode of the port group. for possible values, refer to <a href="https://www.kernel.org/doc/Documentation/networking/bonding.txt">https://www.kernel.org/doc/Documentation/networking/bonding.txt</a> .
<code>--name NAME</code>	Name of the port group.
<code>-h, --help</code>	Show this help message and exit
<code>--uuid UUID</code>	Uuid of the port group.
<code>--node &lt;uuid&gt;</code>	Uuid of the node that this port group belongs to.

Table 9.231. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

## 9.65. BAREMETAL PORT GROUP DELETE

Unregister baremetal port group(s).

**Usage:**

```
openstack baremetal port group delete [-h]
                                     <port group> [<port group> ...]
```

Table 9.232. Positional Arguments

Value	Summary
<port group>	Port group(s) to delete (name or uuid).

Table 9.233. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.66. BAREMETAL PORT GROUP LIST

List baremetal port groups.

### Usage:

```
openstack baremetal port group list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--limit <limit>]
                                     [--marker <port group>]
                                     [--sort <key>[:<direction>]]
                                     [--address <mac-address>]
                                     [--node <node>]
                                     [--long | --fields <field> [<field> ...]]
```

Table 9.234. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable



Table 9.235. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 9.236. Output Formatters

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.237. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.238. Optional Arguments

Value	Summary
<code>--node &lt;node&gt;</code>	Only list port groups of this node (name or uuid).
<code>--address &lt;mac-address&gt;</code>	Only show information for the port group with this mac address.
<code>--long</code>	Show detailed information about the port groups.
<code>--fields &lt;field&gt; [&lt;field&gt; ...]</code>	One or more port group fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.
<code>--limit &lt;limit&gt;</code>	Maximum number of port groups to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
<code>--marker &lt;port group&gt;</code>	Port group uuid (for example, of the last port group in the list from a previous request). Returns the list of port groups after this UUID.

Value	Summary
<code>--sort &lt;key&gt;[:&lt;direction&gt;]</code>	Sort output by specified port group fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
<code>-h, --help</code>	Show this help message and exit

## 9.67. BAREMETAL PORT GROUP SET

Set baremetal port group properties.

### Usage:

```
openstack baremetal port group set [-h] [--node <uuid>]
    [--address <mac-address>]
    [--name <name>]
    [--extra <key=value>] [--mode MODE]
    [--property <key=value>]
    [--support-standalone-ports | --unsupport-standalone-ports]
    <port group>
```

Table 9.239. Positional Arguments

Value	Summary
<code>&lt;port group&gt;</code>	Name or uuid of the port group.

Table 9.240. Optional Arguments

Value	Summary
<code>--support-standalone-ports</code>	Ports that are members of this port group can be used as stand-alone ports.
<code>--extra &lt;key=value&gt;</code>	Extra to set on this baremetal port group (repeat option to set multiple extras).
<code>--address &lt;mac-address&gt;</code>	Mac address for this port group.
<code>--unsupport-standalone-ports</code>	Ports that are members of this port group cannot be used as stand-alone ports.
<code>--property &lt;key=value&gt;</code>	Key/value property related to this port group's configuration (repeat option to set multiple properties).

Value	Summary
<code>--mode MODE</code>	Mode of the port group. for possible values, refer to <a href="https://www.kernel.org/doc/Documentation/networking/bonding.txt">https://www.kernel.org/doc/Documentation/networking/bonding.txt</a> .
<code>--name &lt;name&gt;</code>	Name of the port group.
<code>-h, --help</code>	Show this help message and exit
<code>--node &lt;uuid&gt;</code>	Update uuid of the node that this port group belongs to.

## 9.68. BAREMETAL PORT GROUP SHOW

Show baremetal port group details.

### Usage:

```
openstack baremetal port group show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--address]
                                     [--fields <field> [<field> ...]]
                                     <id>
```

Table 9.241. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 9.242. Positional Arguments

Value	Summary
<code>&lt;id&gt;</code>	Uuid or name of the port group (or mac address if <code>--address</code> is specified).

**Table 9.243. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 9.244. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 9.245. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--address	<id> is the mac address (instead of uuid or name) of the port group.
--fields <field> [<field> ...]	One or more port group fields. only these fields will be fetched from the server.

**Table 9.246. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.69. BAREMETAL PORT GROUP UNSET

Unset baremetal port group properties.

### Usage:

```
openstack baremetal port group unset [-h] [--name] [--address]
                                     [--extra <key>] [--property <key>]
                                     <port group>
```

**Table 9.247. Positional Arguments**

Value	Summary
<port group>	Name or uuid of the port group.

Table 9.248. Optional Arguments

Value	Summary
--property <key>	Property to unset on this baremetal port group (repeat option to unset multiple properties).
--name	Unset the name of the port group.
-h, --help	Show this help message and exit
--address	Unset the address of the port group.
--extra <key>	Extra to unset on this baremetal port group (repeat option to unset multiple extras).

## 9.70. BAREMETAL PORT LIST

List baremetal ports.

### Usage:

```
openstack baremetal port list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--address <mac-address>] [--node <node>]
                             [--port-group <port group>]
                             [--limit <limit>] [--marker <port>]
                             [--sort <key>[:<direction>]]
                             [--long | --fields <field> [<field> ...]]
```

Table 9.249. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 9.250. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 9.251. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.252. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.253. Optional Arguments

Value	Summary
<code>--node &lt;node&gt;</code>	Only list ports of this node (name or uuid).
<code>--address &lt;mac-address&gt;</code>	Only show information for the port with this mac address.
<code>--marker &lt;port&gt;</code>	Port uuid (for example, of the last port in the list from a previous request). Returns the list of ports after this UUID.

Value	Summary
<code>--long</code>	Show detailed information about ports.
<code>--port-group &lt;port group&gt;</code>	Only list ports of this port group (name or uuid).
<code>--limit &lt;limit&gt;</code>	Maximum number of ports to return per request, 0 for no limit. Default is the maximum number used by the Ironic API Service.
<code>--fields &lt;field&gt; [&lt;field&gt; ...]</code>	One or more port fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.
<code>--sort &lt;key&gt;[:&lt;direction&gt;]</code>	Sort output by specified port fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
<code>-h, --help</code>	Show this help message and exit

## 9.71. BAREMETAL PORT SET

Set baremetal port properties.

### Usage:

```
openstack baremetal port set [-h] [--node <uuid>] [--address <address>]
    [--extra <key=value>]
    [--port-group <uuid>]
    [--local-link-connection <key=value>]
    [--pxe-enabled | --pxe-disabled]
    [--physical-network <physical network>]
    <port>
```

Table 9.254. Positional Arguments

Value	Summary
<code>&lt;port&gt;</code>	Uuid of the port

Table 9.255. Optional Arguments

Value	Summary
<code>--pxe-enabled</code>	Indicates that this port should be used when pxe booting this node (default)

Value	Summary
<code>--extra &lt;key=value&gt;</code>	Extra to set on this baremetal port (repeat option to set multiple extras)
<code>--pxe-disabled</code>	Indicates that this port should not be used when pxe booting this node
<code>--port-group &lt;uuid&gt;</code>	Set uuid of the port group that this port belongs to.
<code>--local-link-connection &lt;key=value&gt;</code>	Key/value metadata describing local link connection information. Valid keys are <i>switch_info</i> , <i>switch_id</i> , and <i>port_id</i> . The keys <i>switch_id</i> and <i>port_id</i> are required. Can be specified multiple times.
<code>--physical-network &lt;physical network&gt;</code>	Set the name of the physical network to which this port is connected.
<code>-h, --help</code>	Show this help message and exit
<code>--node &lt;uuid&gt;</code>	Set uuid of the node that this port belongs to
<code>--address &lt;address&gt;</code>	Set mac address for this port

## 9.72. BAREMETAL PORT SHOW

Show baremetal port details.

### Usage:

```

openstack baremetal port show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--address]
                               [--fields <field> [<field> ...]]
                               <id>

```

Table 9.256. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.



Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 9.257. Positional Arguments

Value	Summary
<code>&lt;id&gt;</code>	Uuid of the port (or mac address if <code>--address</code> is specified).

Table 9.258. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 9.259. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.260. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--address</code>	<code>&lt;id&gt;</code> is the mac address (instead of the uuid) of the port.
<code>--fields &lt;field&gt; [&lt;field&gt; ...]</code>	One or more port fields. only these fields will be fetched from the server.

Table 9.261. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.73. BAREMETAL PORT UNSET

Unset baremetal port properties.

### Usage:

```
openstack baremetal port unset [-h] [--extra <key>] [--port-group]
                               [--physical-network]
                               <port>
```

Table 9.262. Positional Arguments

Value	Summary
<port>	Uuid of the port.

Table 9.263. Optional Arguments

Value	Summary
--port-group	Remove port from the port group
-h, --help	Show this help message and exit
--extra <key>	Extra to unset on this baremetal port (repeat option to unset multiple extras)
--physical-network	Unset the physical network on this baremetal port.

## 9.74. BAREMETAL VOLUME CONNECTOR CREATE

Create a new baremetal volume connector.

### Usage:

```
openstack baremetal volume connector create [-h]
                                             [-f {json,shell,table,value,yaml}]
                                             [-c COLUMN]
                                             [--max-width <integer>]
                                             [--fit-width]
                                             [--print-empty]
                                             [--noindent]
                                             [--prefix PREFIX] --node
                                             <uuid> --type <type>
```

```
--connector-id <connector
id> [--uuid <uuid>]
[--extra <key=value>]
```

Table 9.264. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.265. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.266. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.267. Optional Arguments

Value	Summary
--node <uuid>	Uuid of the node that this volume connector belongs to.
--uuid <uuid>	Uuid of the volume connector.
--type <type>	Type of the volume connector. can be <i>iqn</i> , <i>ip</i> , <i>mac</i> , <i>wwnn</i> , <i>wwpn</i> , <i>port</i> , <i>portgroup</i> .
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.

Value	Summary
-h, --help	Show this help message and exit
--connector-id <connector id>	Id of the volume connector in the specified type. for example, the iSCSI initiator IQN for the node if the type is <i>iqn</i> .

Table 9.268. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.75. BAREMETAL VOLUME CONNECTOR DELETE

Unregister baremetal volume connector(s).

### Usage:

```
openstack baremetal volume connector delete [-h]
                                     <volume connector>
                                     [<volume connector> ...]
```

Table 9.269. Positional Arguments

Value	Summary
<volume connector>	Uuid(s) of the volume connector(s) to delete.

Table 9.270. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 9.76. BAREMETAL VOLUME CONNECTOR LIST

List baremetal volume connectors.

### Usage:

```
openstack baremetal volume connector list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
```

```

[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
[--node <node>]
[--limit <limit>]
[--marker <volume connector>]
[--sort <key>[:<direction>]]
[--long | --fields <field> [<field> ...]]

```

Table 9.271. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.272. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.273. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.274. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.275. Optional Arguments

Value	Summary
<code>--node &lt;node&gt;</code>	Only list volume connectors of this node (name or UUID).
<code>--long</code>	Show detailed information about volume connectors.
<code>--limit &lt;limit&gt;</code>	Maximum number of volume connectors to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
<code>--fields &lt;field&gt; [&lt;field&gt; ...]</code>	One or more volume connector fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.
<code>--sort &lt;key&gt;[:&lt;direction&gt;]</code>	Sort output by specified volume connector fields and directions (asc or desc) (default:asc). Multiple fields and directions can be specified, separated by comma.
<code>-h, --help</code>	Show this help message and exit
<code>--marker &lt;volume connector&gt;</code>	Volume connector uuid (for example, of the last volume connector in the list from a previous request). Returns the list of volume connectors after this UUID.

## 9.77. BAREMETAL VOLUME CONNECTOR SET

Set baremetal volume connector properties.

### Usage:

```
openstack baremetal volume connector set [-h] [--node <uuid>]
                                         [--type <type>]
                                         [--connector-id <connector id>]
                                         [--extra <key=value>]
                                         <volume connector>
```

Table 9.276. Positional Arguments

Value	Summary
<code>&lt;volume connector&gt;</code>	Uuid of the volume connector.

Table 9.277. Optional Arguments

Value	Summary
<code>--extra &lt;key=value&gt;</code>	Record arbitrary key/value metadata. can be specified multiple times.
<code>--type &lt;type&gt;</code>	Type of the volume connector. can be <i>iqn</i> , <i>ip</i> , <i>mac</i> , <i>wwnn</i> , <i>wwpn</i> , <i>port</i> , <i>portgroup</i> .
<code>-h, --help</code>	Show this help message and exit
<code>--node &lt;uuid&gt;</code>	Uuid of the node that this volume connector belongs to.
<code>--connector-id &lt;connector id&gt;</code>	Id of the volume connector in the specified type.

## 9.78. BAREMETAL VOLUME CONNECTOR SHOW

Show baremetal volume connector details.

### Usage:

```
openstack baremetal volume connector show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--prefix PREFIX]
                                         [--fields <field> [<field> ...]]
                                         <id>
```

Table 9.278. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 9.279. Positional Arguments

Value	Summary
<id>	Uuid of the volume connector.

**Table 9.280. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 9.281. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 9.282. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	One or more volume connector fields. only these fields will be fetched from the server.

**Table 9.283. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.79. BAREMETAL VOLUME CONNECTOR UNSET

Unset baremetal volume connector properties.

### Usage:

```
openstack baremetal volume connector unset [-h] [--extra <key>]
<volume connector>
```

**Table 9.284. Positional Arguments**



Value	Summary
<volume connector>	Uuid of the volume connector.

Table 9.285. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--extra <key>	Extra to unset (repeat option to unset multiple extras)

## 9.80. BAREMETAL VOLUME TARGET CREATE

Create a new baremetal volume target.

### Usage:

```
openstack baremetal volume target create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent] [--prefix PREFIX]
                                         --node <uuid> --type <volume
                                         type> [--property <key=value>]
                                         --boot-index <boot index>
                                         --volume-id <volume id>
                                         [--uuid <uuid>]
                                         [--extra <key=value>]
```

Table 9.286. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.287. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.288. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.289. Optional Arguments

Value	Summary
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.
--uuid <uuid>	Uuid of the volume target.
--property <key=value>	Key/value property related to the type of this volume target. Can be specified multiple times.
--boot-index <boot index>	Boot index of the volume target.
--type <volume type>	Type of the volume target, e.g. <i>iscsi</i> , <i>fibre_channel</i> .
-h, --help	Show this help message and exit
--volume-id <volume id>	Id of the volume associated with this target.
--node <uuid>	Uuid of the node that this volume target belongs to.

Table 9.290. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.81. BAREMETAL VOLUME TARGET DELETE

Unregister baremetal volume target(s).

**Usage:**

```
openstack baremetal volume target delete [-h]
                                     <volume target>
                                     [<volume target> ...]
```

**Table 9.291. Positional Arguments**

Value	Summary
<volume target>	Uuid(s) of the volume target(s) to delete.

**Table 9.292. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**9.82. BAREMETAL VOLUME TARGET LIST**

List baremetal volume targets.

**Usage:**

```
openstack baremetal volume target list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--node <node>]
                                     [--limit <limit>]
                                     [--marker <volume target>]
                                     [--sort <key>[:<direction>]]
                                     [--long | --fields <field> [<field> ...]]
```

**Table 9.293. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 9.294. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 9.295. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.296. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.297. Optional Arguments

Value	Summary
<code>--node &lt;node&gt;</code>	Only list volume targets of this node (name or uuid).
<code>--marker &lt;volume target&gt;</code>	Volume target uuid (for example, of the last volume target in the list from a previous request). Returns the list of volume targets after this UUID.
<code>--long</code>	Show detailed information about volume targets.
<code>--limit &lt;limit&gt;</code>	Maximum number of volume targets to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.

Value	Summary
<code>--fields &lt;field&gt; [&lt;field&gt; ...]</code>	One or more volume target fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.
<code>--sort &lt;key&gt;[:&lt;direction&gt;]</code>	Sort output by specified volume target fields and directions (asc or desc) (default:asc). Multiple fields and directions can be specified, separated by comma.
<code>-h, --help</code>	Show this help message and exit

## 9.83. BAREMETAL VOLUME TARGET SET

Set baremetal volume target properties.

### Usage:

```
openstack baremetal volume target set [-h] [--node <uuid>]
                                     [--type <volume type>]
                                     [--property <key=value>]
                                     [--boot-index <boot index>]
                                     [--volume-id <volume id>]
                                     [--extra <key=value>]
                                     <volume target>
```

Table 9.298. Positional Arguments

Value	Summary
<code>&lt;volume target&gt;</code>	Uuid of the volume target.

Table 9.299. Optional Arguments

Value	Summary
<code>--extra &lt;key=value&gt;</code>	Record arbitrary key/value metadata. can be specified multiple times.
<code>--property &lt;key=value&gt;</code>	Key/value property related to the type of this volume target. Can be specified multiple times.
<code>--boot-index &lt;boot index&gt;</code>	Boot index of the volume target.
<code>--type &lt;volume type&gt;</code>	Type of the volume target, e.g. <i>iscsi</i> , <i>fibre_channel</i> .
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--volume-id &lt;volume id&gt;</code>	Id of the volume associated with this target.
<code>--node &lt;uuid&gt;</code>	Uuid of the node that this volume target belongs to.

## 9.84. BAREMETAL VOLUME TARGET SHOW

Show baremetal volume target details.

### Usage:

```

openstack baremetal volume target show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--fields <field> [<field> ...]]
                                     <id>

```

Table 9.300. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 9.301. Positional Arguments

Value	Summary
<code>&lt;id&gt;</code>	Uuid of the volume target.

Table 9.302. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.303. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.304. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	One or more volume target fields. only these fields will be fetched from the server.

Table 9.305. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 9.85. BAREMETAL VOLUME TARGET UNSET

Unset baremetal volume target properties.

### Usage:

```
openstack baremetal volume target unset [-h] [--extra <key>]
                                     [--property <key>]
                                     <volume target>
```

Table 9.306. Positional Arguments

Value	Summary
<volume target>	Uuid of the volume target.

Table 9.307. Optional Arguments

Value	Summary
<code>--property &lt;key&gt;</code>	Property to unset on this baremetal volume target (repeat option to unset multiple properties).
<code>-h, --help</code>	Show this help message and exit
<code>--extra &lt;key&gt;</code>	Extra to unset (repeat option to unset multiple extras)



## CHAPTER 10. BGP

This chapter describes the commands under the **bgp** command.

### 10.1. BGP DRAGENT ADD SPEAKER

Add a BGP speaker to a dynamic routing agent

#### Usage:

```
openstack bgp dragent add speaker [-h] <agent-id> <bgp-speaker>
```

Table 10.1. Positional Arguments

Value	Summary
<agent-id>	Id of the dynamic routing agent
<bgp-speaker>	Id or name of the bgp speaker

Table 10.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 10.2. BGP DRAGENT REMOVE SPEAKER

Removes a BGP speaker from a dynamic routing agent

#### Usage:

```
openstack bgp dragent remove speaker [-h] <agent-id> <bgp-speaker>
```

Table 10.3. Positional Arguments

Value	Summary
<agent-id>	Id of the dynamic routing agent
<bgp-speaker>	Id or name of the bgp speaker

Table 10.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 10.3. BGP PEER CREATE

Create a BGP peer

### Usage:

```
openstack bgp peer create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX] --peer-ip <peer-ip-address>
                          --remote-as <peer-remote-as>
                          [--auth-type <peer-auth-type>]
                          [--password <auth-password>]
                          [--project <project>]
                          [--project-domain <project-domain>]
                          <name>
```

Table 10.5. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 10.6. Positional Arguments

Value	Summary
<name>	Name of the bgp peer to create

Table 10.7. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 10.8. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 10.9. Optional Arguments

Value	Summary
<code>--remote-as &lt;peer-remote-as&gt;</code>	Peer as number. (integer in [1, 65535] is allowed)
<code>--auth-type &lt;peer-auth-type&gt;</code>	Authentication algorithm. supported algorithms: none (default), md5
<code>--peer-ip &lt;peer-ip-address&gt;</code>	Peer ip address
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--password &lt;auth-password&gt;</code>	Authentication password
<code>-h, --help</code>	Show this help message and exit
<code>--project &lt;project&gt;</code>	Owner's project (name or id)

Table 10.10. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 10.4. BGP PEER DELETE

Delete a BGP peer

### Usage:

```
openstack bgp peer delete [-h] <bgp-peer>
```

Table 10.11. Positional Arguments

Value	Summary
<code>&lt;bgp-peer&gt;</code>	Bgp peer to delete (name or id)

Table 10.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 10.5. BGP PEER LIST

List BGP peers

### Usage:

```
openstack bgp peer list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]
```

Table 10.13. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 10.14. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 10.15. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 10.16. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 10.17. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 10.6. BGP PEER SET

Update a BGP peer

### Usage:

```
openstack bgp peer set [-h] [--name NAME] [--password <auth-password>]
                        <bgp-peer>
```

Table 10.18. Positional Arguments

Value	Summary
<code>&lt;bgp-peer&gt;</code>	Bgp peer to update (name or id)

Table 10.19. Optional Arguments

Value	Summary
<code>--password &lt;auth-password&gt;</code>	Updated authentication password
<code>-h, --help</code>	Show this help message and exit
<code>--name NAME</code>	Updated name of the bgp peer

## 10.7. BGP PEER SHOW

Show information for a BGP peer

**Usage:**

```
openstack bgp peer show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        <bgp-peer>
```

**Table 10.20. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 10.21. Positional Arguments**

Value	Summary
<bgp-peer>	Bgp peer to display (name or id)

**Table 10.22. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 10.23. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 10.24. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

Table 10.25. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 10.8. BGP SPEAKER ADD NETWORK

Add a network to a BGP speaker

### Usage:

```
openstack bgp speaker add network [-h] <bgp-speaker> <network>
```

Table 10.26. Positional Arguments

Value	Summary
<bgp-speaker>	Bgp speaker (name or id)
<network>	Network to add (name or id)

Table 10.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 10.9. BGP SPEAKER ADD PEER

Add a peer to a BGP speaker

### Usage:

```
openstack bgp speaker add peer [-h] <bgp-speaker> <bgp-peer>
```

Table 10.28. Positional Arguments

Value	Summary
<bgp-peer>	Bgp peer to add (name or id)

Value	Summary
<bgp-speaker>	Bgp speaker (name or id)

Table 10.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 10.10. BGP SPEAKER CREATE

Create a BGP speaker

### Usage:

```
openstack bgp speaker create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] --local-as <local-as>
                             [--ip-version {4,6}]
                             [--advertise-floating-ip-host-routes]
                             [--no-advertise-floating-ip-host-routes]
                             [--advertise-tenant-networks]
                             [--no-advertise-tenant-networks]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             <name>
```

Table 10.30. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 10.31. Positional Arguments

Value	Summary
<name>	Name of the bgp speaker to create



Table 10.32. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 10.33. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 10.34. Optional Arguments

Value	Summary
--no-advertise-floating-ip-host-routes	Disable the advertisement of floating ip host routes by the BGP speaker.
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--no-advertise-tenant-networks	Disable the advertisement of tenant network routes by the BGP speaker.
--ip-version {4,6}	Ip version for the bgp speaker (default is 4)
--advertise-floating-ip-host-routes	Enable the advertisement of floating ip host routes by the BGP speaker. (default)
--local-as <local-as>	Local as number. (integer in [1, 65535] is allowed.)
--advertise-tenant-networks	Enable the advertisement of tenant network routes by the BGP speaker. (default)
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)

Table 10.35. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 10.11. BGP SPEAKER DELETE

Delete a BGP speaker

### Usage:

```
openstack bgp speaker delete [-h] <bgp-speaker>
```

Table 10.36. Positional Arguments

Value	Summary
<bgp-speaker>	Bgp speaker to delete (name or id)

Table 10.37. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 10.12. BGP SPEAKER LIST ADVERTISED ROUTES

List routes advertised

### Usage:

```
openstack bgp speaker list advertised routes [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--noindent]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--sort-column SORT_COLUMN]
                                         <bgp-speaker>
```

Table 10.38. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 10.39. Positional Arguments

Value	Summary
<code>&lt;bgp-speaker&gt;</code>	Bgp speaker (name or id)

Table 10.40. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 10.41. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 10.42. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 10.43. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 10.13. BGP SPEAKER LIST

List BGP speakers

### Usage:

```
openstack bgp speaker list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN]
                          [--agent <agent-id>]
```

Table 10.44. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 10.45. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 10.46. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 10.47. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 10.48. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--agent &lt;agent-id&gt;</code>	List bgp speakers hosted by an agent (id only)

## 10.14. BGP SPEAKER REMOVE NETWORK

Remove a network from a BGP speaker

### Usage:

```
openstack bgp speaker remove network [-h] <bgp-speaker> <network>
```

Table 10.49. Positional Arguments

Value	Summary
<code>&lt;bgp-speaker&gt;</code>	Bgp speaker (name or id)
<code>&lt;network&gt;</code>	Network to remove (name or id)

Table 10.50. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 10.15. BGP SPEAKER REMOVE PEER

Remove a peer from a BGP speaker

### Usage:

```
openstack bgp speaker remove peer [-h] <bgp-speaker> <bgp-peer>
```

Table 10.51. Positional Arguments

Value	Summary
<bgp-peer>	Bgp peer to remove (name or id)
<bgp-speaker>	Bgp speaker (name or id)

Table 10.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 10.16. BGP SPEAKER SET

Set BGP speaker properties

### Usage:

```
openstack bgp speaker set [-h] [--name NAME]
                        [--advertise-floating-ip-host-routes]
                        [--no-advertise-floating-ip-host-routes]
                        [--advertise-tenant-networks]
                        [--no-advertise-tenant-networks]
                        <bgp-speaker>
```

Table 10.53. Positional Arguments

Value	Summary
<bgp-speaker>	Bgp speaker to update (name or id)

Table 10.54. Optional Arguments

Value	Summary
--no-advertise-floating-ip-host-routes	Disable the advertisement of floating ip host routes by the BGP speaker.
--no-advertise-tenant-networks	Disable the advertisement of tenant network routes by the BGP speaker.

Value	Summary
<code>--advertise-floating-ip-host-routes</code>	Enable the advertisement of floating ip host routes by the BGP speaker. (default)
<code>--name NAME</code>	Name of the bgp speaker to update
<code>--advertise-tenant-networks</code>	Enable the advertisement of tenant network routes by the BGP speaker. (default)
<code>-h, --help</code>	Show this help message and exit

## 10.17. BGP SPEAKER SHOW DRAGENTS

List dynamic routing agents hosting a BGP speaker

### Usage:

```
openstack bgp speaker show dragents [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     <bgp-speaker>
```

Table 10.55. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 10.56. Positional Arguments

Value	Summary
<code>&lt;bgp-speaker&gt;</code>	Id or name of the bgp speaker

Table 10.57. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 10.58. Output Formatters

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 10.59. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 10.60. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 10.18. BGP SPEAKER SHOW

Show a BGP speaker

### Usage:

```
openstack bgp speaker show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          <bgp-speaker>
```

Table 10.61. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.



Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 10.62. Positional Arguments

Value	Summary
<code>&lt;bgp-speaker&gt;</code>	Bgp speaker to display (name or id)

Table 10.63. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 10.64. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 10.65. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 10.66. Shell Formatter

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 11. BGPVPN

This chapter describes the commands under the **bgpvpn** command.

### 11.1. BGPVPN CREATE

Create BGP VPN resource

#### Usage:

```
openstack bgpvpn create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--project <project>]
                        [--project-domain <project-domain>]
                        [--name <name>] [--route-target <route-target>]
                        [--import-target <import-target>]
                        [--export-target <export-target>]
                        [--route-distinguisher <route-distinguisher>]
                        [--vni VNI] [--type {12,13}]
```

Table 11.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 11.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.4. Optional Arguments

Value	Summary
--name <name>	Name of the bgp vpn
--route-distinguisher <route-distinguisher>	Add route distinguisher to the list of route Distinguishers from which a Route Distinguishers will be picked from to advertise a VPN route (repeat option for multiple Route Distinguishers)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--vni VNI	Vxlan network identifier to be used for this bgpvpn when a VXLAN encapsulation is used
--import-target <import-target>	Add route target to import list (repeat option for multiple Route Targets)
--route-target <route-target>	Add route target to import/export list (repeat option for multiple Route Targets)
--type {I2,I3}	Bgp vpn type selection between ip vpn (I3) and Ethernet VPN (I2) (default: I3)
-h, --help	Show this help message and exit
--export-target <export-target>	Add route target to export list (repeat option for multiple Route Targets)
--project <project>	Owner's project (name or id)

Table 11.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 11.2. BGPVPN DELETE

Delete BGP VPN resource(s)

**Usage:**

```
openstack bgpvpn delete [-h] <bgpvpn> [<bgpvpn> ...]
```

**Table 11.6. Positional Arguments**

Value	Summary
<bgpvpn>	Bgp vpn(s) to delete (name or id)

**Table 11.7. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 11.3. BGPVPN LIST

List BGP VPN resources

**Usage:**

```
openstack bgpvpn list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
    [--max-width <integer>] [--fit-width]
    [--print-empty] [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN] [--project <project>]
    [--project-domain <project-domain>] [--long]
    [--property <key=value>]
```

**Table 11.8. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 11.9. CSV Formatter**

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 11.10. Output Formatters**

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 11.11. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 11.12. Optional Arguments**

Value	Summary
<code>--property &lt;key=value&gt;</code>	Filter property to apply on returned bgp vpns (repeat to filter on multiple properties)
<code>-h, --help</code>	Show this help message and exit
<code>--project &lt;project&gt;</code>	Owner's project (name or id)
<code>--long</code>	List additional fields in output
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

## 11.4. BGPVPN NETWORK ASSOCIATION CREATE

Create a BGP VPN network association

**Usage:**

```

openstack bgpvpn network association create [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty]
                                           [--noindent]
                                           [--prefix PREFIX]
                                           [--project <project>]
                                           [--project-domain <project-domain>]
                                           <bgpvpn> <network>

```

Table 11.13. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 11.14. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn to apply the network association (name or id)
<network>	Network to associate the bgp vpn (name or id)

Table 11.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 11.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 11.5. BGPVPN NETWORK ASSOCIATION DELETE

Delete a BGP VPN network association(s) for a given BGP VPN

### Usage:

```
openstack bgpvpn network association delete [-h]
                                     <network association ID>
                                     [<network association ID> ...]
                                     <bgpvpn>
```

Table 11.19. Positional Arguments

Value	Summary
<network association ID>	Network association id(s) to remove
<bgpvpn>	Bgp vpn the network association belongs to (name or ID)

Table 11.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 11.6. BGPVPN NETWORK ASSOCIATION LIST

List BGP VPN network associations for a given BGP VPN

### Usage:

```

openstack bgpvpn network association list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--sort-column SORT_COLUMN]
                                         [--long]
                                         [--property <key=value>]
                                         <bgpvpn>

```

Table 11.21. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 11.22. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn listed associations belong to (name or id)

Table 11.23. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric



Table 11.24. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.25. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Filter property to apply on returned bgp vpns (repeat to filter on multiple properties)
--long	List additional fields in output

## 11.7. BGPVPN NETWORK ASSOCIATION SHOW

Show information of a given BGP VPN network association

### Usage:

```
openstack bgpvpn network association show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--prefix PREFIX]
                                         <network association ID>
                                         <bgpvpn>
```

Table 11.27. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 11.28. Positional Arguments

Value	Summary
<code>&lt;network association ID&gt;</code>	Network association id to look up
<code>&lt;bgpvpn&gt;</code>	Bgp vpn the association belongs to (name or id)

Table 11.29. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 11.30. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.31. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 11.32. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 11.8. BGPVPN PORT ASSOCIATION CREATE

Create a BGP VPN port association

### Usage:

```

openstack bgpvpn port association create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--project <project>]
                                     [--project-domain <project-domain>]
                                     [--advertise-fixed-ips | --no-advertise-fixed-ips]
                                     [--prefix-route prefix=<cidr>[,local_pref=<integer>]]
                                     [--bgpvpn-route bgpvpn=<BGP VPN ID or name>[,local_pref=
<integer>]]
                                     <bgpvpn> <port>

```

Table 11.33. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 11.34. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn to apply the port association (name or id)
<port>	Port to associate the bgp vpn (name or id)

Table 11.35. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.36. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.37. Optional Arguments

Value	Summary
--bgpvpn-route bgpvpn=<BGP VPN ID or name> [,local_pref=<integer>]	Add bgp vpn route for route leaking. optionally, can control the value of the BGP LOCAL_PREF of the routes that will be advertised (repeat option for multiple BGP VPN routes)
--no-advertise-fixed-ips	Fixed ips of the port will not be advertised to the BGP VPN
--prefix-route prefix=<cidr>[,local_pref=<integer>]	Add prefix route in cidr notation. optionally, can control the value of the BGP LOCAL_PREF of the routes that will be advertised (repeat option for multiple prefix routes)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--advertise-fixed-ips	Fixed ips of the port will be advertised to the bgp VPN (default)
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)

Table 11.38. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Value	Summary
-------	---------

## 11.9. BGPVPN PORT ASSOCIATION DELETE

Delete a BGP VPN port association(s) for a given BGP VPN

### Usage:

```
openstack bgpvpn port association delete [-h]
                                     <port association ID>
                                     [<port association ID> ...]
                                     <bgpvpn>
```

Table 11.39. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn the port association belongs to (name or id)
<port association ID>	Port association id(s) to remove

Table 11.40. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 11.10. BGPVPN PORT ASSOCIATION LIST

List BGP VPN port associations for a given BGP VPN

### Usage:

```
openstack bgpvpn port association list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--long]
                                     [--property <key=value>]
                                     <bgpvpn>
```

Table 11.41. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 11.42. Positional Arguments

Value	Summary
<code>&lt;bgpvpn&gt;</code>	Bgp vpn listed associations belong to (name or id)

Table 11.43. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.44. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.45. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Filter property to apply on returned bgp vpns (repeat to filter on multiple properties)
--long	List additional fields in output

## 11.11. BGPVPN PORT ASSOCIATION SET

Set BGP VPN port association properties

### Usage:

```

openstack bgpvpn port association set [-h]
                                     [--advertise-fixed-ips | --no-advertise-fixed-ips]
                                     [--prefix-route prefix=<cidr>[,local_pref=<integer>]]
                                     [--bgpvpn-route bgpvpn=<BGP VPN ID or name>[,local_pref=<integer>]]
                                     [--no-prefix-route]
                                     [--no-bgpvpn-route]
                                     <port association ID> <bgpvpn>

```

Table 11.47. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn the port association belongs to (name or id)
<port association ID>	Port association id to update

Table 11.48. Optional Arguments

Value	Summary
--bgpvpn-route bgpvpn=<BGP VPN ID or name>[,local_pref=<integer>]	Add bgp vpn route for route leaking. optionally, can control the value of the BGP LOCAL_PREF of the routes that will be advertised (repeat option for multiple BGP VPN routes)
--no-advertise-fixed-ips	Fixed ips of the port will not be advertised to the BGP VPN
--prefix-route prefix=<cidr>[,local_pref=<integer>]	Add prefix route in cidr notation. optionally, can control the value of the BGP LOCAL_PREF of the routes that will be advertised (repeat option for multiple prefix routes)

Value	Summary
--no-bgpvpn-route	Empty bgp vpn route list
--no-prefix-route	Empty prefix route list
--advertise-fixed-ips	Fixed ips of the port will be advertised to the bgp VPN
-h, --help	Show this help message and exit

## 11.12. BGPVPN PORT ASSOCIATION SHOW

Show information of a given BGP VPN port association

### Usage:

```

openstack bgpvpn port association show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     <port association ID> <bgpvpn>

```

Table 11.49. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 11.50. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn the association belongs to (name or id)
<port association ID>	Port association id to look up

Table 11.51. Output Formatters



Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.52. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.53. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.54. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 11.13. BGPVPN PORT ASSOCIATION UNSET

Unset BGP VPN port association properties

### Usage:

```
openstack bgpvpn port association unset [-h]
                                     [--advertise-fixed-ips | --no-advertise-fixed-ips]
                                     [--prefix-route <cidr>]
                                     [--bgpvpn-route <BGP VPN ID or name>]
                                     [--all-prefix-routes]
                                     [--all-bgpvpn-routes]
                                     <port association ID> <bgpvpn>
```

Table 11.55. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn the port association belongs to (name or id)

Value	Summary
<port association ID>	Port association id to update

Table 11.56. Optional Arguments

Value	Summary
--all-prefix-routes	Empty prefix route list
--no-advertise-fixed-ips	Fixed ips of the port will be advertised to the bgp VPN
--prefix-route <cidr>	Remove prefix route in cidr notation (repeat option for multiple prefix routes)
--all-bgpvpn-routes	Empty bgp vpn route list
--advertise-fixed-ips	Fixed ips of the port will not be advertised to the BGP VPN
-h, --help	Show this help message and exit
--bgpvpn-route <BGP VPN ID or name>	Remove bgp vpn route (repeat option for multiple bgp VPN routes)

## 11.14. BGPVPN ROUTER ASSOCIATION CREATE

Create a BGP VPN router association

### Usage:

```
openstack bgpvpn router association create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty] [--noindent]
                                         [--prefix PREFIX]
                                         [--project <project>]
                                         [--project-domain <project-domain>]
                                         <bgpvpn> <router>
```

Table 11.57. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 11.58. Positional Arguments

Value	Summary
<code>&lt;bgpvpn&gt;</code>	Bgp vpn to apply the router association (name or id)
<code>&lt;router&gt;</code>	Router to associate the bgp vpn (name or id)

Table 11.59. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 11.60. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.61. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project &lt;project&gt;</code>	Owner's project (name or id)
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 11.62. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 11.15. BGPVPN ROUTER ASSOCIATION DELETE

Delete a BGP VPN router association(s) for a given BGP VPN

### Usage:

```
openstack bgpvpn router association delete [-h]
                                     <router association ID>
                                     [<router association ID> ...]
                                     <bgpvpn>
```

Table 11.63. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn the router association belongs to (name or id)
<router association ID>	Router association id(s) to remove

Table 11.64. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 11.16. BGPVPN ROUTER ASSOCIATION LIST

List BGP VPN router associations for a given BGP VPN

### Usage:

```
openstack bgpvpn router association list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--long]
                                     [--property <key=value>]
                                     <bgpvpn>
```

Table 11.65. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 11.66. Positional Arguments

Value	Summary
<code>&lt;bgpvpn&gt;</code>	Bgp vpn listed associations belong to (name or id)

Table 11.67. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.68. Output Formatters

Value	Summary
output formatter options- <code>{csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.69. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.70. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Filter property to apply on returned bgp vpns (repeat to filter on multiple properties)
--long	List additional fields in output

## 11.17. BGPVPN ROUTER ASSOCIATION SHOW

Show information of a given BGP VPN router association

### Usage:

```

openstack bgpvpn router association show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent] [--prefix PREFIX]
                                         <router association ID>
                                         <bgpvpn>

```

Table 11.71. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 11.72. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn the association belongs to (name or id)
<router association ID>	Router association id to look up

Table 11.73. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.74. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.75. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.76. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 11.18. BGPVPN SET

Set BGP VPN properties

### Usage:

```
openstack bgpvpn set [-h] [--name <name>]
                    [--route-target <route-target>]
                    [--no-route-target]
                    [--import-target <import-target>]
                    [--no-import-target]
                    [--export-target <export-target>]
                    [--no-export-target]
                    [--route-distinguisher <route-distinguisher>]
                    [--no-route-distinguisher] [--vni VNI]
                    <bgpvpn>
```

Table 11.77. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn to update (name or id)

**Table 11.78. Optional Arguments**

Value	Summary
--no-route-target	Empty route target list
--name <name>	Name of the bgp vpn
--route-distinguisher <route-distinguisher>	Add route distinguisher to the list of route Distinguishers from which a Route Distinguishers will be picked from to advertise a VPN route (repeat option for multiple Route Distinguishers)
--no-route-distinguisher	Empty route distinguisher list
--no-export-target	Empty export route target list
--no-import-target	Empty import route target list
--vni VNI	Vxlan network identifier to be used for this bgpvpn when a VXLAN encapsulation is used
--import-target <import-target>	Add route target to import list (repeat option for multiple Route Targets)
--route-target <route-target>	Add route target to import/export list (repeat option for multiple Route Targets)
-h, --help	Show this help message and exit
--export-target <export-target>	Add route target to export list (repeat option for multiple Route Targets)

## 11.19. BGPVPN SHOW

Show information of a given BGP VPN

### Usage:

```
openstack bgpvpn show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    <bgpvpn>
```



Table 11.79. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 11.80. Positional Arguments

Value	Summary
<code>&lt;bgpvpn&gt;</code>	Bgp vpn to display (name or id)

Table 11.81. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 11.82. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.83. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 11.84. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 11.20. BGPVPN UNSET

Unset BGP VPN properties

### Usage:

```
openstack bgpvpn unset [-h] [--route-target <route-target>]
                        [--all-route-target]
                        [--import-target <import-target>]
                        [--all-import-target]
                        [--export-target <export-target>]
                        [--all-export-target]
                        [--route-distinguisher <route-distinguisher>]
                        [--all-route-distinguisher] [--vni VNI]
                        <bgpvpn>
```

**Table 11.85. Positional Arguments**

Value	Summary
<bgpvpn>	Bgp vpn to update (name or id)

**Table 11.86. Optional Arguments**

Value	Summary
--all-route-target	Empty route target list
--route-target <route-target>	Remove route target from import/export list (repeat option for multiple Route Targets)
--route-distinguisher <route-distinguisher>	Remove route distinguisher from the list of route Distinguishers from which a Route Distinguishers will be picked from to advertise a VPN route (repeat option for multiple Route Distinguishers)
--all-export-target	Empty export route target list
--all-import-target	Empty import route target list
--vni VNI	Vxlan network identifier to be used for this bgpvpn when a VXLAN encapsulation is used

Value	Summary
--import-target <import-target>	Remove route target from import list (repeat option for multiple Route Targets)
-h, --help	Show this help message and exit
--export-target <export-target>	Remove route target from export list (repeat option for multiple Route Targets)
--all-route-distinguisher	Empty route distinguisher list

## CHAPTER 12. CA

This chapter describes the commands under the **ca** command.

### 12.1. CA GET

Retrieve a CA by providing its URI.

#### Usage:

```
openstack ca get [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                 [--max-width <integer>] [--fit-width] [--print-empty]
                 [--noindent] [--prefix PREFIX]
                 URI
```

Table 12.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 12.2. Positional Arguments

Value	Summary
URI	The uri reference for the ca.

Table 12.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 12.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 12.5. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 12.6. Shell Formatter

Value	Summary
<code>a</code> format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 12.2. CA LIST

List CAs.

Usage:

```
openstack ca list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                  [--max-width <integer>] [--fit-width] [--print-empty]
                  [--noindent] [--quote {all,minimal,none,nonnumeric}]
                  [--sort-column SORT_COLUMN] [--limit LIMIT]
                  [--offset OFFSET] [--name NAME]
```

Table 12.7. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 12.8. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 12.9. Output Formatters**

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 12.10. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 12.11. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--limit LIMIT, -l LIMIT</code>	Specify the limit to the number of items to list per page (default: 10; maximum: 100)
<code>--name NAME, -n NAME</code>	Specify the ca name (default: none)
<code>--offset OFFSET, -o OFFSET</code>	Specify the page offset (default: 0)

## CHAPTER 13. CATALOG

This chapter describes the commands under the **catalog** command.

### 13.1. CATALOG LIST

List services in the service catalog

#### Usage:

```
openstack catalog list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]
```

Table 13.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 13.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 13.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 13.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.5. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 13.2. CATALOG SHOW

Display service catalog details

### Usage:

```
openstack catalog show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        <service>
```

Table 13.6. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 13.7. Positional Arguments

Value	Summary
<service>	Service to display (type or name)

Table 13.8. Output Formatters



Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 13.9. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 13.10. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 13.11. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 14. COE

This chapter describes the commands under the **coe** command.

### 14.1. COE CA ROTATE

Rotate the CA certificate for cluster to revoke access.

#### Usage:

```
openstack coe ca rotate [-h] <cluster>
```

Table 14.1. Positional Arguments

Value	Summary
<cluster>	Id or name of the cluster

Table 14.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 14.2. COE CA SHOW

Show details about the CA certificate for a cluster.

#### Usage:

```
openstack coe ca show [-h] <cluster>
```

Table 14.3. Positional Arguments

Value	Summary
<cluster>	Id or name of the cluster

Table 14.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 14.3. COE CA SIGN

Generate the CA certificate for a cluster.

**Usage:**

```
openstack coe ca sign [-h] <cluster> <csr>
```

**Table 14.5. Positional Arguments**

Value	Summary
<cluster>	Id or name of the cluster
<csr>	File path of csr file to send to magnum to get signed.

**Table 14.6. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 14.4. COE CLUSTER CONFIG

Get Configuration for a Cluster

**Usage:**

```
openstack coe cluster config [-h] [--dir <dir>] [--force] <cluster>
```

**Table 14.7. Positional Arguments**

Value	Summary
<cluster>	The name or uuid of cluster to update

**Table 14.8. Optional Arguments**

Value	Summary
--force	Overwrite files if existing.
-h, --help	Show this help message and exit
--dir <dir>	Directory to save the certificate and config files.

## 14.5. COE CLUSTER CREATE

Create a cluster

**Usage:**

```

openstack coe cluster create [-h] --cluster-template <cluster-template>
                             [--discovery-url <discovery-url>]
                             [--docker-volume-size <docker-volume-size>]
                             [--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...>]
                             [--keypair <keypair>]
                             [--master-count <master-count>]
                             [--node-count <node-count>]
                             [--timeout <timeout>]
                             [--master-flavor <master-flavor>]
                             [--flavor <flavor>]
                             <name>

```

Table 14.9. Positional Arguments

Value	Summary
<name>	Name of the cluster to create.

Table 14.10. Optional Arguments

Value	Summary
--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...>	Arbitrary labels in the form of key=valuepairs to associate with a cluster template. May be used multiple times.
--discovery-url <discovery-url>	Specifies custom delivery url for node discovery.
--cluster-template <cluster-template>	Id or name of the cluster template.
--master-flavor <master-flavor>	The nova flavor name or uuid to use when launching the master node of the Cluster.
--timeout <timeout>	The timeout for cluster creation time. the default is 60 minutes.
--flavor <flavor>	The nova flavor name or uuid to use when launching the Cluster.
--master-count <master-count>	The number of master nodes for the cluster.
--keypair <keypair>	Uuid or name of the keypair to use.
-h, --help	Show this help message and exit
--docker-volume-size <docker-volume-size>	The size in gb for the docker volume to use.
--node-count <node-count>	The cluster node count.

## 14.6. COE CLUSTER DELETE

Delete a cluster

### Usage:

```
openstack coe cluster delete [-h] <cluster> [<cluster> ...]
```

Table 14.11. Positional Arguments

Value	Summary
<cluster>	Id or name of the cluster(s) to delete.

Table 14.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 14.7. COE CLUSTER LIST

List clusters

### Usage:

```
openstack coe cluster list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--limit <limit>] [--sort-key <sort-key>]
                             [--sort-dir <sort-dir>]
```

Table 14.13. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 14.14. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 14.15. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 14.16. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 14.17. Optional Arguments**

Value	Summary
<code>--limit &lt;limit&gt;</code>	Maximum number of clusters to return
<code>-h, --help</code>	Show this help message and exit
<code>--sort-key &lt;sort-key&gt;</code>	Column to sort results by
<code>--sort-dir &lt;sort-dir&gt;</code>	Direction to sort. "asc" or "desc".

## 14.8. COE CLUSTER SHOW

Show a Cluster

### Usage:

```
openstack coe cluster show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          <cluster>
```

Table 14.18. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 14.19. Positional Arguments

Value	Summary
<code>&lt;cluster&gt;</code>	Id or name of the cluster to show.

Table 14.20. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 14.21. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 14.22. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 14.23. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 14.9. COE CLUSTER TEMPLATE CREATE

Create a Cluster Template.

### Usage:

```

openstack coe cluster template create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     --coe <coe> --image <image>
                                     --external-network
                                     <external-network>
                                     [--keypair <keypair>]
                                     [--fixed-network <fixed-network>]
                                     [--fixed-subnet <fixed-subnet>]
                                     [--network-driver <network-driver>]
                                     [--volume-driver <volume-driver>]
                                     [--dns-nameserver <dns-nameserver>]
                                     [--flavor <flavor>]
                                     [--master-flavor <master-flavor>]
                                     [--docker-volume-size <docker-volume-size>]
                                     [--docker-storage-driver <docker-storage-driver>]
                                     [--http-proxy <http-proxy>]
                                     [--https-proxy <https-proxy>]
                                     [--no-proxy <no-proxy>]
                                     [--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...>]
                                     [--tls-disabled] [--public]
                                     [--registry-enabled]
                                     [--server-type <server-type>]
                                     [--master-lb-enabled]
                                     [--floating-ip-enabled]
                                     [--floating-ip-disabled]
                                     <name>

```

Table 14.24. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.



Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 14.25. Positional Arguments

Value	Summary
<code>&lt;name&gt;</code>	Name of the cluster template to create.

Table 14.26. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 14.27. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 14.28. Optional Arguments

Value	Summary
<code>--master-lb-enabled</code>	Indicates whether created clusters should have a load balancer for master nodes or not.
<code>--fixed-subnet &lt;fixed-subnet&gt;</code>	The private neutron subnet name to connect to cluster.
<code>--fixed-network &lt;fixed-network&gt;</code>	The private neutron network name to connect to this Cluster model.
<code>--https-proxy &lt;https-proxy&gt;</code>	The <code>https_proxy</code> address to use for nodes in cluster.

Value	Summary
<code>--registry-enabled</code>	Enable docker registry in the cluster
<code>--volume-driver &lt;volume-driver&gt;</code>	The volume driver name for instantiating container volume.
<code>--labels</code> <code>&lt;KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...&gt;</code>	Arbitrary labels in the form of key=value pairs to associate with a cluster template. May be used multiple times.
<code>--network-driver &lt;network-driver&gt;</code>	The network driver name for instantiating container networks.
<code>--tls-disabled</code>	Disable tls in the cluster.
<code>--master-flavor &lt;master-flavor&gt;</code>	The nova flavor name or uuid to use when launching the master node of the Cluster.
<code>--floating-ip-enabled</code>	Indicates whether created clusters should have a floating ip.
<code>-h, --help</code>	Show this help message and exit
<code>--flavor &lt;flavor&gt;</code>	The nova flavor name or uuid to use when launching the Cluster.
<code>--image &lt;image&gt;</code>	The name or uuid of the base image to customize for the Cluster.
<code>--external-network &lt;external-network&gt;</code>	The external neutron network name or uuid to connect to this Cluster Template.
<code>--coe &lt;coe&gt;</code>	Specify the container orchestration engine to use.
<code>--docker-storage-driver &lt;docker-storage-driver&gt;</code>	Select a docker storage driver. supported: devicemapper, overlay. Default: devicemapper
<code>--keypair &lt;keypair&gt;</code>	The name or uuid of the ssh keypair to load into the Cluster nodes.
<code>--public</code>	Make cluster template public.
<code>--server-type &lt;server-type&gt;</code>	Specify the server type to be used for example vm. for this release default server type will be vm.
<code>--http-proxy &lt;http-proxy&gt;</code>	The http_proxy address to use for nodes in cluster.

Value	Summary
--no-proxy <no-proxy>	The no_proxy address to use for nodes in cluster.
--docker-volume-size <docker-volume-size>	Specify the number of size in gb for the docker volume to use.
--dns-nameserver <dns-nameserver>	The dns nameserver to use for this cluster template.
--floating-ip-disabled	Disables floating ip creation on the new cluster

Table 14.29. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 14.10. COE CLUSTER TEMPLATE DELETE

Delete a Cluster Template.

### Usage:

```
openstack coe cluster template delete [-h]
                                     <cluster-templates>
                                     [<cluster-templates> ...]
```

Table 14.30. Positional Arguments

Value	Summary
<cluster-templates>	Id or name of the (cluster template)s to delete.

Table 14.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 14.11. COE CLUSTER TEMPLATE LIST

List Cluster Templates.

### Usage:

```
openstack coe cluster template list [-h]
```

```

[-f {csv,json,table,value,yaml}]
[-c COLUMN] [--max-width <integer>]
[--fit-width] [--print-empty]
[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
[--limit <limit>]
[--sort-key <sort-key>]
[--sort-dir <sort-dir>]
[--fields <fields>]

```

Table 14.32. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 14.33. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 14.34. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 14.35. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 14.36. Optional Arguments

Value	Summary
--fields <fields>	Comma-separated list of fields to display. available fields: uuid, name, coe, image_id, public, link, apiserver_port, server_type, tls_disabled, registry_enabled
--limit <limit>	Maximum number of cluster templates to return
-h, --help	Show this help message and exit
--sort-key <sort-key>	Column to sort results by
--sort-dir <sort-dir>	Direction to sort. "asc" or "desc".

## 14.12. COE CLUSTER TEMPLATE SHOW

Show a Cluster Template.

### Usage:

```

openstack coe cluster template show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     <cluster-template>

```

Table 14.37. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 14.38. Positional Arguments**

Value	Summary
<cluster-template>	Id or name of the cluster template to show.

**Table 14.39. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 14.40. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 14.41. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 14.42. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 14.13. COE CLUSTER TEMPLATE UPDATE

Update a Cluster Template.

### Usage:

```

openstack coe cluster template update [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]

```

```

[--noindent] [--prefix PREFIX]
<cluster-template> <op>
<path=value> [<path=value> ...]

```

Table 14.43. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 14.44. Positional Arguments

Value	Summary
<op>	Operations: one of <i>add</i> , <i>replace</i> or <i>remove</i>
<cluster-template>	The name or uuid of cluster template to update
<path=value>	Attributes to add/replace or remove (only path is necessary on remove)

Table 14.45. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 14.46. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 14.47. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 14.48. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 14.14. COE CLUSTER UPDATE

Update a Cluster

### Usage:

```
openstack coe cluster update [-h] [--rollback]
                             <cluster> <op> <path=value>
                             [<path=value> ...]
```

Table 14.49. Positional Arguments

Value	Summary
<cluster>	The name or uuid of cluster to update
<path=value>	Attributes to add/replace or remove (only path is necessary on remove)
<op>	Operations: one of <i>add</i> , <i>replace</i> or <i>remove</i>

Table 14.50. Optional Arguments

Value	Summary
--rollback	Rollback cluster on update failure.
-h, --help	Show this help message and exit

## 14.15. COE QUOTAS CREATE

Create a quota.

### Usage:



```
openstack coe quotas create [-h] --project-id <project-id> --resource
                             <resource> [--hard-limit <hard-limit>]
```

Table 14.51. Optional Arguments

Value	Summary
--project-id <project-id>	Project id
-h, --help	Show this help message and exit
--hard-limit <hard-limit>	Max resource limit (default: hard-limit=1)
--resource <resource>	Resource name.

## 14.16. COE QUOTAS DELETE

Delete specified resource quota.

### Usage:

```
openstack coe quotas delete [-h] --project-id <project-id> --resource
                             <resource>
```

Table 14.52. Optional Arguments

Value	Summary
--project-id <project-id>	Project id
-h, --help	Show this help message and exit
--resource <resource>	Resource name.

## 14.17. COE QUOTAS LIST

Print a list of available quotas.

### Usage:

```
openstack coe quotas list [-h] [--marker <marker>] [--limit <limit>]
                          [--sort-key <sort-key>]
                          [--sort-dir <sort-dir>] [--all-tenants]
```

Table 14.53. Optional Arguments

Value	Summary
--sort-key <sort-key>	Column to sort results by.
--sort-dir <sort-dir>	Direction to sort. "asc" or "desc".
--all-tenants	Flag to indicate list all tenant quotas.
--limit <limit>	Maximum number of quotas to return.
-h, --help	Show this help message and exit
--marker <marker>	The last quota uuid of the previous page; displays list of quotas after "marker".

## 14.18. COE QUOTAS SHOW

Show details about the given project resource quota.

### Usage:

```
openstack coe quotas show [-h] --project-id <project-id> --resource
                           <resource>
```

Table 14.54. Optional Arguments

Value	Summary
--project-id <project-id>	Project id
-h, --help	Show this help message and exit
--resource <resource>	Resource name.

## 14.19. COE QUOTAS UPDATE

Update information about the given project resource quota.

### Usage:

```
openstack coe quotas update [-h] --project-id <project-id> --resource
                             <resource> [--hard-limit <hard-limit>]
```

Table 14.55. Optional Arguments

Value	Summary
<code>--project-id &lt;project-id&gt;</code>	Project id
<code>-h, --help</code>	Show this help message and exit
<code>--hard-limit &lt;hard-limit&gt;</code>	Max resource limit (default: <code>hard-limit=1</code> )
<code>--resource &lt;resource&gt;</code>	Resource name.

## 14.20. COE SERVICE LIST

Print a list of Magnum services.

### Usage:

```
openstack coe service list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN]
```

Table 14.56. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <code>&lt;1</code> to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 14.57. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 14.58. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 14.59. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 14.60. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 14.21. COE STATS LIST

Show stats for the given project\_id

### Usage:

```
openstack coe stats list [-h] <project>
```

Table 14.61. Positional Arguments

Value	Summary
<project>	Project id

Table 14.62. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## CHAPTER 15. COMMAND

This chapter describes the commands under the **command** command.

### 15.1. COMMAND LIST

List recognized commands by group

#### Usage:

```
openstack command list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]
                        [--group <group-keyword>]
```

Table 15.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 15.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 15.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 15.4. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 15.5. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--group &lt;group-keyword&gt;</code>	Show commands filtered by a command group, for example: identity, volume, compute, image, network and other keywords

## CHAPTER 16. COMPLETE.ADOC

This chapter describes the commands under the **complete.adoc** command.

### 16.1. COMPLETE

print bash completion command

#### Usage:

```
openstack complete [-h] [--name <command_name>] [--shell <shell>]
```

Table 16.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <command_name>	Command name to support with command completion
--shell <shell>	Shell being used. use none for data only (default: bash)

## CHAPTER 17. COMPUTE

This chapter describes the commands under the **compute** command.

### 17.1. COMPUTE AGENT CREATE

Create compute agent

#### Usage:

```
openstack compute agent create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               <os> <architecture> <version> <url>
                               <md5hash> <hypervisor>
```

Table 17.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 17.2. Positional Arguments

Value	Summary
<url>	Url
<architecture>	Type of architecture
<version>	Version
<hypervisor>	Type of hypervisor
<os>	Type of os
<md5hash>	Md5 hash

Table 17.3. Output Formatters



Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 17.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 17.5. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 17.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 17.2. COMPUTE AGENT DELETE

Delete compute agent(s)

### Usage:

```
openstack compute agent delete [-h] <id> [<id> ...]
```

Table 17.7. Positional Arguments

Value	Summary
<id>	Id of agent(s) to delete

Table 17.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 17.3. COMPUTE AGENT LIST

List compute agents

### Usage:

```
openstack compute agent list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--hypervisor <hypervisor>]
```

Table 17.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 17.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 17.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 17.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 17.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--hypervisor <hypervisor>	Type of hypervisor

## 17.4. COMPUTE AGENT SET

Set compute agent properties

### Usage:

```
openstack compute agent set [-h] [--agent-version <version>]
                             [--url <url>] [--md5hash <md5hash>]
                             <id>
```

Table 17.14. Positional Arguments

Value	Summary
<id>	Id of the agent

Table 17.15. Optional Arguments

Value	Summary
--agent-version <version>	Version of the agent
-h, --help	Show this help message and exit
--md5hash <md5hash>	Md5 hash of the agent
--url <url>	Url of the agent

## 17.5. COMPUTE SERVICE DELETE

Delete compute service(s)

### Usage:

```
openstack compute service delete [-h] <service> [<service> ...]
```

Table 17.16. Positional Arguments

Value	Summary
<service>	Compute service(s) to delete (id only)

Table 17.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 17.6. COMPUTE SERVICE LIST

List compute services

### Usage:

```

openstack compute service list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]
                               [--host <host>] [--service <service>]
                               [--long]

```

Table 17.18. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 17.19. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 17.20. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 17.21. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 17.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--host <host>	List services on specified host (name only)
--long	List additional fields in output
--service <service>	List only specified service (name only)

## 17.7. COMPUTE SERVICE SET

Set compute service properties

### Usage:

```
openstack compute service set [-h] [--enable | --disable]
                               [--disable-reason <reason>]
                               [--up | --down]
                               <host> <service>
```

Table 17.23. Positional Arguments

Value	Summary
<service>	Name of service (binary name)

Value	Summary
<host>	Name of host

**Table 17.24. Optional Arguments**

Value	Summary
--enable	Enable service
--disable-reason <reason>	Reason for disabling the service (in quotes). should be used with --disable option.
--down	Force down service
--up	Force up service
-h, --help	Show this help message and exit
--disable	Disable service

## CHAPTER 18. CONFIGURATION

This chapter describes the commands under the **configuration** command.

### 18.1. CONFIGURATION SHOW

Display configuration details

#### Usage:

```
openstack configuration show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] [--mask | --unmask]
```

**Table 18.1. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 18.2. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 18.3. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 18.4. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--unmask	Show password in clear text
--mask	Attempt to mask passwords (default)

**Table 18.5. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names



## CHAPTER 19. CONSISTENCY

This chapter describes the commands under the **consistency** command.

### 19.1. CONSISTENCY GROUP ADD VOLUME

Add volume(s) to consistency group

#### Usage:

```
openstack consistency group add volume [-h]
                                     <consistency-group> <volume>
                                     [<volume> ...]
```

Table 19.1. Positional Arguments

Value	Summary
<volume>	Volume(s) to add to <consistency-group> (name or id) (repeat option to add multiple volumes)
<consistency-group>	Consistency group to contain <volume> (name or id)

Table 19.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 19.2. CONSISTENCY GROUP CREATE

Create new consistency group.

#### Usage:

```
openstack consistency group create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent] [--prefix PREFIX]
                                   (--volume-type <volume-type> | --consistency-group-source <consistency-
group> | --consistency-group-snapshot <consistency-group-snapshot>)
                                   [--description <description>]
                                   [--availability-zone <availability-zone>]
                                   [<name>]
```

Table 19.3. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 19.4. Positional Arguments

Value	Summary
<code>&lt;name&gt;</code>	Name of new consistency group (default to none)

Table 19.5. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 19.6. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 19.7. Optional Arguments

Value	Summary
<code>--availability-zone &lt;availability-zone&gt;</code>	Availability zone for this consistency group (not available if creating consistency group from source)
<code>--consistency-group-snapshot &lt;consistency-group-snapshot&gt;</code>	Existing consistency group snapshot (name or id)
<code>--consistency-group-source &lt;consistency-group&gt;</code>	Existing consistency group (name or id)

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of this consistency group
--volume-type <volume-type>	Volume type of this consistency group (name or id)

Table 19.8. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

### 19.3. CONSISTENCY GROUP DELETE

Delete consistency group(s).

#### Usage:

```
openstack consistency group delete [-h] [--force]
    <consistency-group>
    [<consistency-group> ...]
```

Table 19.9. Positional Arguments

Value	Summary
<consistency-group>	Consistency group(s) to delete (name or id)

Table 19.10. Optional Arguments

Value	Summary
--force	Allow delete in state other than error or available
-h, --help	Show this help message and exit

### 19.4. CONSISTENCY GROUP LIST

List consistency groups.

#### Usage:

```
openstack consistency group list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
[--all-projects] [--long]

```

Table 19.11. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 19.12. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 19.13. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 19.14. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 19.15. Optional Arguments

Value	Summary
--all-projects	Show details for all projects. admin only. (defaults to False)
-h, --help	Show this help message and exit
--long	List additional fields in output

## 19.5. CONSISTENCY GROUP REMOVE VOLUME

Remove volume(s) from consistency group

### Usage:

```
openstack consistency group remove volume [-h]
                                     <consistency-group> <volume>
                                     [<volume> ...]
```

**Table 19.16. Positional Arguments**

Value	Summary
<volume>	Volume(s) to remove from <consistency-group> (name or ID) (repeat option to remove multiple volumes)
<consistency-group>	Consistency group containing <volume> (name or id)

**Table 19.17. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 19.6. CONSISTENCY GROUP SET

Set consistency group properties

### Usage:

```
openstack consistency group set [-h] [--name <name>]
                                [--description <description>]
                                <consistency-group>
```

**Table 19.18. Positional Arguments**

Value	Summary
<consistency-group>	Consistency group to modify (name or id)

Table 19.19. Optional Arguments

Value	Summary
--name <name>	New consistency group name
-h, --help	Show this help message and exit
--description <description>	New consistency group description

## 19.7. CONSISTENCY GROUP SHOW

Display consistency group details.

### Usage:

```
openstack consistency group show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <consistency-group>
```

Table 19.20. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 19.21. Positional Arguments

Value	Summary
<consistency-group>	Consistency group to display (name or id)

Table 19.22. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 19.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 19.24. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 19.25. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 19.8. CONSISTENCY GROUP SNAPSHOT CREATE

Create new consistency group snapshot.

### Usage:

```
openstack consistency group snapshot create [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty]
                                           [--noindent]
                                           [--prefix PREFIX]
                                           [--consistency-group <consistency-group>]
                                           [--description <description>]
                                           [<snapshot-name>]
```

Table 19.26. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 19.27. Positional Arguments

Value	Summary
<code>&lt;snapshot-name&gt;</code>	Name of new consistency group snapshot (default to None)

Table 19.28. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 19.29. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 19.30. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--consistency-group &lt;consistency-group&gt;</code>	Consistency group to snapshot (name or id) (default to be the same as <code>&lt;snapshot-name&gt;</code> )
<code>--description &lt;description&gt;</code>	Description of this consistency group snapshot



Table 19.31. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 19.9. CONSISTENCY GROUP SNAPSHOT DELETE

```
<consistency-group-snapshot>
[<consistency-group-snapshot> ...]
```

Delete consistency group snapshot(s).

### Usage:

```
openstack consistency group snapshot delete [-h]
```

Table 19.32. Positional Arguments

Value	Summary
<consistency-group-snapshot>	Consistency group snapshot(s) to delete (name or id)

Table 19.33. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 19.10. CONSISTENCY GROUP SNAPSHOT LIST

List consistency group snapshots.

### Usage:

```
openstack consistency group snapshot list [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN]
    [--all-projects] [--long]
    [--status <status>]
    [--consistency-group <consistency-group>]
```

Table 19.34. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 19.35. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 19.36. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 19.37. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 19.38. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show detail for all projects (admin only) (defaults to False)

Value	Summary
<code>--status &lt;status&gt;</code>	Filters results by a status ("available", "error", "creating", "deleting" or "error_deleting")
<code>-h, --help</code>	Show this help message and exit
<code>--consistency-group &lt;consistency-group&gt;</code>	Filters results by a consistency group (name or id)
<code>--long</code>	List additional fields in output

## 19.11. CONSISTENCY GROUP SNAPSHOT SHOW

Display consistency group snapshot details

### Usage:

```
openstack consistency group snapshot show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--prefix PREFIX]
                                         <consistency-group-snapshot>
```

Table 19.39. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 19.40. Positional Arguments

Value	Summary
<code>&lt;consistency-group-snapshot&gt;</code>	Consistency group snapshot to display (name or id)

Table 19.41. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 19.42. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 19.43. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 19.44. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 20. CONSOLE

This chapter describes the commands under the **console** command.

### 20.1. CONSOLE LOG SHOW

Show server's console output

#### Usage:

```
openstack console log show [-h] [--lines <num-lines>] <server>
```

Table 20.1. Positional Arguments

Value	Summary
<server>	Server to show console log (name or id)

Table 20.2. Optional Arguments

Value	Summary
--lines <num-lines>	Number of lines to display from the end of the log (default=all)
-h, --help	Show this help message and exit

### 20.2. CONSOLE URL SHOW

Show server's remote console URL

#### Usage:

```
openstack console url show [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty] [--noindent]
    [--prefix PREFIX]
    [--novnc | --xvpvnc | --spice | --rdp | --serial | --mks]
    <server>
```

Table 20.3. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 20.4. Positional Arguments

Value	Summary
<code>&lt;server&gt;</code>	Server to show url (name or id)

Table 20.5. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 20.6. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 20.7. Optional Arguments

Value	Summary
<code>--mks</code>	Show webmks console url
<code>--novnc</code>	Show novnc console url (default)
<code>--xvpng</code>	Show xvpng console url
<code>--rdp</code>	Show rdp console url
<code>--spice</code>	Show spice console url
<code>-h, --help</code>	Show this help message and exit
<code>--serial</code>	Show serial console url

Table 20.8. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 21. CONTAINER

This chapter describes the commands under the **container** command.

### 21.1. CONTAINER CREATE

Create new container

#### Usage:

```
openstack container create [-h] [-f {csv,json,table,value,yaml}]
  [-c COLUMN] [--max-width <integer>]
  [--fit-width] [--print-empty] [--noindent]
  [--quote {all,minimal,none,nonnumeric}]
  [--sort-column SORT_COLUMN]
  <container-name> [<container-name> ...]
```

Table 21.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 21.2. Positional Arguments

Value	Summary
<container-name>	New container name(s)

Table 21.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 21.4. Output Formatters



Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 21.5. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 21.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 21.2. CONTAINER DELETE

Delete container

### Usage:

```
openstack container delete [-h] [--recursive]
    <container> [<container> ...]
```

Table 21.7. Positional Arguments

Value	Summary
<container>	Container(s) to delete

Table 21.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--recursive, -r</code>	Recursively delete objects and container

## 21.3. CONTAINER LIST

List containers

### Usage:

```
openstack container list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]
                        [--prefix <prefix>] [--marker <marker>]
                        [--end-marker <end-marker>]
                        [--limit <num-containers>] [--long] [--all]
```

Table 21.9. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 21.10. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 21.11. Output Formatters

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 21.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 21.13. Optional Arguments

Value	Summary
<code>--limit &lt;num-containers&gt;</code>	Limit the number of containers returned
<code>--marker &lt;marker&gt;</code>	Anchor for paging
<code>--long</code>	List additional fields in output
<code>--end-marker &lt;end-marker&gt;</code>	End anchor for paging
<code>-h, --help</code>	Show this help message and exit
<code>--prefix &lt;prefix&gt;</code>	Filter list using <prefix>
<code>--all</code>	List all containers (default is 10000)

## 21.4. CONTAINER SAVE

Save container contents locally

### Usage:

```
openstack container save [-h] <container>
```

Table 21.14. Positional Arguments

Value	Summary
<code>&lt;container&gt;</code>	Container to save

Table 21.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 21.5. CONTAINER SET

Set container properties

### Usage:

```
openstack container set [-h] --property <key=value> <container>
```

Table 21.16. Positional Arguments

Value	Summary
<container>	Container to modify

Table 21.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Set a property on this container (repeat option to set multiple properties)

## 21.6. CONTAINER SHOW

Display container details

### Usage:

```
openstack container show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        <container>
```

Table 21.18. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 21.19. Positional Arguments

Value	Summary
<code>&lt;container&gt;</code>	Container to display

Table 21.20. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 21.21. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 21.22. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 21.23. Shell Formatter

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## 21.7. CONTAINER UNSET

Unset container properties

### Usage:

```
openstack container unset [-h] --property <key> <container>
```

Table 21.24. Positional Arguments

Value	Summary
<container>	Container to modify

Table 21.25. Optional Arguments

Value	Summary
--property <key>	Property to remove from container (repeat option to remove multiple properties)
-h, --help	Show this help message and exit

## CHAPTER 22. CRON

This chapter describes the commands under the **cron** command.

### 22.1. CRON TRIGGER CREATE

Create new trigger.

#### Usage:

```
openstack cron trigger create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent] [--prefix PREFIX]
                             [--params PARAMS] [--pattern <* * * * *>]
                             [--first-time <YYYY-MM-DD HH:MM>]
                             [--count <integer>] [--utc]
                             name workflow_identifier [workflow_input]
```

Table 22.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 22.2. Positional Arguments

Value	Summary
workflow_input	Workflow input
workflow_identifier	Workflow name or id
name	Cron trigger name

Table 22.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 22.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 22.5. Optional Arguments

Value	Summary
--count <integer>	Number of wanted executions
--first-time <YYYY-MM-DD HH:MM>	Date and time of the first execution. time is treated as local time unless --utc is also specified
--params PARAMS	Workflow params
--utc	All times specified should be treated as utc
-h, --help	Show this help message and exit
--pattern <* * * * *>	Cron trigger pattern

Table 22.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 22.2. CRON TRIGGER DELETE

Delete trigger.

### Usage:

```
openstack cron trigger delete [-h] cron_trigger [cron_trigger ...]
```

Table 22.7. Positional Arguments



Value	Summary
cron_trigger	Name of cron trigger(s).

Table 22.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 22.3. CRON TRIGGER LIST

List all cron triggers.

### Usage:

```
openstack cron trigger list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
```

Table 22.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 22.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 22.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 22.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 22.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 22.4. CRON TRIGGER SHOW

Show specific cron trigger.

### Usage:

```

openstack cron trigger show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             cron_trigger

```

Table 22.14. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 22.15. Positional Arguments

Value	Summary
<code>cron_trigger</code>	Cron trigger name

Table 22.16. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 22.17. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 22.18. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 22.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 23. DATASTORE

This chapter describes the commands under the **datastore** command.

### 23.1. DATASTORE LIST

List available datastores

#### Usage:

```
openstack datastore list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]
```

Table 23.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 23.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 23.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 23.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 23.5. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 23.2. DATASTORE SHOW

Shows details of a datastore

### Usage:

```
openstack datastore show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        <datastore>
```

Table 23.6. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 23.7. Positional Arguments

Value	Summary
<datastore>	Id of the datastore

Table 23.8. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 23.9. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 23.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 23.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 23.3. DATASTORE VERSION LIST

Lists available versions for a datastore

### Usage:

```
openstack datastore version list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                <datastore>
```

Table 23.12. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 23.13. Positional Arguments

Value	Summary
<code>&lt;datastore&gt;</code>	Id or name of the datastore

Table 23.14. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 23.15. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 23.16. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 23.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 23.4. DATASTORE VERSION SHOW

Shows details of a datastore version.

### Usage:

```
openstack datastore version show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--datastore <datastore>]
                                <datastore_version>
```

Table 23.18. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 23.19. Positional Arguments

Value	Summary
<datastore_version>	Id or name of the datastore version.

Table 23.20. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated



Table 23.21. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 23.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--datastore <datastore>	Id or name of the datastore. optional if the id of the datastore_version is provided.

Table 23.23. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 24. DNS

This chapter describes the commands under the **dns** command.

### 24.1. DNS QUOTA LIST

List quotas

Usage:

```
openstack dns quota list [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        [--project-id PROJECT_ID]
```

Table 24.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 24.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 24.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 24.4. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
--project-id PROJECT_ID	Project id default: current project
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 24.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 24.2. DNS QUOTA RESET

Delete blacklist

### Usage:

```
openstack dns quota reset [-h] [--all-projects] [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          [--project-id PROJECT_ID]
```

Table 24.6. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
--project-id PROJECT_ID	Project id
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

## 24.3. DNS QUOTA SET

Set blacklist properties

### Usage:

```
openstack dns quota set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        [--project-id PROJECT_ID]
                        [--api-export-size <api-export-size>]
                        [--zones <zones>]
                        [--recordset-records <recordset-records>]
                        [--zone-records <zone-records>]
                        [--zone-recordsets <zone-recordsets>]
```

**Table 24.7. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 24.8. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 24.9. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 24.10. Optional Arguments**

Value	Summary
<code>--project-id PROJECT_ID</code>	Project id
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--api-export-size &lt;api-export-size&gt;</code>	New value for the api-export-size quota
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None
<code>--all-projects</code>	Show results from all projects. default: false
<code>--zone-recordsets &lt;zone-recordsets&gt;</code>	New value for the zone-recordsets quota
<code>--zone-records &lt;zone-records&gt;</code>	New value for the zone-records quota
<code>-h, --help</code>	Show this help message and exit
<code>--recordset-records &lt;recordset-records&gt;</code>	New value for the recordset-records quota
<code>--zones &lt;zones&gt;</code>	New value for the zones quota

Table 24.11. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 24.4. DNS SERVICE LIST

List service statuses

### Usage:

```
openstack dns service list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN]
                          [--hostname HOSTNAME]
                          [--service_name SERVICE_NAME]
                          [--status STATUS] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
```

Table 24.12. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 24.13. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 24.14. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 24.15. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 24.16. Optional Arguments

Value	Summary
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>--service_name SERVICE_NAME</code>	Service name
<code>--hostname HOSTNAME</code>	Hostname
<code>--status STATUS</code>	Status
<code>-h, --help</code>	Show this help message and exit

## 24.5. DNS SERVICE SHOW

Show service status details

### Usage:

```
openstack dns service show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] [--all-projects]
                             [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             id
```

Table 24.17. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 24.18. Positional Arguments

Value	Summary
<code>id</code>	Service status id

Table 24.19. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 24.20. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 24.21. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 24.22. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names



## CHAPTER 25. EC2

This chapter describes the commands under the **ec2** command.

### 25.1. EC2 CREDENTIALS CREATE

Create EC2 credentials

#### Usage:

```
openstack ec2 credentials create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--project <project>] [--user <user>]
```

Table 25.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 25.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 25.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 25.4. Optional Arguments

Value	Summary
--user <user>	Create credentials for user (name or id; default: current authenticated user)
-h, --help	Show this help message and exit
--project <project>	Create credentials in project (name or id; default: current authenticated project)

Table 25.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 25.2. EC2 CREDENTIALS DELETE

Delete EC2 credentials

### Usage:

```
openstack ec2 credentials delete [-h] [--user <user>]
                                <access-key> [<access-key> ...]
```

Table 25.6. Positional Arguments

Value	Summary
<access-key>	Credentials access key(s)

Table 25.7. Optional Arguments

Value	Summary
--user <user>	Delete credentials for user (name or id)
-h, --help	Show this help message and exit

## 25.3. EC2 CREDENTIALS LIST

List EC2 credentials

### Usage:

```
openstack ec2 credentials list [-h] [-f {csv,json,table,value,yaml}]
```

```

[-c COLUMN] [--max-width <integer>]
[--fit-width] [--print-empty]
[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
[--user <user>]

```

Table 25.8. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 25.9. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 25.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 25.11. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 25.12. Optional Arguments

Value	Summary
--user <user>	Filter list by user (name or id)
-h, --help	Show this help message and exit

## 25.4. EC2 CREDENTIALS SHOW

Display EC2 credentials details

### Usage:

```
openstack ec2 credentials show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--user <user>]
                               <access-key>
```

Table 25.13. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 25.14. Positional Arguments

Value	Summary
<access-key>	Credentials access key

Table 25.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 25.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 25.17. Optional Arguments

Value	Summary
--user <user>	Show credentials for user (name or id)
-h, --help	Show this help message and exit

Table 25.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 26. ENDPOINT

This chapter describes the commands under the **endpoint** command.

### 26.1. ENDPOINT CREATE

Create new endpoint

#### Usage:

```
openstack endpoint create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX] --publicurl <url>
                          [--adminurl <url>] [--internalurl <url>]
                          [--region <region-id>]
                          <service>
```

Table 26.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 26.2. Positional Arguments

Value	Summary
<service>	Service to be associated with new endpoint (name or ID)

Table 26.3. Output Formatters

Value	Summary
output formatter options- f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 26.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 26.5. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--region <region-id>	New endpoint region id
--internalurl <url>	New endpoint internal url
--publicurl <url>	New endpoint public url (required)
--adminurl <url>	New endpoint admin url

Table 26.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 26.2. ENDPOINT DELETE

Delete endpoint(s)

### Usage:

```
openstack endpoint delete [-h] <endpoint-id> [<endpoint-id> ...]
```

Table 26.7. Positional Arguments

Value	Summary
<endpoint-id>	Endpoint(s) to delete (id only)

Table 26.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 26.3. ENDPOINT LIST

List endpoints

### Usage:

```
openstack endpoint list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--long]
```

Table 26.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 26.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 26.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 26.12. JSON Formatter



Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 26.13. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

## 26.4. ENDPOINT SHOW

Display endpoint details

### Usage:

```
openstack endpoint show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        <endpoint>
```

Table 26.14. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 26.15. Positional Arguments

Value	Summary
<code>&lt;endpoint&gt;</code>	Endpoint to display (endpoint id, service id, service name, service type)

Table 26.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 26.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 26.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 26.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 27. EVENT

This chapter describes the commands under the **event** command.

### 27.1. EVENT TRIGGER CREATE

Create new trigger.

#### Usage:

```
openstack event trigger create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--params PARAMS]
                               name workflow_id exchange topic event
                               [workflow_input]
```

Table 27.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 27.2. Positional Arguments

Value	Summary
workflow_input	Workflow input
name	Event trigger name
exchange	Event trigger exchange
topic	Event trigger topic
workflow_id	Workflow id
event	Event trigger event name

Table 27.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 27.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 27.5. Optional Arguments

Value	Summary
--params PARAMS	Workflow params
-h, --help	Show this help message and exit

Table 27.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 27.2. EVENT TRIGGER DELETE

Delete trigger.

### Usage:

```
openstack event trigger delete [-h]
                               event_trigger_id [event_trigger_id ...]
```

Table 27.7. Positional Arguments

Value	Summary
event_trigger_id	Id of event trigger(s).

Table 27.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 27.3. EVENT TRIGGER LIST

List all event triggers.

### Usage:

```
openstack event trigger list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
```

Table 27.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 27.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 27.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 27.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 27.13. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 27.4. EVENT TRIGGER SHOW

Show specific event trigger.

### Usage:

```
openstack event trigger show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             event_trigger
```

Table 27.14. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 27.15. Positional Arguments

Value	Summary
event_trigger	Event trigger id

Table 27.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 27.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 27.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 27.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 28. EXTENSION

This chapter describes the commands under the **extension** command.

### 28.1. EXTENSION LIST

List API extensions

#### Usage:

```
openstack extension list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--compute]
                        [--identity] [--network] [--volume] [--long]
```

Table 28.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 28.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 28.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated



Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 28.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 28.5. Optional Arguments

Value	Summary
<code>--compute</code>	List extensions for the compute api
<code>--long</code>	List additional fields in output
<code>--volume</code>	List extensions for the block storage api
<code>-h, --help</code>	Show this help message and exit
<code>--network</code>	List extensions for the network api
<code>--identity</code>	List extensions for the identity api

## 28.2. EXTENSION SHOW

Show API extension

### Usage:

```
openstack extension show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        <extension>
```

Table 28.6. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 28.7. Positional Arguments

Value	Summary
<code>&lt;extension&gt;</code>	Extension to display. currently, only network extensions are supported. (Name or Alias)

Table 28.8. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 28.9. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 28.10. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 28.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 29. FIREWALL

This chapter describes the commands under the **firewall** command.

### 29.1. FIREWALL GROUP CREATE

Create a new firewall group

#### Usage:

```
openstack firewall group create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--name NAME]
                                [--description <description>]
                                [--ingress-firewall-policy <ingress-firewall-policy> | --no-ingress-firewall-
policy]
                                [--egress-firewall-policy <egress-firewall-policy> | --no-egress-firewall-policy]
                                [--public | --private | --share | --no-share]
                                [--enable | --disable]
                                [--project <project>]
                                [--project-domain <project-domain>]
                                [--port <port> | --no-port]
```

Table 29.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 29.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 29.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 29.4. Optional Arguments

Value	Summary
--share	Share the firewall group to be used in all projects (by default, it is restricted to be used by the current project).
--no-port	Detach all port from the firewall group
--disable	Disable firewall group
--public	Make the firewall group public, which allows it to be used in all projects (as opposed to the default, which is to restrict its use to the current project). This option is deprecated and would be removed in R release.
--no-egress-firewall-policy	Detach egress firewall policy from the firewall group
--enable	Enable firewall group
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--egress-firewall-policy <egress-firewall-policy>	Egress firewall policy (name or id)
--project <project>	Owner's project (name or id)
--no-share	Restrict use of the firewall group to the current project
--no-ingress-firewall-policy	Detach ingress firewall policy from the firewall group
--private	Restrict use of the firewall group to the current project. This option is deprecated and would be removed in R release.
--port <port>	Port(s) (name or id) to apply firewall group. this option can be repeated
--name NAME	Name for the firewall group

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the firewall group
--ingress-firewall-policy <ingress-firewall-policy>	Ingress firewall policy (name or id)

Table 29.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 29.2. FIREWALL GROUP DELETE

Delete firewall group(s)

### Usage:

```
openstack firewall group delete [-h]
                                <firewall-group> [<firewall-group> ...]
```

Table 29.6. Positional Arguments

Value	Summary
<firewall-group>	Firewall group(s) to delete (name or id)

Table 29.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 29.3. FIREWALL GROUP LIST

List firewall groups

### Usage:

```
openstack firewall group list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
```

```

[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN] [--long]

```

Table 29.8. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 29.9. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 29.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 29.11. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 29.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

## 29.4. FIREWALL GROUP POLICY ADD RULE

Insert a rule into a given firewall policy

### Usage:

```
openstack firewall group policy add rule [-h]
                                     [--insert-before <firewall-rule>]
                                     [--insert-after <firewall-rule>]
                                     <firewall-policy>
                                     <firewall-rule>
```

Table 29.13. Positional Arguments

Value	Summary
<firewall-policy>	Firewall policy to insert rule (name or id)
<firewall-rule>	Firewall rule to be inserted (name or id)

Table 29.14. Optional Arguments

Value	Summary
--insert-after <firewall-rule>	Insert the new rule after this existing rule (name or ID)
-h, --help	Show this help message and exit
--insert-before <firewall-rule>	Insert the new rule before this existing rule (name or ID)

## 29.5. FIREWALL GROUP POLICY CREATE

Create a new firewall policy

### Usage:

```
openstack firewall group policy create [-h]
                                       [-f {json,shell,table,value,yaml}]
                                       [-c COLUMN]
                                       [--max-width <integer>]
```



```

[--fit-width] [--print-empty]
[--noindent] [--prefix PREFIX]
[--description DESCRIPTION]
[--audited | --no-audited]
[--share | --public | --private | --no-share]
[--project <project>]
[--project-domain <project-domain>]
[--firewall-rule <firewall-rule> | --no-firewall-rule]
<name>

```

Table 29.15. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 29.16. Positional Arguments

Value	Summary
<name>	Name for the firewall policy

Table 29.17. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 29.18. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 29.19. Optional Arguments

Value	Summary
--share	Share the firewall policy to be used in all projects (by default, it is restricted to be used by the current project).
--public	Make the firewall policy public, which allows it to be used in all projects (as opposed to the default, which is to restrict its use to the current project.) This option is deprecated and would be removed in R release.
--no-audited	Disable auditing for the policy
--no-firewall-rule	Unset all firewall rules from firewall policy
--audited	Enable auditing for the policy
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--no-share	Restrict use of the firewall policy to the current project
--firewall-rule <firewall-rule>	Firewall rule(s) to apply (name or id)
--private	Restrict use of the firewall policy to the current project. This option is deprecated and would be removed in R release.
--description DESCRIPTION	Description of the firewall policy
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)

Table 29.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 29.6. FIREWALL GROUP POLICY DELETE

Delete firewall policy(s)

**Usage:**

```
openstack firewall group policy delete [-h]
                                     <firewall-policy>
                                     [<firewall-policy> ...]
```

**Table 29.21. Positional Arguments**

Value	Summary
<firewall-policy>	Firewall policy(s) to delete (name or id)

**Table 29.22. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 29.7. FIREWALL GROUP POLICY LIST

List firewall policies

**Usage:**

```
openstack firewall group policy list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--long]
```

**Table 29.23. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 29.24. CSV Formatter**

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 29.25. Output Formatters**

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 29.26. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 29.27. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

## 29.8. FIREWALL GROUP POLICY REMOVE RULE

Remove a rule from a given firewall policy

### Usage:

```
openstack firewall group policy remove rule [-h]
                                     <firewall-policy>
                                     <firewall-rule>
```

**Table 29.28. Positional Arguments**

Value	Summary
<code>&lt;firewall-policy&gt;</code>	Firewall policy to remove rule (name or id)

Value	Summary
<firewall-rule>	Firewall rule to remove from policy (name or id)

Table 29.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 29.9. FIREWALL GROUP POLICY SET

Set firewall policy properties

### Usage:

```

openstack firewall group policy set [-h] [--description DESCRIPTION]
                                     [--audited | --no-audited]
                                     [--share | --public | --private | --no-share]
                                     [--name <name>]
                                     [--firewall-rule <firewall-rule>]
                                     [--no-firewall-rule]
                                     <firewall-policy>

```

Table 29.30. Positional Arguments

Value	Summary
<firewall-policy>	Firewall policy to update (name or id)

Table 29.31. Optional Arguments

Value	Summary
--share	Share the firewall policy to be used in all projects (by default, it is restricted to be used by the current project).
--public	Make the firewall policy public, which allows it to be used in all projects (as opposed to the default, which is to restrict its use to the current project.) This option is deprecated and would be removed in R release.
--no-audited	Disable auditing for the policy

Value	Summary
--no-firewall-rule	Remove all firewall rules from firewall policy
--audited	Enable auditing for the policy
--no-share	Restrict use of the firewall policy to the current project
--firewall-rule <firewall-rule>	Firewall rule(s) to apply (name or id)
--private	Restrict use of the firewall policy to the current project. This option is deprecated and would be removed in R release.
--description DESCRIPTION	Description of the firewall policy
-h, --help	Show this help message and exit
--name <name>	Name for the firewall policy

## 29.10. FIREWALL GROUP POLICY SHOW

Display firewall policy details

### Usage:

```

openstack firewall group policy show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     <firewall-policy>

```

Table 29.32. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 29.33. Positional Arguments

Value	Summary
<firewall-policy>	Firewall policy to show (name or id)

Table 29.34. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 29.35. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 29.36. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 29.37. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 29.11. FIREWALL GROUP POLICY UNSET

Unset firewall policy properties

### Usage:

```
openstack firewall group policy unset [-h]
                                     [--firewall-rule <firewall-rule> | --all-firewall-rule]
                                     [--audited] [--share] [--public]
                                     <firewall-policy>
```

Table 29.38. Positional Arguments

Value	Summary
<firewall-policy>	Firewall policy to unset (name or id)

Table 29.39. Optional Arguments

Value	Summary
--share	Restrict use of the firewall policy to the current project
--public	Restrict use of the firewall policy to the current project. This option is deprecated and would be removed in R release.
--audited	Disable auditing for the policy
--all-firewall-rule	Remove all firewall rules from the firewall policy
--firewall-rule <firewall-rule>	Remove firewall rule(s) from the firewall policy (name or ID)
-h, --help	Show this help message and exit

## 29.12. FIREWALL GROUP RULE CREATE

Create a new firewall rule

### Usage:

```

openstack firewall group rule create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--name <name>]
                                     [--description <description>]
                                     [--protocol {tcp,udp,icmp,any}]
                                     [--action {allow,deny,reject}]
                                     [--ip-version <ip-version>]
                                     [--source-ip-address <source-ip-address> | --no-source-ip-address]
                                     [--destination-ip-address <destination-ip-address> | --no-destination-ip-
address]
                                     [--source-port <source-port> | --no-source-port]
                                     [--destination-port <destination-port> | --no-destination-port]
                                     [--public | --private | --share | --no-share]
                                     [--enable-rule | --disable-rule]
                                     [--project <project>]
                                     [--project-domain <project-domain>]

```



Table 29.40. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 29.41. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 29.42. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 29.43. Optional Arguments

Value	Summary
<code>--destination-port &lt;destination-port&gt;</code>	Destination port number or range(integer in [1, 65535] or range like 123:456)
<code>--no-destination-ip-address</code>	Detach destination ip address
<code>--source-ip-address &lt;source-ip-address&gt;</code>	Source ip address or subnet
<code>--share</code>	Share the firewall rule to be used in all projects (by default, it is restricted to be used by the current project).
<code>--no-source-ip-address</code>	Detach source ip address

Value	Summary
--private	Restrict use of the firewall rule to the current project. This option is deprecated and would be removed in R release.
--enable-rule	Enable this rule (default is enabled)
--name <name>	Name of the firewall rule
--no-source-port	Detach source port number or range
--destination-ip-address <destination-ip-address>	Destination ip address or subnet
-h, --help	Show this help message and exit
--description <description>	Description of the firewall rule
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--action {allow,deny,reject}	Action for the firewall rule
--ip-version <ip-version>	Set ip version 4 or 6 (default is 4)
--source-port <source-port>	Source port number or range(integer in [1, 65535] or range like 123:456)
--no-share	Restrict use of the firewall rule to the current project
--no-destination-port	Detach destination port number or range
--project <project>	Owner's project (name or id)
--disable-rule	Disable this rule
--public	Make the firewall policy public, which allows it to be used in all projects (as opposed to the default, which is to restrict its use to the current project). This option is deprecated and would be removed in R Release
--protocol {tcp,udp,icmp,any}	Protocol for the firewall rule

Table 29.44. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 29.13. FIREWALL GROUP RULE DELETE

Delete firewall rule(s)

### Usage:

```
openstack firewall group rule delete [-h]
                                     <firewall-rule>
                                     [<firewall-rule> ...]
```

Table 29.45. Positional Arguments

Value	Summary
<firewall-rule>	Firewall rule(s) to delete (name or id)

Table 29.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 29.14. FIREWALL GROUP RULE LIST

List firewall rules that belong to a given tenant

### Usage:

```
openstack firewall group rule list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN] [--long]
```

Table 29.47. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 29.48. CSV Formatter**

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 29.49. Output Formatters**

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 29.50. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 29.51. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

## 29.15. FIREWALL GROUP RULE SET

Set firewall rule properties

### Usage:

```

openstack firewall group rule set [-h] [--name <name>]
                                [--description <description>]
                                [--protocol {tcp,udp,icmp,any}]
                                [--action {allow,deny,reject}]
                                [--ip-version <ip-version>]
                                [--source-ip-address <source-ip-address> | --no-source-ip-address]
                                [--destination-ip-address <destination-ip-address> | --no-destination-ip-
address]
                                [--source-port <source-port> | --no-source-port]
                                [--destination-port <destination-port> | --no-destination-port]
                                [--public | --private | --share | --no-share]
                                [--enable-rule | --disable-rule]
                                <firewall-rule>

```

**Table 29.52. Positional Arguments**

Value	Summary
<firewall-rule>	Firewall rule to set (name or id)

**Table 29.53. Optional Arguments**

Value	Summary
--share	Share the firewall rule to be used in all projects (by default, it is restricted to be used by the current project).
--no-source-ip-address	Detach source ip address
--source-ip-address <source-ip-address>	Source ip address or subnet
--ip-version <ip-version>	Set ip version 4 or 6 (default is 4)
--private	Restrict use of the firewall rule to the current project. This option is deprecated and would be removed in R release.
--no-source-port	Detach source port number or range
--name <name>	Name of the firewall rule
--enable-rule	Enable this rule (default is enabled)

Value	Summary
--destination-port <destination-port>	Destination port number or range(integer in [1, 65535] or range like 123:456)
--source-port <source-port>	Source port number or range(integer in [1, 65535] or range like 123:456)
--disable-rule	Disable this rule
--no-share	Restrict use of the firewall rule to the current project
--no-destination-port	Detach destination port number or range
--no-destination-ip-address	Detach destination ip address
--destination-ip-address <destination-ip-address>	Destination ip address or subnet
-h, --help	Show this help message and exit
--description <description>	Description of the firewall rule
--protocol {tcp,udp,icmp,any}	Protocol for the firewall rule
--action {allow,deny,reject}	Action for the firewall rule
--public	Make the firewall policy public, which allows it to be used in all projects (as opposed to the default, which is to restrict its use to the current project). This option is deprecated and would be removed in R Release

## 29.16. FIREWALL GROUP RULE SHOW

Display firewall rule details

### Usage:

```

openstack firewall group rule show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--noindent] [--prefix PREFIX]
                                  <firewall-rule>

```

Table 29.54. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 29.55. Positional Arguments

Value	Summary
<code>&lt;firewall-rule&gt;</code>	Firewall rule to display (name or id)

Table 29.56. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 29.57. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 29.58. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 29.59. Shell Formatter

Value	Summary
-------	---------

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 29.17. FIREWALL GROUP RULE UNSET

Unset firewall rule properties

### Usage:

```
openstack firewall group rule unset [-h] [--source-ip-address]
                                     [--destination-ip-address]
                                     [--source-port]
                                     [--destination-port] [--share]
                                     [--public] [--enable-rule]
                                     <firewall-rule>
```

Table 29.60. Positional Arguments

Value	Summary
<firewall-rule>	Firewall rule to unset (name or id)

Table 29.61. Optional Arguments

Value	Summary
--share	Restrict use of the firewall rule to the current project
--public	Restrict use of the firewall rule to the current project. This option is deprecated and would be removed in R Release.
--enable-rule	Disable this rule
--destination-port	Destination port number or range(integer in [1, 65535] or range like 123:456)
--source-ip-address	Source ip address or subnet
-h, --help	Show this help message and exit
--destination-ip-address	Destination ip address or subnet
--source-port	Source port number or range(integer in [1, 65535] or range like 123:456)



## 29.18. FIREWALL GROUP SET

Set firewall group properties

### Usage:

```
openstack firewall group set [-h] [--name NAME]
                             [--description <description>]
                             [--ingress-firewall-policy <ingress-firewall-policy> | --no-ingress-firewall-policy]
                             [--egress-firewall-policy <egress-firewall-policy> | --no-egress-firewall-policy]
                             [--public | --private | --share | --no-share]
                             [--enable | --disable] [--port <port>]
                             [--no-port]
                             <firewall-group>
```

Table 29.62. Positional Arguments

Value	Summary
<firewall-group>	Firewall group to update (name or id)

Table 29.63. Optional Arguments

Value	Summary
--share	Share the firewall group to be used in all projects (by default, it is restricted to be used by the current project).
--no-port	Detach all port from the firewall group
--disable	Disable firewall group
--public	Make the firewall group public, which allows it to be used in all projects (as opposed to the default, which is to restrict its use to the current project). This option is deprecated and would be removed in R release.
--no-egress-firewall-policy	Detach egress firewall policy from the firewall group
--enable	Enable firewall group
--egress-firewall-policy <egress-firewall-policy>	Egress firewall policy (name or id)
--no-share	Restrict use of the firewall group to the current project
--no-ingress-firewall-policy	Detach ingress firewall policy from the firewall group

Value	Summary
--private	Restrict use of the firewall group to the current project. This option is deprecated and would be removed in R release.
--port <port>	Port(s) (name or id) to apply firewall group. this option can be repeated
--name NAME	Name for the firewall group
-h, --help	Show this help message and exit
--description <description>	Description of the firewall group
--ingress-firewall-policy <ingress-firewall-policy>	Ingress firewall policy (name or id)

## 29.19. FIREWALL GROUP SHOW

Display firewall group details

### Usage:

```
openstack firewall group show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent] [--prefix PREFIX]
                             <firewall-group>
```

Table 29.64. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 29.65. Positional Arguments

Value	Summary
-------	---------

Value	Summary
<firewall-group>	Firewall group to show (name or id)

Table 29.66. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 29.67. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 29.68. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 29.69. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 29.20. FIREWALL GROUP UNSET

Unset firewall group properties

### Usage:

```
openstack firewall group unset [-h] [--port <port> | --all-port]
                               [--ingress-firewall-policy]
                               [--egress-firewall-policy]
                               [--public | --share] [--enable]
                               <firewall-group>
```

Table 29.70. Positional Arguments

Value	Summary
<firewall-group>	Firewall group to unset (name or id)

**Table 29.71. Optional Arguments**

Value	Summary
--share	Restrict use of the firewall group to the current project
--all-port	Remove all ports for this firewall group
--public	Make the firewall group public, which allows it to be used in all projects (as opposed to the default, which is to restrict its use to the current project). This option is deprecated and would be removed in R release.
--enable	Disable firewall group
--ingress-firewall-policy	Ingress firewall policy (name or id) to delete
--egress-firewall-policy	Egress firewall policy (name or id) to delete
--port <port>	Port(s) (name or id) to apply firewall group. this option can be repeated
-h, --help	Show this help message and exit

## CHAPTER 30. FLAVOR

This chapter describes the commands under the **flavor** command.

### 30.1. FLAVOR CREATE

Create new flavor

#### Usage:

```
openstack flavor create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--id <id>] [--ram <size-mb>]
                        [--disk <size-gb>] [--ephemeral <size-gb>]
                        [--swap <size-mb>] [--vcpus <vcpus>]
                        [--rxtx-factor <factor>] [--public | --private]
                        [--property <key=value>] [--project <project>]
                        [--project-domain <project-domain>]
                        <flavor-name>
```

Table 30.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 30.2. Positional Arguments

Value	Summary
<flavor-name>	New flavor name

Table 30.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 30.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 30.5. Optional Arguments

Value	Summary
--disk <size-gb>	Disk size in gb (default 0g)
--ram <size-mb>	Memory size in mb (default 256m)
--id <id>	Unique flavor id; <i>auto</i> creates a uuid (default: auto)
--private	Flavor is not available to other projects
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--ephemeral <size-gb>	Ephemeral disk size in gb (default 0g)
--property <key=value>	Property to add for this flavor (repeat option to set multiple properties)
--vcpus <vcpus>	Number of vcpus (default 1)
--swap <size-mb>	Additional swap space size in mb (default 0m)
--rxtx-factor <factor>	Rx/tx factor (default 1.0)
-h, --help	Show this help message and exit
--project <project>	Allow <project> to access private flavor (name or id) (Must be used with --private option)
--public	Flavor is available to other projects (default)

Table 30.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 30.2. FLAVOR DELETE

Delete flavor(s)

### Usage:

```
openstack flavor delete [-h] <flavor> [<flavor> ...]
```

Table 30.7. Positional Arguments

Value	Summary
<flavor>	Flavor(s) to delete (name or id)

Table 30.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 30.3. FLAVOR LIST

List flavors

### Usage:

```
openstack flavor list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN]
                    [--public | --private | --all] [--long]
                    [--marker <flavor-id>] [--limit <num-flavors>]
```

Table 30.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 30.10. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 30.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 30.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 30.13. Optional Arguments

Value	Summary
<code>--public</code>	List only public flavors (default)
<code>--private</code>	List only private flavors
<code>--long</code>	List additional fields in output
<code>--limit &lt;num-flavors&gt;</code>	Maximum number of flavors to display
<code>-h, --help</code>	Show this help message and exit



Value	Summary
--marker <flavor-id>	The last flavor id of the previous page
--all	List all flavors, whether public or private

## 30.4. FLAVOR SET

Set flavor properties

### Usage:

```
openstack flavor set [-h] [--no-property] [--property <key=value>]
                    [--project <project>]
                    [--project-domain <project-domain>]
                    <flavor>
```

Table 30.14. Positional Arguments

Value	Summary
<flavor>	Flavor to modify (name or id)

Table 30.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--property <key=value>	Property to add or modify for this flavor (repeat option to set multiple properties)
--no-property	Remove all properties from this flavor (specify both --no-property and --property to remove the current properties before setting new properties.)
--project <project>	Set flavor access to project (name or id) (admin only)

## 30.5. FLAVOR SHOW

Display flavor details

### Usage:

```

openstack flavor show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    <flavor>

```

Table 30.16. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 30.17. Positional Arguments

Value	Summary
<flavor>	Flavor to display (name or id)

Table 30.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 30.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 30.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 30.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 30.6. FLAVOR UNSET

Unset flavor properties

### Usage:

```
openstack flavor unset [-h] [--property <key>] [--project <project>]
                        [--project-domain <project-domain>]
                        <flavor>
```

Table 30.22. Positional Arguments

Value	Summary
<flavor>	Flavor to modify (name or id)

Table 30.23. Optional Arguments

Value	Summary
--property <key>	Property to remove from flavor (repeat option to unset multiple properties)
-h, --help	Show this help message and exit
--project <project>	Remove flavor access from project (name or id) (admin only)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

## CHAPTER 31. FLOATING

This chapter describes the commands under the **floating** command.

### 31.1. FLOATING IP CREATE

Create floating IP

#### Usage:

```
openstack floating ip create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] [--subnet <subnet>]
                             [--port <port>]
                             [--floating-ip-address <ip-address>]
                             [--fixed-ip-address <ip-address>]
                             [--qos-policy <qos-policy>]
                             [--description <description>]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             <network>
```

Table 31.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 31.2. Positional Arguments

Value	Summary
<network>	Network to allocate floating ip from (name or id)

Table 31.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 31.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.5. Optional Arguments

Value	Summary
--fixed-ip-address <ip-address>	Fixed ip address mapped to the floating ip
--description <description>	Set floating ip description
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--project <project>	Owner's project (name or id)
--port <port>	Port to be associated with the floating ip (name or ID)
--qos-policy <qos-policy>	Attach qos policy to the floating ip (name or id)
-h, --help	Show this help message and exit
--floating-ip-address <ip-address>	Floating ip address
--subnet <subnet>	Subnet on which you want to create the floating ip (name or ID)

Table 31.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 31.2. FLOATING IP DELETE

Delete floating IP(s)

**Usage:**

```
openstack floating ip delete [-h] <floating-ip> [<floating-ip> ...]
```

**Table 31.7. Positional Arguments**

Value	Summary
<floating-ip>	Floating ip(s) to delete (ip address or id)

**Table 31.8. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**31.3. FLOATING IP LIST**

List floating IP(s)

**Usage:**

```
openstack floating ip list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty] [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN]
    [--network <network>] [--port <port>]
    [--fixed-ip-address <ip-address>] [--long]
    [--status <status>] [--project <project>]
    [--project-domain <project-domain>]
    [--router <router>]
```

**Table 31.9. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 31.10. CSV Formatter**

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 31.11. Output Formatters

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 31.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 31.13. Optional Arguments

Value	Summary
<code>--fixed-ip-address &lt;ip-address&gt;</code>	List floating ip(s) according to given fixed ip address
<code>--router &lt;router&gt;</code>	List floating ip(s) according to given router (name or ID)
<code>--long</code>	List additional fields in output
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--status &lt;status&gt;</code>	List floating ip(s) according to given status ( <i>ACTIVE</i> , <i>DOWN</i> )
<code>--network &lt;network&gt;</code>	List floating ip(s) according to given network (name or ID)
<code>--port &lt;port&gt;</code>	List floating ip(s) according to given port (name or ID)

Value	Summary
-h, --help	Show this help message and exit
--project <project>	List floating ip(s) according to given project (name or ID)

## 31.4. FLOATING IP POOL LIST

List pools of floating IP addresses

### Usage:

```
openstack floating ip pool list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]
```

Table 31.14. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 31.15. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 31.16. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table



Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 31.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 31.5. FLOATING IP SET

Set floating IP Properties

### Usage:

```
openstack floating ip set [-h] [--port <port>]
                        [--fixed-ip-address <ip-address>]
                        [--qos-policy <qos-policy> | --no-qos-policy]
                        <floating-ip>
```

Table 31.19. Positional Arguments

Value	Summary
<floating-ip>	Floating ip to modify (ip address or id)

Table 31.20. Optional Arguments

Value	Summary
--qos-policy <qos-policy>	Attach qos policy to the floating ip (name or id)
-h, --help	Show this help message and exit
--no-qos-policy	Remove the qos policy attached to the floating ip

Value	Summary
<code>--port &lt;port&gt;</code>	Associate the floating ip with port (name or id)
<code>--fixed-ip-address &lt;ip-address&gt;</code>	Fixed ip of the port (required only if port has multiple IPs)

## 31.6. FLOATING IP SHOW

Display floating IP details

### Usage:

```
openstack floating ip show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          <floating-ip>
```

Table 31.21. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 31.22. Positional Arguments

Value	Summary
<code>&lt;floating-ip&gt;</code>	Floating ip to display (ip address or id)

Table 31.23. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 31.24. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 31.26. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 31.7. FLOATING IP UNSET

Unset floating IP Properties

### Usage:

```
openstack floating ip unset [-h] [--port] [--qos-policy] <floating-ip>
```

Table 31.27. Positional Arguments

Value	Summary
<floating-ip>	Floating ip to disassociate (ip address or id)

Table 31.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--qos-policy	Remove the qos policy attached to the floating ip

Value	Summary
--port	Disassociate any port associated with the floating ip

## CHAPTER 32. HELP.ADOC

This chapter describes the commands under the **help.adoc** command.

### 32.1. HELP

print detailed help for another command

#### Usage:

```
openstack help [-h] [cmd [cmd ...]]
```

Table 32.1. Positional Arguments

Value	Summary
cmd	Name of the command

Table 32.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## CHAPTER 33. HOST

This chapter describes the commands under the **host** command.

### 33.1. HOST LIST

List hosts

#### Usage:

```
openstack host list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                   [--max-width <integer>] [--fit-width]
                   [--print-empty] [--noindent]
                   [--quote {all,minimal,none,nonnumeric}]
                   [--sort-column SORT_COLUMN] [--zone <zone>]
```

Table 33.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 33.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 33.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 33.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 33.5. Optional Arguments

Value	Summary
--zone <zone>	Only return hosts in the availability zone
-h, --help	Show this help message and exit

## 33.2. HOST SET

Set host properties

### Usage:

```
openstack host set [-h] [--enable | --disable]
                  [--enable-maintenance | --disable-maintenance]
                  <host>
```

Table 33.6. Positional Arguments

Value	Summary
<host>	Host to modify (name only)

Table 33.7. Optional Arguments

Value	Summary
--enable-maintenance	Enable maintenance mode for the host
-h, --help	Show this help message and exit
--disable	Disable the host
--disable-maintenance	Disable maintenance mode for the host
--enable	Enable the host

## 33.3. HOST SHOW

Display host details

**Usage:**

```

openstack host show [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN]
                    <host>

```

**Table 33.8. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 33.9. Positional Arguments**

Value	Summary
<host>	Name of host

**Table 33.10. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 33.11. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated



Table 33.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 33.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## CHAPTER 34. HYPERVISOR

This chapter describes the commands under the **hypervisor** command.

### 34.1. HYPERVISOR LIST

List hypervisors

#### Usage:

```
openstack hypervisor list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN]
                          [--matching <hostname>] [--long]
```

**Table 34.1. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 34.2. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 34.3. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 34.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 34.5. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output
<code>--matching &lt;hostname&gt;</code>	Filter hypervisors using <hostname> substring

## 34.2. HYPERVISOR SHOW

Display hypervisor details

### Usage:

```
openstack hypervisor show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          <hypervisor>
```

Table 34.6. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 34.7. Positional Arguments**

Value	Summary
<hypervisor>	Hypervisor to display (name or id)

**Table 34.8. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 34.9. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 34.10. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 34.11. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 34.3. HYPERVISOR STATS SHOW

Display hypervisor stats details

### Usage:

```
openstack hypervisor stats show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
```

**Table 34.12. Table Formatter**

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 34.13. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 34.14. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 34.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 34.16. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## CHAPTER 35. IMAGE

This chapter describes the commands under the **image** command.

### 35.1. IMAGE ADD PROJECT

Associate project with image

#### Usage:

```
openstack image add project [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             [--project-domain <project-domain>]
                             <image> <project>
```

Table 35.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 35.2. Positional Arguments

Value	Summary
<image>	Image to share (name or id)
<project>	Project to associate with image (name or id)

Table 35.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 35.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 35.5. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 35.6. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 35.2. IMAGE CREATE

Create/upload an image

### Usage:

```
openstack image create [-h] [-f {json,shell,table,value,yaml}]
  [-c COLUMN] [--max-width <integer>]
  [--fit-width] [--print-empty] [--noindent]
  [--prefix PREFIX] [--id <id>]
  [--container-format <container-format>]
  [--disk-format <disk-format>]
  [--min-disk <disk-gb>] [--min-ram <ram-mb>]
  [--file <file> | --volume <volume>] [--force]
  [--protected | --unprotected]
  [--public | --private | --community | --shared]
  [--property <key=value>] [--tag <tag>]
  [--project <project>]
  [--project-domain <project-domain>]
  <image-name>
```

Table 35.7. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 35.8. Positional Arguments

Value	Summary
<code>&lt;image-name&gt;</code>	New image name

Table 35.9. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 35.10. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 35.11. Optional Arguments

Value	Summary
<code>--volume &lt;volume&gt;</code>	Create image from a volume
<code>--force</code>	Force image creation if volume is in use (only meaningful with <code>--volume</code> )
<code>--community</code>	Image is accessible to the community
<code>--id &lt;id&gt;</code>	Image id to reserve
<code>--private</code>	Image is inaccessible to the public (default)



Value	Summary
<code>--disk-format &lt;disk-format&gt;</code>	Image disk format. the supported options are: ami, ari, aki, vhd, vmdk, raw, qcow2, vhdx, vdi, iso, ploop. The default format is: raw
<code>--unprotected</code>	Allow image to be deleted (default)
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--property &lt;key=value&gt;</code>	Set a property on this image (repeat option to set multiple properties)
<code>--min-disk &lt;disk-gb&gt;</code>	Minimum disk size needed to boot image, in gigabytes
<code>--min-ram &lt;ram-mb&gt;</code>	Minimum ram size needed to boot image, in megabytes
<code>--shared</code>	Image can be shared
<code>--file &lt;file&gt;</code>	Upload image from local file
<code>--container-format &lt;container-format&gt;</code>	Image container format. the supported options are: ami, ari, aki, bare, docker, ova, ovf. The default format is: bare
<code>-h, --help</code>	Show this help message and exit
<code>--tag &lt;tag&gt;</code>	Set a tag on this image (repeat option to set multiple tags)
<code>--public</code>	Image is accessible to the public
<code>--project &lt;project&gt;</code>	Set an alternate project on this image (name or id)
<code>--protected</code>	Prevent image from being deleted

Table 35.12. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

## 35.3. IMAGE DELETE

Delete image(s)

### Usage:

```
openstack image delete [-h] <image> [<image> ...]
```

Table 35.13. Positional Arguments

Value	Summary
<image>	Image(s) to delete (name or id)

Table 35.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 35.4. IMAGE LIST

List available images

### Usage:

```
openstack image list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
    [--max-width <integer>] [--fit-width]
    [--print-empty] [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN]
    [--public | --private | --shared]
    [--property <key=value>] [--name <name>]
    [--status <status>] [--long]
    [--sort <key>[:<direction>]]
    [--limit <num-images>] [--marker <image>]
```

Table 35.15. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 35.16. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 35.17. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 35.18. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 35.19. Optional Arguments

Value	Summary
<code>--public</code>	List only public images
<code>--private</code>	List only private images
<code>--name &lt;name&gt;</code>	Filter images based on name.
<code>--property &lt;key=value&gt;</code>	Filter output based on property
<code>--status &lt;status&gt;</code>	Filter images based on status.
<code>--limit &lt;num-images&gt;</code>	Maximum number of images to display.
<code>--marker &lt;image&gt;</code>	The last image of the previous page. display list of images after marker. Display all images if not specified. (name or ID)
<code>--long</code>	List additional fields in output

Value	Summary
<code>--sort &lt;key&gt;[:&lt;direction&gt;]</code>	Sort output by selected keys and directions(asc or desc) (default: name:asc), multiple keys and directions can be specified separated by comma
<code>--shared</code>	List only shared images
<code>-h, --help</code>	Show this help message and exit

## 35.5. IMAGE REMOVE PROJECT

Disassociate project with image

### Usage:

```
openstack image remove project [-h] [--project-domain <project-domain>]
                               <image> <project>
```

Table 35.20. Positional Arguments

Value	Summary
<code>&lt;image&gt;</code>	Image to unshare (name or id)
<code>&lt;project&gt;</code>	Project to disassociate with image (name or id)

Table 35.21. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

## 35.6. IMAGE SAVE

Save an image locally

### Usage:

```
openstack image save [-h] [--file <filename>] <image>
```

Table 35.22. Positional Arguments

Value	Summary
<image>	Image to save (name or id)

Table 35.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--file <filename>	Downloaded image save filename (default: stdout)

## 35.7. IMAGE SET

Set image properties

Usage:

```

openstack image set [-h] [--name <name>] [--min-disk <disk-gb>]
                    [--min-ram <ram-mb>]
                    [--container-format <container-format>]
                    [--disk-format <disk-format>]
                    [--protected | --unprotected]
                    [--public | --private | --community | --shared]
                    [--property <key=value>] [--tag <tag>]
                    [--architecture <architecture>]
                    [--instance-id <instance-id>]
                    [--kernel-id <kernel-id>] [--os-distro <os-distro>]
                    [--os-version <os-version>]
                    [--ramdisk-id <ramdisk-id>]
                    [--deactivate | --activate] [--project <project>]
                    [--project-domain <project-domain>]
                    [--accept | --reject | --pending]
                    <image>

```

Table 35.24. Positional Arguments

Value	Summary
<image>	Image to modify (name or id)

Table 35.25. Optional Arguments

Value	Summary
--instance-id <instance-id>	Id of server instance used to create this image
--unprotected	Allow image to be deleted (default)

Value	Summary
--activate	Activate the image
--accept	Accept the image membership
--community	Image is accessible to the community
--os-version <os-version>	Operating system distribution version
--private	Image is inaccessible to the public (default)
--name <name>	New image name
--project <project>	Set an alternate project on this image (name or id)
--min-ram <ram-mb>	Minimum ram size needed to boot image, in megabytes
--deactivate	Deactivate the image
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--protected	Prevent image from being deleted
--pending	Reset the image membership to <i>pending</i>
--os-distro <os-distro>	Operating system distribution name
--architecture <architecture>	Operating system architecture
--property <key=value>	Set a property on this image (repeat option to set multiple properties)
--reject	Reject the image membership
--shared	Image can be shared
--min-disk <disk-gb>	Minimum disk size needed to boot image, in gigabytes
--ramdisk-id <ramdisk-id>	Id of ramdisk image used to boot this disk image

Value	Summary
<code>--tag &lt;tag&gt;</code>	Set a tag on this image (repeat option to set multiple tags)
<code>--public</code>	Image is accessible to the public
<code>--kernel-id &lt;kernel-id&gt;</code>	Id of kernel image used to boot this disk image
<code>--disk-format &lt;disk-format&gt;</code>	Image disk format. the supported options are: ami, ari, aki, vhd, vmdk, raw, qcow2, vhdx, vdi, iso, ploop
<code>--container-format &lt;container-format&gt;</code>	Image container format. the supported options are: ami, ari, aki, bare, docker, ova, ovf

## 35.8. IMAGE SHOW

Display image details

### Usage:

```
openstack image show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--human-readable]
                    <image>
```

Table 35.26. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 35.27. Positional Arguments

Value	Summary
<code>&lt;image&gt;</code>	Image to display (name or id)

Table 35.28. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 35.29. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 35.30. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--human-readable	Print image size in a human-friendly format.

Table 35.31. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 35.9. IMAGE UNSET

Unset image tags and properties

### Usage:

```
openstack image unset [-h] [--tag <tag>] [--property <property-key>]
<image>
```

Table 35.32. Positional Arguments

Value	Summary
<image>	Image to modify (name or id)

Table 35.33. Optional Arguments



Value	Summary
-h, --help	Show this help message and exit
--property <property-key>	Unset a property on this image (repeat option to unset multiple properties)
--tag <tag>	Unset a tag on this image (repeat option to unset multiple tags)

## CHAPTER 36. IP

This chapter describes the commands under the **ip** command.

### 36.1. IP AVAILABILITY LIST

List IP availability for network

#### Usage:

```
openstack ip availability list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--ip-version <ip-version>]
                             [--project <project>]
                             [--project-domain <project-domain>]
```

**Table 36.1. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 36.2. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 36.3. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 36.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 36.5. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--ip-version &lt;ip-version&gt;</code>	List ip availability of given ip version networks (default is 4)
<code>--project &lt;project&gt;</code>	List ip availability of given project (name or id)

## 36.2. IP AVAILABILITY SHOW

Show network IP availability details

### Usage:

```
openstack ip availability show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               <network>
```

Table 36.6. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 36.7. Positional Arguments

Value	Summary
<code>&lt;network&gt;</code>	Show ip availability for a specific network (name or ID)

Table 36.8. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 36.9. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 36.10. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 36.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 37. KEYPAIR

This chapter describes the commands under the **keypair** command.

### 37.1. KEYPAIR CREATE

Create new public or private key for server ssh access

#### Usage:

```
openstack keypair create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        [--public-key <file> | --private-key <file>]
                        <name>
```

Table 37.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 37.2. Positional Arguments

Value	Summary
<name>	New public or private key name

Table 37.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 37.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 37.5. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--public-key &lt;file&gt;</code>	Filename for public key to add. if not used, creates a private key.
<code>--private-key &lt;file&gt;</code>	Filename for private key to save. if not used, print private key in console.

Table 37.6. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 37.2. KEYPAIR DELETE

Delete public or private key(s)

### Usage:

```
openstack keypair delete [-h] <key> [<key> ...]
```

Table 37.7. Positional Arguments

Value	Summary
<code>&lt;key&gt;</code>	Name of key(s) to delete (name only)

Table 37.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 37.3. KEYPAIR LIST

List key fingerprints

**Usage:**

```
openstack keypair list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]
```

**Table 37.9. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 37.10. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 37.11. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 37.12. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

Table 37.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 37.4. KEYPAIR SHOW

Display key details

### Usage:

```
openstack keypair show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--public-key]
                        <key>
```

Table 37.14. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 37.15. Positional Arguments

Value	Summary
<key>	Public or private key to display (name only)

Table 37.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated



Table 37.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 37.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--public-key	Show only bare public key paired with the generated key

Table 37.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 38. LIMITS

This chapter describes the commands under the **limits** command.

### 38.1. LIMITS SHOW

Show compute and block storage limits

#### Usage:

```
openstack limits show [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                      [--max-width <integer>] [--fit-width]
                      [--print-empty] [--noindent]
                      [--quote {all,minimal,none,nonnumeric}]
                      [--sort-column SORT_COLUMN] (--absolute | --rate)
                      [--reserved] [--project <project>]
                      [--domain <domain>]
```

Table 38.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 38.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 38.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 38.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 38.5. Optional Arguments

Value	Summary
<code>--reserved</code>	Include reservations count [only valid with <code>--absolute</code> ]
<code>--project &lt;project&gt;</code>	Show limits for a specific project (name or id) [only valid with <code>--absolute</code> ]
<code>--rate</code>	Show rate limits
<code>-h, --help</code>	Show this help message and exit
<code>--absolute</code>	Show absolute limits
<code>--domain &lt;domain&gt;</code>	Domain the project belongs to (name or id) [only valid with <code>--absolute</code> ]

## CHAPTER 39. LOADBALANCER

This chapter describes the commands under the **loadbalancer** command.

### 39.1. LOADBALANCER AMPHORA LIST

List amphorae

Usage:

```
openstack loadbalancer amphora list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--sort-column SORT_COLUMN]
                                   [--loadbalancer <loadbalancer>]
                                   [--compute-id <compute-id>]
                                   [--role {MASTER,BACKUP,STANDALONE}]
                                   [--status
{PENDING_DELETE,DELETED,ERROR,PENDING_CREATE,BOOTING,READY,ALLOCATED}]
```

Table 39.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 39.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.5. Optional Arguments

Value	Summary
--role {MASTER,BACKUP,STANDALONE}	Filter by role.
--loadbalancer <loadbalancer>	Filter by load balancer (name or id).
-h, --help	Show this help message and exit
--status {PENDING_DELETE,DELETED,ERROR,PENDING_CREATE,BOOTING,READY,ALLOCATED}, --provisioning-status {PENDING_DELETE,DELETED,ERROR,PENDING_CREATE,BOOTING,READY,ALLOCATED}	Filter by amphora provisioning status.
--compute-id <compute-id>	Filter by compute id.

## 39.2. LOADBALANCER AMPHORA SHOW

Show the details of a single amphora

### Usage:

```
openstack loadbalancer amphora show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     <amphora-id>
```

Table 39.6. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 39.7. Positional Arguments

Value	Summary
<code>&lt;amphora-id&gt;</code>	Uuid of the amphora.

Table 39.8. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 39.9. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 39.10. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 39.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.3. LOADBALANCER CREATE

Create a load balancer

### Usage:

```
openstack loadbalancer create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent] [--prefix PREFIX]
                             [--name <name>]
                             [--description <description>]
                             [--vip-address <vip_address>]
                             [--vip-port-id <vip_port_id>]
                             [--vip-subnet-id <vip_subnet_id>]
                             [--vip-network-id <vip_network_id>]
                             [--vip-qos-policy-id <vip_qos_policy_id>]
                             [--project <project>]
                             [--enable | --disable]
```

**Table 39.12. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 39.13. VIP Network**

Value	Summary
--vip-network-id <vip_network_id>	Set network for the load balancer (name or id).
--vip-subnet-id <vip_subnet_id>	Set subnet for the load balancer (name or id).
At least one of the following arguments is required.--vip-port-id <vip_port_id>	Set port for the load balancer (name or id).

**Table 39.14. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 39.15. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 39.16. Optional Arguments**

Value	Summary
--disable	Disable load balancer.
--vip-qos-policy-id <vip_qos_policy_id>	Set qos policy id for vip port. unset with <i>none</i> .
--enable	Enable load balancer (default).
--name <name>	New load balancer name.
--vip-address <vip_address>	Set the vip ip address.
-h, --help	Show this help message and exit
--description <description>	Set load balancer description.
--project <project>	Project for the load balancer (name or id).

**Table 39.17. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.4. LOADBALANCER DELETE

Delete a load balancer



**Usage:**

```
openstack loadbalancer delete [-h] [--cascade] <load_balancer>
```

**Table 39.18. Positional Arguments**

Value	Summary
<load_balancer>	Load balancers to delete (name or id)

**Table 39.19. Optional Arguments**

Value	Summary
--cascade	Cascade the delete to all child elements of the load balancer.
-h, --help	Show this help message and exit

## 39.5. LOADBALANCER FAILOVER

Trigger load balancer failover

**Usage:**

```
openstack loadbalancer failover [-h] <load_balancer>
```

**Table 39.20. Positional Arguments**

Value	Summary
<load_balancer>	Name or uuid of the load balancer.

**Table 39.21. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 39.6. LOADBALANCER HEALTHMONITOR CREATE

Create a health monitor

**Usage:**

```
openstack loadbalancer healthmonitor create [-h]
                                             [-f {json,shell,table,value,yaml}]
                                             [-c COLUMN]
```

```

[--max-width <integer>]
[--fit-width]
[--print-empty]
[--noindent]
[--prefix PREFIX]
[--name <name>] --delay
<delay>
[--expected-codes <codes>]
[--http-method
{GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,CONNECT,TRACE}]
--timeout <timeout>
--max-retries <max_retries>
[--url-path <url_path>]
--type
{PING,HTTP,TCP,HTTPS,TLS-HELLO}
[--max-retries-down <max_retries_down>]
[--enable | --disable]
<pool>

```

Table 39.22. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.23. Positional Arguments

Value	Summary
<pool>	Set the pool for the health monitor (name or id).

Table 39.24. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 39.25. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

**Table 39.26. Optional Arguments**

Value	Summary
--disable	Disable health monitor.
--timeout <timeout>	Set the maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
--enable	Enable health monitor (default).
--name <name>	Set the health monitor name.
--max-retries <max_retries>	The number of successful checks before changing the operating status of the member to ONLINE.
--http-method {GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,CONNECT,TRACE}	Set the http method that the health monitor uses for requests.
--expected-codes <codes>	Set the list of http status codes expected in response from the member to declare it healthy.
--type {PING,HTTP,TCP,HTTPS,TLS-HELLO}	Set the health monitor type.
--delay <delay>	Set the time in seconds, between sending probes to members.
--max-retries-down <max_retries_down>	Set the number of allowed check failures before changing the operating status of the member to ERROR.
-h, --help	Show this help message and exit
--url-path <url_path>	Set the http url path of the request sent by the monitor to test the health of a backend member.

**Table 39.27. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.7. LOADBALANCER HEALTHMONITOR DELETE

Delete a health monitor

### Usage:

```
openstack loadbalancer healthmonitor delete [-h] <health_monitor>
```

Table 39.28. Positional Arguments

Value	Summary
<health_monitor>	Health monitor to delete (name or id).

Table 39.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 39.8. LOADBALANCER HEALTHMONITOR LIST

List health monitors

### Usage:

```
openstack loadbalancer healthmonitor list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--sort-column SORT_COLUMN]
```

Table 39.30. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.31. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 39.32. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.33. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.34. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 39.9. LOADBALANCER HEALTHMONITOR SET

Update a health monitor

### Usage:

```
openstack loadbalancer healthmonitor set [-h] [--name <name>]
                                     [--delay <delay>]
                                     [--expected-codes <codes>]
                                     [--http-method
{GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,CONNECT,TRACE}]
                                     [--timeout <timeout>]
                                     [--max-retries <max_retries>]
                                     [--max-retries-down <max_retries_down>]
                                     [--url-path <url_path>]
                                     [--enable | --disable]
                                     <health_monitor>
```

-

**Table 39.35. Positional Arguments**

Value	Summary
<health_monitor>	Health monitor to update (name or id).

**Table 39.36. Optional Arguments**

Value	Summary
--disable	Disable health monitor.
--timeout <timeout>	Set the maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
--enable	Enable health monitor.
--name <name>	Set health monitor name.
--max-retries <max_retries>	Set the number of successful checks before changing the operating status of the member to ONLINE.
--http-method {GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,CONNECT,TRACE}	Set the http method that the health monitor uses for requests.
--expected-codes <codes>	Set the list of http status codes expected in response from the member to declare it healthy.
--delay <delay>	Set the time in seconds, between sending probes to members.
--max-retries-down <max_retries_down>	Set the number of allowed check failures before changing the operating status of the member to ERROR.
-h, --help	Show this help message and exit
--url-path <url_path>	Set the http url path of the request sent by the monitor to test the health of a backend member.

## 39.10. LOADBALANCER HEALTHMONITOR SHOW

Show the details of a single health monitor

**Usage:**

```

openstack loadbalancer healthmonitor show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--prefix PREFIX]
                                         <health_monitor>

```

Table 39.37. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.38. Positional Arguments

Value	Summary
<health_monitor>	Name or uuid of the health monitor.

Table 39.39. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 39.40. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.41. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 39.42. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.11. LOADBALANCER L7POLICY CREATE

Create a l7policy

### Usage:

```
openstack loadbalancer l7policy create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--name <name>]
                                     [--description <description>]
                                     --action
                                     {REDIRECT_TO_URL,REDIRECT_TO_POOL,REJECT}
                                     [--redirect-pool <pool> | --redirect-url <url>]
                                     [--position <position>]
                                     [--enable | --disable]
                                     <listener>
```

Table 39.43. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.44. Positional Arguments



Value	Summary
<listener>	Listener to add l7policy to (name or id).

**Table 39.45. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 39.46. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 39.47. Optional Arguments**

Value	Summary
--position <position>	Sequence number of this l7 policy.
--disable	Disable l7policy.
--enable	Enable l7policy (default).
--name <name>	Set the l7policy name.
--redirect-pool <pool>	Set the pool to redirect requests to (name or id).
--action {REDIRECT_TO_URL,REDIRECT_TO_POOL,REJECT }	Set the action of the policy.
--redirect-url <url>	Set the url to redirect requests to.
-h, --help	Show this help message and exit
--description <description>	Set l7policy description.

**Table 39.48. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.12. LOADBALANCER L7POLICY DELETE

Delete a l7policy

### Usage:

```
openstack loadbalancer l7policy delete [-h] <policy>
```

Table 39.49. Positional Arguments

Value	Summary
<policy>	L7policy to delete (name or id).

Table 39.50. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 39.13. LOADBALANCER L7POLICY LIST

List l7policies

### Usage:

```
openstack loadbalancer l7policy list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
```

Table 39.51. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 39.52. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 39.53. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.54. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 39.55. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 39.14. LOADBALANCER L7POLICY SET

Update a l7policy

**Usage:**

```

openstack loadbalancer l7policy set [-h] [--name <name>]
                                   [--description <description>]
                                   [--action {REDIRECT_TO_URL,REDIRECT_TO_POOL,REJECT}]
                                   [--redirect-pool <pool> | --redirect-url <url>]
                                   [--position <position>]
                                   [--enable | --disable]
                                   <policy>

```

Table 39.56. Positional Arguments

Value	Summary
<policy>	L7policy to update (name or id).

Table 39.57. Optional Arguments

Value	Summary
--position <position>	Set sequence number of this l7 policy.
--disable	Disable l7policy.
--enable	Enable l7policy.
--name <name>	Set l7policy name.
--redirect-pool <pool>	Set the pool to redirect requests to (name or id).
--action {REDIRECT_TO_URL,REDIRECT_TO_POOL,REJECT }	Set the action of the policy.
--redirect-url <url>	Set the url to redirect requests to.
-h, --help	Show this help message and exit
--description <description>	Set l7policy description.

## 39.15. LOADBALANCER L7POLICY SHOW

Show the details of a single l7policy

### Usage:

```

openstack loadbalancer l7policy show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]

```

```

[--fit-width] [--print-empty]
[--noindent] [--prefix PREFIX]
<policy>

```

**Table 39.58. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 39.59. Positional Arguments**

Value	Summary
<policy>	Name or uuid of the l7policy.

**Table 39.60. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 39.61. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 39.62. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 39.63. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.16. LOADBALANCER L7RULE CREATE

Create a l7rule

### Usage:

```
openstack loadbalancer l7rule create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     --compare-type
                                     {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,STARTS_WITH}
                                     [--invert] --value <value>
                                     [--key <key>] --type
                                     {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER}
                                     [--enable | --disable]
                                     <l7policy>
```

Table 39.64. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.65. Positional Arguments

Value	Summary
<l7policy>	L7policy to add l7rule to (name or id).

Table 39.66. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 39.67. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 39.68. Optional Arguments**

Value	Summary
--value <value>	Set the rule value to match on.
--enable	Enable l7rule (default).
--invert	Invert l7rule.
--type {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER}	Set the type for the l7rule.
--key <key>	Set the key for the l7rule's value to match on.
-h, --help	Show this help message and exit
--disable	Disable l7rule.
--compare-type {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,START S_WITH}	Set the compare type for the l7rule.

**Table 39.69. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.17. LOADBALANCER L7RULE DELETE

Delete a l7rule

### Usage:

```
openstack loadbalancer l7rule delete [-h] <l7policy> <rule_id>
```

**Table 39.70. Positional Arguments**

Value	Summary
<l7policy>	L7policy to delete rule from (name or id).
<rule_id>	L7rule to delete.

**Table 39.71. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 39.18. LOADBALANCER L7RULE LIST

List l7rules for l7policy

### Usage:

```
openstack loadbalancer l7rule list [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN]
    <l7policy>
```

**Table 39.72. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable



Table 39.73. Positional Arguments

Value	Summary
<l7policy>	L7policy to list rules for (name or id).

Table 39.74. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 39.75. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.76. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.77. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 39.19. LOADBALANCER L7RULE SET

Update a l7rule

### Usage:

```
openstack loadbalancer l7rule set [-h]
                                [--compare-type
                                {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,STARTS_WITH}]
```

```

[--invert] [--value <value>]
[--key <key>]
[--type {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER}]
[--enable | --disable]
<l7policy> <l7rule_id>

```

Table 39.78. Positional Arguments

Value	Summary
<l7policy>	L7policy to update l7rule on (name or id).
<l7rule_id>	L7rule to update.

Table 39.79. Optional Arguments

Value	Summary
--value <value>	Set the rule value to match on.
--enable	Enable l7rule.
--invert	Invert l7rule.
--type {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER}	Set the type for the l7rule.
--key <key>	Set the key for the l7rule's value to match on.
-h, --help	Show this help message and exit
--disable	Disable l7rule.
--compare-type {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,START S_WITH}	Set the compare type for the l7rule.

## 39.20. LOADBALANCER L7RULE SHOW

Show the details of a single l7rule

### Usage:

```

openstack loadbalancer l7rule show [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    <l7policy> <l7rule_id>

```

Table 39.80. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 39.81. Positional Arguments

Value	Summary
<code>&lt;l7policy&gt;</code>	L7policy to show rule from (name or id).
<code>&lt;l7rule_id&gt;</code>	L7rule to show.

Table 39.82. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 39.83. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 39.84. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 39.85. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.21. LOADBALANCER LIST

List load balancers

### Usage:

```
openstack loadbalancer list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN] [--name <name>]
                          [--enable | --disable]
                          [--project <project-id>]
```

Table 39.86. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.87. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 39.88. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.89. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.90. Optional Arguments

Value	Summary
--name <name>	List load balancers according to their name.
-h, --help	Show this help message and exit
--disable	List disabled load balancers.
--project <project-id>	List load balancers according to their project (name or ID).
--enable	List enabled load balancers.

## 39.22. LOADBALANCER LISTENER CREATE

Create a listener

### Usage:

```
openstack loadbalancer listener create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--name <name>]
                                     [--description <description>]
                                     --protocol
                                     {TCP,HTTP,HTTPS,TERMINATED_HTTPS}
                                     [--connection-limit <limit>]
                                     [--default-pool <pool>]
                                     [--default-tls-container-ref <container_ref>]
                                     [--sni-container-refs [<container_ref> [<container_ref> ...]]]
                                     [--insert-headers <header=value,...>]
```

```
--protocol-port <port>
[--enable | --disable]
<loadbalancer>
```

**Table 39.91. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 39.92. Positional Arguments**

Value	Summary
<loadbalancer>	Load balancer for the listener (name or id).

**Table 39.93. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 39.94. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 39.95. Optional Arguments**

Value	Summary
--protocol-port <port>	Set the protocol port number for the listener.
--disable	Disable listener.

Value	Summary
--connection-limit <limit>	Set the maximum number of connections permitted for this listener.
--name <name>	Set the listener name.
--protocol {TCP,HTTP,HTTPS,TERMINATED_HTTPS}	The protocol for the listener.
--enable	Enable listener (default).
--sni-container-refs [<container_ref> [<container_ref> ...]]	A list of uris to the key manager service secrets containers containing the certificates and keys for TERMINATED_TLS the listener using Server Name Indication.
--default-pool <pool>	Set the name or id of the pool used by the listener if no L7 policies match.
-h, --help	Show this help message and exit
--description <description>	Set the description of this listener.
--insert-headers <header=value,...>	A dictionary of optional headers to insert into the request before it is sent to the backend member.
--default-tls-container-ref <container_ref>	The uri to the key manager service secrets container containing the certificate and key for TERMINATED_TLS listeners.

Table 39.96. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.23. LOADBALANCER LISTENER DELETE

Delete a listener

### Usage:

```
openstack loadbalancer listener delete [-h] <listener>
```

Table 39.97. Positional Arguments

Value	Summary
<listener>	Listener to delete (name or id)

Table 39.98. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 39.24. LOADBALANCER LISTENER LIST

List listeners

### Usage:

```

openstack loadbalancer listener list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--name <name>]
                                     [--loadbalancer <loadbalancer>]
                                     [--enable | --disable]
                                     [--project <project>]

```

Table 39.99. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.100. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric



Table 39.101. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.102. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.103. Optional Arguments

Value	Summary
--enable	List enabled listeners.
--name <name>	List listeners by listener name.
--loadbalancer <loadbalancer>	Filter by load balancer (name or id).
-h, --help	Show this help message and exit
--disable	List disabled listeners.
--project <project>	List listeners by project id.

## 39.25. LOADBALANCER LISTENER SET

Update a listener

### Usage:

```
openstack loadbalancer listener set [-h] [--name <name>]
                                     [--description <description>]
                                     [--connection-limit <limit>]
                                     [--default-pool <pool>]
                                     [--default-tls-container-ref <container-ref>]
                                     [--sni-container-refs [<container-ref> [<container-ref> ...]]]
```

```

[--insert-headers <header=value>]
[--enable | --disable]
<listener>

```

**Table 39.104. Positional Arguments**

Value	Summary
<listener>	Listener to modify (name or id).

**Table 39.105. Optional Arguments**

Value	Summary
<b>--disable</b>	Disable listener.
<b>--connection-limit</b> <limit>	The maximum number of connections permitted for this listener. Default value is -1 which represents infinite connections.
<b>--default-pool</b> <pool>	The id of the pool used by the listener if no l7 policies match.
<b>--enable</b>	Enable listener.
<b>--insert-headers</b> <header=value>	A dictionary of optional headers to insert into the request before it is sent to the backend member.
<b>--name</b> <name>	Set the listener name.
<b>-h, --help</b>	Show this help message and exit
<b>--description</b> <description>	Set the description of this listener.
<b>--default-tls-container-ref</b> <container-ref>	The uri to the key manager service secrets container containing the certificate and key for TERMINATED_TLSlisteners.
<b>--sni-container-refs</b> [<container-ref> [<container-ref> ...]]	A list of uris to the key manager service secrets containers containing the certificates and keys for TERMINATED_TLS the listener using Server Name Indication.

## 39.26. LOADBALANCER LISTENER SHOW

Show the details of a single listener

### Usage:

```

openstack loadbalancer listener show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     <listener>

```

Table 39.106. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.107. Positional Arguments

Value	Summary
<listener>	Name or uuid of the listener

Table 39.108. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 39.109. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.110. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 39.111. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.27. LOADBALANCER LISTENER STATS SHOW

Shows the current statistics for a listener.

### Usage:

```
openstack loadbalancer listener stats show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty] [--noindent]
                                         [--prefix PREFIX]
                                         <listener>
```

Table 39.112. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.113. Positional Arguments

Value	Summary
<listener>	Name or uuid of the listener

Table 39.114. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 39.115. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.116. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 39.117. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.28. LOADBALANCER MEMBER CREATE

Creating a member in a pool

### Usage:

```
openstack loadbalancer member create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    [--name <name>]
    [--weight <weight>] --address
    <ip_address>
    [--subnet-id <subnet_id>]
    --protocol-port <protocol_port>
    [--monitor-port <monitor_port>]
    [--monitor-address <monitor_address>]
    [--enable | --disable]
    <pool>
```

Table 39.118. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 39.119. Positional Arguments

Value	Summary
<code>&lt;pool&gt;</code>	Id or name of the pool to create the member for.

Table 39.120. Output Formatters

Value	Summary
output formatter options- <code>f</code> {json,shell,table,value,yaml}, <code>--format</code> {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 39.121. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 39.122. Optional Arguments

Value	Summary
<code>--protocol-port &lt;protocol_port&gt;</code>	The protocol port number the backend member server is listening on.
<code>--enable</code>	Enable member (default)
<code>--name &lt;name&gt;</code>	Name of the member.

Value	Summary
<code>--monitor-port &lt;monitor_port&gt;</code>	An alternate protocol port used for health monitoring a backend member.
<code>--subnet-id &lt;subnet_id&gt;</code>	The subnet id the member service is accessible from.
<code>--monitor-address &lt;monitor_address&gt;</code>	An alternate ip address used for health monitoring a backend member.
<code>--address &lt;ip_address&gt;</code>	The ip address of the backend member server
<code>-h, --help</code>	Show this help message and exit
<code>--disable</code>	Disable member
<code>--weight &lt;weight&gt;</code>	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool.

Table 39.123. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 39.29. LOADBALANCER MEMBER DELETE

Delete a member from a pool

### Usage:

```
openstack loadbalancer member delete [-h] <pool> <member>
```

Table 39.124. Positional Arguments

Value	Summary
<code>&lt;member&gt;</code>	Name or id of the member to be deleted.
<code>&lt;pool&gt;</code>	Pool name or id to delete the member from.

Table 39.125. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 39.30. LOADBALANCER MEMBER LIST

List members in a pool

#### Usage:

```

openstack loadbalancer member list [-h]
                                  [-f {csv,json,table,value,yaml}]
                                  [-c COLUMN] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--noindent]
                                  [--quote {all,minimal,none,nonnumeric}]
                                  [--sort-column SORT_COLUMN]
                                  <pool>

```

Table 39.126. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.127. Positional Arguments

Value	Summary
<pool>	Pool name or id to list the members of.

Table 39.128. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 39.129. Output Formatters



Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.130. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.131. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 39.31. LOADBALANCER MEMBER SET

Update a member

### Usage:

```
openstack loadbalancer member set [-h] [--name <name>]
                                [--weight <weight>]
                                [--monitor-port <monitor_port>]
                                [--monitor-address <monitor_address>]
                                [--enable | --disable]
                                <pool> <member>
```

Table 39.132. Positional Arguments

Value	Summary
<member>	Name or id of the member to update
<pool>	Pool that the member to update belongs to (name or ID).

Table 39.133. Optional Arguments

Value	Summary
--enable	Set the admin_state_up to true
--name <name>	Set the name of the member
--monitor-port <monitor_port>	An alternate protocol port used for health monitoring a backend member
--monitor-address <monitor_address>	An alternate ip address used for health monitoring a backend member.
-h, --help	Show this help message and exit
--disable	Set the admin_state_up to false
--weight <weight>	Set the weight of member in the pool

## 39.32. LOADBALANCER MEMBER SHOW

Shows details of a single Member

### Usage:

```

openstack loadbalancer member show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--noindent] [--prefix PREFIX]
                                  <pool> <member>

```

Table 39.134. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.135. Positional Arguments

Value	Summary
<member>	Name or id of the member to show.
<pool>	Pool name or id to show the members of.

**Table 39.136. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 39.137. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 39.138. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 39.139. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.33. LOADBALANCER POOL CREATE

Create a pool

### Usage:

```
openstack loadbalancer pool create [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--noindent] [--prefix PREFIX]
                                  [--name <name>]
```

```

[--description <description>]
--protocol
{TCP,HTTP,HTTPS,TERMINATED_HTTPS,PROXY}
(--listener <listener> | --loadbalancer <load_balancer>)
[--session-persistence <session persistence>]
--lb-algorithm
{SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS}
[--enable | --disable]

```

Table 39.140. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.141. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 39.142. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.143. Optional Arguments

Value	Summary
--disable	Disable pool.
--enable	Enable pool (default).
--name <name>	Set pool name.

Value	Summary
<code>--loadbalancer &lt;load_balancer&gt;</code>	Load balancer to add the pool to (name or id)
<code>--session-persistence &lt;session persistence&gt;</code>	Set the session persistence for the listener (key=value).
<code>--protocol</code> {TCP,HTTP,HTTPS,TERMINATED_HTTPS,PROXY}	Set the pool protocol.
<code>--lb-algorithm</code> {SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTION S}	Load balancing algorithm to use.
<code>--listener &lt;listener&gt;</code>	Listener to add the pool to (name or id).
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	Set pool description.

**Table 39.144. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 39.34. LOADBALANCER POOL DELETE

Delete a pool

### Usage:

```
openstack loadbalancer pool delete [-h] <pool>
```

**Table 39.145. Positional Arguments**

Value	Summary
<code>&lt;pool&gt;</code>	Pool to delete (name or id).

**Table 39.146. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 39.35. LOADBALANCER POOL LIST

List pools

### Usage:

```
openstack loadbalancer pool list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--loadbalancer <loadbalancer>]
```

Table 39.147. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.148. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 39.149. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.150. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.151. Optional Arguments

Value	Summary
--loadbalancer <loadbalancer>	Filter by load balancer (name or id).
-h, --help	Show this help message and exit

## 39.36. LOADBALANCER POOL SET

Update a pool

### Usage:

```

openstack loadbalancer pool set [-h] [--name <name>]
                                [--description <description>]
                                [--session-persistence <session_persistence>]
                                [--lb-algorithm {SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS}]
                                [--enable | --disable]
                                <pool>

```

Table 39.152. Positional Arguments

Value	Summary
<pool>	Pool to update (name or id).

Table 39.153. Optional Arguments

Value	Summary
--disable	Disable pool.
--enable	Enable pool.
--name <name>	Set the name of the pool.
--session-persistence <session_persistence>	Set the session persistence for the listener (key=value).
--lb-algorithm {SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS}	Set the load balancing algorithm to use.

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Set the description of the pool.

## 39.37. LOADBALANCER POOL SHOW

Show the details of a single pool

### Usage:

```
openstack loadbalancer pool show [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    <pool>
```

Table 39.154. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.155. Positional Arguments

Value	Summary
<pool>	Name or uuid of the pool.

Table 39.156. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table



Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 39.157. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.158. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 39.159. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.38. LOADBALANCER QUOTA DEFAULTS SHOW

Show quota defaults

### Usage:

```
openstack loadbalancer quota defaults show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty] [--noindent]
                                         [--prefix PREFIX]
```

Table 39.160. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 39.161. Output Formatters**

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 39.162. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 39.163. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

**Table 39.164. Shell Formatter**

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## 39.39. LOADBALANCER QUOTA LIST

List quotas

### Usage:

```
openstack loadbalancer quota list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
[--project <project-id>]

```

Table 39.165. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.166. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 39.167. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.168. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.169. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project-id>	Name or uuid of the project.

## 39.40. LOADBALANCER QUOTA RESET

Resets quotas to default quotas

### Usage:

```
openstack loadbalancer quota reset [-h] <project>
```

Table 39.170. Positional Arguments

Value	Summary
<project>	Project to reset quotas (name or id)

Table 39.171. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 39.41. LOADBALANCER QUOTA SET

Update a quota

### Usage:

```
openstack loadbalancer quota set [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    [--healthmonitor <health_monitor>]
    [--listener <listener>]
    [--loadbalancer <load_balancer>]
    [--member <member>] [--pool <pool>]
    <project>
```

Table 39.172. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 39.173. Positional Arguments

Value	Summary
<code>&lt;project&gt;</code>	Name or uuid of the project.

Table 39.174. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 39.175. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 39.176. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 39.177. Quota limits

Value	Summary
<code>--member &lt;member&gt;</code>	New value for the member quota limit. value -1 means unlimited.

Value	Summary
At least one of the following arguments is required.--healthmonitor <health_monitor>	New value for the health monitor quota. value -1 means unlimited.
--loadbalancer <load_balancer>	New value for the load balancer quota limit. value -1 means unlimited.
--pool <pool>	New value for the pool quota limit. value -1 means unlimited.
--listener <listener>	New value for the listener quota. value -1 means unlimited.

Table 39.178. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")--prefix PREFIX	Add a prefix to all variable names

## 39.42. LOADBALANCER QUOTA SHOW

Show the quota details for a project

### Usage:

```

openstack loadbalancer quota show [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    <project>

```

Table 39.179. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 39.180. Positional Arguments

Value	Summary
<project>	Name or uuid of the project.

Table 39.181. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 39.182. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.183. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 39.184. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.43. LOADBALANCER SET

Update a load balancer

### Usage:

```
openstack loadbalancer set [-h] [--name <name>]
                        [--description <description>]
                        [--vip-qos-policy-id <vip_qos_policy_id>]
                        [--enable | --disable]
                        <load_balancer>
```

Table 39.185. Positional Arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer to update.

Table 39.186. Optional Arguments

Value	Summary
--description <description>	Set load balancer description.
--vip-qos-policy-id <vip_qos_policy_id>	Set qos policy id for vip port. unset with <i>none</i> .
--enable	Enable load balancer.
--name <name>	Set load balancer name.
-h, --help	Show this help message and exit
--disable	Disable load balancer.

## 39.44. LOADBALANCER SHOW

Show the details for a single load balancer

### Usage:

```
openstack loadbalancer show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <load_balancer>
```

Table 39.187. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable



Table 39.188. Positional Arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer.

Table 39.189. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 39.190. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.191. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 39.192. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 39.45. LOADBALANCER STATS SHOW

Shows the current statistics for a load balancer

### Usage:

```
openstack loadbalancer stats show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <load_balancer>
```

Table 39.193. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 39.194. Positional Arguments

Value	Summary
<code>&lt;load_balancer&gt;</code>	Name or uuid of the load balancer.

Table 39.195. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 39.196. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 39.197. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 39.198. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 40. MESSAGING

This chapter describes the commands under the **messaging** command.

### 40.1. MESSAGING CLAIM CREATE

Create claim and return a list of claimed messages

#### Usage:

```
openstack messaging claim create [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--ttl <ttl>] [--grace <grace>]
                                [--limit <limit>]
                                <queue_name>
```

Table 40.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.2. Positional Arguments

Value	Summary
<queue_name>	Name of the queue to be claim

Table 40.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 40.4. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 40.5. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.6. Optional Arguments

Value	Summary
--limit <limit>	Claims a set of messages, up to limit
-h, --help	Show this help message and exit
--grace <grace>	The message grace period in seconds
--ttl <ttl>	Time to live in seconds for claim

## 40.2. MESSAGING CLAIM QUERY

Display claim details

### Usage:

```
openstack messaging claim query [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]
                               <queue_name> <claim_id>
```

Table 40.7. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 40.8. Positional Arguments**

Value	Summary
<code>&lt;claim_id&gt;</code>	Id of the claim
<code>&lt;queue_name&gt;</code>	Name of the claimed queue

**Table 40.9. CSV Formatter**

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 40.10. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 40.11. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 40.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 40.3. MESSAGING CLAIM RELEASE

Delete a claim

### Usage:

```
openstack messaging claim release [-h] <queue_name> <claim_id>
```

Table 40.13. Positional Arguments

Value	Summary
<claim_id>	Claim id to delete
<queue_name>	Name of the claimed queue

Table 40.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 40.4. MESSAGING CLAIM RENEW

Renew a claim

### Usage:

```
openstack messaging claim renew [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--ttl <ttl>] [--grace <grace>]
                                <queue_name> <claim_id>
```

Table 40.15. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 40.16. Positional Arguments

Value	Summary
<code>&lt;claim_id&gt;</code>	Claim id
<code>&lt;queue_name&gt;</code>	Name of the claimed queue

Table 40.17. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 40.18. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 40.19. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 40.20. Optional Arguments



Value	Summary
-h, --help	Show this help message and exit
--grace <grace>	The message grace period in seconds
--ttl <ttl>	Time to live in seconds for claim

## 40.5. MESSAGING FLAVOR CREATE

Create a pool flavor

### Usage:

```
openstack messaging flavor create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--capabilities <capabilities>]
                                <flavor_name> <pool_group>
```

Table 40.21. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.22. Positional Arguments

Value	Summary
<pool_group>	Pool group for flavor
<flavor_name>	Name of the flavor

Table 40.23. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 40.24. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 40.25. Optional Arguments**

Value	Summary
--capabilities <capabilities>	Describes flavor-specific capabilities, this option is only available in client api version < 2 .
-h, --help	Show this help message and exit

**Table 40.26. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.6. MESSAGING FLAVOR DELETE

Delete a pool flavor

### Usage:

```
openstack messaging flavor delete [-h] <flavor_name>
```

**Table 40.27. Positional Arguments**

Value	Summary
<flavor_name>	Name of the flavor

**Table 40.28. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 40.7. MESSAGING FLAVOR LIST

List available pool flavors

### Usage:

```

openstack messaging flavor list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--marker <flavor_name>]
                                [--limit <limit>] [--detailed]

```

Table 40.29. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.30. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 40.31. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 40.32. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 40.33. Optional Arguments

Value	Summary
<code>--detailed</code>	If show detailed capabilities of flavor
<code>--limit &lt;limit&gt;</code>	Page size limit
<code>-h, --help</code>	Show this help message and exit
<code>--marker &lt;flavor_name&gt;</code>	Flavor's paging marker

## 40.8. MESSAGING FLAVOR SHOW

Display pool flavor details

### Usage:

```
openstack messaging flavor show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <flavor_name>
```

Table 40.34. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 40.35. Positional Arguments**

Value	Summary
<code>&lt;flavor_name&gt;</code>	Flavor to display (name)

**Table 40.36. Output Formatters**

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 40.37. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 40.38. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

**Table 40.39. Shell Formatter**

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## 40.9. MESSAGING FLAVOR UPDATE

Update a flavor's attributes

### Usage:

```
openstack messaging flavor update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--pool_group <pool_group>]
                                [--capabilities <capabilities>]
                                <flavor_name>
```

**Table 40.40. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 40.41. Positional Arguments**

Value	Summary
<flavor_name>	Name of the flavor

**Table 40.42. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 40.43. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.44. Optional Arguments

Value	Summary
<code>--pool_group &lt;pool_group&gt;</code>	Pool group the flavor sits on
<code>-h, --help</code>	Show this help message and exit
<code>--capabilities &lt;capabilities&gt;</code>	Describes flavor-specific capabilities.

Table 40.45. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 40.10. MESSAGING HEALTH

Display detailed health status of Zaqr server

### Usage:

```
openstack messaging health [-h]
```

Table 40.46. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 40.11. MESSAGING HOMEDOC

Display detailed resource doc of Zaqr server

### Usage:

```
openstack messaging homedoc [-h]
```

Table 40.47. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 40.12. MESSAGING MESSAGE LIST

List all messages for a given queue

### Usage:

```
openstack messaging message list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN]
    [--message-ids <message_ids>]
    [--limit <limit>] [--echo]
    [--include-claimed]
    [--include-delayed]
    [--client-id <client_id>]
    <queue_name>
```

**Table 40.48. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 40.49. Positional Arguments**

Value	Summary
<queue_name>	Name of the queue

**Table 40.50. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 40.51. Output Formatters**



Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 40.52. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.53. Optional Arguments

Value	Summary
--client-id <client_id>	A uuid for each client instance.
--limit <limit>	Maximum number of messages to get
--echo	Whether to get this client's own messages
--message-ids <message_ids>	List of messages' ids to retrieve
-h, --help	Show this help message and exit
--include-delayed	Whether to include delayed messages
--include-claimed	Whether to include claimed messages

## 40.13. MESSAGING MESSAGE POST

Post messages for a given queue

### Usage:

```
openstack messaging message post [-h] [--client-id <client_id>]
                                <queue_name> <messages>
```

Table 40.54. Positional Arguments

Value	Summary
<messages>	Messages to be posted.
<queue_name>	Name of the queue

Table 40.55. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--client-id <client_id>	A uuid for each client instance.

## 40.14. MESSAGING PING

Check if Zaqar server is alive or not

### Usage:

```
openstack messaging ping [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
```

Table 40.56. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.57. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 40.58. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.59. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 40.60. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.15. MESSAGING POOL CREATE

Create a pool

### Usage:

```
openstack messaging pool create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--pool_group <pool_group>]
                               [--pool_options <pool_options>]
                               <pool_name> <pool_uri> <pool_weight>
```

Table 40.61. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 40.62. Positional Arguments**

Value	Summary
<code>&lt;pool_weight&gt;</code>	Weight of the pool
<code>&lt;pool_name&gt;</code>	Name of the pool
<code>&lt;pool_uri&gt;</code>	Storage engine uri

**Table 40.63. Output Formatters**

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 40.64. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 40.65. Optional Arguments**

Value	Summary
<code>--pool_group &lt;pool_group&gt;</code>	Group of the pool
<code>-h, --help</code>	Show this help message and exit
<code>--pool_options &lt;pool_options&gt;</code>	An optional request component related to storage-specific options

**Table 40.66. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.16. MESSAGING POOL DELETE

Delete a pool

### Usage:

```
openstack messaging pool delete [-h] <pool_name>
```

Table 40.67. Positional Arguments

Value	Summary
<pool_name>	Name of the pool

Table 40.68. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 40.17. MESSAGING POOL LIST

List available Pools

### Usage:

```
openstack messaging pool list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]
                               [--marker <pool_name>] [--limit <limit>]
                               [--detailed]
```

Table 40.69. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 40.70. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 40.71. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 40.72. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 40.73. Optional Arguments

Value	Summary
<code>--detailed</code>	Detailed output
<code>--limit &lt;limit&gt;</code>	Page size limit
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--marker &lt;pool_name&gt;</code>	Pool's paging marker

## 40.18. MESSAGING POOL SHOW

Display pool details

### Usage:

```
openstack messaging pool show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               <pool_name>
```

Table 40.74. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.75. Positional Arguments

Value	Summary
<code>&lt;pool_name&gt;</code>	Pool to display (name)

Table 40.76. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 40.77. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.78. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 40.79. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.19. MESSAGING POOL UPDATE

Update a pool attribute

### Usage:

```

openstack messaging pool update [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--pool_uri <pool_uri>]
                               [--pool_weight <pool_weight>]
                               [--pool_group <pool_group>]
                               [--pool_options <pool_options>]
                               <pool_name>

```

Table 40.80. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.81. Positional Arguments



Value	Summary
<pool_name>	Name of the pool

**Table 40.82. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 40.83. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 40.84. Optional Arguments**

Value	Summary
--pool_group <pool_group>	Group of the pool
-h, --help	Show this help message and exit
--pool_options <pool_options>	An optional request component related to storage-specific options
--pool_uri <pool_uri>	Storage engine uri
--pool_weight <pool_weight>	Weight of the pool

**Table 40.85. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.20. MESSAGING QUEUE CREATE

Create a queue

**Usage:**

```

openstack messaging queue create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <queue_name>

```

**Table 40.86. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 40.87. Positional Arguments**

Value	Summary
<queue_name>	Name of the queue

**Table 40.88. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 40.89. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 40.90. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

Table 40.91. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.21. MESSAGING QUEUE DELETE

Delete a queue

### Usage:

```
openstack messaging queue delete [-h] <queue_name>
```

Table 40.92. Positional Arguments

Value	Summary
<queue_name>	Name of the queue

Table 40.93. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 40.22. MESSAGING QUEUE GET METADATA

Get queue metadata

### Usage:

```
openstack messaging queue get metadata [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     <queue_name>
```

Table 40.94. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 40.95. Positional Arguments

Value	Summary
<code>&lt;queue_name&gt;</code>	Name of the queue

Table 40.96. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 40.97. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 40.98. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 40.99. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.23. MESSAGING QUEUE LIST

List available queues

### Usage:

```
openstack messaging queue list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]
                               [--marker <queue_id>] [--limit <limit>]
                               [--detailed]
```

Table 40.100. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.101. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 40.102. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 40.103. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.104. Optional Arguments

Value	Summary
--marker <queue_id>	Queue's paging marker
--limit <limit>	Page size limit
-h, --help	Show this help message and exit
--detailed	If show detailed information of queue

## 40.24. MESSAGING QUEUE PURGE

Purge a queue

### Usage:

```
openstack messaging queue purge [-h]
                                [--resource_types <resource_types>]
                                <queue_name>
```

Table 40.105. Positional Arguments

Value	Summary
<queue_name>	Name of the queue

Table 40.106. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resource_types <resource_types>	Resource types want to be purged.

## 40.25. MESSAGING QUEUE SET METADATA

Set queue metadata

### Usage:

```
openstack messaging queue set metadata [-h]
    <queue_name> <queue_metadata>
```

Table 40.107. Positional Arguments

Value	Summary
<queue_name>	Name of the queue
<queue_metadata>	Queue metadata, all the metadata of the queue will be replaced by queue_metadata

Table 40.108. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 40.26. MESSAGING QUEUE SIGNED URL

Create a pre-signed url

### Usage:

```
openstack messaging queue signed url [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    [--paths <paths>]
    [--ttl-seconds <ttl_seconds>]
    [--methods <methods>]
    <queue_name>
```

Table 40.109. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 40.110. Positional Arguments**

Value	Summary
<queue_name>	Name of the queue

**Table 40.111. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 40.112. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 40.113. Optional Arguments**

Value	Summary
--ttl-seconds <ttl_seconds>	Length of time (in seconds) until the signature expires
-h, --help	Show this help message and exit
--paths <paths>	Allowed paths in a comma-separated list. options: messages, subscriptions, claims
--methods <methods>	Http methods to allow as a comma-separated list. Options: GET, HEAD, OPTIONS, POST, PUT, DELETE

**Table 40.114. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.27. MESSAGING QUEUE STATS



Get queue stats

### Usage:

```
openstack messaging queue stats [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <queue_name>
```

**Table 40.115. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 40.116. Positional Arguments**

Value	Summary
<queue_name>	Name of the queue

**Table 40.117. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 40.118. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 40.119. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

Table 40.120. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.28. MESSAGING SUBSCRIPTION CREATE

Create a subscription for queue

### Usage:

```
openstack messaging subscription create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--options <options>]
                                     <queue_name> <subscriber> <ttl>
```

Table 40.121. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.122. Positional Arguments

Value	Summary
<subscriber>	Subscriber which will be notified
<ttl>	Time to live of the subscription in seconds

Value	Summary
<queue_name>	Name of the queue to subscribe to

**Table 40.123. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 40.124. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 40.125. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--options <options>	Metadata of the subscription in json format

**Table 40.126. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.29. MESSAGING SUBSCRIPTION DELETE

Delete a subscription

### Usage:

```
openstack messaging subscription delete [-h]
                                     <queue_name> <subscription_id>
```

**Table 40.127. Positional Arguments**

Value	Summary
<subscription_id>	Id of the subscription
<queue_name>	Name of the queue for the subscription

Table 40.128. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 40.30. MESSAGING SUBSCRIPTION LIST

List available subscriptions

### Usage:

```

openstack messaging subscription list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--marker <subscription_id>]
                                     [--limit <limit>]
                                     <queue_name>

```

Table 40.129. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.130. Positional Arguments

Value	Summary
<queue_name>	Name of the queue to subscribe to

**Table 40.131. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 40.132. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 40.133. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 40.134. Optional Arguments**

Value	Summary
--limit <limit>	Page size limit, default value is 20
-h, --help	Show this help message and exit
--marker <subscription_id>	Subscription's paging marker, the id of the last subscription of the previous page

## 40.31. MESSAGING SUBSCRIPTION SHOW

Display subscription details

**Usage:**

```

openstack messaging subscription show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     <queue_name> <subscription_id>

```

Table 40.135. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.136. Positional Arguments

Value	Summary
<subscription_id>	Id of the subscription
<queue_name>	Name of the queue to subscribe to

Table 40.137. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 40.138. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.139. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 40.140. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 40.32. MESSAGING SUBSCRIPTION UPDATE

Update a subscription

### Usage:

```
openstack messaging subscription update [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--subscriber <subscriber>]
                                     [--ttl <ttl>]
                                     [--options <options>]
                                     <queue_name> <subscription_id>
```

Table 40.141. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 40.142. Positional Arguments

Value	Summary
<subscription_id>	Id of the subscription

Value	Summary
<queue_name>	Name of the queue to subscribe to

**Table 40.143. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 40.144. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 40.145. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--options <options>	Metadata of the subscription in json format
--subscriber <subscriber>	Subscriber which will be notified
--ttl <ttl>	Time to live of the subscription in seconds

**Table 40.146. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names



## CHAPTER 41. METRIC

This chapter describes the commands under the **metric** command.

### 41.1. METRIC AGGREGATES

Get measurements of aggregated metrics

#### Usage:

```
openstack metric aggregates [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--resource-type RESOURCE_TYPE]
                             [--start START] [--stop STOP]
                             [--granularity GRANULARITY]
                             [--needed-overlap NEEDED_OVERLAP]
                             [--groupby GROUPBY] [--fill FILL]
                             operations [search]
```

Table 41.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.2. Positional Arguments

Value	Summary
operations	Operations to apply to time series
search	A query to filter resource. the syntax is a combination of attribute, operator and value. For example: id=90d58eea-70d7-4294-a49a-170dcd44c3c would filter resource with a certain id. More complex queries can be built, e.g.: not (flavor_id!="1" and memory>=24). Use "" to force data to be interpreted as string. Supported operators are: not, and, $\wedge$ or, $\vee$ , $\geq$ , $\leq$ , $\neq$ , $\lt$ , $\gt$ , $\lt$ , $\gt$ , $\leq$ , $\geq$ , $\neq$ , eq, ne, lt, gt, ge, le, in, like, $\neq$ , $\geq$ , $\leq$ , like, in.

Table 41.3. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 41.4. Output Formatters

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.5. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.6. Optional Arguments

Value	Summary
<code>--groupby GROUPBY</code>	Attribute to use to group resources
<code>--fill FILL</code>	Value to use when backfilling timestamps with missing values in a subset of series. Value should be a float or <i>null</i> .
<code>--start START</code>	Beginning of the period
<code>--resource-type RESOURCE_TYPE</code>	Resource type to query
<code>--stop STOP</code>	End of the period
<code>--granularity GRANULARITY</code>	Granularity to retrieve
<code>-h, --help</code>	Show this help message and exit
<code>--needed-overlap NEEDED_OVERLAP</code>	Percentage of overlap across datapoints

## 41.2. METRIC ARCHIVE-POLICY CREATE

Create an archive policy

### Usage:

```
openstack metric archive-policy create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     -d <DEFINITION> [-b BACK_WINDOW]
                                     [-m AGGREGATION_METHODS]
                                     name
```

Table 41.7. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.8. Positional Arguments

Value	Summary
name	Name of the archive policy

Table 41.9. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.10. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 41.11. Optional Arguments**

Value	Summary
<code>-d &lt;DEFINITION&gt;, --definition &lt;DEFINITION&gt;</code>	Two attributes (separated by ,) of an archive policy definition with its name and value separated with a :
<code>-m AGGREGATION_METHODS, --aggregation-method AGGREGATION_METHODS</code>	Aggregation method of the archive policy
<code>-h, --help</code>	Show this help message and exit
<code>-b BACK_WINDOW, --back-window BACK_WINDOW</code>	Back window of the archive policy

**Table 41.12. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 41.3. METRIC ARCHIVE-POLICY DELETE

Delete an archive policy

### Usage:

```
openstack metric archive-policy delete [-h] name
```

**Table 41.13. Positional Arguments**

Value	Summary
<code>name</code>	Name of the archive policy

**Table 41.14. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 41.4. METRIC ARCHIVE-POLICY LIST

List archive policies

### Usage:

```
openstack metric archive-policy list [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN]
```

Table 41.15. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.16. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 41.17. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.18. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 41.5. METRIC ARCHIVE-POLICY-RULE CREATE

Create an archive policy rule

### Usage:

```

openstack metric archive-policy-rule create [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty]
                                           [--noindent]
                                           [--prefix PREFIX] -a
ARCHIVE_POLICY_NAME -m
METRIC_PATTERN
name

```

Table 41.20. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.21. Positional Arguments

Value	Summary
name	Rule name

**Table 41.22. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 41.23. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 41.24. Optional Arguments**

Value	Summary
-a ARCHIVE_POLICY_NAME, --archive-policy-name ARCHIVE_POLICY_NAME	Archive policy name
-h, --help	Show this help message and exit
-m METRIC_PATTERN, --metric-pattern METRIC_PATTERN	Wildcard of metric name to match

**Table 41.25. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.6. METRIC ARCHIVE-POLICY-RULE DELETE

Delete an archive policy rule

### Usage:

```
openstack metric archive-policy-rule delete [-h] name
```

**Table 41.26. Positional Arguments**

Value	Summary
name	Name of the archive policy rule

Table 41.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 41.7. METRIC ARCHIVE-POLICY-RULE LIST

List archive policy rules

### Usage:

```

openstack metric archive-policy-rule list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--sort-column SORT_COLUMN]

```

Table 41.28. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.29. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 41.30. Output Formatters



Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.31. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.32. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 41.8. METRIC ARCHIVE-POLICY-RULE SHOW

Show an archive policy rule

### Usage:

```
openstack metric archive-policy-rule show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--prefix PREFIX]
                                         name
```

Table 41.33. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 41.34. Positional Arguments**

Value	Summary
<code>name</code>	Name of the archive policy rule

**Table 41.35. Output Formatters**

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 41.36. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 41.37. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

**Table 41.38. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 41.9. METRIC ARCHIVE-POLICY SHOW

Show an archive policy

**Usage:**

```

openstack metric archive-policy show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     name

```

Table 41.39. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.40. Positional Arguments

Value	Summary
name	Name of the archive policy

Table 41.41. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.42. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.43. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 41.44. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.10. METRIC ARCHIVE-POLICY UPDATE

Update an archive policy

### Usage:

```
openstack metric archive-policy update [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     -d <DEFINITION>
                                     name
```

Table 41.45. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.46. Positional Arguments

Value	Summary
name	Name of the archive policy

Table 41.47. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.48. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.49. Optional Arguments

Value	Summary
-d <DEFINITION>, --definition <DEFINITION>	Two attributes (separated by ,) of an archive policy definition with its name and value separated with a :
-h, --help	Show this help message and exit

Table 41.50. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.11. METRIC BENCHMARK MEASURES ADD

Do benchmark testing of adding measurements

### Usage:

```
openstack metric benchmark measures add [-h]
                                     [--resource-id RESOURCE_ID]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--workers WORKERS] --count
                                     COUNT [--batch BATCH]
                                     [--timestamp-start TIMESTAMP_START]
```

```

[--timestamp-end TIMESTAMP_END]
[--wait]
metric

```

Table 41.51. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.52. Positional Arguments

Value	Summary
metric	Id or name of the metric

Table 41.53. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.54. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.55. Optional Arguments

Value	Summary
--wait	Wait for all measures to be processed
--count COUNT, -n COUNT	Number of total measures to send

Value	Summary
<code>--timestamp-start TIMESTAMP_START, -s TIMESTAMP_START</code>	First timestamp to use
<code>--workers WORKERS, -w WORKERS</code>	Number of workers to use
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>--batch BATCH, -b BATCH</code>	Number of measures to send in each batch
<code>-h, --help</code>	Show this help message and exit
<code>--timestamp-end TIMESTAMP_END, -e TIMESTAMP_END</code>	Last timestamp to use

Table 41.56. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 41.12. METRIC BENCHMARK MEASURES SHOW

Do benchmark testing of measurements show

### Usage:

```
openstack metric benchmark measures show [-h]
      [-f {json,shell,table,value,yaml}]
      [-c COLUMN]
      [--max-width <integer>]
      [--fit-width] [--print-empty]
      [--noindent] [--prefix PREFIX]
      [--sort-column SORT_COLUMN]
      [--utc]
      [--resource-id RESOURCE_ID]
      [--aggregation AGGREGATION]
      [--start START] [--stop STOP]
      [--granularity GRANULARITY]
      [--refresh]
      [--resample RESAMPLE]
      [--workers WORKERS] --count
      COUNT
      metric
```

Table 41.57. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.58. Positional Arguments

Value	Summary
<code>metric</code>	Id or name of the metric

Table 41.59. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.60. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.61. Optional Arguments

Value	Summary
<code>--start START</code>	Beginning of the period
<code>--count COUNT, -n COUNT</code>	Number of total measures to send



Value	Summary
--aggregation AGGREGATION	Aggregation to retrieve
--refresh	Force aggregation of all known measures
--workers WORKERS, -w WORKERS	Number of workers to use
--resample RESAMPLE	Granularity to resample time-series to (in seconds)
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
--stop STOP	End of the period
--granularity GRANULARITY	Granularity to retrieve
--utc	Return timestamps as utc
-h, --help	Show this help message and exit

Table 41.62. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.13. METRIC BENCHMARK METRIC CREATE

Do benchmark testing of metric creation

### Usage:

```
openstack metric benchmark metric create [-h]
                                         [--resource-id RESOURCE_ID]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent] [--prefix PREFIX]
                                         [--archive-policy-name ARCHIVE_POLICY_NAME]
                                         [--workers WORKERS] --count
                                         COUNT [--keep]
```

Table 41.63. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.64. Output Formatters

Value	Summary
output formatter options- <code>f</code> {json,shell,table,value,yaml}, <code>--format</code> {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 41.65. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.66. Optional Arguments

Value	Summary
<code>--count COUNT, -n COUNT</code>	Number of metrics to create
<code>--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME</code>	Name of the archive policy
<code>--keep, -k</code>	Keep created metrics
<code>--workers WORKERS, -w WORKERS</code>	Number of workers to use
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>-h, --help</code>	Show this help message and exit

Table 41.67. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.14. METRIC BENCHMARK METRIC SHOW

Do benchmark testing of metric show

### Usage:

```
openstack metric benchmark metric show [-h] [--resource-id RESOURCE_ID]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    [--workers WORKERS] --count
    COUNT
    metric [metric ...]
```

Table 41.68. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.69. Positional Arguments

Value	Summary
metric	Id or name of the metrics

Table 41.70. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 41.71. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.72. Optional Arguments

Value	Summary
<code>--count COUNT, -n COUNT</code>	Number of metrics to get
<code>-h, --help</code>	Show this help message and exit
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>--workers WORKERS, -w WORKERS</code>	Number of workers to use

Table 41.73. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 41.15. METRIC CAPABILITIES LIST

List capabilities

### Usage:

```
openstack metric capabilities list [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
```

Table 41.74. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.75. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 41.76. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.77. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 41.78. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.16. METRIC CREATE

Create a metric

### Usage:

```
openstack metric create [-h] [--resource-id RESOURCE_ID]
                        [-f {json,shell,table,value,yaml}] [-c COLUMN]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty] [--noindent] [--prefix PREFIX]
[--archive-policy-name ARCHIVE_POLICY_NAME]
[--unit UNIT]
[METRIC_NAME]

```

Table 41.79. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.80. Positional Arguments

Value	Summary
METRIC_NAME	Name of the metric

Table 41.81. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.82. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.83. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>--unit UNIT, -u UNIT</code>	Unit of the metric
<code>--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME</code>	Name of the archive policy

**Table 41.84. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

## 41.17. METRIC DELETE

Delete a metric

### Usage:

```
openstack metric delete [-h] [--resource-id RESOURCE_ID]
metric [metric ...]
```

**Table 41.85. Positional Arguments**

Value	Summary
<code>metric</code>	Ids or names of the metric

**Table 41.86. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource

## 41.18. METRIC LIST

List metrics

### Usage:

```
openstack metric list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
[--max-width <integer>] [--fit-width]
```

```

[--print-empty] [--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN] [--limit <LIMIT>]
[--marker <MARKER>] [--sort <SORT>]

```

Table 41.87. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.88. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 41.89. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.90. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.91. Optional Arguments



Value	Summary
<code>--limit &lt;LIMIT&gt;</code>	Number of metrics to return (default is server default)
<code>-h, --help</code>	Show this help message and exit
<code>--marker &lt;MARKER&gt;</code>	Last item of the previous listing. return the next results after this value
<code>--sort &lt;SORT&gt;</code>	Sort of metric attribute (example: user_id:desc-nullslast)

## 41.19. METRIC MEASURES ADD

Add measurements to a metric

### Usage:

```
openstack metric measures add [-h] [--resource-id RESOURCE_ID] -m
                             MEASURE
                             metric
```

**Table 41.92. Positional Arguments**

Value	Summary
metric	Id or name of the metric

**Table 41.93. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>-m MEASURE, --measure MEASURE</code>	Timestamp and value of a measure separated with a @

## 41.20. METRIC MEASURES AGGREGATION

Get measurements of aggregated metrics

### Usage:

```
openstack metric measures aggregation [-h]
                                     [-f {csv,json,table,value,yaml}]
```

```

[-c COLUMN]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
[--utc] -m METRIC [METRIC ...]
[--aggregation AGGREGATION]
[--reaggregation REAGGREGATION]
[--start START] [--stop STOP]
[--granularity GRANULARITY]
[--needed-overlap NEEDED_OVERLAP]
[--query QUERY]
[--resource-type RESOURCE_TYPE]
[--groupby GROUPBY] [--refresh]
[--resample RESAMPLE]
[--fill FILL]

```

Table 41.94. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.95. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 41.96. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.97. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.98. Optional Arguments

Value	Summary
<code>--groupby GROUPBY</code>	Attribute to use to group resources
<code>--start START</code>	Beginning of the period
<code>--query QUERY</code>	A query to filter resource. the syntax is a combination of attribute, operator and value. For example: <code>id=90d58eea-70d7-4294-a49a-170dcdf44c3c</code> would filter resource with a certain id. More complex queries can be built, e.g.: <code>not (flavor_id!="1" and memory&gt;=24)</code> . Use <code>"</code> to force data to be interpreted as string. Supported operators are: <code>not</code> , <code>and</code> , <code>^</code> or <code>v</code> , <code>&gt;=</code> , <code>&lt;=</code> , <code>!=</code> , <code>&gt;</code> , <code>&lt;</code> , <code>=</code> , <code>==</code> , <code>eq</code> , <code>ne</code> , <code>lt</code> , <code>gt</code> , <code>ge</code> , <code>le</code> , <code>in</code> , <code>like</code> , <code>≠</code> , <code>≥</code> , <code>≤</code> , <code>like</code> , <code>in</code> .
<code>--fill FILL</code>	Value to use when backfilling timestamps with missing values in a subset of series. Value should be a float or <i>null</i> .
<code>--aggregation AGGREGATION</code>	Granularity aggregation function to retrieve
<code>-m METRIC [METRIC ...], --metric METRIC [METRIC ...]</code>	Metrics ids or metric name
<code>--resource-type RESOURCE_TYPE</code>	Resource type to query
<code>--refresh</code>	Force aggregation of all known measures
<code>--reaggregation REAGGREGATION</code>	Groupby aggregation function to retrieve
<code>--stop STOP</code>	End of the period

Value	Summary
--granularity GRANULARITY	Granularity to retrieve
--utc	Return timestamps as utc
-h, --help	Show this help message and exit
--resample RESAMPLE	Granularity to resample time-series to (in seconds)
--needed-overlap NEEDED_OVERLAP	Percent of datapoints in each metrics required

## 41.21. METRIC MEASURES BATCH-METRICS

### Usage:

```
openstack metric measures batch-metrics [-h] file
```

Table 41.99. Positional Arguments

Value	Summary
file	File containing measurements to batch or - for stdin (see Gnocchi REST API docs for the format)

Table 41.100. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 41.22. METRIC MEASURES BATCH-RESOURCES-METRICS

### Usage:

```
openstack metric measures batch-resources-metrics [-h]
                                                    [--create-metrics]
                                                    file
```

Table 41.101. Positional Arguments

Value	Summary
file	File containing measurements to batch or - for stdin (see Gnocchi REST API docs for the format)

Table 41.102. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--create-metrics	Create unknown metrics

## 41.23. METRIC MEASURES SHOW

Get measurements of a metric

### Usage:

```

openstack metric measures show [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN] [--utc]
                               [--resource-id RESOURCE_ID]
                               [--aggregation AGGREGATION]
                               [--start START] [--stop STOP]
                               [--granularity GRANULARITY] [--refresh]
                               [--resample RESAMPLE]
                               metric

```

Table 41.103. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.104. Positional Arguments

Value	Summary
metric	Id or name of the metric

Table 41.105. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 41.106. Output Formatters**

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 41.107. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 41.108. Optional Arguments**

Value	Summary
<code>--start START</code>	Beginning of the period
<code>--aggregation AGGREGATION</code>	Aggregation to retrieve
<code>--refresh</code>	Force aggregation of all known measures
<code>--resample RESAMPLE</code>	Granularity to resample time-series to (in seconds)
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>--stop STOP</code>	End of the period
<code>--granularity GRANULARITY</code>	Granularity to retrieve
<code>--utc</code>	Return timestamps as utc
<code>-h, --help</code>	Show this help message and exit

## 41.24. METRIC METRIC CREATE

Deprecated: Create a metric

### Usage:

```
openstack metric metric create [-h] [--resource-id RESOURCE_ID]
                               [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--archive-policy-name ARCHIVE_POLICY_NAME]
                               [--unit UNIT]
                               [METRIC_NAME]
```

Table 41.109. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.110. Positional Arguments

Value	Summary
METRIC_NAME	Name of the metric

Table 41.111. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.112. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.113. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>--unit UNIT, -u UNIT</code>	Unit of the metric
<code>--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME</code>	Name of the archive policy

Table 41.114. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 41.25. METRIC METRIC DELETE

Deprecated: Delete a metric

### Usage:

```
openstack metric metric delete [-h] [--resource-id RESOURCE_ID]
                               metric [metric ...]
```

Table 41.115. Positional Arguments

Value	Summary
<code>metric</code>	Ids or names of the metric

Table 41.116. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit



Value	Summary
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource

## 41.26. METRIC METRIC LIST

Deprecated: List metrics

### Usage:

```
openstack metric metric list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--limit <LIMIT>] [--marker <MARKER>]
                             [--sort <SORT>]
```

Table 41.117. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.118. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 41.119. Output Formatters

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.120. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.121. Optional Arguments

Value	Summary
<code>--limit &lt;LIMIT&gt;</code>	Number of metrics to return (default is server default)
<code>-h, --help</code>	Show this help message and exit
<code>--marker &lt;MARKER&gt;</code>	Last item of the previous listing. return the next results after this value
<code>--sort &lt;SORT&gt;</code>	Sort of metric attribute (example: user_id:desc-nullslast)

## 41.27. METRIC METRIC SHOW

Deprecated: Show a metric

### Usage:

```

openstack metric metric show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             [--resource-id RESOURCE_ID]
                             metric

```

Table 41.122. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.123. Positional Arguments

Value	Summary
<code>metric</code>	Id or name of the metric

Table 41.124. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 41.125. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.126. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource

Table 41.127. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 41.28. METRIC RESOURCE BATCH DELETE

Delete a batch of resources based on attribute values

### Usage:

```
openstack metric resource batch delete [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--type RESOURCE_TYPE]
                                     query
```

Table 41.128. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.129. Positional Arguments

Value	Summary
query	A query to filter resource. the syntax is a combination of attribute, operator and value. For example: id=90d58eea-70d7-4294-a49a-170dcdf44c3c would filter resource with a certain id. More complex queries can be built, e.g.: not (flavor_id!="1" and memory>=24). Use "" to force data to be interpreted as string. Supported operators are: not, and, $\wedge$ or, $\vee$ , $\geq$ , $\leq$ , $\neq$ , $\lt$ , $\gt$ , $\leq$ , $\geq$ , eq, ne, lt, gt, ge, le, in, like, $\neq$ , $\geq$ , $\leq$ , like, in.

Table 41.130. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.131. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.132. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Table 41.133. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.29. METRIC RESOURCE CREATE

Create a resource

### Usage:

```
openstack metric resource create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--type RESOURCE_TYPE] [-a ATTRIBUTE]
                                [-m ADD_METRIC] [-n CREATE_METRIC]
                                resource_id
```

Table 41.134. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.135. Positional Arguments

Value	Summary
<code>resource_id</code>	Id of the resource

Table 41.136. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 41.137. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.138. Optional Arguments

Value	Summary
<code>-n CREATE_METRIC, --create-metric CREATE_METRIC</code>	Name:archive_policy_name of a metric to create
<code>-h, --help</code>	Show this help message and exit
<code>-a ATTRIBUTE, --attribute ATTRIBUTE</code>	Name and value of an attribute separated with a :
<code>-m ADD_METRIC, --add-metric ADD_METRIC</code>	Name:id of a metric to add

Value	Summary
<code>--type RESOURCE_TYPE, -t RESOURCE_TYPE</code>	Type of resource

Table 41.139. Shell Formatter

Value	Summary
<code>a</code> format a UNIX shell can parse ( <code>variable="value"</code> ) <code>--prefix PREFIX</code>	Add a prefix to all variable names

## 41.30. METRIC RESOURCE DELETE

Delete a resource

### Usage:

```
openstack metric resource delete [-h] resource_id
```

Table 41.140. Positional Arguments

Value	Summary
<code>resource_id</code>	Id of the resource

Table 41.141. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 41.31. METRIC RESOURCE HISTORY

Show the history of a resource

### Usage:

```
openstack metric resource history [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--details] [--limit <LIMIT>]
                                [--marker <MARKER>] [--sort <SORT>]
                                [--type RESOURCE_TYPE]
                                resource_id
```

Table 41.142. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.143. Positional Arguments

Value	Summary
<code>resource_id</code>	Id of a resource

Table 41.144. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 41.145. Output Formatters

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.146. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.147. Optional Arguments



Value	Summary
--details	Show all attributes of generic resources
--limit <LIMIT>	Number of resources to return (default is server default)
--sort <SORT>	Sort of resource attribute (example: user_id:desc-nullslast)
--marker <MARKER>	Last item of the previous listing. return the next results after this value
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

## 41.32. METRIC RESOURCE LIST

List resources

### Usage:

```
openstack metric resource list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN] [--details]
                               [--history] [--limit <LIMIT>]
                               [--marker <MARKER>] [--sort <SORT>]
                               [--type RESOURCE_TYPE]
```

Table 41.148. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.149. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 41.150. Output Formatters**

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 41.151. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 41.152. Optional Arguments**

Value	Summary
<code>--details</code>	Show all attributes of generic resources
<code>--limit &lt;LIMIT&gt;</code>	Number of resources to return (default is server default)
<code>--history</code>	Show history of the resources
<code>--sort &lt;SORT&gt;</code>	Sort of resource attribute (example: <code>user_id:desc-nullslast</code> )
<code>-h, --help</code>	Show this help message and exit
<code>--type RESOURCE_TYPE, -t RESOURCE_TYPE</code>	Type of resource
<code>--marker &lt;MARKER&gt;</code>	Last item of the previous listing. return the next results after this value

## 41.33. METRIC RESOURCE SEARCH

Search resources with specified query rules

### Usage:

```
openstack metric resource search [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN]
    [--details] [--history]
    [--limit <LIMIT>] [--marker <MARKER>]
    [--sort <SORT>] [--type RESOURCE_TYPE]
    query
```

Table 41.153. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.154. Positional Arguments

Value	Summary
query	A query to filter resource. the syntax is a combination of attribute, operator and value. For example: id=90d58eea-70d7-4294-a49a-170dcdf44c3c would filter resource with a certain id. More complex queries can be built, e.g.: not (flavor_id!="1" and memory>=24). Use "" to force data to be interpreted as string. Supported operators are: not, and, $\wedge$ or, $\vee$ , >=, <=, !=, >, <, =, ==, eq, ne, lt, gt, ge, le, in, like, ≠, ≥, ≤, like, in.

Table 41.155. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 41.156. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.157. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.158. Optional Arguments

Value	Summary
--details	Show all attributes of generic resources
--limit <LIMIT>	Number of resources to return (default is server default)
--history	Show history of the resources
--sort <SORT>	Sort of resource attribute (example: user_id:desc-nullslast)
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource
--marker <MARKER>	Last item of the previous listing. return the next results after this value

## 41.34. METRIC RESOURCE SHOW

Show a resource

### Usage:

```
openstack metric resource show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
```

```

[--noindent] [--prefix PREFIX]
[--type RESOURCE_TYPE]
resource_id

```

Table 41.159. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.160. Positional Arguments

Value	Summary
resource_id	Id of a resource

Table 41.161. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.162. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.163. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Table 41.164. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.35. METRIC RESOURCE-TYPE CREATE

Create a resource type

### Usage:

```

openstack metric resource-type create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [-a ATTRIBUTE]
                                     name

```

Table 41.165. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.166. Positional Arguments

Value	Summary
name	Name of the resource type

Table 41.167. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.168. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.169. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-a ATTRIBUTE, --attribute ATTRIBUTE	Attribute definition, attribute_name:attribute_type:attribute_is_required:attribute_type_option_name=attribute_type_option_value:... For example: display_name:string:true:max_length=255

Table 41.170. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")--prefix PREFIX	Add a prefix to all variable names

## 41.36. METRIC RESOURCE-TYPE DELETE

Delete a resource type

### Usage:

```
openstack metric resource-type delete [-h] name
```

Table 41.171. Positional Arguments

Value	Summary
name	Name of the resource type

Table 41.172. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 41.37. METRIC RESOURCE-TYPE LIST

List resource types

### Usage:

```

openstack metric resource-type list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]

```

Table 41.173. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.174. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 41.175. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated



Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.176. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.177. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 41.38. METRIC RESOURCE-TYPE SHOW

Show a resource type

### Usage:

```
openstack metric resource-type show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     name
```

Table 41.178. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.179. Positional Arguments

Value	Summary
name	Name of the resource type

Table 41.180. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.181. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.182. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 41.183. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.39. METRIC RESOURCE-TYPE UPDATE

### Usage:

```

openstack metric resource-type update [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [-a ATTRIBUTE]
                                     [-r REMOVE_ATTRIBUTE]
                                     name

```

Table 41.184. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.185. Positional Arguments

Value	Summary
name	Name of the resource type

Table 41.186. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 41.187. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.188. Optional Arguments

Value	Summary
<code>-r REMOVE_ATTRIBUTE</code> , <code>--remove-attribute</code> <code>REMOVE_ATTRIBUTE</code>	Attribute name
<code>-h</code> , <code>--help</code>	Show this help message and exit

Value	Summary
-a ATTRIBUTE, --attribute ATTRIBUTE	Attribute definition, attribute_name:attribute_type:attribute_is_required:attribute_type_option_name=attribute_type_option_value:... For example: display_name:string:true:max_length=255

Table 41.189. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")--prefix PREFIX	Add a prefix to all variable names

## 41.40. METRIC RESOURCE UPDATE

Update a resource

### Usage:

```

openstack metric resource update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--type RESOURCE_TYPE] [-a ATTRIBUTE]
                                [-m ADD_METRIC] [-n CREATE_METRIC]
                                [-d DELETE_METRIC]
                                resource_id

```

Table 41.190. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.191. Positional Arguments

Value	Summary
resource_id	Id of the resource

**Table 41.192. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 41.193. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 41.194. Optional Arguments**

Value	Summary
-n CREATE_METRIC, --create-metric CREATE_METRIC	Name:archive_policy_name of a metric to create
-m ADD_METRIC, --add-metric ADD_METRIC	Name:id of a metric to add
-d DELETE_METRIC, --delete-metric DELETE_METRIC	Name of a metric to delete
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource
-a ATTRIBUTE, --attribute ATTRIBUTE	Name and value of an attribute separated with a :

**Table 41.195. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.41. METRIC SERVER VERSION

Show the version of Gnocchi server

### Usage:

```
openstack metric server version [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
```

**Table 41.196. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 41.197. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 41.198. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 41.199. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 41.200. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 41.42. METRIC SHOW

Show a metric

### Usage:

```
openstack metric show [-h] [-f {json,shell,table,value,yaml}]
  [-c COLUMN] [--max-width <integer>] [--fit-width]
  [--print-empty] [--noindent] [--prefix PREFIX]
  [--resource-id RESOURCE_ID]
  metric
```

Table 41.201. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 41.202. Positional Arguments

Value	Summary
metric	Id or name of the metric

Table 41.203. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.204. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.205. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource

Table 41.206. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 41.43. METRIC STATUS

Show the status of measurements processing

### Usage:

```
openstack metric status [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
```

Table 41.207. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 41.208. Output Formatters



Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.209. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.210. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 41.211. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 42. MODULE

This chapter describes the commands under the **module** command.

### 42.1. MODULE LIST

List module versions

#### Usage:

```
openstack module list [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--all]
```

**Table 42.1. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 42.2. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 42.3. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 42.4. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--all	Show all modules that have version information

**Table 42.5. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 43. NETWORK

This chapter describes the commands under the **network** command.

### 43.1. NETWORK AGENT ADD NETWORK

Add network to an agent

#### Usage:

```
openstack network agent add network [-h] [--dhcp] <agent-id> <network>
```

**Table 43.1. Positional Arguments**

Value	Summary
<agent-id>	Agent to which a network is added (id only)
<network>	Network to be added to an agent (name or id)

**Table 43.2. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--dhcp	Add network to a dhcp agent

### 43.2. NETWORK AGENT ADD ROUTER

Add router to an agent

#### Usage:

```
openstack network agent add router [-h] [--l3] <agent-id> <router>
```

**Table 43.3. Positional Arguments**

Value	Summary
<agent-id>	Agent to which a router is added (id only)
<router>	Router to be added to an agent (name or id)

**Table 43.4. Optional Arguments**

Value	Summary
--l3	Add router to an l3 agent
-h, --help	Show this help message and exit

### 43.3. NETWORK AGENT DELETE

Delete network agent(s)

#### Usage:

```
openstack network agent delete [-h]
                               <network-agent> [<network-agent> ...]
```

Table 43.5. Positional Arguments

Value	Summary
<network-agent>	Network agent(s) to delete (id only)

Table 43.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 43.4. NETWORK AGENT LIST

List network agents

#### Usage:

```
openstack network agent list [-h] [-f {csv,json,table,value,yaml}]
                              [-c COLUMN] [--max-width <integer>]
                              [--fit-width] [--print-empty] [--noindent]
                              [--quote {all,minimal,none,nonnumeric}]
                              [--sort-column SORT_COLUMN]
                              [--agent-type <agent-type>]
                              [--host <host>]
                              [--network <network> | --router <router>]
                              [--long]
```

Table 43.7. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.8. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 43.9. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.10. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.11. Optional Arguments

Value	Summary
<code>--router &lt;router&gt;</code>	List agents hosting this router (name or id)
<code>--host &lt;host&gt;</code>	List only agents running on the specified host

Value	Summary
--long	List additional fields in output
--network <network>	List agents hosting a network (name or id)
--agent-type <agent-type>	List only agents with the specified agent type. the supported agent types are: bgp, dhcp, open-vswitch, linux-bridge, ofa, l3, loadbalancer, metering, metadata, macvtap, nic.
-h, --help	Show this help message and exit

## 43.5. NETWORK AGENT REMOVE NETWORK

Remove network from an agent.

### Usage:

```
openstack network agent remove network [-h] [--dhcp]
<agent-id> <network>
```

Table 43.12. Positional Arguments

Value	Summary
<agent-id>	Agent to which a network is removed (id only)
<network>	Network to be removed from an agent (name or id)

Table 43.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--dhcp	Remove network from dhcp agent

## 43.6. NETWORK AGENT REMOVE ROUTER

Remove router from an agent

### Usage:

```
openstack network agent remove router [-h] [--l3] <agent-id> <router>
```

Table 43.14. Positional Arguments

Value	Summary
<agent-id>	Agent from which router will be removed (id only)
<router>	Router to be removed from an agent (name or id)

Table 43.15. Optional Arguments

Value	Summary
--l3	Remove router from an l3 agent
-h, --help	Show this help message and exit

## 43.7. NETWORK AGENT SET

Set network agent properties

### Usage:

```
openstack network agent set [-h] [--description <description>]
                             [--enable | --disable]
                             <network-agent>
```

Table 43.16. Positional Arguments

Value	Summary
<network-agent>	Network agent to modify (id only)

Table 43.17. Optional Arguments

Value	Summary
--disable	Disable network agent
-h, --help	Show this help message and exit
--description <description>	Set network agent description
--enable	Enable network agent

## 43.8. NETWORK AGENT SHOW

Display network agent details

### Usage:



```

openstack network agent show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <network-agent>

```

Table 43.18. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.19. Positional Arguments

Value	Summary
<network-agent>	Network agent to display (id only)

Table 43.20. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.21. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.23. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.9. NETWORK AUTO ALLOCATED TOPOLOGY CREATE

Create the auto allocated topology for project

### Usage:

```

openstack network auto allocated topology create [-h]
          [-f {json,shell,table,value,yaml}]
          [-c COLUMN]
          [--max-width <integer>]
          [--fit-width]
          [--print-empty]
          [--noindent]
          [--prefix PREFIX]
          [--project <project>]
          [--project-domain <project-domain>]
          [--check-resources]
          [--or-show]

```

Table 43.24. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.25. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.26. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--check-resources	Validate the requirements for auto allocated topology. Does not return a topology.
--or-show	If topology exists returns the topology's information (Default)
--project <project>	Return the auto allocated topology for a given project. Default is current project
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 43.28. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.10. NETWORK AUTO ALLOCATED TOPOLOGY DELETE

Delete auto allocated topology for project

### Usage:

```
openstack network auto allocated topology delete [-h]
                                           [--project <project>]
                                           [--project-domain <project-domain>]
```

Table 43.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--project &lt;project&gt;</code>	Delete auto allocated topology for a given project. Default is the current project
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

## 43.11. NETWORK CREATE

Create new network

### Usage:

```

openstack network create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--share | --no-share]
                        [--enable | --disable] [--project <project>]
                        [--description <description>] [--mtu <mtu>]
                        [--project-domain <project-domain>]
                        [--availability-zone-hint <availability-zone>]
                        [--enable-port-security | --disable-port-security]
                        [--external | --internal]
                        [--default | --no-default]
                        [--qos-policy <qos-policy>]
                        [--transparent-vlan | --no-transparent-vlan]
                        [--provider-network-type <provider-network-type>]
                        [--provider-physical-network <provider-physical-network>]
                        [--provider-segment <provider-segment>]
                        [--tag <tag> | --no-tag]
                        <name>

```

Table 43.30. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.31. Positional Arguments

Value	Summary
<name>	New network name

Table 43.32. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.33. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.34. Optional Arguments

Value	Summary
--availability-zone-hint <availability-zone>	Availability zone in which to create this network (Network Availability Zone extension required, repeat option to set multiple availability zones)
--enable	Enable network (default)
--internal	Set this network as an internal network (default)
--disable-port-security	Disable port security by default for ports created on this network
--transparent-vlan	Make the network vlan transparent
--share	Share the network between projects
--enable-port-security	Enable port security by default for ports created on this network (default)
--provider-segment <provider-segment>	Vlan id for vlan networks or tunnel id for GENEVE/GRE/VXLAN networks
--qos-policy <qos-policy>	Qos policy to attach to this network (name or id)

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Set network description
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--mtu <mtu>	Set network mtu
--no-tag	No tags associated with the network
--no-transparent-vlan	Do not make the network vlan transparent
--no-share	Do not share the network between projects
--external	Set this network as an external network (external-net extension required)
--provider-physical-network <provider-physical-network>	Name of the physical network over which the virtual network is implemented
--default	Specify if this network should be used as the default external network
--provider-network-type <provider-network-type>	The physical mechanism by which the virtual network is implemented. For example: flat, geneve, gre, local, vlan, vxlan.
--project <project>	Owner's project (name or id)
--tag <tag>	Tag to be added to the network (repeat option to set multiple tags)
--disable	Disable network
--no-default	Do not use the network as the default external network (default)

Table 43.35. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")--prefix PREFIX	Add a prefix to all variable names

## 43.12. NETWORK DELETE

Delete network(s)

### Usage:

```
openstack network delete [-h] <network> [<network> ...]
```

Table 43.36. Positional Arguments

Value	Summary
<network>	Network(s) to delete (name or id)

Table 43.37. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.13. NETWORK FLAVOR ADD PROFILE

Add a service profile to a network flavor

### Usage:

```
openstack network flavor add profile [-h] <flavor> <service-profile>
```

Table 43.38. Positional Arguments

Value	Summary
<service-profile>	Service profile (id only)
<flavor>	Network flavor (name or id)

Table 43.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.14. NETWORK FLAVOR CREATE

Create new network flavor

### Usage:

■

```

openstack network flavor create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                --service-type <service-type>
                                [--description DESCRIPTION]
                                [--project <project>]
                                [--project-domain <project-domain>]
                                [--enable | --disable]
                                <name>

```

Table 43.40. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.41. Positional Arguments

Value	Summary
<name>	Name for the flavor

Table 43.42. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.43. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.44. Optional Arguments



Value	Summary
--enable	Enable the flavor (default)
--project <project>	Owner's project (name or id)
--service-type <service-type>	Service type to which the flavor applies to: e.g. vpn (See openstack network service provider list for loaded examples.)
--description DESCRIPTION	Description for the flavor
-h, --help	Show this help message and exit
--disable	Disable the flavor
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 43.45. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.15. NETWORK FLAVOR DELETE

Delete network flavors

### Usage:

```
openstack network flavor delete [-h] <flavor> [<flavor> ...]
```

Table 43.46. Positional Arguments

Value	Summary
<flavor>	Flavor(s) to delete (name or id)

Table 43.47. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.16. NETWORK FLAVOR LIST

List network flavors

### Usage:

```
openstack network flavor list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
```

Table 43.48. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.49. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 43.50. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.51. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.17. NETWORK FLAVOR PROFILE CREATE

Create new network flavor profile

### Usage:

```

openstack network flavor profile create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent] [--prefix PREFIX]
                                         [--project <project>]
                                         [--project-domain <project-domain>]
                                         [--description <description>]
                                         [--enable | --disable]
                                         [--driver DRIVER]
                                         [--metainfo METAINFO]

```

Table 43.53. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.54. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 43.55. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 43.56. Optional Arguments**

Value	Summary
--description <description>	Description for the flavor profile
--driver DRIVER	Python module path to driver. this becomes required if --metainfo is missing and vice versa
--enable	Enable the flavor profile
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
-h, --help	Show this help message and exit
--disable	Disable the flavor profile
--project <project>	Owner's project (name or id)
--metainfo METAINFO	Metainfo for the flavor profile. this becomes required if --driver is missing and vice versa

**Table 43.57. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.18. NETWORK FLAVOR PROFILE DELETE

Delete network flavor profile

### Usage:

```
openstack network flavor profile delete [-h]
                                     <flavor-profile>
                                     [<flavor-profile> ...]
```

**Table 43.58. Positional Arguments**

Value	Summary
<flavor-profile>	Flavor profile(s) to delete (id only)

**Table 43.59. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 43.19. NETWORK FLAVOR PROFILE LIST

List network flavor profile(s)

### Usage:

```
openstack network flavor profile list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
```

**Table 43.60. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.61. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 43.62. Output Formatters

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.63. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.64. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 43.20. NETWORK FLAVOR PROFILE SET

Set network flavor profile properties

### Usage:

```
openstack network flavor profile set [-h]
                                     [--project-domain <project-domain>]
                                     [--description <description>]
                                     [--enable | --disable]
                                     [--driver DRIVER]
                                     [--metainfo METAINFO]
                                     <flavor-profile>
```

Table 43.65. Positional Arguments

Value	Summary
<flavor-profile>	Flavor profile to update (id only)

Table 43.66. Optional Arguments

Value	Summary
--description <description>	Description for the flavor profile
--driver DRIVER	Python module path to driver. this becomes required if --metainfo is missing and vice versa
--enable	Enable the flavor profile
-h, --help	Show this help message and exit
--disable	Disable the flavor profile
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--metainfo METAINFO	Metainfo for the flavor profile. this becomes required if --driver is missing and vice versa

## 43.21. NETWORK FLAVOR PROFILE SHOW

Display network flavor profile details

### Usage:

```
openstack network flavor profile show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     <flavor-profile>
```

Table 43.67. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 43.68. Positional Arguments**

Value	Summary
<code>&lt;flavor-profile&gt;</code>	Flavor profile to display (id only)

**Table 43.69. Output Formatters**

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 43.70. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 43.71. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

**Table 43.72. Shell Formatter**

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names



## 43.22. NETWORK FLAVOR REMOVE PROFILE

Remove service profile from network flavor

### Usage:

```
openstack network flavor remove profile [-h] <flavor> <service-profile>
```

Table 43.73. Positional Arguments

Value	Summary
<service-profile>	Service profile (id only)
<flavor>	Network flavor (name or id)

Table 43.74. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.23. NETWORK FLAVOR SET

Set network flavor properties

### Usage:

```
openstack network flavor set [-h] [--description DESCRIPTION]
                             [--disable | --enable] [--name <name>]
                             <flavor>
```

Table 43.75. Positional Arguments

Value	Summary
<flavor>	Flavor to update (name or id)

Table 43.76. Optional Arguments

Value	Summary
--enable	Enable network flavor
--name <name>	Set flavor name
-h, --help	Show this help message and exit

Value	Summary
--disable	Disable network flavor
--description DESCRIPTION	Set network flavor description

## 43.24. NETWORK FLAVOR SHOW

Display network flavor details

### Usage:

```
openstack network flavor show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent] [--prefix PREFIX]
                             <flavor>
```

Table 43.77. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.78. Positional Arguments

Value	Summary
<flavor>	Flavor to display (name or id)

Table 43.79. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.80. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.81. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 43.82. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 43.25. NETWORK LIST

List networks

### Usage:

```
openstack network list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]
                        [--external | --internal] [--long]
                        [--name <name>] [--enable | --disable]
                        [--project <project>]
                        [--project-domain <project-domain>]
                        [--share | --no-share] [--status <status>]
                        [--provider-network-type <provider-network-type>]
                        [--provider-physical-network <provider-physical-network>]
                        [--provider-segment <provider-segment>]
                        [--agent <agent-id>] [--tags <tag>[,<tag>,...]]
                        [--any-tags <tag>[,<tag>,...]]
                        [--not-tags <tag>[,<tag>,...]]
                        [--not-any-tags <tag>[,<tag>,...]]
```

Table 43.83. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.84. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 43.85. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.86. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.87. Optional Arguments

Value	Summary
<code>--share</code>	List networks shared between projects
<code>--agent &lt;agent-id&gt;</code>	List networks hosted by agent (id only)

Value	Summary
--tags <tag>[,<tag>,...]	List networks which have all given tag(s) (comma-separated list of tags)
--enable	List enabled networks
--not-any-tags <tag>[,<tag>,...]	Exclude networks which have any given tag(s) (comma-separated list of tags)
--name <name>	List networks according to their name
--internal	List internal networks
--long	List additional fields in output
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--any-tags <tag>[,<tag>,...]	List networks which have any given tag(s) (comma-separated list of tags)
--status <status>	List networks according to their status ( <i>active</i> , <i>BUILD</i> , <i>DOWN</i> , <i>ERROR</i> )
--provider-segment <provider-segment>	List networks according to vlan id for vlan networks or Tunnel ID for GENEVE/GRE/VXLAN networks
--no-share	List networks not shared between projects
--external	List external networks
--provider-physical-network <provider-physical-network>	List networks according to name of the physical network
--provider-network-type <provider-network-type>	List networks according to their physical mechanisms. The supported options are: flat, geneve, gre, local, vlan, vxlan.
-h, --help	Show this help message and exit
--disable	List disabled networks
--not-tags <tag>[,<tag>,...]	Exclude networks which have all given tag(s) (comma-separated list of tags)
--project <project>	List networks according to their project (name or id)

## 43.26. NETWORK LOG CREATE

Create a new network log

### Usage:

```
openstack network log create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             [--description <description>]
                             [--enable | --disable]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             [--event <event>] --resource-type
                             <resource-type> [--resource <resource>]
                             [--target <target>]
                             <name>
```

**Table 43.88. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 43.89. Positional Arguments**

Value	Summary
<name>	Name for the network log

**Table 43.90. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 43.91. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 43.92. Optional Arguments**

Value	Summary
--description <description>	Description of the network log
--enable	Enable this log (default is disabled)
--resource <resource>	Security group (name or id) for logging. you can control for logging target combination with --target option.
--project <project>	Owner's project (name or id)
--resource-type <resource-type>	Network log type(s). you can see supported type(s) with following command: \$ openstack network loggable resource list
--event <event>	An event to store with log
--target <target>	Port (name or id) for logging. you can control for logging target combination with --resource option.
-h, --help	Show this help message and exit
--disable	Disable this log
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

**Table 43.93. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.27. NETWORK LOG DELETE

Delete network log(s)

**Usage:**

■

```
openstack network log delete [-h] <network-log> [<network-log> ...]
```

Table 43.94. Positional Arguments

Value	Summary
<network-log>	Network log(s) to delete (name or id)

Table 43.95. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.28. NETWORK LOG LIST

List network logs

### Usage:

```
openstack network log list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN] [--long]
```

Table 43.96. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.97. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 43.98. Output Formatters



Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.99. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.100. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

## 43.29. NETWORK LOG SET

Set network log properties

### Usage:

```
openstack network log set [-h] [--description <description>]
                          [--enable | --disable] [--name <name>]
                          <network-log>
```

Table 43.101. Positional Arguments

Value	Summary
<network-log>	Network log to set (name or id)

Table 43.102. Optional Arguments

Value	Summary
--disable	Disable this log

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the network log
--name <name>	Name of the network log
--enable	Enable this log (default is disabled)

## 43.30. NETWORK LOG SHOW

Display network log details

### Usage:

```
openstack network log show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <network-log>
```

Table 43.103. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.104. Positional Arguments

Value	Summary
<network-log>	Network log to show (name or id)

Table 43.105. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.106. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.107. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.108. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.31. NETWORK LOGGABLE RESOURCES LIST

List supported loggable resources

### Usage:

```
openstack network loggable resources list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--sort-column SORT_COLUMN]
                                         [--long]
```

Table 43.109. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.110. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 43.111. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.112. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.113. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

## 43.32. NETWORK METER CREATE

Create network meter

### Usage:

```
openstack network meter create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--description <description>]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               [--share | --no-share]
                               <name>
```

Table 43.114. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.115. Positional Arguments

Value	Summary
<name>	Name of meter

Table 43.116. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.117. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.118. Optional Arguments

Value	Summary
--share	Share meter between projects
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--no-share	Do not share meter between projects
-h, --help	Show this help message and exit
--description <description>	Create description for meter
--project <project>	Owner's project (name or id)

Table 43.119. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.33. NETWORK METER DELETE

Delete network meter

### Usage:

```
openstack network meter delete [-h] <meter> [<meter> ...]
```

Table 43.120. Positional Arguments

Value	Summary
<meter>	Meter to delete (name or id)

Table 43.121. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.34. NETWORK METER LIST

List network meters

### Usage:

```
openstack network meter list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
```

Table 43.122. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.123. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 43.124. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.125. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.126. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 43.35. NETWORK METER RULE CREATE

Create a new meter rule

### Usage:

```

openstack network meter rule create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--project <project>]
                                     [--project-domain <project-domain>]
                                     [--exclude | --include]
                                     [--ingress | --egress]
                                     --remote-ip-prefix
                                     <remote-ip-prefix>
                                     <meter>

```

Table 43.127. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.



Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.128. Positional Arguments

Value	Summary
<code>&lt;meter&gt;</code>	Label to associate with this metering rule (name or ID)

Table 43.129. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 43.130. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.131. Optional Arguments

Value	Summary
<code>--exclude</code>	Exclude remote ip prefix from traffic count
<code>--include</code>	Include remote ip prefix from traffic count (default)
<code>--remote-ip-prefix &lt;remote-ip-prefix&gt;</code>	The remote ip prefix to associate with this rule
<code>--ingress</code>	Apply rule to incoming network traffic (default)
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>-h</code> , <code>--help</code>	Show this help message and exit

Value	Summary
--project <project>	Owner's project (name or id)
--egress	Apply rule to outgoing network traffic

Table 43.132. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.36. NETWORK METER RULE DELETE

Delete meter rule(s)

### Usage:

```
openstack network meter rule delete [-h]
                                   <meter-rule-id>
                                   [<meter-rule-id> ...]
```

Table 43.133. Positional Arguments

Value	Summary
<meter-rule-id>	Meter rule to delete (id only)

Table 43.134. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.37. NETWORK METER RULE LIST

List meter rules

### Usage:

```
openstack network meter rule list [-h] [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--sort-column SORT_COLUMN]
```

Table 43.135. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.136. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 43.137. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.138. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.139. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 43.38. NETWORK METER RULE SHOW

Display meter rules details

### Usage:

```
openstack network meter rule show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <meter-rule-id>
```

**Table 43.140. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 43.141. Positional Arguments**

Value	Summary
<meter-rule-id>	Meter rule (id only)

**Table 43.142. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 43.143. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 43.144. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

Table 43.145. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.39. NETWORK METER SHOW

Show network meter

### Usage:

```
openstack network meter show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <meter>
```

Table 43.146. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.147. Positional Arguments

Value	Summary
<meter>	Meter to display (name or id)

Table 43.148. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.149. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.150. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.151. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.40. NETWORK QOS POLICY CREATE

Create a QoS policy

### Usage:

```
openstack network qos policy create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent] [--prefix PREFIX]
                                   [--description <description>]
                                   [--share | --no-share]
                                   [--project <project>]
                                   [--project-domain <project-domain>]
                                   [--default | --no-default]
                                   <name>
```

Table 43.152. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.153. Positional Arguments

Value	Summary
<code>&lt;name&gt;</code>	Name of qos policy to create

Table 43.154. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 43.155. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.156. Optional Arguments

Value	Summary
<code>--share</code>	Make the qos policy accessible by other projects
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--no-share</code>	Make the qos policy not accessible by other projects (default)

Value	Summary
--no-default	Set this as a non-default network qos policy
--default	Set this as a default network qos policy
-h, --help	Show this help message and exit
--description <description>	Description of the qos policy
--project <project>	Owner's project (name or id)

Table 43.157. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.41. NETWORK QOS POLICY DELETE

Delete Qos Policy(s)

### Usage:

```
openstack network qos policy delete [-h]
                                   <qos-policy> [<qos-policy> ...]
```

Table 43.158. Positional Arguments

Value	Summary
<qos-policy>	Qos policy(s) to delete (name or id)

Table 43.159. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.42. NETWORK QOS POLICY LIST

List QoS policies

### Usage:



```

openstack network qos policy list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--project <project>]
                                [--project-domain <project-domain>]
                                [--share | --no-share]

```

Table 43.160. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.161. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 43.162. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.163. JSON Formatter

Value	Summary
-------	---------

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.164. Optional Arguments

Value	Summary
--share	List qos policies shared between projects
-h, --help	Show this help message and exit
--no-share	List qos policies not shared between projects
--project <project>	List qos policies according to their project (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

## 43.43. NETWORK QOS POLICY SET

Set QoS policy properties

### Usage:

```
openstack network qos policy set [-h] [--name <name>]
                                [--description <description>]
                                [--share | --no-share]
                                [--default | --no-default]
                                <qos-policy>
```

Table 43.165. Positional Arguments

Value	Summary
<qos-policy>	Qos policy to modify (name or id)

Table 43.166. Optional Arguments

Value	Summary
--share	Make the qos policy accessible by other projects
--name <name>	Set qos policy name

Value	Summary
--no-share	Make the qos policy not accessible by other projects
--no-default	Set this as a non-default network qos policy
--default	Set this as a default network qos policy
-h, --help	Show this help message and exit
--description <description>	Description of the qos policy

## 43.44. NETWORK QOS POLICY SHOW

Display QoS policy details

### Usage:

```
openstack network qos policy show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <qos-policy>
```

Table 43.167. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.168. Positional Arguments

Value	Summary
<qos-policy>	Qos policy to display (name or id)

Table 43.169. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.170. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.171. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.172. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.45. NETWORK QOS RULE CREATE

Create new Network QoS rule

### Usage:

```

openstack network qos rule create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--type <type>]
                                [--max-kbps <max-kbps>]
                                [--max-burst-kbits <max-burst-kbits>]
                                [--dscp-mark <dscp-mark>]
                                [--min-kbps <min-kbps>]
                                [--ingress | --egress]
                                <qos-policy>

```

Table 43.173. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.174. Positional Arguments

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)

Table 43.175. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.176. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.177. Optional Arguments

Value	Summary
--min-kbps <min-kbps>	Minimum guaranteed bandwidth in kbps
--dscp-mark <dscp-mark>	Dscp mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54
--max-kbps <max-kbps>	Maximum bandwidth in kbps

Value	Summary
--ingress	Ingress traffic direction from the project point of view
--type <type>	Qos rule type (dscp-marking, minimum-bandwidth, bandwidth-limit)
--max-burst-kbits <max-burst-kbits>	Maximum burst in kilobits, 0 means automatic
-h, --help	Show this help message and exit
--egress	Egress traffic direction from the project point of view

Table 43.178. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.46. NETWORK QOS RULE DELETE

Delete Network QoS rule

### Usage:

```
openstack network qos rule delete [-h] <qos-policy> <rule-id>
```

Table 43.179. Positional Arguments

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)
<rule-id>	Network qos rule to delete (id)

Table 43.180. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.47. NETWORK QOS RULE LIST

List Network QoS rules

**Usage:**

```

openstack network qos rule list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                <qos-policy>

```

**Table 43.181. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 43.182. Positional Arguments**

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)

**Table 43.183. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 43.184. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.185. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.186. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 43.48. NETWORK QOS RULE SET

Set Network QoS rule properties

### Usage:

```
openstack network qos rule set [-h] [--max-kbps <max-kbps>]
                               [--max-burst-kbits <max-burst-kbits>]
                               [--dscp-mark <dscp-mark>]
                               [--min-kbps <min-kbps>]
                               [--ingress | --egress]
                               <qos-policy> <rule-id>
```

Table 43.187. Positional Arguments

Value	Summary
<code>&lt;qos-policy&gt;</code>	Qos policy that contains the rule (name or id)
<code>&lt;rule-id&gt;</code>	Network qos rule to delete (id)

Table 43.188. Optional Arguments

Value	Summary
<code>--min-kbps &lt;min-kbps&gt;</code>	Minimum guaranteed bandwidth in kbps
<code>--dscp-mark &lt;dscp-mark&gt;</code>	Dscp mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54



Value	Summary
--max-kbps <max-kbps>	Maximum bandwidth in kbps
--ingress	Ingress traffic direction from the project point of view
--max-burst-kbits <max-burst-kbits>	Maximum burst in kilobits, 0 means automatic
-h, --help	Show this help message and exit
--egress	Egress traffic direction from the project point of view

## 43.49. NETWORK QoS RULE SHOW

Display Network QoS rule details

### Usage:

```
openstack network qos rule show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <qos-policy> <rule-id>
```

Table 43.189. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.190. Positional Arguments

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)
<rule-id>	Network qos rule to delete (id)

Table 43.191. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.192. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.193. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.194. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.50. NETWORK QOS RULE TYPE LIST

List QoS rule types

### Usage:

```

openstack network qos rule type list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]

```

Table 43.195. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.196. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 43.197. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.198. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.199. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 43.51. NETWORK QOS RULE TYPE SHOW

Show details about supported QoS rule type

**Usage:**

```

openstack network qos rule type show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     <qos-rule-type-name>

```

Table 43.200. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.201. Positional Arguments

Value	Summary
<qos-rule-type-name>	Name of qos rule type

Table 43.202. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.203. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.204. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.205. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.52. NETWORK RBAC CREATE

Create network RBAC policy

### Usage:

```
openstack network rbac create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX] --type
                               <type> --action <action>
                               (--target-project <target-project> | --target-all-projects)
                               [--target-project-domain <target-project-domain>]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               <rbac-object>
```

Table 43.206. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.207. Positional Arguments

Value	Summary
<rbac-object>	The object to which this rbac policy affects (name or ID)

**Table 43.208. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 43.209. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 43.210. Optional Arguments**

Value	Summary
--target-project-domain <target-project-domain>	Domain the target project belongs to (name or id). This can be used in case collisions between project names exist.
--target-project <target-project>	The project to which the rbac policy will be enforced (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--type <type>	Type of the object that rbac policy affects ("qos_policy" or "network")
--action <action>	Action for the rbac policy ("access_as_external" or "access_as_shared")
-h, --help	Show this help message and exit
--target-all-projects	Allow creating rbac policy for all projects.
--project <project>	The owner project (name or id)

**Table 43.211. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.53. NETWORK RBAC DELETE

Delete network RBAC policy(s)

### Usage:

```
openstack network rbac delete [-h] <rbac-policy> [<rbac-policy> ...]
```

Table 43.212. Positional Arguments

Value	Summary
<rbac-policy>	Rbac policy(s) to delete (id only)

Table 43.213. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.54. NETWORK RBAC LIST

List network RBAC policies

### Usage:

```
openstack network rbac list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN] [--type <type>]
                             [--action <action>] [--long]
```

Table 43.214. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.215. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 43.216. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.217. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.218. Optional Arguments

Value	Summary
<code>--type &lt;type&gt;</code>	List network rbac policies according to given object type ("qos_policy" or "network")
<code>-h, --help</code>	Show this help message and exit
<code>--action &lt;action&gt;</code>	List network rbac policies according to given action ("access_as_external" or "access_as_shared")



Value	Summary
--long	List additional fields in output

## 43.55. NETWORK RBAC SET

Set network RBAC policy properties

### Usage:

```
openstack network rbac set [-h] [--target-project <target-project>]
                          [--target-project-domain <target-project-domain>]
                          <rbac-policy>
```

Table 43.219. Positional Arguments

Value	Summary
<rbac-policy>	Rbac policy to be modified (id only)

Table 43.220. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--target-project-domain <target-project-domain>	Domain the target project belongs to (name or id). This can be used in case collisions between project names exist.
--target-project <target-project>	The project to which the rbac policy will be enforced (name or ID)

## 43.56. NETWORK RBAC SHOW

Display network RBAC policy details

### Usage:

```
openstack network rbac show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <rbac-policy>
```

Table 43.221. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.222. Positional Arguments

Value	Summary
<code>&lt;rbac-policy&gt;</code>	Rbac policy (id only)

Table 43.223. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 43.224. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.225. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 43.226. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.57. NETWORK SEGMENT CREATE

Create new network segment

### Usage:

```
openstack network segment create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--description <description>]
                                [--physical-network <physical-network>]
                                [--segment <segment>] --network
                                <network> --network-type
                                <network-type>
                                <name>
```

Table 43.227. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.228. Positional Arguments

Value	Summary
<name>	New network segment name

Table 43.229. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.230. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.231. Optional Arguments

Value	Summary
<code>--network-type &lt;network-type&gt;</code>	Network type of this network segment (flat, geneve, gre, local, vlan or vxlan)
<code>--segment &lt;segment&gt;</code>	Segment identifier for this network segment which is based on the network type, VLAN ID for vlan network type and tunnel ID for geneve, gre and vxlan network types
<code>--network &lt;network&gt;</code>	Network this network segment belongs to (name or id)
<code>--physical-network &lt;physical-network&gt;</code>	Physical network name of this network segment
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	Network segment description

Table 43.232. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 43.58. NETWORK SEGMENT DELETE

Delete network segment(s)

### Usage:

```
openstack network segment delete [-h]
                                <network-segment>
                                [<network-segment> ...]
```

Table 43.233. Positional Arguments

Value	Summary
<code>&lt;network-segment&gt;</code>	Network segment(s) to delete (name or id)

Table 43.234. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.59. NETWORK SEGMENT LIST

List network segments

### Usage:

```
openstack network segment list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN] [--long]
                               [--network <network>]
```

Table 43.235. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.236. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 43.237. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.238. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.239. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--network <network>	List network segments that belong to this network (name or ID)
--long	List additional fields in output

## 43.60. NETWORK SEGMENT SET

Set network segment properties

### Usage:

```
openstack network segment set [-h] [--description <description>]
                               [--name <name>]
                               <network-segment>
```

Table 43.240. Positional Arguments

Value	Summary
<network-segment>	Network segment to modify (name or id)

Table 43.241. Optional Arguments

Value	Summary
--name <name>	Set network segment name

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Set network segment description

## 43.61. NETWORK SEGMENT SHOW

Display network segment details

### Usage:

```
openstack network segment show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               <network-segment>
```

Table 43.242. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.243. Positional Arguments

Value	Summary
<network-segment>	Network segment to display (name or id)

Table 43.244. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.245. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.246. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.247. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.62. NETWORK SERVICE PROVIDER LIST

List Service Providers

### Usage:

```
openstack network service provider list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--sort-column SORT_COLUMN]
```

Table 43.248. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable



Table 43.249. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 43.250. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.251. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.252. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 43.63. NETWORK SET

Set network properties

### Usage:

```
openstack network set [-h] [--name <name>] [--enable | --disable]
                    [--share | --no-share]
                    [--description <description>] [--mtu <mtu>]
                    [--enable-port-security | --disable-port-security]
                    [--external | --internal]
                    [--default | --no-default]
                    [--qos-policy <qos-policy> | --no-qos-policy]
                    [--tag <tag>] [--no-tag]
                    [--provider-network-type <provider-network-type>]
```

```

[--provider-physical-network <provider-physical-network>]
[--provider-segment <provider-segment>]
<network>

```

Table 43.253. Positional Arguments

Value	Summary
<network>	Network to modify (name or id)

Table 43.254. Optional Arguments

Value	Summary
--share	Share the network between projects
--enable-port-security	Enable port security by default for ports created on this network
--enable	Enable network
--no-tag	Clear tags associated with the network. specify both --tag and --no-tag to overwrite current tags
--name <name>	Set network name
--provider-physical-network <provider-physical-network>	Name of the physical network over which the virtual network is implemented
--internal	Set this network as an internal network
--mtu <mtu>	Set network mtu
--description <description>	Set network description
--provider-network-type <provider-network-type>	The physical mechanism by which the virtual network is implemented. For example: flat, geneve, gre, local, vlan, vxlan.
--no-share	Do not share the network between projects
--no-qos-policy	Remove the qos policy attached to this network
--external	Set this network as an external network (external-net extension required)
--disable-port-security	Disable port security by default for ports created on this network

Value	Summary
--no-default	Do not use the network as the default external network
--default	Set the network as the default external network
--qos-policy <qos-policy>	Qos policy to attach to this network (name or id)
-h, --help	Show this help message and exit
--disable	Disable network
--provider-segment <provider-segment>	Vlan id for vlan networks or tunnel id for GENEVE/GRE/VXLAN networks
--tag <tag>	Tag to be added to the network (repeat option to set multiple tags)

## 43.64. NETWORK SHOW

Show network details

### Usage:

```
openstack network show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        <network>
```

Table 43.255. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.256. Positional Arguments

Value	Summary
<network>	Network to display (name or id)

Table 43.257. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.258. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.259. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.260. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.65. NETWORK SUPPORT LIST

List all subports for a given network trunk

### Usage:

```
openstack network support list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN] --trunk
                               <trunk>
```

Table 43.261. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 43.262. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 43.263. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.264. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 43.265. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--trunk &lt;trunk&gt;</code>	List subports belonging to this trunk (name or id)

## 43.66. NETWORK TRUNK CREATE

Create a network trunk for a given project

### Usage:

```
openstack network trunk create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--description <description>]
                               --parent-port <parent-port>
                               [--subport <port=,segmentation-type=,segmentation-id=>]
                               [--enable | --disable]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               <name>
```

Table 43.266. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.267. Positional Arguments

Value	Summary
<name>	Name of the trunk to create

Table 43.268. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.269. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.270. Optional Arguments

Value	Summary
--description <description>	A description of the trunk
--enable	Enable trunk (default)
--subport <port=,segmentation-type=,segmentation-id=>	Subport to add. subport is of form <i>port=&lt;name or id&gt;,segmentation-type=,segmentation-ID=</i> (--subport) option can be repeated
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--parent-port <parent-port>	Parent port belonging to this trunk (name or id)
-h, --help	Show this help message and exit
--disable	Disable trunk
--project <project>	Owner's project (name or id)

Table 43.271. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.67. NETWORK TRUNK DELETE

Delete a given network trunk

### Usage:

```
openstack network trunk delete [-h] <trunk> [<trunk> ...]
```

Table 43.272. Positional Arguments

Value	Summary
<trunk>	Trunk(s) to delete (name or id)

Table 43.273. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 43.68. NETWORK TRUNK LIST

List all network trunks

### Usage:

```
openstack network trunk list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN] [--long]
```

Table 43.274. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.275. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 43.276. Output Formatters



Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.277. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.278. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

## 43.69. NETWORK TRUNK SET

Set network trunk properties

### Usage:

```
openstack network trunk set [-h] [--name <name>]
                             [--description <description>]
                             [--subport <port=,segmentation-type=,segmentation-id=>]
                             [--enable | --disable]
                             <trunk>
```

Table 43.279. Positional Arguments

Value	Summary
<trunk>	Trunk to modify (name or id)

Table 43.280. Optional Arguments

Value	Summary
--description <description>	A description of the trunk
--enable	Enable trunk
--name <name>	Set trunk name
--subport <port=,segmentation-type=,segmentation-id=>	Subport to add. subport is of form <i>port=&lt;name or id&gt;,segmentation-type=,segmentation-ID=(--subport)</i> option can be repeated
-h, --help	Show this help message and exit
--disable	Disable trunk

## 43.70. NETWORK TRUNK SHOW

Show information of a given network trunk

### Usage:

```
openstack network trunk show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <trunk>
```

Table 43.281. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 43.282. Positional Arguments

Value	Summary
<trunk>	Trunk to display (name or id)

Table 43.283. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.284. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.285. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.286. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 43.71. NETWORK TRUNK UNSET

Unset subports from a given network trunk

### Usage:

```
openstack network trunk unset [-h] --subport <subport> <trunk>
```

Table 43.287. Positional Arguments

Value	Summary
<trunk>	Unset subports from this trunk (name or id)

Table 43.288. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--subport <subport>	Subport to delete (name or id of the port) (--subport) option can be repeated

## 43.72. NETWORK UNSET

Unset network properties

### Usage:

```
openstack network unset [-h] [--tag <tag> | --all-tag] <network>
```

Table 43.289. Positional Arguments

Value	Summary
<network>	Network to modify (name or id)

Table 43.290. Optional Arguments

Value	Summary
--all-tag	Clear all tags associated with the network
-h, --help	Show this help message and exit
--tag <tag>	Tag to be removed from the network (repeat option to remove multiple tags)

## CHAPTER 44. OBJECT

This chapter describes the commands under the **object** command.

### 44.1. OBJECT CREATE

Upload object to container

#### Usage:

```
openstack object create [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--name <name>]
                        <container> <filename> [<filename> ...]
```

Table 44.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 44.2. Positional Arguments

Value	Summary
<filename>	Local filename(s) to upload
<container>	Container for new object

Table 44.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 44.4. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 44.5. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 44.6. Optional Arguments

Value	Summary
--name <name>	Upload a file and rename it. can only be used when uploading a single object
-h, --help	Show this help message and exit

## 44.2. OBJECT DELETE

Delete object from container

### Usage:

```
openstack object delete [-h] <container> <object> [<object> ...]
```

Table 44.7. Positional Arguments

Value	Summary
<object>	Object(s) to delete
<container>	Delete object(s) from <container>

Table 44.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 44.3. OBJECT LIST

List objects

#### Usage:

```
openstack object list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
  [--max-width <integer>] [--fit-width]
  [--print-empty] [--noindent]
  [--quote {all,minimal,none,nonnumeric}]
  [--sort-column SORT_COLUMN] [--prefix <prefix>]
  [--delimiter <delimiter>] [--marker <marker>]
  [--end-marker <end-marker>]
  [--limit <num-objects>] [--long] [--all]
  <container>
```

Table 44.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 44.10. Positional Arguments

Value	Summary
<container>	Container to list

Table 44.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 44.12. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 44.13. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 44.14. Optional Arguments

Value	Summary
--marker <marker>	Anchor for paging
--long	List additional fields in output
--delimiter <delimiter>	Roll up items with <delimiter>
--limit <num-objects>	Limit the number of objects returned
--end-marker <end-marker>	End anchor for paging
-h, --help	Show this help message and exit
--prefix <prefix>	Filter list using <prefix>
--all	List all objects in container (default is 10000)

## 44.4. OBJECT SAVE

Save object locally

### Usage:

```
openstack object save [-h] [--file <filename>] <container> <object>
```

Table 44.15. Positional Arguments



Value	Summary
<object>	Object to save
<container>	Download <object> from <container>

Table 44.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--file <filename>	Destination filename (defaults to object name); using - as the filename will print the file to stdout

## 44.5. OBJECT SET

Set object properties

**Usage:**

```
openstack object set [-h] --property <key=value> <container> <object>
```

Table 44.17. Positional Arguments

Value	Summary
<object>	Object to modify
<container>	Modify <object> from <container>

Table 44.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Set a property on this object (repeat option to set multiple properties)

## 44.6. OBJECT SHOW

Display object details

**Usage:**

```
openstack object show [-h] [-f {json,shell,table,value,yaml}]
```

```
[-c COLUMN] [--max-width <integer>] [--fit-width]
[--print-empty] [--noindent] [--prefix PREFIX]
<container> <object>
```

Table 44.19. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 44.20. Positional Arguments

Value	Summary
<object>	Object to display
<container>	Display <object> from <container>

Table 44.21. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 44.22. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 44.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 44.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 44.7. OBJECT STORE ACCOUNT SET

Set account properties

### Usage:

```
openstack object store account set [-h] --property <key=value>
```

Table 44.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Set a property on this account (repeat option to set multiple properties)

## 44.8. OBJECT STORE ACCOUNT SHOW

Display account details

### Usage:

```
openstack object store account show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
```

Table 44.26. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 44.27. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 44.28. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 44.29. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 44.30. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 44.9. OBJECT STORE ACCOUNT UNSET

Unset account properties

### Usage:

```
openstack object store account unset [-h] --property <key>
```

**Table 44.31. Optional Arguments**

Value	Summary
--property <key>	Property to remove from account (repeat option to remove multiple properties)
-h, --help	Show this help message and exit

## 44.10. OBJECT UNSET

Unset object properties

### Usage:

```
openstack object unset [-h] --property <key> <container> <object>
```

Table 44.32. Positional Arguments

Value	Summary
<object>	Object to modify
<container>	Modify <object> from <container>

Table 44.33. Optional Arguments

Value	Summary
--property <key>	Property to remove from object (repeat option to remove multiple properties)
-h, --help	Show this help message and exit

## CHAPTER 45. ORCHESTRATION

This chapter describes the commands under the **orchestration** command.

### 45.1. ORCHESTRATION BUILD INFO

Retrieve build information.

#### Usage:

```
openstack orchestration build info [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
```

Table 45.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 45.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 45.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 45.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 45.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 45.2. ORCHESTRATION RESOURCE TYPE LIST

List resource types.

### Usage:

```
openstack orchestration resource type list [-h]
      [-f {csv,json,table,value,yaml}]
      [-c COLUMN]
      [--max-width <integer>]
      [--fit-width]
      [--print-empty] [--noindent]
      [--quote {all,minimal,none,nonnumeric}]
      [--sort-column SORT_COLUMN]
      [--filter <key=value>]
      [--long]
```

Table 45.6. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 45.7. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 45.8. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 45.9. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 45.10. Optional Arguments

Value	Summary
--filter <key=value>	Filter parameters to apply on returned resource types. This can be specified multiple times. It can be any of name, version or support_status
-h, --help	Show this help message and exit
--long	Show resource types with corresponding description of each resource type.

## 45.3. ORCHESTRATION RESOURCE TYPE SHOW

Show details and optionally generate a template for a resource type.

### Usage:

```

openstack orchestration resource type show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty] [--noindent]
                                         [--prefix PREFIX]
                                         [--template-type <template-type>]
                                         [--long]
                                         <resource-type>

```



Table 45.11. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 45.12. Positional Arguments

Value	Summary
<code>&lt;resource-type&gt;</code>	Resource type to show details for

Table 45.13. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to <code>yaml</code>
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 45.14. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 45.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--template-type &lt;template-type&gt;</code>	Optional template type to generate, <code>hot</code> or <code>cfm</code>
<code>--long</code>	Show resource type with corresponding description.

Table 45.16. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 45.4. ORCHESTRATION SERVICE LIST

List the Heat engines.

### Usage:

```
openstack orchestration service list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
```

Table 45.17. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 45.18. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 45.19. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 45.20. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 45.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 45.5. ORCHESTRATION TEMPLATE FUNCTION LIST

List the available functions.

### Usage:

```

openstack orchestration template function list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width]
                                     [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--with_conditions]
                                     <template-version>

```

Table 45.22. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 45.23. Positional Arguments

Value	Summary
<code>&lt;template-version&gt;</code>	Template version to get the functions for

Table 45.24. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 45.25. Output Formatters

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 45.26. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 45.27. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--with_conditions</code>	Show condition functions for template.

## 45.6. ORCHESTRATION TEMPLATE VALIDATE

Validate a template

### Usage:

```
openstack orchestration template validate [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent]
                                         [--prefix PREFIX]
                                         [-e <environment>]
                                         [--show-nested]
                                         [--parameter <key=value>]
                                         [--ignore-errors <error1,error2,...>]
                                         -t <template>
```

**Table 45.28. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 45.29. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 45.30. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 45.31. Optional Arguments**

Value	Summary
<code>--ignore-errors &lt;error1,error2,...&gt;</code>	List of heat errors to ignore
<code>-e &lt;environment&gt;, --environment &lt;environment&gt;</code>	Path to the environment. can be specified multiple times
<code>-t &lt;template&gt;, --template &lt;template&gt;</code>	Path to the template
<code>--parameter &lt;key=value&gt;</code>	Parameter values used to create the stack. this can be specified multiple times
<code>-h, --help</code>	Show this help message and exit
<code>--show-nested</code>	Resolve parameters from nested templates as well

Table 45.32. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 45.7. ORCHESTRATION TEMPLATE VERSION LIST

List the available template versions.

### Usage:

```

openstack orchestration template version list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--noindent]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--sort-column SORT_COLUMN]

```

Table 45.33. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 45.34. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 45.35. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 45.36. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 45.37. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## CHAPTER 46. OVERCLOUD

This chapter describes the commands under the **overcloud** command.

### 46.1. OVERCLOUD CEPH-UPGRADE RUN

Run heat stack update for overcloud nodes to run Ceph upgrade.

#### Usage:

```

openstack overcloud ceph-upgrade run [--templates [TEMPLATES]]
    [--stack STACK]
    [--timeout <TIMEOUT>]
    [--control-scale CONTROL_SCALE]
    [--compute-scale COMPUTE_SCALE]
    [--ceph-storage-scale CEPH_STORAGE_SCALE]
    [--block-storage-scale BLOCK_STORAGE_SCALE]
    [--swift-storage-scale SWIFT_STORAGE_SCALE]
    [--control-flavor CONTROL_FLAVOR]
    [--compute-flavor COMPUTE_FLAVOR]
    [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
    [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
    [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup]
    [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]
    [--dry-run] [--run-validations]
    [--skip-postconfig]
    [--force-postconfig]
    [--skip-deploy-identifier]
    [--rhel-reg]
    [--reg-method {satellite,portal}]
    [--reg-org REG_ORG] [--reg-force]
    [--reg-sat-url REG_SAT_URL]
    [--reg-activation-key REG_ACTIVATION_KEY]
    [--answers-file ANSWERS_FILE]
    [--disable-password-generation]
    [--deployed-server]
    [--config-download]
    [--output-dir OUTPUT_DIR]
    [--ceph-ansible-playbook CEPH_ANSIBLE_PLAYBOOK]

```

Table 46.1. Optional Arguments



Value	Summary
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data.yaml</code> in the <code>--templates</code> directory
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudSwiftStorageFlavor</code> . It will be removed after the "P" release.)
<code>--ceph-storage-scale CEPH_STORAGE_SCALE</code>	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter <code>CephStorageCount</code> . It will be removed after the "P" release.)
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory
<code>--environment-file &lt;HEAT ENVIRONMENT FILE&gt;, -e &lt;HEAT ENVIRONMENT FILE&gt;</code>	Environment files to be passed to the <code>heat stack-create</code> or <code>heat stack-update</code> command. (Can be specified more than once.)
<code>--disable-validations</code>	Disable the pre-deployment validations entirely. these validations are the built-in pre-deployment validations. To enable external validations from <code>tripleo-validations</code> , use the <code>--run-validations</code> flag.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes. (deprecated. use an environment file and set the parameter <code>ControllerCount</code> . It will be removed after the "P" release.)

Value	Summary
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used ( <code>/var/lib/mistral/&lt;execution id&gt;</code> ).
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter <code>BlockStorageCount</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--config-download</code>	Run deployment via <code>config-download</code> mechanism
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--ceph-ansible-playbook CEPH_ANSIBLE_PLAYBOOK</code>	Path to switch the ceph-ansible playbook used for update.
<code>--disable-password-generation</code>	Disable password generation.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location

Value	Summary
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--stack STACK</code>	Stack name to create or update
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes. (deprecated. use an environment file and set the parameter ComputeCount. It will be removed after the "P" release.)
<code>--environment-directory &lt;HEAT ENVIRONMENT DIRECTORY&gt;</code>	Environment file directories that are automatically added to the heat stack-create or heat stack-update commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter OvercloudControlFlavor. It will be removed after the "P" release.)
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--timeout &lt;TIMEOUT&gt;, -t &lt;TIMEOUT&gt;</code>	Deployment timeout in minutes.
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter OvercloudCephStorageFlavor. It will be removed after the "P" release.)
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default roles_data.yaml in the --templates directory
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.

Value	Summary
-------	---------

Table 46.2. Registration Parameters

Value	Summary
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.

## 46.2. OVERCLOUD CONFIG DOWNLOAD

Download Overcloud Config

### Usage:

```
openstack overcloud config download [-h] [--name NAME]
                                     [--config-dir CONFIG_DIR]
                                     [--config-type CONFIG_TYPE]
```

Table 46.3. Optional Arguments

Value	Summary
<code>--config-type CONFIG_TYPE</code>	Type of object config to be extract from the deployment, defaults to all keys available
<code>-h, --help</code>	Show this help message and exit
<code>--config-dir CONFIG_DIR</code>	The directory where the configuration files will be pushed
<code>--name NAME</code>	The name of the plan, which is used for the object storage container, workflow environment and orchestration stack names.

## 46.3. OVERCLOUD CONTAINER IMAGE BUILD

Build overcloud container images with kolla-build.

### Usage:

```
openstack overcloud container image build [-h] --config-file <yaml
config file>
--kolla-config-file <config
file> [--list-images]
[--list-dependencies]
```

Table 46.4. Optional Arguments

Value	Summary
--kolla-config-file <config file>	Path to a kolla config file to use. multiple config files can be specified, with values in later files taking precedence. By default, tripleo kolla conf file /usr/share/tripleo-common/container-images/tripleo_kolla_config_overrides.conf is added.
--list-images	Show the images which would be built instead of building them.
-h, --help	Show this help message and exit
--list-dependencies	Show the image build dependencies instead of building them.
--config-file <yaml config file>	Yaml config file specifying the images to build. may be specified multiple times. Order is preserved, and later files will override some options in previous files. Other options will append.

## 46.4. OVERCLOUD CONTAINER IMAGE PREPARE

Generate files defining the images, tags and registry.

### Usage:

```
openstack overcloud container image prepare [-h]
[--template-file <yaml template file>]
[--pull-source <location>]
[--push-destination <location>]
[--tag <tag>]
[--tag-from-label <image label>]
[--namespace <namespace>]
[--prefix <prefix>]
[--suffix <suffix>]
[--set <variable=value>]
[--exclude <regex>]
```

```

[--images-file <file path>]
[--output-images-file <file path>]
[--service-environment-file <file path>]
[--environment-file <file path>]
[--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
[--env-file <file path>]
[--output-env-file <file path>]
[--roles-file ROLES_FILE]

```

Table 46.5. Optional Arguments

Value	Summary
--environment-directory <HEAT ENVIRONMENT DIRECTORY>	Environment file directories that are automatically added to the update command. Entries will be filtered to only contain images used by containerized services. Can be specified more than once. Files in directories are loaded in ascending sort order.
--pull-source <location>	Location of image registry to pull images from. (DEPRECATED. Include the registry in --namespace)
--env-file <file path>	File to write heat environment file which specifies all image parameters. Any existing file will be overwritten.(DEPRECATED. Use --output-env-file instead)
--output-images-file <file path>	File to write resulting image entries to, as well as stdout. Any existing file will be overwritten.
--suffix <suffix>	Override the default name suffix substitution. Default:
--set <variable=value>	Set the value of a variable in the template, even if it has no dedicated argument such as "--suffix".
--prefix <prefix>	Override the default name prefix substitution. Default: openstack-
--tag-from-label <image label>	Use the value of the specified label to discover the versioned tag.
--push-destination <location>	Location of image registry to push images to. if specified, a push_destination will be set for every image entry.
--exclude <regex>	Pattern to match against resulting imagename entries to exclude from the final output. Can be specified multiple times.

Value	Summary
<code>--images-file &lt;file path&gt;</code>	File to write resulting image entries to, as well as stdout. Any existing file will be overwritten. (DEPRECATED. Use <code>--output-images-file</code> instead)
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code>
<code>--template-file &lt;yaml template file&gt;</code>	Yaml template file which the images config file will be built from. Default: <code>/usr/share/tripleo-common/container-images/overcloud_containers.yaml.j2</code>
<code>--output-env-file &lt;file path&gt;</code>	File to write heat environment file which specifies all image parameters. Any existing file will be overwritten.
<code>-h, --help</code>	Show this help message and exit
<code>--service-environment-file &lt;file path&gt;</code>	Environment files specifying which services are containerized. Entries will be filtered to only contain images used by containerized services. (Can be specified more than once.)(DEPRECATED. Use <code>--environment-file</code> instead)
<code>--environment-file &lt;file path&gt;, -e &lt;file path&gt;</code>	Environment files specifying which services are containerized. Entries will be filtered to only contain images used by containerized services. (Can be specified more than once.)
<code>--namespace &lt;namespace&gt;</code>	Override the default namespace substitution. Default: <code>registry.access.redhat.com/rhosp13</code>
<code>--tag &lt;tag&gt;</code>	Override the default tag substitution. if <code>--tag-from-label</code> is specified, start discovery with this tag. Default: <code>latest</code>

## 46.5. OVERCLOUD CONTAINER IMAGE TAG DISCOVER

Discover the versioned tag for an image.

### Usage:

```
openstack overcloud container image tag discover [-h] --image
          <container image>
          [--tag-from-label <image label>]
```

Table 46.6. Optional Arguments

Value	Summary
<code>--tag-from-label &lt;image label&gt;</code>	Use the value of the specified label to discover the tag.
<code>-h, --help</code>	Show this help message and exit
<code>--image &lt;container image&gt;</code>	Fully qualified name of the image to discover the tag for (Including registry and stable tag).

## 46.6. OVERCLOUD CONTAINER IMAGE UPLOAD

Push overcloud container images to registries.

### Usage:

```
openstack overcloud container image upload [-h] --config-file <yaml
config file>
```

Table 46.7. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--config-file &lt;yaml config file&gt;</code>	Yaml config file specifying the image build. may be specified multiple times. Order is preserved, and later files will override some options in previous files. Other options will append.

## 46.7. OVERCLOUD CREDENTIALS

Create the overcloudrc file

### Usage:

```
openstack overcloud credentials [-h] [--directory [DIRECTORY]] plan
```

Table 46.8. Positional Arguments

Value	Summary
<code>plan</code>	The name of the plan you want to create rc files for.

Table 46.9. Optional Arguments



Value	Summary
-h, --help	Show this help message and exit
--directory [DIRECTORY]	The directory to create the rc files. defaults to the current directory.

## 46.8. OVERCLOUD DELETE

Delete overcloud stack and plan

### Usage:

```
openstack overcloud delete [-h] [-y] [stack]
```

Table 46.10. Positional Arguments

Value	Summary
stack	Name or id of heat stack to delete(default=env: OVERCLOUD_STACK_NAME)

Table 46.11. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-y, --yes	Skip yes/no prompt (assume yes).

## 46.9. OVERCLOUD DEPLOY

Deploy Overcloud

### Usage:

```
openstack overcloud deploy [--templates [TEMPLATES]] [--stack STACK]
                             [--timeout <TIMEOUT>]
                             [--control-scale CONTROL_SCALE]
                             [--compute-scale COMPUTE_SCALE]
                             [--ceph-storage-scale CEPH_STORAGE_SCALE]
                             [--block-storage-scale BLOCK_STORAGE_SCALE]
                             [--swift-storage-scale SWIFT_STORAGE_SCALE]
                             [--control-flavor CONTROL_FLAVOR]
                             [--compute-flavor COMPUTE_FLAVOR]
                             [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
                             [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
                             [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
```

```

[--libvirt-type {kvm,qemu}]
[--ntp-server NTP_SERVER]
[--no-proxy NO_PROXY]
[--overcloud-ssh-user OVERCLOUD_SSH_USER]
[--overcloud-ssh-key OVERCLOUD_SSH_KEY]
[--environment-file <HEAT ENVIRONMENT FILE>]
[--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
[--roles-file ROLES_FILE]
[--networks-file NETWORKS_FILE]
[--plan-environment-file PLAN_ENVIRONMENT_FILE]
[--no-cleanup] [--update-plan-only]
[--validation-errors-nonfatal]
[--validation-warnings-fatal]
[--disable-validations] [--dry-run]
[--run-validations] [--skip-postconfig]
[--force-postconfig]
[--skip-deploy-identifier] [--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG] [--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server] [--config-download]
[--output-dir OUTPUT_DIR]

```

Table 46.12. Optional Arguments

Value	Summary
--networks-file NETWORKS_FILE, -n NETWORKS_FILE	Networks file, overrides the default network_data.yaml in the --templates directory
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudSwiftStorageFlavor. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)
--no-proxy NO_PROXY	A comma separated list of hosts that should not be proxied.
--block-storage-flavor BLOCK_STORAGE_FLAVOR	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudBlockStorageFlavor. It will be removed after the "P" release.)

Value	Summary
--deployed-server	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the --disable-validations.
--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE	Plan environment file, overrides the default plan-environment.yaml in the --templates directory
--environment-file <HEAT ENVIRONMENT FILE>, -e <HEAT ENVIRONMENT FILE>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
--disable-validations	Disable the pre-deployment validations entirely. these validations are the built-in pre-deployment validations. To enable external validations from tripleo-validations, use the --run-validations flag.
--skip-postconfig	Skip the overcloud post-deployment configuration.
--answers-file ANSWERS_FILE	Path to a yaml file with arguments and parameters.
--control-scale CONTROL_SCALE	New number of control nodes. (deprecated. use an environment file and set the parameter ControllerCount. It will be removed after the "P" release.)
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to overcloud nodes
--output-dir OUTPUT_DIR	Directory to use for saved output when using --config-download. The directory must be writeable by the mistral user. When not specified, the default server side value will be used (/var/lib/mistral/<execution id>).
--block-storage-scale BLOCK_STORAGE_SCALE	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter BlockStorageCount. It will be removed after the "P" release.)
--compute-flavor COMPUTE_FLAVOR	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter OvercloudComputeFlavor. It will be removed after the "P" release.)
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes. (deprecated. use an environment file and set the parameter ObjectStorageCount. It will be removed after the "P" release.)

Value	Summary
<code>--config-download</code>	Run deployment via config-download mechanism
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the DeployIdentifier parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--disable-password-generation</code>	Disable password generation.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--stack STACK</code>	Stack name to create or update
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes. (deprecated. use an environment file and set the parameter ComputeCount. It will be removed after the "P" release.)
<code>--environment-directory &lt;HEAT ENVIRONMENT DIRECTORY&gt;</code>	Environment file directories that are automatically added to the heat stack-create or heat stack-update commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.

Value	Summary
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--timeout &lt;TIMEOUT&gt;, -t &lt;TIMEOUT&gt;</code>	Deployment timeout in minutes.
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.

Table 46.13. Registration Parameters

Value	Summary
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.

## 46.10. OVERCLOUD EXECUTE

Execute a Heat software config on the servers.

**Usage:**

```
openstack overcloud execute [-h] [-s SERVER_NAME] [-g GROUP] file_in
```

**Table 46.14. Positional Arguments**

Value	Summary
file_in	None

**Table 46.15. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
-s SERVER_NAME, --server_name SERVER_NAME	Nova server_name or partial name to match.
-g GROUP, --group GROUP	Heat software config "group" type. defaults to "script".

## 46.11. OVERCLOUD FAILURES

Get deployment failures

**Usage:**

```
openstack overcloud failures [-h] [--plan PLAN]
```

**Table 46.16. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--plan PLAN, --stack PLAN	Name of the stack/plan. (default: overcloud)

## 46.12. OVERCLOUD FFWD-UPGRADE CONVERGE

Converge the fast-forward upgrade on Overcloud Nodes This is the last step for completion of a fast forward upgrade. The main task is updating the plan and stack to unblock future stack updates. For the ffwd upgrade workflow we have set and used the config-download Software/Structured Deployment for the OS::TripleO and OS::Heat resources. This unsets those back to their default values.

**Usage:**

```
openstack overcloud ffwd-upgrade converge [--templates [TEMPLATES]]
                                         [--stack STACK]
```

```

[--timeout <TIMEOUT>]
[--control-scale CONTROL_SCALE]
[--compute-scale COMPUTE_SCALE]
[--ceph-storage-scale CEPH_STORAGE_SCALE]
[--block-storage-scale BLOCK_STORAGE_SCALE]
[--swift-storage-scale SWIFT_STORAGE_SCALE]
[--control-flavor CONTROL_FLAVOR]
[--compute-flavor COMPUTE_FLAVOR]
[--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
[--block-storage-flavor BLOCK_STORAGE_FLAVOR]
[--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
[--libvirt-type {kvm,qemu}]
[--ntp-server NTP_SERVER]
[--no-proxy NO_PROXY]
[--overcloud-ssh-user OVERCLOUD_SSH_USER]
[--overcloud-ssh-key OVERCLOUD_SSH_KEY]
[--environment-file <HEAT ENVIRONMENT FILE>]
[--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
[--roles-file ROLES_FILE]
[--networks-file NETWORKS_FILE]
[--plan-environment-file PLAN_ENVIRONMENT_FILE]
[--no-cleanup]
[--update-plan-only]
[--validation-errors-nonfatal]
[--validation-warnings-fatal]
[--disable-validations]
[--dry-run]
[--run-validations]
[--skip-postconfig]
[--force-postconfig]
[--skip-deploy-identifier]
[--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG]
[--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--output-dir OUTPUT_DIR]
[--yes]

```

Table 46.17. Optional Arguments

Value	Summary
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data.yaml</code> in the <code>--templates</code> directory

Value	Summary
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudSwiftStorageFlavor</code> . It will be removed after the "P" release.)
<code>--ceph-storage-scale CEPH_STORAGE_SCALE</code>	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter <code>CephStorageCount</code> . It will be removed after the "P" release.)
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory
<code>--environment-file &lt;HEAT ENVIRONMENT FILE&gt;, -e &lt;HEAT ENVIRONMENT FILE&gt;</code>	Environment files to be passed to the <code>heat stack-create</code> or <code>heat stack-update</code> command. (Can be specified more than once.)
<code>--disable-validations</code>	Disable the pre-deployment validations entirely. these validations are the built-in pre-deployment validations. To enable external validations from <code>tripleo-validations</code> , use the <code>--run-validations</code> flag.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--yes</code>	Use <code>--yes</code> to skip the confirmation required before any <code>ffwd-upgrade</code> operation. Use this with caution!
<code>--answers-file ANSWERS_FILE</code>	Path to a yml file with arguments and parameters.
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes. (deprecated. use an environment file and set the parameter <code>ControllerCount</code> . It will be removed after the "P" release.)



Value	Summary
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used ( <code>/var/lib/mistral/&lt;execution id&gt;</code> ).
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter <code>BlockStorageCount</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--config-download</code>	Run deployment via config-download mechanism
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--disable-password-generation</code>	Disable password generation.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.

Value	Summary
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--stack STACK</code>	Stack name to create or update
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes. (deprecated. use an environment file and set the parameter ComputeCount. It will be removed after the "P" release.)
<code>--environment-directory &lt;HEAT ENVIRONMENT DIRECTORY&gt;</code>	Environment file directories that are automatically added to the heat stack-create or heat stack-update commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter OvercloudControlFlavor. It will be removed after the "P" release.)
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--timeout &lt;TIMEOUT&gt;, -t &lt;TIMEOUT&gt;</code>	Deployment timeout in minutes.
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter OvercloudCephStorageFlavor. It will be removed after the "P" release.)
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default roles_data.yaml in the --templates directory
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.

Table 46.18. Registration Parameters

Value	Summary
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.

### 46.13. OVERCLOUD FFWD-UPGRADE PREPARE

Run heat stack update for overcloud nodes to refresh heat stack outputs. The heat stack outputs are what we use later on to generate ansible playbooks which deliver the ffwd upgrade workflow. This is used as the first step for a fast forward upgrade of your overcloud.

#### Usage:

```

openstack overcloud ffwd-upgrade prepare [--templates [TEMPLATES]]
    [--stack STACK]
    [--timeout <TIMEOUT>]
    [--control-scale CONTROL_SCALE]
    [--compute-scale COMPUTE_SCALE]
    [--ceph-storage-scale CEPH_STORAGE_SCALE]
    [--block-storage-scale BLOCK_STORAGE_SCALE]
    [--swift-storage-scale SWIFT_STORAGE_SCALE]
    [--control-flavor CONTROL_FLAVOR]
    [--compute-flavor COMPUTE_FLAVOR]
    [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
    [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
    [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup]
    [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]

```

```

[--dry-run]
[--run-validations]
[--skip-postconfig]
[--force-postconfig]
[--skip-deploy-identifier]
[--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG]
[--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--output-dir OUTPUT_DIR]
[--yes]
[--ceph-ansible-playbook CEPH_ANSIBLE_PLAYBOOK]

```

Table 46.19. Optional Arguments

Value	Summary
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data.yaml</code> in the <code>--templates</code> directory
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudSwiftStorageFlavor</code> . It will be removed after the "P" release.)
<code>--ceph-storage-scale CEPH_STORAGE_SCALE</code>	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter <code>CephStorageCount</code> . It will be removed after the "P" release.)
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory

Value	Summary
<code>--environment-file &lt;HEAT ENVIRONMENT FILE&gt;, -e &lt;HEAT ENVIRONMENT FILE&gt;</code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--disable-validations</code>	Disable the pre-deployment validations entirely. these validations are the built-in pre-deployment validations. To enable external validations from tripleo-validations, use the <code>--run-validations</code> flag.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--yes</code>	Use <code>--yes</code> to skip the confirmation required before any ffwd-upgrade operation. Use this with caution!
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes. (deprecated. use an environment file and set the parameter <code>ControllerCount</code> . It will be removed after the "P" release.)
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used ( <code>/var/lib/mistral/&lt;execution id&gt;</code> ).
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter <code>BlockStorageCount</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--config-download</code>	Run deployment via config-download mechanism
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.

Value	Summary
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--ceph-ansible-playbook</code> <code>CEPH_ANSIBLE_PLAYBOOK</code>	Path to switch the ceph-ansible playbook used for upgrade.
<code>--disable-password-generation</code>	Disable password generation.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--stack STACK</code>	Stack name to create or update
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes. (deprecated. use an environment file and set the parameter <code>ComputeCount</code> . It will be removed after the "P" release.)
<code>--environment-directory &lt;HEAT ENVIRONMENT DIRECTORY&gt;</code>	Environment file directories that are automatically added to the <code>heat stack-create</code> or <code>heat stack-update</code> commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.

Value	Summary
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--timeout &lt;TIMEOUT&gt;, -t &lt;TIMEOUT&gt;</code>	Deployment timeout in minutes.
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.

Table 46.20. Registration Parameters

Value	Summary
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.

## 46.14. OVERCLOUD FFWD-UPGRADE RUN

Run fast forward upgrade ansible playbooks on Overcloud nodes This will run the `fast_forward_upgrade_playbook.yaml` ansible playbook. This playbook was generated when you ran the

`ffwd-upgrade prepare` command. Running `'ffwd-upgrade run'` is the second step in the `ffwd` upgrade workflow.

### Usage:

```
openstack overcloud ffwd-upgrade run [-h] [--yes]
                                     [--static-inventory STATIC_INVENTORY]
                                     [--ssh-user SSH_USER]
                                     [--stack STACK]
```

Table 46.21. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--stack STACK</code>	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
<code>--static-inventory STATIC_INVENTORY</code>	Path to an existing ansible inventory to use. if not specified, one will be generated in <code>~/tripleo-ansible-inventory.yaml</code>
<code>--yes</code>	Use <code>--yes</code> to skip the confirmation required before any <code>ffwd-upgrade</code> operation. Use this with caution!
<code>--ssh-user SSH_USER</code>	The ssh user name for connecting to the overcloud nodes.

## 46.15. OVERCLOUD GENERATE FENCING

Generate fencing parameters

### Usage:

```
openstack overcloud generate fencing [-h] [-a FENCE_ACTION]
                                     [--delay DELAY] [--ipmi-lanplus]
                                     [--ipmi-no-lanplus]
                                     [--ipmi-cipher IPMI_CIPHER]
                                     [--ipmi-level IPMI_LEVEL]
                                     [--output OUTPUT]
                                     instackenv
```

Table 46.22. Positional Arguments

Value	Summary
<code>instackenv</code>	None

Table 46.23. Optional Arguments



Value	Summary
--ipmi-no-lanplus	Do not use lanplus. defaults to: false
--output OUTPUT	Write parameters to a file
--delay DELAY	Wait delay seconds before fencing is started
--ipmi-lanplus	Deprecated: this is the default.
-a FENCE_ACTION, --action FENCE_ACTION	Deprecated: this option is ignored.
--ipmi-level IPMI_LEVEL	Privileged level on ipmi device. valid levels: callback, user, operator, administrator.
--ipmi-cipher IPMI_CIPHER	Ciphersuite to use (same as ipmitool -c parameter.
-h, --help	Show this help message and exit

## 46.16. OVERCLOUD IMAGE BUILD

Build images for the overcloud

### Usage:

```
openstack overcloud image build [-h] [--config-file <yaml config file>]
                                [--image-name <image name>] [--no-skip]
                                [--output-directory OUTPUT_DIRECTORY]
```

Table 46.24. Optional Arguments

Value	Summary
--no-skip	Skip build if cached image exists.
-h, --help	Show this help message and exit
--config-file <yaml config file>	Yaml config file specifying the image build. may be specified multiple times. Order is preserved, and later files will override some options in previous files. Other options will append.
--image-name <image name>	Name of image to build. may be specified multiple times. If unspecified, will build all images in given YAML files.
--output-directory OUTPUT_DIRECTORY	Output directory for images. defaults to \$TRIPLEO_ROOT, or current directory if unset.

## 46.17. OVERCLOUD IMAGE UPLOAD

Create overcloud glance images from existing image files.

### Usage:

```
openstack overcloud image upload [-h] [--image-path IMAGE_PATH]
                                [--os-image-name OS_IMAGE_NAME]
                                [--ironic-python-agent-name IPA_NAME]
                                [--http-boot HTTP_BOOT]
                                [--update-existing] [--whole-disk]
                                [--architecture ARCHITECTURE]
                                [--platform PLATFORM]
```

Table 46.25. Optional Arguments

Value	Summary
--platform PLATFORM	Platform type for these images. platform is a sub-category of architecture. For example you may have generic images for x86_64 but offer images specific to SandyBridge (SNB).
--update-existing	Update images if already exist
--os-image-name OS_IMAGE_NAME	Openstack disk image filename
--image-path IMAGE_PATH	Path to directory containing image files
--http-boot HTTP_BOOT	Root directory for the introspection image
--whole-disk	When set, the overcloud-full image to be uploaded will be considered as a whole disk one
-h, --help	Show this help message and exit
--architecture ARCHITECTURE	Architecture type for these images, <i>x86_64</i> , <i>i386</i> and <i>ppc64le</i> are common options. This option should match at least one <i>arch</i> value in <i>instackenv.json</i>
--ironic-python-agent-name IPA_NAME	Openstack ironic-python-agent (agent) image filename

## 46.18. OVERCLOUD NETENV VALIDATE

Validate the network environment file.

### Usage:

```
openstack overcloud netenv validate [-h] [-f NETENV]
```

Table 46.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-f NETENV, --file NETENV	Path to the network environment file

## 46.19. OVERCLOUD NODE CONFIGURE

Configure Node boot options.

### Usage:

```

openstack overcloud node configure [-h] [--all-manageable]
                                   [--deploy-kernel DEPLOY_KERNEL]
                                   [--deploy-ramdisk DEPLOY_RAMDISK]
                                   [--instance-boot-option {local,netboot}]
                                   [--root-device ROOT_DEVICE]
                                   [--root-device-minimum-size ROOT_DEVICE_MINIMUM_SIZE]
                                   [--overwrite-root-device-hints]
                                   [<node_uuid> [<node_uuid> ...]]

```

Table 46.27. Positional Arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be configured

Table 46.28. Optional Arguments

Value	Summary
--deploy-kernel DEPLOY_KERNEL	Image with deploy kernel.
--root-device-minimum-size ROOT_DEVICE_MINIMUM_SIZE	Minimum size (in gib) of the detected root device. Used with --root-device.
--root-device ROOT_DEVICE	Define the root device for nodes. can be either a list of device names (without /dev) to choose from or one of two strategies: largest or smallest. For it to work this command should be run after the introspection.
--all-manageable	Configure all nodes currently in <i>manageable</i> state
--deploy-ramdisk DEPLOY_RAMDISK	Image with deploy ramdisk.

Value	Summary
<code>--instance-boot-option {local,netboot}</code>	Whether to set instances for booting from local hard drive (local) or network (netboot).
<code>-h, --help</code>	Show this help message and exit
<code>--overwrite-root-device-hints</code>	Whether to overwrite existing root device hints when <code>--root-device</code> is used.

## 46.20. OVERCLOUD NODE DELETE

Delete overcloud nodes.

### Usage:

```

openstack overcloud node delete [-h] [--stack STACK]
                                [--templates [TEMPLATES]]
                                [-e <HEAT ENVIRONMENT FILE>]
                                [--timeout <TIMEOUT>]
                                <node> [<node> ...]

```

Table 46.29. Positional Arguments

Value	Summary
<code>&lt;node&gt;</code>	Node id(s) to delete

Table 46.30. Optional Arguments

Value	Summary
<code>-e &lt;HEAT ENVIRONMENT FILE&gt;, --environment-file &lt;HEAT ENVIRONMENT FILE&gt;</code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.) This argument is deprecated. The command now utilizes a deployment plan, which should be updated prior to running this command, should that be required. Otherwise this argument will be silently ignored.
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy. This argument is deprecated. The command now utilizes a deployment plan, which should be updated prior to running this command, should that be required. Otherwise this argument will be silently ignored.
<code>-h, --help</code>	Show this help message and exit

Value	Summary
--stack STACK	Name or id of heat stack to scale (default=env: OVERCLOUD_STACK_NAME)
--timeout <TIMEOUT>	Timeout in minutes to wait for the nodes to be deleted. Keep in mind that due to keystone session duration that timeout has an upper bound of 4 hours

## 46.21. OVERCLOUD NODE DISCOVER

Discover overcloud nodes by polling their BMCs.

### Usage:

```
openstack overcloud node discover [-h] (--ip <ips> | --range <range>)
                                --credentials <key:value>
                                [--port <ports>] [--introspect]
                                [--run-validations] [--provide]
                                [--no-deploy-image]
                                [--instance-boot-option {local,netboot}]
```

Table 46.31. Optional Arguments

Value	Summary
--provide	Provide (make available) the nodes
--no-deploy-image	Skip setting the deploy kernel and ramdisk.
--instance-boot-option {local,netboot}	Whether to set instances for booting from local hard drive (local) or network (netboot).
--credentials <key:value>	Key/value pairs of possible credentials
--range <range>	Ip range to probe
--port <ports>	Bmc port(s) to probe
--run-validations	Run the pre-deployment validations. these external validations are from the TripleO Validations project.
-h, --help	Show this help message and exit
--introspect	Introspect the imported nodes
--ip <ips>	Ip address(es) to probe

## 46.22. OVERCLOUD NODE IMPORT

Import baremetal nodes from a JSON, YAML or CSV file. The node status will be set to *manageable* by default.

### Usage:

```
openstack overcloud node import [-h] [--introspect] [--run-validations]
                                [--validate-only] [--provide]
                                [--no-deploy-image]
                                [--instance-boot-option {local,netboot}]
                                env_file
```

Table 46.32. Positional Arguments

Value	Summary
env_file	None

Table 46.33. Optional Arguments

Value	Summary
--provide	Provide (make available) the nodes
--no-deploy-image	Skip setting the deploy kernel and ramdisk.
--validate-only	Validate the env_file and then exit without actually importing the nodes.
--run-validations	Run the pre-deployment validations. these external validations are from the TripleO Validations project.
--instance-boot-option {local,netboot}	Whether to set instances for booting from local hard drive (local) or network (netboot).
-h, --help	Show this help message and exit
--introspect	Introspect the imported nodes

## 46.23. OVERCLOUD NODE INTROSPECT

Introspect specified nodes or all nodes in *manageable* state.

### Usage:

```
openstack overcloud node introspect [-h] [--all-manageable] [--provide]
                                     [--run-validations]
                                     [<node_uuid> [<node_uuid> ...]]
```

Table 46.34. Positional Arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be introspected

Table 46.35. Optional Arguments

Value	Summary
--provide	Provide (make available) the nodes once introspected
--all-manageable	Introspect all nodes currently in <i>manageable</i> state
-h, --help	Show this help message and exit
--run-validations	Run the pre-deployment validations. these external validations are from the TripleO Validations project.

## 46.24. OVERCLOUD NODE PROVIDE

Mark nodes as available based on UUIDs or current *manageable* state.

### Usage:

```
openstack overcloud node provide [-h] [--all-manageable]
                                [<node_uuid> [<node_uuid> ...]]
```

Table 46.36. Positional Arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be provided

Table 46.37. Optional Arguments

Value	Summary
--all-manageable	Provide all nodes currently in <i>manageable</i> state
-h, --help	Show this help message and exit

## 46.25. OVERCLOUD PARAMETERS SET

Set a parameters for a plan

**Usage:**

```
openstack overcloud parameters set [-h] name file_in
```

**Table 46.38. Positional Arguments**

Value	Summary
name	The name of the plan, which is used for the swift container, Mistral environment and Heat stack names.
file_in	None

**Table 46.39. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 46.26. OVERCLOUD PLAN CREATE

Create a deployment plan

**Usage:**

```
openstack overcloud plan create [-h] [--templates TEMPLATES]
                                [--plan-environment-file PLAN_ENVIRONMENT_FILE]
                                [--disable-password-generation]
                                [--source-url SOURCE_URL]
                                name
```

**Table 46.40. Positional Arguments**

Value	Summary
name	The name of the plan, which is used for the object storage container, workflow environment and orchestration stack names.

**Table 46.41. Optional Arguments**

Value	Summary
--source-url SOURCE_URL	The url of a git repository containing the heat templates to deploy. If this or --templates isn't provided, the templates packaged on the Undercloud will be used.



Value	Summary
-h, --help	Show this help message and exit
--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE	Plan environment file, overrides the default plan-environment.yaml in the --templates directory
--disable-password-generation	Disable password generation.
--templates TEMPLATES	The directory containing the heat templates to deploy. If this or --source_url isn't provided, the templates packaged on the Undercloud will be used.

## 46.27. OVERCLOUD PLAN DELETE

Delete an overcloud deployment plan. The plan will not be deleted if a stack exists with the same name.

### Usage:

```
openstack overcloud plan delete [-h] <name> [<name> ...]
```

Table 46.42. Positional Arguments

Value	Summary
<name>	Name of the plan(s) to delete

Table 46.43. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 46.28. OVERCLOUD PLAN DEPLOY

Deploy a deployment plan

### Usage:

```
openstack overcloud plan deploy [-h] [--timeout <TIMEOUT>]
                                [--run-validations]
                                name
```

Table 46.44. Positional Arguments

Value	Summary
name	The name of the plan to deploy.

Table 46.45. Optional Arguments

Value	Summary
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
-h, --help	Show this help message and exit
--run-validations	Run the pre-deployment validations. these external validations are from the TripleO Validations project.

## 46.29. OVERCLOUD PLAN EXPORT

Export a deployment plan

### Usage:

```
openstack overcloud plan export [-h] [--output-file <output file>]
                               [--force-overwrite]
                               <name>
```

Table 46.46. Positional Arguments

Value	Summary
<name>	Name of the plan to export.

Table 46.47. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--output-file <output file>, -o <output file>	Name of the output file for export. it will default to "<name>.tar.gz".
--force-overwrite, -f	Overwrite output file if it exists.

## 46.30. OVERCLOUD PLAN LIST

List overcloud deployment plans.

### Usage:

```

openstack overcloud plan list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]

```

Table 46.48. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 46.49. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 46.50. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 46.51. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 46.31. OVERCLOUD PROFILES LIST

List overcloud node profiles

### Usage:

```

openstack overcloud profiles list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN] [--all]
                                [--control-scale CONTROL_SCALE]
                                [--compute-scale COMPUTE_SCALE]
                                [--ceph-storage-scale CEPH_STORAGE_SCALE]
                                [--block-storage-scale BLOCK_STORAGE_SCALE]
                                [--swift-storage-scale SWIFT_STORAGE_SCALE]
                                [--control-flavor CONTROL_FLAVOR]
                                [--compute-flavor COMPUTE_FLAVOR]
                                [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
                                [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
                                [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]

```

Table 46.53. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 46.54. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 46.55. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 46.56. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.57. Optional Arguments

Value	Summary
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes
--control-flavor CONTROL_FLAVOR	Nova flavor to use for control nodes.
--ceph-storage-flavor CEPH_STORAGE_FLAVOR	Nova flavor to use for ceph storage nodes.
--block-storage-flavor BLOCK_STORAGE_FLAVOR	Nova flavor to use for cinder storage nodes
--control-scale CONTROL_SCALE	New number of control nodes.
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes.
--block-storage-scale BLOCK_STORAGE_SCALE	New number of cinder storage nodes.
--compute-scale COMPUTE_SCALE	New number of compute nodes.
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes.
-h, --help	Show this help message and exit
--all	List all nodes, even those not available to nova.
--compute-flavor COMPUTE_FLAVOR	Nova flavor to use for compute nodes.

## 46.32. OVERCLOUD PROFILES MATCH

Assign and validate profiles on nodes

### Usage:

```
openstack overcloud profiles match [-h] [--dry-run]
                                [--control-scale CONTROL_SCALE]
                                [--compute-scale COMPUTE_SCALE]
                                [--ceph-storage-scale CEPH_STORAGE_SCALE]
                                [--block-storage-scale BLOCK_STORAGE_SCALE]
                                [--swift-storage-scale SWIFT_STORAGE_SCALE]
                                [--control-flavor CONTROL_FLAVOR]
                                [--compute-flavor COMPUTE_FLAVOR]
                                [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
                                [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
                                [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
```

Table 46.58. Optional Arguments

Value	Summary
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes
--control-flavor CONTROL_FLAVOR	Nova flavor to use for control nodes.
--ceph-storage-flavor CEPH_STORAGE_FLAVOR	Nova flavor to use for ceph storage nodes.
--block-storage-flavor BLOCK_STORAGE_FLAVOR	Nova flavor to use for cinder storage nodes
--control-scale CONTROL_SCALE	New number of control nodes.
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes.
--block-storage-scale BLOCK_STORAGE_SCALE	New number of cinder storage nodes.
--dry-run	Only run validations, but do not apply any changes.
--compute-scale COMPUTE_SCALE	New number of compute nodes.
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes.
-h, --help	Show this help message and exit
--compute-flavor COMPUTE_FLAVOR	Nova flavor to use for compute nodes.

## 46.33. OVERCLOUD RAID CREATE

Create RAID on given nodes

**Usage:**

```
openstack overcloud raid create [-h] --node NODE configuration
```

**Table 46.59. Positional Arguments**

Value	Summary
configuration	Raid configuration (yaml/json string or file name).

**Table 46.60. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--node NODE	Nodes to create raid on (expected to be in manageable state). Can be specified multiple times.

## 46.34. OVERCLOUD ROLE LIST

List available roles

**Usage:**

```
openstack overcloud role list [-h] [--roles-path <roles directory>]
```

**Table 46.61. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--roles-path <roles directory>	Filesystem path containing the role yaml files. by default this is /usr/share/openstack-tripleo-heat-templates/roles

## 46.35. OVERCLOUD ROLE SHOW

Show information about a given role

**Usage:**

```
openstack overcloud role show [-h] [--roles-path <roles directory>]
                                <role>
```

**Table 46.62. Positional Arguments**

Value	Summary
<role>	Role to display more information about.

Table 46.63. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--roles-path <roles directory>	Filesystem path containing the role yaml files. by default this is /usr/share/openstack-tripleo-heat-templates/roles

## 46.36. OVERCLOUD ROLES GENERATE

Generate roles\_data.yaml file

### Usage:

```
openstack overcloud roles generate [-h]
                                   [--roles-path <roles directory>]
                                   [-o <output file>] [--skip-validate]
                                   <role> [<role> ...]
```

Table 46.64. Positional Arguments

Value	Summary
<role>	List of roles to use to generate the roles_data.yaml file for the deployment. NOTE: Ordering is important if no role has the "primary" and "controller" tags. If no role is tagged then the first role listed will be considered the primary role. This usually is the controller role.

Table 46.65. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-o <output file>, --output-file <output file>	File to capture all output to. for example, roles_data.yaml
--roles-path <roles directory>	Filesystem path containing the role yaml files. by default this is /usr/share/openstack-tripleo-heat-templates/roles



Value	Summary
<code>--skip-validate</code>	Skip role metadata type validation when generating the <code>roles_data.yaml</code>

## 46.37. OVERCLOUD STATUS

Get deployment status

### Usage:

```
openstack overcloud status [-h] [--plan PLAN]
```

Table 46.66. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--plan PLAN, --stack PLAN</code>	Name of the stack/plan. (default: overcloud)

## 46.38. OVERCLOUD SUPPORT REPORT COLLECT

Run `sosreport` on selected servers.

### Usage:

```
openstack overcloud support report collect [-h] [-c CONTAINER]
                                           [-o DESTINATION]
                                           [--skip-container-delete]
                                           [-t TIMEOUT]
                                           [-n CONCURRENCY]
                                           [--collect-only | --download-only]
                                           server_name
```

Table 46.67. Positional Arguments

Value	Summary
<code>server_name</code>	Nova <code>server_name</code> or partial name to match. for example "controller" will match all controllers for an environment.

Table 46.68. Optional Arguments

Value	Summary
<code>-c CONTAINER, --container CONTAINER</code>	Swift container to store logs to

Value	Summary
-o DESTINATION, --output DESTINATION	Output directory for the report
--skip-container-delete	Do not delete the container after the files have been downloaded. Ignored if --collect-only or --download-only is provided.
--collect-only	Skip log downloads, only collect logs and put in the container
--download-only	Skip generation, only download from the provided container
-n CONCURRENCY, --concurrency CONCURRENCY	Number of parallel log collection and object deletion tasks to run.
-t TIMEOUT, --timeout TIMEOUT	Maximum time to wait for the log collection and container deletion workflows to finish.
-h, --help	Show this help message and exit

## 46.39. OVERCLOUD UPDATE CONVERGE

Converge the update on Overcloud nodes. This restores the plan and stack so that normal deployment workflow is back in place.

### Usage:

```

openstack overcloud update converge [--templates [TEMPLATES]]
                                   [--stack STACK]
                                   [--timeout <TIMEOUT>]
                                   [--control-scale CONTROL_SCALE]
                                   [--compute-scale COMPUTE_SCALE]
                                   [--ceph-storage-scale CEPH_STORAGE_SCALE]
                                   [--block-storage-scale BLOCK_STORAGE_SCALE]
                                   [--swift-storage-scale SWIFT_STORAGE_SCALE]
                                   [--control-flavor CONTROL_FLAVOR]
                                   [--compute-flavor COMPUTE_FLAVOR]
                                   [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
                                   [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
                                   [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
                                   [--libvirt-type {kvm,qemu}]
                                   [--ntp-server NTP_SERVER]
                                   [--no-proxy NO_PROXY]
                                   [--overcloud-ssh-user OVERCLOUD_SSH_USER]
                                   [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
                                   [--environment-file <HEAT ENVIRONMENT FILE>]
                                   [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
                                   [--roles-file ROLES_FILE]
                                   [--networks-file NETWORKS_FILE]

```

```

[--plan-environment-file PLAN_ENVIRONMENT_FILE]
[--no-cleanup] [--update-plan-only]
[--validation-errors-nonfatal]
[--validation-warnings-fatal]
[--disable-validations] [--dry-run]
[--run-validations]
[--skip-postconfig]
[--force-postconfig]
[--skip-deploy-identifier]
[--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG] [--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--output-dir OUTPUT_DIR]

```

Table 46.69. Optional Arguments

Value	Summary
--networks-file NETWORKS_FILE, -n NETWORKS_FILE	Networks file, overrides the default network_data.yaml in the --templates directory
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudSwiftStorageFlavor. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)
--no-proxy NO_PROXY	A comma separated list of hosts that should not be proxied.
--block-storage-flavor BLOCK_STORAGE_FLAVOR	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudBlockStorageFlavor. It will be removed after the "P" release.)
--deployed-server	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the --disable-validations.
--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE	Plan environment file, overrides the default plan-environment.yaml in the --templates directory

Value	Summary
<code>--environment-file &lt;HEAT ENVIRONMENT FILE&gt;, -e &lt;HEAT ENVIRONMENT FILE&gt;</code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--disable-validations</code>	Disable the pre-deployment validations entirely. these validations are the built-in pre-deployment validations. To enable external validations from tripleo-validations, use the <code>--run-validations</code> flag.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes. (deprecated. use an environment file and set the parameter <code>ControllerCount</code> . It will be removed after the "P" release.)
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used ( <code>/var/lib/mistral/&lt;execution id&gt;</code> ).
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter <code>BlockStorageCount</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--config-download</code>	Run deployment via config-download mechanism
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy

Value	Summary
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--disable-password-generation</code>	Disable password generation.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--stack STACK</code>	Stack name to create or update
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes. (deprecated. use an environment file and set the parameter <code>ComputeCount</code> . It will be removed after the "P" release.)
<code>--environment-directory &lt;HEAT ENVIRONMENT DIRECTORY&gt;</code>	Environment file directories that are automatically added to the <code>heat stack-create</code> or <code>heat stack-update</code> commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--timeout &lt;TIMEOUT&gt;, -t &lt;TIMEOUT&gt;</code>	Deployment timeout in minutes.

Value	Summary
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.

Table 46.70. Registration Parameters

Value	Summary
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.

## 46.40. OVERCLOUD UPDATE PREPARE

Run `heat stack update` for overcloud nodes to refresh heat stack outputs. The heat stack outputs are what we use later on to generate ansible playbooks which deliver the minor update workflow. This is used as the first step for a minor update of your overcloud.

### Usage:

```
openstack overcloud update prepare [--templates [TEMPLATES]]
                                   [--stack STACK]
                                   [--timeout <TIMEOUT>]
                                   [--control-scale CONTROL_SCALE]
                                   [--compute-scale COMPUTE_SCALE]
                                   [--ceph-storage-scale CEPH_STORAGE_SCALE]
```

```

[--block-storage-scale BLOCK_STORAGE_SCALE]
[--swift-storage-scale SWIFT_STORAGE_SCALE]
[--control-flavor CONTROL_FLAVOR]
[--compute-flavor COMPUTE_FLAVOR]
[--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
[--block-storage-flavor BLOCK_STORAGE_FLAVOR]
[--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
[--libvirt-type {kvm,qemu}]
[--ntp-server NTP_SERVER]
[--no-proxy NO_PROXY]
[--overcloud-ssh-user OVERCLOUD_SSH_USER]
[--overcloud-ssh-key OVERCLOUD_SSH_KEY]
[--environment-file <HEAT ENVIRONMENT FILE>]
[--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
[--roles-file ROLES_FILE]
[--networks-file NETWORKS_FILE]
[--plan-environment-file PLAN_ENVIRONMENT_FILE]
[--no-cleanup] [--update-plan-only]
[--validation-errors-nonfatal]
[--validation-warnings-fatal]
[--disable-validations] [--dry-run]
[--run-validations]
[--skip-postconfig]
[--force-postconfig]
[--skip-deploy-identifier]
[--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG] [--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--output-dir OUTPUT_DIR]
[--ceph-ansible-playbook CEPH_ANSIBLE_PLAYBOOK]

```

Table 46.71. Optional Arguments

Value	Summary
--networks-file NETWORKS_FILE, -n NETWORKS_FILE	Networks file, overrides the default network_data.yaml in the --templates directory
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudSwiftStorageFlavor. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)

Value	Summary
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory
<code>--environment-file &lt;HEAT ENVIRONMENT FILE&gt;, -e &lt;HEAT ENVIRONMENT FILE&gt;</code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--disable-validations</code>	Disable the pre-deployment validations entirely. these validations are the built-in pre-deployment validations. To enable external validations from tripleo-validations, use the <code>--run-validations</code> flag.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes. (deprecated. use an environment file and set the parameter <code>ControllerCount</code> . It will be removed after the "P" release.)
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used ( <code>/var/lib/mistral/&lt;execution id&gt;</code> ).
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter <code>BlockStorageCount</code> . It will be removed after the "P" release.)



Value	Summary
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--config-download</code>	Run deployment via config-download mechanism
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--ceph-ansible-playbook CEPH_ANSIBLE_PLAYBOOK</code>	Path to switch the ceph-ansible playbook used for update.
<code>--disable-password-generation</code>	Disable password generation.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--stack STACK</code>	Stack name to create or update

Value	Summary
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes. (deprecated. use an environment file and set the parameter <code>ComputeCount</code> . It will be removed after the "P" release.)
<code>--environment-directory &lt;HEAT ENVIRONMENT DIRECTORY&gt;</code>	Environment file directories that are automatically added to the <code>heat stack-create</code> or <code>heat stack-update</code> commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--timeout &lt;TIMEOUT&gt;, -t &lt;TIMEOUT&gt;</code>	Deployment timeout in minutes.
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.

Table 46.72. Registration Parameters

Value	Summary
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-force</code>	Register the system even if it is already registered.

Value	Summary
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.

## 46.41. OVERCLOUD UPDATE RUN

Run minor update ansible playbooks on Overcloud nodes

### Usage:

```
openstack overcloud update run [-h] --nodes NODES [--playbook PLAYBOOK]
                               [--ssh-user SSH_USER]
                               [--static-inventory STATIC_INVENTORY]
                               [--stack STACK]
```

Table 46.73. Optional Arguments

Value	Summary
<code>--playbook PLAYBOOK</code>	Ansible playbook to use for the minor update. defaults to the special value <i>all</i> which causes all the update playbooks to be executed. That is the <code>update_steps_playbook.yaml</code> and then <code>thedeploy_steps_playbook.yaml</code> . Set this to each of those playbooks in consecutive invocations of this command if you prefer to run them manually. Note: make sure to run both those playbooks so that all services are updated and running with the target version configuration.
<code>--ssh-user SSH_USER</code>	The ssh user name for connecting to the overcloud nodes.
<code>--stack STACK</code>	Name or id of heat stack (default=env: <code>OVERCLOUD_STACK_NAME</code> )
<code>--static-inventory STATIC_INVENTORY</code>	Path to an existing ansible inventory to use. if not specified, one will be generated in <code>~/tripleo-ansible-inventory.yaml</code>

Value	Summary
--nodes NODES	Required parameter. this specifies the overcloud nodes to run the minor update playbooks on. You can use the name of a specific node, or the name of the role (e.g. Compute). You may also use the special value <i>all</i> to run the minor on all nodes. In all cases the minor update ansible playbook is executed on one node at a time (with serial 1)
-h, --help	Show this help message and exit

## 46.42. OVERCLOUD UPGRADE CONVERGE

Major upgrade converge - reset Heat resources in the stored plan This is the last step for completion of a overcloud major upgrade. The main task is updating the plan and stack to unblock future stack updates. For the major upgrade workflow we have set specific values for some stack Heat resources. This unsets those back to their default values.

### Usage:

```

openstack overcloud upgrade converge [--templates [TEMPLATES]]
    [--stack STACK]
    [--timeout <TIMEOUT>]
    [--control-scale CONTROL_SCALE]
    [--compute-scale COMPUTE_SCALE]
    [--ceph-storage-scale CEPH_STORAGE_SCALE]
    [--block-storage-scale BLOCK_STORAGE_SCALE]
    [--swift-storage-scale SWIFT_STORAGE_SCALE]
    [--control-flavor CONTROL_FLAVOR]
    [--compute-flavor COMPUTE_FLAVOR]
    [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
    [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
    [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup]
    [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]
    [--dry-run] [--run-validations]
    [--skip-postconfig]

```

```

[--force-postconfig]
[--skip-deploy-identifier]
[--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG] [--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--output-dir OUTPUT_DIR]

```

Table 46.74. Optional Arguments

Value	Summary
--networks-file NETWORKS_FILE, -n NETWORKS_FILE	Networks file, overrides the default network_data.yaml in the --templates directory
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudSwiftStorageFlavor. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)
--no-proxy NO_PROXY	A comma separated list of hosts that should not be proxied.
--block-storage-flavor BLOCK_STORAGE_FLAVOR	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudBlockStorageFlavor. It will be removed after the "P" release.)
--deployed-server	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the --disable-validations.
--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE	Plan environment file, overrides the default plan-environment.yaml in the --templates directory
--environment-file <HEAT ENVIRONMENT FILE>, -e <HEAT ENVIRONMENT FILE>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)

Value	Summary
<code>--disable-validations</code>	Disable the pre-deployment validations entirely. these validations are the built-in pre-deployment validations. To enable external validations from tripleo-validations, use the <code>--run-validations</code> flag.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes. (deprecated. use an environment file and set the parameter <code>ControllerCount</code> . It will be removed after the "P" release.)
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used ( <code>/var/lib/mistral/&lt;execution id&gt;</code> ).
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter <code>BlockStorageCount</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--config-download</code>	Run deployment via config-download mechanism
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy

Value	Summary
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--disable-password-generation</code>	Disable password generation.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--stack STACK</code>	Stack name to create or update
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes. (deprecated. use an environment file and set the parameter <code>ComputeCount</code> . It will be removed after the "P" release.)
<code>--environment-directory &lt;HEAT ENVIRONMENT DIRECTORY&gt;</code>	Environment file directories that are automatically added to the <code>heat stack-create</code> or <code>heat stack-update</code> commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--timeout &lt;TIMEOUT&gt;, -t &lt;TIMEOUT&gt;</code>	Deployment timeout in minutes.
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.

Value	Summary
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.

**Table 46.75. Registration Parameters**

Value	Summary
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.

## 46.43. OVERCLOUD UPGRADE PREPARE

Run `heat stack update` for overcloud nodes to refresh heat stack outputs. The heat stack outputs are what we use later on to generate ansible playbooks which deliver the major upgrade workflow. This is used as the first step for a major upgrade of your overcloud.

### Usage:

```
openstack overcloud upgrade prepare [--templates [TEMPLATES]]
                                   [--stack STACK]
                                   [--timeout <TIMEOUT>]
                                   [--control-scale CONTROL_SCALE]
                                   [--compute-scale COMPUTE_SCALE]
                                   [--ceph-storage-scale CEPH_STORAGE_SCALE]
                                   [--block-storage-scale BLOCK_STORAGE_SCALE]
                                   [--swift-storage-scale SWIFT_STORAGE_SCALE]
```



```

[--control-flavor CONTROL_FLAVOR]
[--compute-flavor COMPUTE_FLAVOR]
[--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
[--block-storage-flavor BLOCK_STORAGE_FLAVOR]
[--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
[--libvirt-type {kvm,qemu}]
[--ntp-server NTP_SERVER]
[--no-proxy NO_PROXY]
[--overcloud-ssh-user OVERCLOUD_SSH_USER]
[--overcloud-ssh-key OVERCLOUD_SSH_KEY]
[--environment-file <HEAT ENVIRONMENT FILE>]
[--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
[--roles-file ROLES_FILE]
[--networks-file NETWORKS_FILE]
[--plan-environment-file PLAN_ENVIRONMENT_FILE]
[--no-cleanup] [--update-plan-only]
[--validation-errors-nonfatal]
[--validation-warnings-fatal]
[--disable-validations] [--dry-run]
[--run-validations]
[--skip-postconfig]
[--force-postconfig]
[--skip-deploy-identifier]
[--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG] [--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--output-dir OUTPUT_DIR]
[--ceph-ansible-playbook CEPH_ANSIBLE_PLAYBOOK]

```

Table 46.76. Optional Arguments

Value	Summary
--networks-file NETWORKS_FILE, -n NETWORKS_FILE	Networks file, overrides the default network_data.yaml in the --templates directory
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudSwiftStorageFlavor. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)
--no-proxy NO_PROXY	A comma separated list of hosts that should not be proxied.

Value	Summary
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--plan-environment-file</code> <code>PLAN_ENVIRONMENT_FILE, -p</code> <code>PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory
<code>--environment-file &lt;HEAT ENVIRONMENT FILE&gt;, -e</code> <code>&lt;HEAT ENVIRONMENT FILE&gt;</code>	Environment files to be passed to the <code>heat stack-create</code> or <code>heat stack-update</code> command. (Can be specified more than once.)
<code>--disable-validations</code>	Disable the pre-deployment validations entirely. these validations are the built-in pre-deployment validations. To enable external validations from <code>tripleo-validations</code> , use the <code>--run-validations</code> flag.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes. (deprecated. use an environment file and set the parameter <code>ControllerCount</code> . It will be removed after the "P" release.)
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the <code>mistral</code> user. When not specified, the default server side value will be used ( <code>/var/lib/mistral/&lt;execution id&gt;</code> ).
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter <code>BlockStorageCount</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)

Value	Summary
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes. (deprecated. use an environment file and set the parameter ObjectStorageCount. It will be removed after the "P" release.)
--config-download	Run deployment via config-download mechanism
--ntp-server NTP_SERVER	The ntp for overcloud nodes.
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--skip-deploy-identifier	Skip generation of a unique identifier for the DeployIdentifier parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
--ceph-ansible-playbook CEPH_ANSIBLE_PLAYBOOK	Path to switch the ceph-ansible playbook used for upgrade.
--disable-password-generation	Disable password generation.
--no-cleanup	Don't cleanup temporary files, just log their location
--validation-errors-nonfatal	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
--update-plan-only	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
--run-validations	Run external validations from the tripleo-validations project.
--stack STACK	Stack name to create or update
--compute-scale COMPUTE_SCALE	New number of compute nodes. (deprecated. use an environment file and set the parameter ComputeCount. It will be removed after the "P" release.)

Value	Summary
<code>--environment-directory &lt;HEAT ENVIRONMENT DIRECTORY&gt;</code>	Environment file directories that are automatically added to the <code>heat stack-create</code> or <code>heat stack-update</code> commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--timeout &lt;TIMEOUT&gt;, -t &lt;TIMEOUT&gt;</code>	Deployment timeout in minutes.
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.

Table 46.77. Registration Parameters

Value	Summary
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.

Value	Summary
<code>--reg-org REG_ORG</code>	Organization key to use for registration.

## 46.44. OVERCLOUD UPGRADE RUN

Run major upgrade ansible playbooks on Overcloud nodes. This will run the major upgrade ansible playbooks on the overcloud. By default all playbooks are executed, that is the `upgrade_steps_playbook.yaml` then the `deploy_steps_playbook.yaml` and then the `post_upgrade_steps_playbook.yaml`. The upgrade playbooks are made available after completion of the `overcloud upgrade prepare` command. This `overcloud upgrade run` command is the second step in the major upgrade workflow.

### Usage:

```
openstack overcloud upgrade run [-h] (--nodes NODES | --roles ROLES)
                                [--playbook PLAYBOOK]
                                [--static-inventory STATIC_INVENTORY]
                                [--ssh-user SSH_USER]
                                [--skip-tags SKIP_TAGS] [--stack STACK]
```

Table 46.78. Optional Arguments

Value	Summary
<code>--playbook PLAYBOOK</code>	Ansible playbook to use for the major upgrade. Defaults to the special value <code>all</code> which causes all the upgrade playbooks to run. That is the <code>upgrade_steps_playbook.yaml</code> then <code>deploy_steps_playbook.yaml</code> and then <code>post_upgrade_steps_playbooks.yaml</code> . Set this to each of those playbooks in consecutive invocations of this command if you prefer to run them manually. Note: you will have to run all of those playbooks so that all services are upgraded and running with the target version configuration.
<code>--roles ROLES</code>	A string that identifies the role or comma-separated list of roles to be upgraded in this upgrade run invocation. NOTE: nodes of specified role(s) are upgraded in parallel. This is REQUIRED for controlplane roles. For non controlplane roles (e.g., "Compute"), you may consider instead using the <code>--nodes</code> argument to limit the upgrade to a specific node or list (comma separated string) of nodes.
<code>--stack STACK</code>	Name or id of heat stack (default= <code>env: OVERCLOUD_STACK_NAME</code> )

Value	Summary
--static-inventory STATIC_INVENTORY	Path to an existing ansible inventory to use. if not specified, one will be generated in ~/tripleo-ansible-inventory.yaml
--nodes NODES	A string that identifies a single node or comma-separated list of nodes to be upgraded in parallel in this upgrade run invocation. For example: --nodes "compute-0, compute-1, compute-5". NOTE: Using this parameter with nodes of controlplane roles (e.g. "-- nodes controller-1") is NOT supported and WILL end badly unless you include ALL nodes of that role as a comma separated string. You should instead use the --roles parameter for controlplane roles and specify the role name.
-h, --help	Show this help message and exit
--ssh-user SSH_USER	The ssh user name for connecting to the overcloud nodes.
--skip-tags SKIP_TAGS	A string specifying the tag or comma separated list of tags to be passed as --skip-tags to ansible-playbook. The currently supported values are <i>validation</i> and <i>pre-upgrade</i> . In particular <i>validation</i> is useful if you must re-run following a failed upgrade and some services cannot be started.

## CHAPTER 47. PORT

This chapter describes the commands under the **port** command.

### 47.1. PORT CREATE

Create a new port

#### Usage:

```
openstack port create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    --network <network> [--description <description>]
                    [--device <device-id>]
                    [--mac-address <mac-address>]
                    [--device-owner <device-owner>]
                    [--vnic-type <vnic-type>] [--host <host-id>]
                    [--dns-name dns-name]
                    [--fixed-ip subnet=<subnet>,ip-address=<ip-address> | --no-fixed-ip]
                    [--binding-profile <binding-profile>]
                    [--enable | --disable] [--project <project>]
                    [--project-domain <project-domain>]
                    [--security-group <security-group> | --no-security-group]
                    [--qos-policy <qos-policy>]
                    [--enable-port-security | --disable-port-security]
                    [--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]]
                    [--tag <tag> | --no-tag]
                    <name>
```

Table 47.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 47.2. Positional Arguments

Value	Summary
<name>	Name of this port

Table 47.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 47.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 47.5. Optional Arguments

Value	Summary
--enable	Enable port (default)
--no-security-group	Associate no security groups with this port
--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]	Add allowed-address pair associated with this port: ip-address=<ip-address>[,mac-address=<mac-address>] (repeat option to set multiple allowed-address pairs)
--fixed-ip subnet=<subnet>,ip-address=<ip-address>	Desired ip and/or subnet for this port (name or id): subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)
--disable-port-security	Disable port security for this port
--enable-port-security	Enable port security for this port (default)
--device-owner <device-owner>	Device owner of this port. this is the entity that uses the port (for example, network:dhcp).
--network <network>	Network this port belongs to (name or id)
--device <device-id>	Port device id
--vnic-type <vnic-type>	Vnic type for this port (direct
direct-physical	macvtap
normal	baremetal



Value	Summary
virtio-forwarder, default: normal)	-h, --help
Show this help message and exit	--disable
Disable port	--project-domain <project-domain>
Domain the project belongs to (name or id). this can be used in case collisions between project names exist.	--mac-address <mac-address>
Mac address of this port (admin only)	--no-tag
No tags associated with the port	--binding-profile <binding-profile>
Custom data to be passed as binding:profile. data may be passed as <key>=<value> or JSON. (repeat option to set multiple binding:profile data)	--security-group <security-group>
Security group to associate with this port (name or ID) (repeat option to set multiple security groups)	--qos-policy <qos-policy>
Attach qos policy to this port (name or id)	--project <project>
Owner's project (name or id)	--tag <tag>
Tag to be added to the port (repeat option to set multiple tags)	--description <description>
Description of this port	--no-fixed-ip
No ip or subnet for this port.	--host <host-id>
Allocate port on host <host-id> (id only)	--dns-name dns-name

Table 47.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")--prefix PREFIX	Add a prefix to all variable names

## 47.2. PORT DELETE

Delete port(s)

**Usage:**

```
openstack port delete [-h] <port> [<port> ...]
```

Table 47.7. Positional Arguments

Value	Summary
<port>	Port(s) to delete (name or id)

Table 47.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 47.3. PORT LIST

List ports

Usage:

```
openstack port list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN]
                    [--device-owner <device-owner>]
                    [--network <network>]
                    [--router <router> | --server <server> | --device-id <device-id>]
                    [--mac-address <mac-address>] [--long]
                    [--project <project>]
                    [--project-domain <project-domain>]
                    [--fixed-ip subnet=<subnet>,ip-address=<ip-address>]
                    [--tags <tag>[,<tag>,...]]
                    [--any-tags <tag>[,<tag>,...]]
                    [--not-tags <tag>[,<tag>,...]]
                    [--not-any-tags <tag>[,<tag>,...]]
```

Table 47.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 47.10. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 47.11. Output Formatters

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 47.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 47.13. Optional Arguments

Value	Summary
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--mac-address &lt;mac-address&gt;</code>	List only ports with this mac address
<code>--not-any-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	Exclude ports which have any given tag(s) (comma-separated list of tags)
<code>--router &lt;router&gt;</code>	List only ports attached to this router (name or id)
<code>--tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	List ports which have all given tag(s) (comma-separated list of tags)
<code>--long</code>	List additional fields in output
<code>--project &lt;project&gt;</code>	List ports according to their project (name or id)

Value	Summary
<code>--any-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	List ports which have any given tag(s) (comma-separated list of tags)
<code>--device-owner &lt;device-owner&gt;</code>	List only ports with the specified device owner. this is the entity that uses the port (for example, network:dhcp).
<code>--network &lt;network&gt;</code>	List only ports connected to this network (name or id)
<code>--fixed-ip subnet=&lt;subnet&gt;,ip-address=&lt;ip-address&gt;</code>	Desired ip and/or subnet for filtering ports (name or ID): subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)
<code>--not-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	Exclude ports which have all given tag(s) (comma-separated list of tags)
<code>-h, --help</code>	Show this help message and exit
<code>--device-id &lt;device-id&gt;</code>	List only ports with the specified device id
<code>--server &lt;server&gt;</code>	List only ports attached to this server (name or id)

## 47.4. PORT SET

Set port properties

### Usage:

```

openstack port set [-h] [--description <description>]
                  [--device <device-id>] [--mac-address <mac-address>]
                  [--device-owner <device-owner>]
                  [--vnic-type <vnic-type>] [--host <host-id>]
                  [--dns-name dns-name] [--enable | --disable]
                  [--name <name>]
                  [--fixed-ip subnet=<subnet>,ip-address=<ip-address>]
                  [--no-fixed-ip]
                  [--binding-profile <binding-profile>]
                  [--no-binding-profile] [--qos-policy <qos-policy>]
                  [--security-group <security-group>]
                  [--no-security-group]
                  [--enable-port-security | --disable-port-security]
                  [--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]]
                  [--no-allowed-address]
                  [--data-plane-status <status>] [--tag <tag>]
                  [--no-tag]
                  <port>

```

Table 47.14. Positional Arguments

Value	Summary
<port>	Port to modify (name or id)

Table 47.15. Optional Arguments

Value	Summary
--enable	Enable port
--no-security-group	Clear existing security groups associated with this port
--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]	Add allowed-address pair associated with this port: ip-address=<ip-address>[,mac-address=<mac-address>] (repeat option to set multiple allowed-address pairs)
--fixed-ip subnet=<subnet>,ip-address=<ip-address>	Desired ip and/or subnet for this port (name or id): subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)
--disable-port-security	Disable port security for this port
--enable-port-security	Enable port security for this port
--name <name>	Set port name
--no-binding-profile	Clear existing information of binding:profile.specify both --binding-profile and --no-binding-profile to overwrite the current binding:profile information.
--device-owner <device-owner>	Device owner of this port. this is the entity that uses the port (for example, network:dhcp).
--device <device-id>	Port device id
--qos-policy <qos-policy>	Attach qos policy to this port (name or id)
-h, --help	Show this help message and exit
--disable	Disable port
--data-plane-status <status>	Set data plane status of this port (active

Value	Summary
down). Unset it to None with the <i>port unset</i> command (requires data plane status extension)	--mac-address <mac-address>
Mac address of this port (admin only)	--no-tag
Clear tags associated with the port. specify both --tag and --no-tag to overwrite current tags	--binding-profile <binding-profile>
Custom data to be passed as binding:profile. data may be passed as <key>=<value> or JSON. (repeat option to set multiple binding:profile data)	--security-group <security-group>
Security group to associate with this port (name or ID) (repeat option to set multiple security groups)	--vnic-type <vnic-type>
Vnic type for this port (direct	direct-physical
macvtap	normal
baremetal	virtio-forwarder, default: normal)
--tag <tag>	Tag to be added to the port (repeat option to set multiple tags)
--description <description>	Description of this port
--no-fixed-ip	Clear existing information of fixed ip addresses.Specify both --fixed-ip and --no-fixed-ip to overwrite the current fixed IP addresses.
--host <host-id>	Allocate port on host <host-id> (id only)
--no-allowed-address	Clear existing allowed-address pairs associatedwith this port.(Specify both --allowed-address and --no-allowed-address to overwrite the current allowed-address pairs)
--dns-name dns-name	Set dns name to this port (requires dns integration extension)

## 47.5. PORT SHOW

Display port details

**Usage:**

```

openstack port show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    <port>

```

Table 47.16. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 47.17. Positional Arguments

Value	Summary
<port>	Port to display (name or id)

Table 47.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 47.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 47.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 47.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 47.6. PORT UNSET

Unset port properties

### Usage:

```

openstack port unset [-h]
                    [--fixed-ip subnet=<subnet>,ip-address=<ip-address>]
                    [--binding-profile <binding-profile-key>]
                    [--security-group <security-group>]
                    [--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]]
                    [--qos-policy] [--data-plane-status]
                    [--tag <tag> | --all-tag]
                    <port>

```

Table 47.22. Positional Arguments

Value	Summary
<port>	Port to modify (name or id)

Table 47.23. Optional Arguments

Value	Summary
--all-tag	Clear all tags associated with the port
--allowed-address ip-address=<ip-address>[,mac- address=<mac-address>]	Desired allowed-address pair which should be removed from this port: ip-address=<ip-address> [,mac-address =<mac-address>] (repeat option to set multiple allowed-address pairs)
--data-plane-status	Clear existing information of data plane status
--qos-policy	Remove the qos policy attached to the port
--security-group <security-group>	Security group which should be removed this port (name or ID) (repeat option to unset multiple security groups)



Value	Summary
--fixed-ip subnet=<subnet>,ip-address=<ip-address>	Desired ip and/or subnet which should be removed from this port (name or ID): subnet=<subnet>,ip-address =<ip-address> (repeat option to unset multiple fixed IP addresses)
-h, --help	Show this help message and exit
--binding-profile <binding-profile-key>	Desired key which should be removed from binding:profile(repeat option to unset multiple binding:profile data)
--tag <tag>	Tag to be removed from the port (repeat option to remove multiple tags)

## CHAPTER 48. PROJECT

This chapter describes the commands under the **project** command.

### 48.1. PROJECT CREATE

Create new project

#### Usage:

```
openstack project create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        [--description <description>]
                        [--enable | --disable]
                        [--property <key=value>] [--or-show]
                        <project-name>
```

Table 48.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 48.2. Positional Arguments

Value	Summary
<project-name>	New project name

Table 48.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 48.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 48.5. Optional Arguments

Value	Summary
--description <description>	Project description
--enable	Enable project (default)
--or-show	Return existing project
--property <key=value>	Add a property to <name> (repeat option to set multiple properties)
-h, --help	Show this help message and exit
--disable	Disable project

Table 48.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 48.2. PROJECT DELETE

Delete project(s)

### Usage:

```
openstack project delete [-h] <project> [<project> ...]
```

Table 48.7. Positional Arguments

Value	Summary
<project>	Project(s) to delete (name or id)

Table 48.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 48.3. PROJECT LIST

List projects

### Usage:

```
openstack project list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--long]
                        [--sort <key>[:<direction>]]
```

**Table 48.9. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 48.10. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 48.11. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 48.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 48.13. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--sort &lt;key&gt;[:&lt;direction&gt;]</code>	Sort output by selected keys and directions (asc or desc) (default: asc), repeat this option to specify multiple keys and directions.
<code>--long</code>	List additional fields in output

## 48.4. PROJECT PURGE

Clean resources associated with a project

### Usage:

```
openstack project purge [-h] [--dry-run] [--keep-project]
                        [--auth-project | --project <project>]
                        [--project-domain <project-domain>]
```

Table 48.14. Optional Arguments

Value	Summary
<code>--auth-project</code>	Delete resources of the project used to authenticate
<code>--project &lt;project&gt;</code>	Project to clean (name or id)
<code>--dry-run</code>	List a project's resources
<code>--keep-project</code>	Clean project resources, but don't delete the project
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

## 48.5. PROJECT SET

Set project properties

### Usage:

```
openstack project set [-h] [--name <name>]
                    [--description <description>]
                    [--enable | --disable] [--property <key=value>]
                    <project>
```

Table 48.15. Positional Arguments

Value	Summary
<code>&lt;project&gt;</code>	Project to modify (name or id)

Table 48.16. Optional Arguments

Value	Summary
<code>--description &lt;description&gt;</code>	Set project description
<code>--enable</code>	Enable project
<code>--name &lt;name&gt;</code>	Set project name
<code>--property &lt;key=value&gt;</code>	Set a project property (repeat option to set multiple properties)
<code>-h, --help</code>	Show this help message and exit
<code>--disable</code>	Disable project

## 48.6. PROJECT SHOW

Display project details

### Usage:

```
openstack project show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>]
```

```

[--fit-width] [--print-empty] [--noindent]
[--prefix PREFIX]
<project>

```

Table 48.17. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 48.18. Positional Arguments

Value	Summary
<project>	Project to display (name or id)

Table 48.19. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 48.20. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 48.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 48.22. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 48.7. PROJECT UNSET

Unset project properties

### Usage:

```
openstack project unset [-h] [--property <key>] <project>
```

**Table 48.23. Positional Arguments**

Value	Summary
<project>	Project to modify (name or id)

**Table 48.24. Optional Arguments**

Value	Summary
--property <key>	Unset a project property (repeat option to unset multiple properties)
-h, --help	Show this help message and exit



## CHAPTER 49. PTR

This chapter describes the commands under the **ptr** command.

### 49.1. PTR RECORD LIST

List floatingip ptr records

#### Usage:

```
openstack ptr record list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
```

Table 49.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 49.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.5. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

## 49.2. PTR RECORD SET

Set floatingip ptr record

### Usage:

```

openstack ptr record set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        [--description DESCRIPTION | --no-description]
                        [--ttl TTL | --no-ttl] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
floatingip_id ptrdname

```

Table 49.6. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 49.7. Positional Arguments

Value	Summary
<code>floatingip_id</code>	Floating ip id in format region:floatingip_id
<code>ptrdname</code>	Ptrd name

Table 49.8. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 49.9. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.10. Optional Arguments

Value	Summary
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None
<code>--no-ttl--all-projects</code>	Show results from all projects. default: false

Value	Summary
--no-description-ttl TTL	Ttl
--description DESCRIPTION	Description
-h, --help	Show this help message and exit

Table 49.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

### 49.3. PTR RECORD SHOW

Show floatingip ptr record details

#### Usage:

```

openstack ptr record show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          floatingip_id

```

Table 49.12. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 49.13. Positional Arguments

Value	Summary
floatingip_id	Floating ip id in format region:floatingip_id

Value	Summary
-------	---------

Table 49.14. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.15. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.16. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 49.17. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 49.4. PTR RECORD UNSET

Unset floatingip ptr record

**Usage:**

```
openstack ptr record unset [-h] [--all-projects] [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             floatingip_id
```

Table 49.18. Positional Arguments

Value	Summary
floatingip_id	Floating ip id in format region:floatingip_id

Table 49.19. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

## CHAPTER 50. QUOTA

This chapter describes the commands under the **quota** command.

### 50.1. QUOTA LIST

List quotas for all projects with non-default quota values or list detailed quota informations for requested project

#### Usage:

```
openstack quota list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN] [--project <project>]
                    [--detail] (--compute | --volume | --network)
```

Table 50.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 50.2. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 50.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 50.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 50.5. Optional Arguments

Value	Summary
<code>--compute</code>	List compute quota
<code>--project &lt;project&gt;</code>	List quotas for this project <project> (name or id)
<code>--detail</code>	Show details about quotas usage
<code>--volume</code>	List volume quota
<code>-h, --help</code>	Show this help message and exit
<code>--network</code>	List network quota

## 50.2. QUOTA SET

Set quotas for project or class

### Usage:

```

openstack quota set [-h] [--class] [--properties <properties>]
                    [--server-groups <server-groups>] [--ram <ram>]
                    [--key-pairs <key-pairs>] [--instances <instances>]
                    [--fixed-ips <fixed-ips>]
                    [--injected-file-size <injected-file-size>]
                    [--server-group-members <server-group-members>]
                    [--injected-files <injected-files>]
                    [--cores <cores>]
                    [--injected-path-size <injected-path-size>]
                    [--per-volume-gigabytes <per-volume-gigabytes>]
                    [--gigabytes <gigabytes>]
                    [--backup-gigabytes <backup-gigabytes>]

```



```

[--snapshots <snapshots>] [--volumes <volumes>]
[--backups <backups>] [--l7policies <l7policies>]
[--subnetpools <subnetpools>] [--vips <vips>]
[--ports <ports>] [--subnets <subnets>]
[--networks <networks>]
[--floating-ips <floating-ips>]
[--secgroup-rules <secgroup-rules>]
[--health-monitors <health-monitors>]
[--secgroups <secgroups>] [--routers <routers>]
[--rbac-policies <rbac-policies>]
[--volume-type <volume-type>]
<project/class>

```

Table 50.6. Positional Arguments

Value	Summary
<project/class>	Set quotas for this project or class (name/id)

Table 50.7. Optional Arguments

Value	Summary
--server-groups <server-groups>	New value for the server-groups quota
--subnetpools <subnetpools>	New value for the subnetpools quota
--injected-path-size <injected-path-size>	New value for the injected-path-size quota
--rbac-policies <rbac-policies>	New value for the rbac-policies quota
--fixed-ips <fixed-ips>	New value for the fixed-ips quota
--per-volume-gigabytes <per-volume-gigabytes>	New value for the per-volume-gigabytes quota
--ports <ports>	New value for the ports quota
--volume-type <volume-type>	Set quotas for a specific <volume-type>
--snapshots <snapshots>	New value for the snapshots quota
--subnets <subnets>	New value for the subnets quota
--networks <networks>	New value for the networks quota
--backups <backups>	New value for the backups quota
--backup-gigabytes <backup-gigabytes>	New value for the backup-gigabytes quota

Value	Summary
--volumes <volumes>	New value for the volumes quota
-h, --help	Show this help message and exit
--cores <cores>	New value for the cores quota
--key-pairs <key-pairs>	New value for the key-pairs quota
--l7policies <l7policies>	New value for the l7policies quota
--instances <instances>	New value for the instances quota
--injected-files <injected-files>	New value for the injected-files quota
--routers <routers>	New value for the routers quota
--properties <properties>	New value for the properties quota
--secgroup-rules <secgroup-rules>	New value for the secgroup-rules quota
--server-group-members <server-group-members>	New value for the server-group-members quota
--secgroups <secgroups>	New value for the secgroups quota
--ram <ram>	New value for the ram quota
--injected-file-size <injected-file-size>	New value for the injected-file-size quota
--vips <vips>	New value for the vips quota
--health-monitors <health-monitors>	New value for the health-monitors quota
--gigabytes <gigabytes>	New value for the gigabytes quota
--class	Set quotas for <class>
--floating-ips <floating-ips>	New value for the floating-ips quota

### 50.3. QUOTA SHOW

Show quotas for project or class

**Usage:**

```

openstack quota show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--class | --default]
                    [<project/class>]

```

Table 50.8. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 50.9. Positional Arguments

Value	Summary
<project/class>	Show quotas for this project or class (name or id)

Table 50.10. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 50.11. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 50.12. Optional Arguments

Value	Summary
--default	Show default quotas for <project>

Value	Summary
-h, --help	Show this help message and exit
--class	Show quotas for <class>

**Table 50.13. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 51. RECORDSET

This chapter describes the commands under the **recordset** command.

### 51.1. RECORDSET CREATE

Create new recordset

#### Usage:

```
openstack recordset create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX] --record RECORD --type
                          TYPE [--ttl TTL] [--description DESCRIPTION]
                          [--all-projects] [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          zone_id name
```

Table 51.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 51.2. Positional Arguments

Value	Summary
zone_id	Zone id
name	Recordset name

Table 51.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.5. Optional Arguments

Value	Summary
--edit-managed	Edit resources marked as managed. default: false
--ttl TTL	Time to live (seconds)
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--record RECORD	Recordset record, repeat if necessary
--type TYPE	Recordset type
--description DESCRIPTION	Description
-h, --help	Show this help message and exit

Table 51.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 51.2. RECORDSET DELETE

Delete recordset

### Usage:

```
openstack recordset delete [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
```

```

[--prefix PREFIX] [--all-projects]
[--edit-managed]
[--sudo-project-id SUDO_PROJECT_ID]
zone_id id

```

Table 51.7. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 51.8. Positional Arguments

Value	Summary
zone_id	Zone id
id	Recordset id

Table 51.9. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.10. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.11. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 51.12. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 51.3. RECORDSET LIST

List recordsets

### Usage:

```
openstack recordset list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--name NAME]
                        [--type TYPE] [--data DATA] [--ttl TTL]
                        [--description DESCRIPTION] [--status STATUS]
                        [--action ACTION] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        zone_id
```

Table 51.13. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable



Table 51.14. Positional Arguments

Value	Summary
zone_id	Zone id. to list all recordsets specify <i>all</i>

Table 51.15. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.16. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 51.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.18. Optional Arguments

Value	Summary
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--edit-managed	Edit resources marked as managed. default: false
--data DATA	Recordset record data
--ttl TTL	Time to live (seconds)
--all-projects	Show results from all projects. default: false

Value	Summary
--name NAME	Recordset name
--type TYPE	Recordset type
--description DESCRIPTION	Description
--status STATUS	Recordset status
-h, --help	Show this help message and exit
--action ACTION	Recordset action

## 51.4. RECORDSET SET

Set recordset properties

### Usage:

```

openstack recordset set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        [--records RECORDS [RECORDS ...]]
                        [--description DESCRIPTION | --no-description]
                        [--ttl TTL | --no-ttl] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        zone_id id

```

Table 51.19. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 51.20. Positional Arguments

Value	Summary
zone_id	Zone id
id	Recordset id

**Table 51.21. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 51.22. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 51.23. Optional Arguments**

Value	Summary
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--no-ttl--all-projects	Show results from all projects. default: false
--no-description--ttl TTL	Ttl
--records RECORDS [RECORDS ...]	Records
--description DESCRIPTION	Description
-h, --help	Show this help message and exit

**Table 51.24. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 51.5. RECORDSET SHOW

Show recordset details

### Usage:

```
openstack recordset show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        zone_id id
```

Table 51.25. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 51.26. Positional Arguments

Value	Summary
zone_id	Zone id
id	Recordset id

Table 51.27. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.28. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.29. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 51.30. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 52. RESOURCE

This chapter describes the commands under the **resource** command.

### 52.1. RESOURCE MEMBER CREATE

Shares a resource to another tenant.

#### Usage:

```
openstack resource member create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                resource_id resource_type member_id
```

Table 52.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 52.2. Positional Arguments

Value	Summary
member_id	Project id to whom the resource is shared to.
resource_type	Resource type.
resource_id	Resource id to be shared.

Table 52.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.5. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 52.2. RESOURCE MEMBER DELETE

Delete a resource sharing relationship.

### Usage:

```
openstack resource member delete [-h] resource resource_type member_id
```

Table 52.7. Positional Arguments

Value	Summary
resource	Resource id to be shared.
resource_type	Resource type.
member_id	Project id to whom the resource is shared to.

Table 52.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 52.3. RESOURCE MEMBER LIST

List all members.

### Usage:

```
openstack resource member list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]
                               resource_id resource_type
```

Table 52.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 52.10. Positional Arguments

Value	Summary
resource_type	Resource type.
resource_id	Resource id to be shared.

Table 52.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 52.12. Output Formatters



Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.13. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 52.4. RESOURCE MEMBER SHOW

Show specific member information.

### Usage:

```
openstack resource member show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [-m MEMBER_ID]
                               resource resource_type
```

Table 52.15. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 52.16. Positional Arguments**

Value	Summary
<code>resource</code>	Resource id to be shared.
<code>resource_type</code>	Resource type.

**Table 52.17. Output Formatters**

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 52.18. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 52.19. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-m MEMBER_ID, --member-id MEMBER_ID</code>	Project id to whom the resource is shared to. no need to provide this param if you are the resource member.

**Table 52.20. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 52.5. RESOURCE MEMBER UPDATE

Update resource sharing status.

### Usage:

```
openstack resource member update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [-m MEMBER_ID]
                                [-s {pending,accepted,rejected}]
                                resource_id resource_type
```

Table 52.21. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 52.22. Positional Arguments

Value	Summary
resource_type	Resource type.
resource_id	Resource id to be shared.

Table 52.23. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.24. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-m MEMBER_ID, --member-id MEMBER_ID	Project id to whom the resource is shared to. no need to provide this param if you are the resource member.
-s {pending,accepted,rejected}, --status {pending,accepted,rejected}	Status of the sharing.

Table 52.26. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 53. ROLE

This chapter describes the commands under the **role** command.

### 53.1. ROLE ADD

Add role to project:user

#### Usage:

```
openstack role add [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--noindent] [--prefix PREFIX]
                  --project <project> --user <user>
                  <role>
```

Table 53.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 53.2. Positional Arguments

Value	Summary
<role>	Role to add to <project>:<user> (name or id)

Table 53.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 53.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 53.5. Optional Arguments

Value	Summary
--user <user>	Include <user> (name or id)
-h, --help	Show this help message and exit
--project <project>	Include <project> (name or id)

Table 53.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 53.2. ROLE ASSIGNMENT LIST

List role assignments

### Usage:

```
openstack role assignment list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--user <user>] [--project <project>]
                             [--names] [--auth-user] [--auth-project]
```

Table 53.7. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 53.8. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 53.9. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 53.10. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 53.11. Optional Arguments

Value	Summary
<code>--auth-project</code>	Only list assignments for the project to which the authenticated user's token is scoped
<code>--user &lt;user&gt;</code>	User to filter (name or id)
<code>--auth-user</code>	Only list assignments for the authenticated user
<code>--names</code>	Display names instead of ids
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--project &lt;project&gt;</code>	Project to filter (name or id)

### 53.3. ROLE CREATE

Create new role

#### Usage:

```
openstack role create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--or-show]
                    <name>
```

Table 53.12. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 53.13. Positional Arguments

Value	Summary
<code>&lt;name&gt;</code>	New role name

Table 53.14. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 53.15. JSON Formatter



Value	Summary
--noindent	Whether to disable indenting the json

Table 53.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--or-show	Return existing role

Table 53.17. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 53.4. ROLE DELETE

Delete role(s)

Usage:

```
openstack role delete [-h] <role> [<role> ...]
```

Table 53.18. Positional Arguments

Value	Summary
<role>	Role(s) to delete (name or id)

Table 53.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 53.5. ROLE LIST

List roles

Usage:

```
openstack role list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty] [--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN] [--project <project>]
[--user <user>]

```

Table 53.20. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 53.21. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 53.22. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 53.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 53.24. Optional Arguments

Value	Summary
--user <user>	Filter roles by <user> (name or id)
-h, --help	Show this help message and exit
--project <project>	Filter roles by <project> (name or id)

## 53.6. ROLE REMOVE

Remove role from project : user

### Usage:

```
openstack role remove [-h] --project <project> --user <user> <role>
```

Table 53.25. Positional Arguments

Value	Summary
<role>	Role to remove (name or id)

Table 53.26. Optional Arguments

Value	Summary
--user <user>	Include <user> (name or id)
-h, --help	Show this help message and exit
--project <project>	Include <project> (name or id)

## 53.7. ROLE SHOW

Display role details

### Usage:

```
openstack role show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    <role>
```

Table 53.27. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 53.28. Positional Arguments

Value	Summary
<code>&lt;role&gt;</code>	Role to display (name or id)

Table 53.29. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 53.30. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 53.31. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 53.32. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 54. ROUTER

This chapter describes the commands under the **router** command.

### 54.1. ROUTER ADD PORT

Add a port to a router

#### Usage:

```
openstack router add port [-h] <router> <port>
```

Table 54.1. Positional Arguments

Value	Summary
<port>	Port to be added (name or id)
<router>	Router to which port will be added (name or id)

Table 54.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 54.2. ROUTER ADD SUBNET

Add a subnet to a router

#### Usage:

```
openstack router add subnet [-h] <router> <subnet>
```

Table 54.3. Positional Arguments

Value	Summary
<subnet>	Subnet to be added (name or id)
<router>	Router to which subnet will be added (name or id)

Table 54.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 54.3. ROUTER CREATE

Create a new router

### Usage:

```
openstack router create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--enable | --disable]
                        [--distributed | --centralized]
                        [--ha | --no-ha] [--description <description>]
                        [--project <project>]
                        [--project-domain <project-domain>]
                        [--availability-zone-hint <availability-zone>]
                        [--tag <tag> | --no-tag]
                        <name>
```

Table 54.5. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 54.6. Positional Arguments

Value	Summary
<name>	New router name

Table 54.7. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.8. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 54.9. Optional Arguments**

Value	Summary
<code>--availability-zone-hint &lt;availability-zone&gt;</code>	Availability zone in which to create this router (Router Availability Zone extension required, repeat option to set multiple availability zones)
<code>--description &lt;description&gt;</code>	Set router description
<code>--distributed</code>	Create a distributed router
<code>--ha</code>	Create a highly available router
<code>--no-tag</code>	No tags associated with the router
<code>--enable</code>	Enable router (default)
<code>--centralized</code>	Create a centralized router
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--no-ha</code>	Create a legacy router
<code>-h, --help</code>	Show this help message and exit
<code>--disable</code>	Disable router
<code>--project &lt;project&gt;</code>	Owner's project (name or id)
<code>--tag &lt;tag&gt;</code>	Tag to be added to the router (repeat option to set multiple tags)

**Table 54.10. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 54.4. ROUTER DELETE

Delete router(s)

### Usage:

```
openstack router delete [-h] <router> [<router> ...]
```

Table 54.11. Positional Arguments

Value	Summary
<router>	Router(s) to delete (name or id)

Table 54.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 54.5. ROUTER LIST

List routers

### Usage:

```
openstack router list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
    [--max-width <integer>] [--fit-width]
    [--print-empty] [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN] [--name <name>]
    [--enable | --disable] [--long]
    [--project <project>]
    [--project-domain <project-domain>]
    [--agent <agent-id>] [--tags <tag>[,<tag>,...]]
    [--any-tags <tag>[,<tag>,...]]
    [--not-tags <tag>[,<tag>,...]]
    [--not-any-tags <tag>[,<tag>,...]]
```

Table 54.13. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.



Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 54.14. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.15. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.16. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.17. Optional Arguments

Value	Summary
<code>--agent &lt;agent-id&gt;</code>	List routers hosted by an agent (id only)
<code>--enable</code>	List enabled routers
<code>--not-any-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	Exclude routers which have any given tag(s) (comma-separated list of tags)
<code>--name &lt;name&gt;</code>	List routers according to their name

Value	Summary
<code>--tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	List routers which have all given tag(s) (comma-separated list of tags)
<code>--long</code>	List additional fields in output
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--any-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	List routers which have any given tag(s) (comma-separated list of tags)
<code>--not-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	Exclude routers which have all given tag(s) (comma-separated list of tags)
<code>-h, --help</code>	Show this help message and exit
<code>--disable</code>	List disabled routers
<code>--project &lt;project&gt;</code>	List routers according to their project (name or id)

## 54.6. ROUTER REMOVE PORT

Remove a port from a router

### Usage:

```
openstack router remove port [-h] <router> <port>
```

**Table 54.18. Positional Arguments**

Value	Summary
<code>&lt;port&gt;</code>	Port to be removed and deleted (name or id)
<code>&lt;router&gt;</code>	Router from which port will be removed (name or id)

**Table 54.19. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 54.7. ROUTER REMOVE SUBNET

Remove a subnet from a router

### Usage:

```
openstack router remove subnet [-h] <router> <subnet>
```

Table 54.20. Positional Arguments

Value	Summary
<subnet>	Subnet to be removed (name or id)
<router>	Router from which the subnet will be removed (name or id)

Table 54.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 54.8. ROUTER SET

Set router properties

### Usage:

```
openstack router set [-h] [--name <name>] [--description <description>]
                    [--enable | --disable]
                    [--distributed | --centralized]
                    [--route destination=<subnet>,gateway=<ip-address>]
                    [--no-route] [--ha | --no-ha]
                    [--external-gateway <network>]
                    [--fixed-ip subnet=<subnet>,ip-address=<ip-address>]
                    [--enable-snat | --disable-snat] [--tag <tag>]
                    [--no-tag]
                    <router>
```

Table 54.22. Positional Arguments

Value	Summary
<router>	Router to modify (name or id)

Table 54.23. Optional Arguments

Value	Summary
--description <description>	Set router description

Value	Summary
--distributed	Set router to distributed mode (disabled router only)
--route destination=<subnet>,gateway=<ip-address>	Routes associated with the router destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to set multiple routes)
--no-ha	Clear high availability attribute of the router (disabled router only)
--enable	Enable router
--no-tag	Clear tags associated with the router. specify both --tag and --no-tag to overwrite current tags
--name <name>	Set router name
--ha	Set the router as highly available (disabled router only)
--tag <tag>	Tag to be added to the router (repeat option to set multiple tags)
--centralized	Set router to centralized mode (disabled router only)
--disable-snat	Disable source nat on external gateway
--external-gateway <network>	External network used as router's gateway (name or id)
--fixed-ip subnet=<subnet>,ip-address=<ip-address>	Desired ip and/or subnet (name or id) on external gateway: subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)
--no-route	Clear routes associated with the router. specify both --route and --no-route to overwrite current value of route.
-h, --help	Show this help message and exit
--disable	Disable router
--enable-snat	Enable source nat on external gateway

## 54.9. ROUTER SHOW

Display router details

### Usage:

```
openstack router show [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--max-width <integer>] [--fit-width]
                       [--print-empty] [--noindent] [--prefix PREFIX]
                       <router>
```

**Table 54.24. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 54.25. Positional Arguments**

Value	Summary
<router>	Router to display (name or id)

**Table 54.26. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 54.27. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 54.28. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

Table 54.29. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 54.10. ROUTER UNSET

Unset router properties

### Usage:

```
openstack router unset [-h]
                        [--route destination=<subnet>,gateway=<ip-address>]
                        [--external-gateway] [--tag <tag> | --all-tag]
                        <router>
```

Table 54.30. Positional Arguments

Value	Summary
<router>	Router to modify (name or id)

Table 54.31. Optional Arguments

Value	Summary
--external-gateway	Remove external gateway information from the router
--all-tag	Clear all tags associated with the router
-h, --help	Show this help message and exit
--route destination=<subnet>,gateway=<ip-address>	Routes to be removed from the router destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to unset multiple routes)
--tag <tag>	Tag to be removed from the router (repeat option to remove multiple tags)

## CHAPTER 55. SECRET

This chapter describes the commands under the **secret** command.

### 55.1. SECRET CONTAINER CREATE

Store a container in Barbican.

#### Usage:

```
openstack secret container create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--name NAME] [--type TYPE]
                                [--secret SECRET]
```

Table 55.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 55.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 55.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 55.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--secret SECRET, -s SECRET	One secret to store in a container (can be set multiple times). Example: --secret "private_key=https://url.test/v1/secrets/1-2-3-4"
--name NAME, -n NAME	A human-friendly name.
--type TYPE	Type of container to create (default: generic).

Table 55.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 55.2. SECRET CONTAINER DELETE

Delete a container by providing its href.

### Usage:

```
openstack secret container delete [-h] URI
```

Table 55.6. Positional Arguments

Value	Summary
URI	The uri reference for the container

Table 55.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 55.3. SECRET CONTAINER GET

Retrieve a container by providing its URI.

### Usage:

```
openstack secret container get [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
```



```

[--fit-width] [--print-empty]
[--noindent] [--prefix PREFIX]
URI

```

**Table 55.8. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 55.9. Positional Arguments**

Value	Summary
URI	The uri reference for the container.

**Table 55.10. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 55.11. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 55.12. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 55.13. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 55.4. SECRET CONTAINER LIST

List containers.

### Usage:

```
openstack secret container list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--limit LIMIT] [--offset OFFSET]
                                [--name NAME] [--type TYPE]
```

Table 55.14. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 55.15. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 55.16. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 55.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 55.18. Optional Arguments

Value	Summary
--type TYPE, -t TYPE	Specify the type filter for the list (default: none).
-h, --help	Show this help message and exit
--limit LIMIT, -l LIMIT	Specify the limit to the number of items to list per page (default: 10; maximum: 100)
--name NAME, -n NAME	Specify the container name (default: none)
--offset OFFSET, -o OFFSET	Specify the page offset (default: 0)

## 55.5. SECRET DELETE

Delete a secret by providing its URI.

### Usage:

```
openstack secret delete [-h] URI
```

Table 55.19. Positional Arguments

Value	Summary
URI	The uri reference for the secret

Table 55.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 55.6. SECRET GET

Retrieve a secret by providing its URI.

### Usage:

```
openstack secret get [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--decrypt] [--payload]
                    [--payload_content_type PAYLOAD_CONTENT_TYPE]
                    URI
```

Table 55.21. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 55.22. Positional Arguments

Value	Summary
URI	The uri reference for the secret.

Table 55.23. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 55.24. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 55.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--payload, -p	If specified, retrieve the unencrypted secret data; the data type can be specified with --payload_content_type. If the user wishes to only retrieve the value of the payload they must add "-f value" to format returning only the value of the payload
--payload_content_type PAYLOAD_CONTENT_TYPE, -t PAYLOAD_CONTENT_TYPE	The content type of the decrypted secret (default: text/plain).
--decrypt, -d	If specified, retrieve the unencrypted secret data; the data type can be specified with --payload_content_type.

Table 55.26. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 55.7. SECRET LIST

List secrets.

### Usage:

```
openstack secret list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN] [--limit LIMIT]
                    [--offset OFFSET] [--name NAME]
                    [--algorithm ALGORITHM] [--bit-length BIT_LENGTH]
                    [--mode MODE] [--secret-type SECRET_TYPE]
```

Table 55.27. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 55.28. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 55.29. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 55.30. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 55.31. Optional Arguments

Value	Summary
<code>--secret-type SECRET_TYPE, -s SECRET_TYPE</code>	Specify the secret type (default: none).
<code>--name NAME, -n NAME</code>	Specify the secret name (default: none)

Value	Summary
--limit LIMIT, -l LIMIT	Specify the limit to the number of items to list per page (default: 10; maximum: 100)
--bit-length BIT_LENGTH, -b BIT_LENGTH	The bit length filter for the list (default: 0).
--algorithm ALGORITHM, -a ALGORITHM	The algorithm filter for the list(default: none).
-h, --help	Show this help message and exit
--mode MODE, -m MODE	The algorithm mode filter for the list (default: None).
--offset OFFSET, -o OFFSET	Specify the page offset (default: 0)

## 55.8. SECRET ORDER CREATE

Create a new order.

### Usage:

```

openstack secret order create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--name NAME] [--algorithm ALGORITHM]
                               [--bit-length BIT_LENGTH] [--mode MODE]
                               [--payload-content-type PAYLOAD_CONTENT_TYPE]
                               [--expiration EXPIRATION]
                               [--request-type REQUEST_TYPE]
                               [--subject-dn SUBJECT_DN]
                               [--source-container-ref SOURCE_CONTAINER_REF]
                               [--ca-id CA_ID] [--profile PROFILE]
                               [--request-file REQUEST_FILE]
                               type

```

Table 55.32. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 55.33. Positional Arguments

Value	Summary
<code>type</code>	The type of the order (key, asymmetric, certificate) to create.

Table 55.34. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 55.35. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 55.36. Optional Arguments

Value	Summary
<code>--payload-content-type</code> <code>PAYLOAD_CONTENT_TYPE</code> , <code>-t</code> <code>PAYLOAD_CONTENT_TYPE</code>	The type/format of the secret to be generated (default: application/octet-stream).
<code>--expiration EXPIRATION</code> , <code>-x EXPIRATION</code>	The expiration time for the secret in iso 8601 format.
<code>--request-file REQUEST_FILE</code>	The file containing the csr.
<code>--subject-dn SUBJECT_DN</code>	The subject of the certificate.
<code>--request-type REQUEST_TYPE</code>	The type of the certificate request.
<code>--name NAME</code> , <code>-n NAME</code>	A human-friendly name.



Value	Summary
--bit-length BIT_LENGTH, -b BIT_LENGTH	The bit length of the requested secret key (default: 256).
--source-container-ref SOURCE_CONTAINER_REF	The source of the certificate when using stored-key requests.
--algorithm ALGORITHM, -a ALGORITHM	The algorithm to be used with the requested key (default: aes).
-h, --help	Show this help message and exit
--mode MODE, -m MODE	The algorithm mode to be used with the requested key (default: cbc).
--profile PROFILE	The profile of certificate to use.
--ca-id CA_ID	The identifier of the ca to use for the certificate request.

Table 55.37. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 55.9. SECRET ORDER DELETE

Delete an order by providing its href.

### Usage:

```
openstack secret order delete [-h] URI
```

Table 55.38. Positional Arguments

Value	Summary
URI	The uri reference for the order

Table 55.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 55.10. SECRET ORDER GET

Retrieve an order by providing its URI.

### Usage:

```
openstack secret order get [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          URI
```

Table 55.40. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 55.41. Positional Arguments

Value	Summary
URI	The uri reference order.

Table 55.42. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 55.43. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 55.44. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 55.45. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 55.11. SECRET ORDER LIST

List orders.

### Usage:

```

openstack secret order list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN] [--limit LIMIT]
                             [--offset OFFSET]

```

Table 55.46. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 55.47. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 55.48. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 55.49. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 55.50. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit LIMIT, -l LIMIT	Specify the limit to the number of items to list per page (default: 10; maximum: 100)
--offset OFFSET, -o OFFSET	Specify the page offset (default: 0)

## 55.12. SECRET STORE

Store a secret in Barbican.

### Usage:

```
openstack secret store [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--name NAME]
                        [--payload PAYLOAD] [--secret-type SECRET_TYPE]
                        [--payload-content-type PAYLOAD_CONTENT_TYPE]
                        [--payload-content-encoding PAYLOAD_CONTENT_ENCODING]
                        [--algorithm ALGORITHM]
                        [--bit-length BIT_LENGTH] [--mode MODE]
                        [--expiration EXPIRATION]
```

Table 55.51. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 55.52. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 55.53. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 55.54. Optional Arguments

Value	Summary
<code>--payload-content-type</code> <code>PAYLOAD_CONTENT_TYPE</code> , <code>-t</code> <code>PAYLOAD_CONTENT_TYPE</code>	The type/format of the provided secret data; "text/plain" is assumed to be UTF-8; required when <code>-payload</code> is supplied.
<code>--expiration EXPIRATION</code> , <code>-x EXPIRATION</code>	The expiration time for the secret in iso 8601 format.
<code>--secret-type SECRET_TYPE</code> , <code>-s SECRET_TYPE</code>	The secret type; must be one of symmetric, public, private, certificate, passphrase, opaque (default)
<code>--payload-content-encoding</code> <code>PAYLOAD_CONTENT_ENCODING</code> , <code>-e</code> <code>PAYLOAD_CONTENT_ENCODING</code>	Required if <code>--payload-content-type</code> is "application/octet-stream".
<code>--name NAME</code> , <code>-n NAME</code>	A human-friendly name.

Value	Summary
<code>--bit-length BIT_LENGTH, -b BIT_LENGTH</code>	The bit length (default: 256).
<code>--algorithm ALGORITHM, -a ALGORITHM</code>	The algorithm (default: aes).
<code>-h, --help</code>	Show this help message and exit
<code>--mode MODE, -m MODE</code>	The algorithm mode; used only for reference (default: cbc)
<code>--payload PAYLOAD, -p PAYLOAD</code>	The unencrypted secret; if provided, you must also provide a <code>payload_content_type</code>

Table 55.55. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 55.13. SECRET UPDATE

Update a secret with no payload in Barbican.

### Usage:

```
openstack secret update [-h] URI payload
```

Table 55.56. Positional Arguments

Value	Summary
URI	The uri reference for the secret.
payload	The unencrypted secret

Table 55.57. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## CHAPTER 56. SECURITY

This chapter describes the commands under the **security** command.

### 56.1. SECURITY GROUP CREATE

Create a new security group

#### Usage:

```
openstack security group create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--description <description>]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               <name>
```

Table 56.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 56.2. Positional Arguments

Value	Summary
<name>	New security group name

Table 56.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 56.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 56.5. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	Security group description
<code>--project &lt;project&gt;</code>	Owner's project (name or id)
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 56.6. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 56.2. SECURITY GROUP DELETE

Delete security group(s)

### Usage:

```
openstack security group delete [-h] <group> [<group> ...]
```

Table 56.7. Positional Arguments

Value	Summary
<code>&lt;group&gt;</code>	Security group(s) to delete (name or id)

Table 56.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit



## 56.3. SECURITY GROUP LIST

List security groups

### Usage:

```
openstack security group list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--project <project>]
                             [--project-domain <project-domain>]
```

Table 56.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 56.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 56.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 56.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	List security groups according to the project (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

## 56.4. SECURITY GROUP RULE CREATE

Create a new security group rule

### Usage:

```

openstack security group rule create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    [--remote-ip <ip-address> | --remote-group <group>]
    [--description <description>]
    [--dst-port <port-range>]
    [--icmp-type <icmp-type>]
    [--icmp-code <icmp-code>]
    [--protocol <protocol>]
    [--ingress | --egress]
    [--ethertype <ethertype>]
    [--project <project>]
    [--project-domain <project-domain>]
    <group>

```

Table 56.14. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 56.15. Positional Arguments

Value	Summary
<code>&lt;group&gt;</code>	Create rule in this security group (name or id)

Table 56.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 56.17. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 56.18. Optional Arguments

Value	Summary
<code>--remote-ip &lt;ip-address&gt;</code>	Remote ip address block (may use cidr notation; default for IPv4 rule: 0.0.0.0/0)
<code>--remote-group &lt;group&gt;</code>	Remote security group (name or id)
<code>--icmp-type &lt;icmp-type&gt;</code>	Icmp type for icmp ip protocols
<code>--icmp-code &lt;icmp-code&gt;</code>	Icmp code for icmp ip protocols

Value	Summary
--ethertype <ethertype>	Ethertype of network traffic (ipv4, ipv6; default: based on IP protocol)
--ingress	Rule applies to incoming network traffic (default)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--protocol <protocol>	Ip protocol (ah, dccp, ecp, esp, gre, icmp, igmp, ipv6-encap, ipv6-frag, ipv6-icmp, ipv6-nonxt, ipv6-opts, ipv6-route, ospf, pgm, rsvp, sctp, tcp, udp, udplite, vrrp and integer representations [0-255] or any; default: tcp)
--dst-port <port-range>	Destination port, may be a single port or a starting and ending port range: 137:139. Required for IP protocols TCP and UDP. Ignored for ICMP IP protocols.
-h, --help	Show this help message and exit
--description <description>	Set security group rule description
--project <project>	Owner's project (name or id)
--egress	Rule applies to outgoing network traffic

Table 56.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 56.5. SECURITY GROUP RULE DELETE

Delete security group rule(s)

### Usage:

```
openstack security group rule delete [-h] <rule> [<rule> ...]
```

Table 56.20. Positional Arguments

Value	Summary
<rule>	Security group rule(s) to delete (id only)

Table 56.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 56.6. SECURITY GROUP RULE LIST

List security group rules

### Usage:

```

openstack security group rule list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--protocol <protocol>]
                                [--ingress | --egress] [--long]
                                [<group>]

```

Table 56.22. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 56.23. Positional Arguments

Value	Summary
<group>	List all rules in this security group (name or id)

Table 56.24. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 56.25. Output Formatters**

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 56.26. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 56.27. Optional Arguments**

Value	Summary
<code>--protocol &lt;protocol&gt;</code>	List rules by the ip protocol ( <code>ah</code> , <code>dhcp</code> , <code>egp</code> , <code>esp</code> , <code>gre</code> , <code>icmp</code> , <code>igmp</code> , <code>ipv6-encap</code> , <code>ipv6-frag</code> , <code>ipv6-icmp</code> , <code>ipv6-nonxt</code> , <code>ipv6-opts</code> , <code>ipv6-route</code> , <code>ospf</code> , <code>pgm</code> , <code>rsvp</code> , <code>sctp</code> , <code>tcp</code> , <code>udp</code> , <code>udplite</code> , <code>vrrp</code> and integer representations [0-255]).
<code>-h</code> , <code>--help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output
<code>--ingress</code>	List rules applied to incoming network traffic
<code>--egress</code>	List rules applied to outgoing network traffic

## 56.7. SECURITY GROUP RULE SHOW

Display security group rule details

**Usage:**

```

openstack security group rule show [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    <rule>

```

Table 56.28. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 56.29. Positional Arguments

Value	Summary
<rule>	Security group rule to display (id only)

Table 56.30. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 56.31. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.32. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 56.33. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 56.8. SECURITY GROUP SET

Set security group properties

### Usage:

```
openstack security group set [-h] [--name <new-name>]
                             [--description <description>]
                             <group>
```

Table 56.34. Positional Arguments

Value	Summary
<group>	Security group to modify (name or id)

Table 56.35. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	New security group description
--name <new-name>	New security group name

## 56.9. SECURITY GROUP SHOW

Display security group details

### Usage:

```
openstack security group show [-h] [-f {json,shell,table,value,yaml}]
                              [-c COLUMN] [--max-width <integer>]
                              [--fit-width] [--print-empty]
```



```
[--noindent] [--prefix PREFIX]
<group>
```

**Table 56.36. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 56.37. Positional Arguments**

Value	Summary
<group>	Security group to display (name or id)

**Table 56.38. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 56.39. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 56.40. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 56.41. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 57. SERVER

This chapter describes the commands under the **server** command.

### 57.1. SERVER ADD FIXED IP

Add fixed IP address to server

#### Usage:

```
openstack server add fixed ip [-h] [--fixed-ip-address <ip-address>]
                               <server> <network>
```

Table 57.1. Positional Arguments

Value	Summary
<server>	Server to receive the fixed ip address (name or id)
<network>	Network to allocate the fixed ip address from (name or ID)

Table 57.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fixed-ip-address <ip-address>	Requested fixed ip address

### 57.2. SERVER ADD FLOATING IP

Add floating IP address to server

#### Usage:

```
openstack server add floating ip [-h] [--fixed-ip-address <ip-address>]
                                   <server> <ip-address>
```

Table 57.3. Positional Arguments

Value	Summary
<server>	Server to receive the floating ip address (name or id)
<ip-address>	Floating ip address to assign to the first available server port (IP only)

Table 57.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fixed-ip-address <ip-address>	Fixed ip address to associate with this floating ip address. The first server port containing the fixed IP address will be used

## 57.3. SERVER ADD NETWORK

Add network to server

### Usage:

```
openstack server add network [-h] <server> <network>
```

Table 57.5. Positional Arguments

Value	Summary
<server>	Server to add the network to (name or id)
<network>	Network to add to the server (name or id)

Table 57.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.4. SERVER ADD PORT

Add port to server

### Usage:

```
openstack server add port [-h] <server> <port>
```

Table 57.7. Positional Arguments

Value	Summary
<server>	Server to add the port to (name or id)
<port>	Port to add to the server (name or id)

Table 57.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.5. SERVER ADD SECURITY GROUP

Add security group to server

### Usage:

```
openstack server add security group [-h] <server> <group>
```

Table 57.9. Positional Arguments

Value	Summary
<server>	Server (name or id)
<group>	Security group to add (name or id)

Table 57.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.6. SERVER ADD VOLUME

Add volume to server

### Usage:

```
openstack server add volume [-h] [--device <device>] <server> <volume>
```

Table 57.11. Positional Arguments

Value	Summary
<volume>	Volume to add (name or id)
<server>	Server (name or id)

Table 57.12. Optional Arguments

Value	Summary
--device <device>	Server internal device name for volume
-h, --help	Show this help message and exit

## 57.7. SERVER BACKUP CREATE

Create a server backup image

### Usage:

```
openstack server backup create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--name <image-name>]
                               [--type <backup-type>]
                               [--rotate <count>] [--wait]
                               <server>
```

Table 57.13. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 57.14. Positional Arguments

Value	Summary
<server>	Server to back up (name or id)

Table 57.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 57.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 57.17. Optional Arguments

Value	Summary
--type <backup-type>	Used to populate the backup_type property of the backup image (default: empty)
-h, --help	Show this help message and exit
--wait	Wait for backup image create to complete
--rotate <count>	Number of backups to keep (default: 1)
--name <image-name>	Name of the backup image (default: server name)

Table 57.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 57.8. SERVER CREATE

Create a new server

### Usage:

```
openstack server create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        (--image <image> | --volume <volume>) --flavor
                        <flavor> [--security-group <security-group>]
                        [--key-name <key-name>]
                        [--property <key=value>]
                        [--file <dest-filename=source-filename>]
                        [--user-data <user-data>]
```

```

[--availability-zone <zone-name>]
[--block-device-mapping <dev-name=mapping>]
[--nic <net-id=net-uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-addr,port-id=port-
uuid,auto,none>]
[--network <network>] [--port <port>]
[--hint <key=value>]
[--config-drive <config-drive-volume>|True]
[--min <count>] [--max <count>] [--wait]
<server-name>

```

Table 57.19. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 57.20. Positional Arguments

Value	Summary
<server-name>	New server name

Table 57.21. Output Formatters

Value	Summary
output formatter options-f { <code>json,shell,table,value,yaml</code> }, <code>--format</code> { <code>json,shell,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 57.22. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 57.23. Optional Arguments



Value	Summary
<code>--port &lt;port&gt;</code>	Create a nic on the server and connect it to port. Specify option multiple times to create multiple NICs. This is a wrapper for the <code>--nic port-id=&lt;port&gt;</code> parameter that provides simple syntax for the standard use case of connecting a new server to a given port. For more advanced use cases, refer to the <code>--nic</code> parameter.
<code>--nic &lt;net-id=net-uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-addr,port-id=port-uuid,auto,none&gt;</code>	Create a nic on the server. specify option multiple times to create multiple NICs. Either net-id or port-id must be provided, but not both. net-id: attach NIC to network with this UUID, port-id: attach NIC to port with this UUID, v4-fixed-ip: IPv4 fixed address for NIC (optional), v6-fixed-ip: IPv6 fixed address for NIC (optional), none: (v2.37+) no network is attached, auto: (v2.37+) the compute service will automatically allocate a network. Specifying a --nic of auto or none cannot be used with any other --nic value.
<code>--availability-zone &lt;zone-name&gt;</code>	Select an availability zone for the server
<code>--hint &lt;key=value&gt;</code>	Hints for the scheduler (optional extension)
<code>--wait</code>	Wait for build to complete
<code>--max &lt;count&gt;</code>	Maximum number of servers to launch (default=1)
<code>--volume &lt;volume&gt;</code>	Create server using this volume as the boot disk (name or ID). This option automatically creates a block device mapping with a boot index of 0. On many hypervisors (libvirt/kvm for example) this will be device vda. Do not create a duplicate mapping using <code>--block-device-</code> mapping for this volume.
<code>--config-drive &lt;config-drive-volume&gt;</code>	True
Use specified volume as the config drive, or <i>true</i> to use an ephemeral drive	<code>--property &lt;key=value&gt;</code>
Set a property on this server (repeat option to set multiple values)	<code>--file &lt;dest-filename=source-filename&gt;</code>
File to inject into image before boot (repeat option to set multiple files)	<code>--network &lt;network&gt;</code>

Value	Summary
Create a nic on the server and connect it to network. Specify option multiple times to create multiple NICs. This is a wrapper for the <code>--nic net-id=&lt;network&gt;</code> parameter that provides simple syntax for the standard use case of connecting a new server to a given network. For more advanced use cases, refer to the <code>-- nic</code> parameter.	<code>--block-device-mapping &lt;dev-name=mapping&gt;</code>
Create a block device on the server. Block device mapping in the format <code>&lt;dev-name&gt;=&lt;id&gt;:&lt;type&gt;:&lt;size(GB)&gt;:&lt;delete-on-terminate&gt;</code> <code>&lt;dev-name&gt;</code> : block device name, like: vdb, xvdc (required) <code>&lt;id&gt;</code> : UUID of the volume or snapshot (required) <code>&lt;type&gt;</code> : volume or snapshot; default: volume (optional) <code>&lt;size(GB)&gt;</code> : volume size if create from snapshot (optional) <code>&lt;delete-on-terminate&gt;</code> : true or false; default: false (optional) (optional extension)	<code>--security-group &lt;security-group&gt;</code>
Security group to assign to this server (name or id) (repeat option to set multiple groups)	<code>--min &lt;count&gt;</code>
Minimum number of servers to launch (default=1)	<code>--key-name &lt;key-name&gt;</code>
Keypair to inject into this server (optional extension)	<code>-h, --help</code>
Show this help message and exit	<code>--user-data &lt;user-data&gt;</code>
User data file to serve from the metadata server	<code>--flavor &lt;flavor&gt;</code>
Create server with this flavor (name or id)	<code>--image &lt;image&gt;</code>

Table 57.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## 57.9. SERVER DELETE

Delete server(s)

### Usage:

```
openstack server delete [-h] [--wait] <server> [<server> ...]
```

Table 57.25. Positional Arguments

Value	Summary
<server>	Server(s) to delete (name or id)

Table 57.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for delete to complete

## 57.10. SERVER DUMP CREATE

Create a dump file in server(s) Trigger crash dump in server(s) with features like kdump in Linux. It will create a dump file in the server(s) dumping the server(s)' memory, and also crash the server(s). OSC sees the dump file (server dump) as a kind of resource.

### Usage:

```
openstack server dump create [-h] <server> [<server> ...]
```

Table 57.27. Positional Arguments

Value	Summary
<server>	Server(s) to create dump file (name or id)

Table 57.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.11. SERVER EVENT LIST

List recent events of a server

### Usage:

```
openstack server event list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN] [--long]
                             <server>
```

Table 57.29. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 57.30. Positional Arguments

Value	Summary
<code>&lt;server&gt;</code>	Server to list events (name or id)

Table 57.31. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 57.32. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 57.33. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 57.34. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

## 57.12. SERVER EVENT SHOW

Show server event details

### Usage:

```
openstack server event show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <server> <request-id>
```

Table 57.35. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 57.36. Positional Arguments

Value	Summary
<server>	Server to show event details (name or id)
<request-id>	Request id of the event to show (id only)

Table 57.37. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 57.38. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 57.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 57.40. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 57.13. SERVER GROUP CREATE

Create a new server group.

### Usage:

```
openstack server group create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent] [--prefix PREFIX]
                             [--policy <policy>]
                             <name>
```

Table 57.41. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 57.42. Positional Arguments

Value	Summary
<code>&lt;name&gt;</code>	New server group name

Table 57.43. Output Formatters

Value	Summary
output formatter options- <code>f</code> <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 57.44. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 57.45. Optional Arguments

Value	Summary
<code>--policy &lt;policy&gt;</code>	Add a policy to <code>&lt;name&gt;</code> ( <i>affinity</i> or <i>anti-affinity</i> , defaults to <i>affinity</i> ). Specify <code>--os-compute-api-version 2.15</code> or higher for the <i>soft-affinity</i> or <i>soft-anti-affinity</i> policy.
<code>-h</code> , <code>--help</code>	Show this help message and exit

Table 57.46. Shell Formatter

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## 57.14. SERVER GROUP DELETE

Delete existing server group(s).

### Usage:

```
openstack server group delete [-h] <server-group> [<server-group> ...]
```

Table 57.47. Positional Arguments

Value	Summary
<server-group>	Server group(s) to delete (name or id)

Table 57.48. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.15. SERVER GROUP LIST

List all server groups.

### Usage:

```
openstack server group list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--all-projects] [--long]
```

Table 57.49. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 57.50. CSV Formatter



Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 57.51. Output Formatters**

Value	Summary
output formatter options- <code>f</code> <code>{csv,json,table,value,yaml}</code> , <code>--format</code> <code>{csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 57.52. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 57.53. Optional Arguments**

Value	Summary
<code>--all-projects</code>	Display information from all projects (admin only)
<code>-h</code> , <code>--help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

## 57.16. SERVER GROUP SHOW

Display server group details.

### Usage:

```
openstack server group show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <server-group>
```

**Table 57.54. Table Formatter**

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 57.55. Positional Arguments

Value	Summary
<code>&lt;server-group&gt;</code>	Server group to display (name or id)

Table 57.56. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 57.57. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 57.58. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 57.59. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 57.17. SERVER IMAGE CREATE

Create a new server disk image from an existing server

### Usage:

```
openstack server image create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent] [--prefix PREFIX]
                             [--name <image-name>] [--wait]
                             <server>
```

Table 57.60. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 57.61. Positional Arguments

Value	Summary
<server>	Server to create image (name or id)

Table 57.62. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 57.63. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 57.64. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for operation to complete
--name <image-name>	Name of new disk image (default: server name)

Table 57.65. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 57.18. SERVER LIST

List servers

### Usage:

```
openstack server list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
    [--max-width <integer>] [--fit-width]
    [--print-empty] [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN]
    [--reservation-id <reservation-id>]
    [--ip <ip-address-regex>]
    [--ip6 <ip-address-regex>] [--name <name-regex>]
    [--instance-name <server-name>]
    [--status <status>] [--flavor <flavor>]
    [--image <image>] [--host <hostname>]
    [--all-projects] [--project <project>]
    [--project-domain <project-domain>]
    [--user <user>] [--user-domain <user-domain>]
    [--long] [-n] [--marker <server>]
    [--limit <num-servers>] [--deleted]
    [--changes-since <changes-since>]
```

Table 57.66. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 57.67. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 57.68. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 57.69. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 57.70. Optional Arguments

Value	Summary
<code>--image &lt;image&gt;</code>	Search by image (name or id)
<code>--marker &lt;server&gt;</code>	The last server of the previous page. display list of servers after marker. Display all servers if not specified. (name or ID)
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Value	Summary
<code>--limit &lt;num-servers&gt;</code>	Maximum number of servers to display. if limit equals -1, all servers will be displayed. If limit is greater than <i>osapi_max_limit</i> option of Nova API, <i>osapi_max_limit</i> will be used instead.
<code>--all-projects</code>	Include all projects (admin only)
<code>--user &lt;user&gt;</code>	Search by user (admin only) (name or id)
<code>-n, --no-name-lookup</code>	Skip flavor and image name lookup.
<code>--changes-since &lt;changes-since&gt;</code>	List only servers changed after a certain point of time. The provided time should be an ISO 8061 formatted time. ex 2016-03-04T06:27:59Z .
<code>--ip &lt;ip-address-regex&gt;</code>	Regular expression to match ip addresses
<code>--reservation-id &lt;reservation-id&gt;</code>	Only return instances that match the reservation
<code>--long</code>	List additional fields in output
<code>--project &lt;project&gt;</code>	Search by project (admin only) (name or id)
<code>--status &lt;status&gt;</code>	Search by server status
<code>--host &lt;hostname&gt;</code>	Search by hostname
<code>--deleted</code>	Only display deleted servers (admin only).
<code>--name &lt;name-regex&gt;</code>	Regular expression to match names
<code>--user-domain &lt;user-domain&gt;</code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
<code>-h, --help</code>	Show this help message and exit
<code>--ip6 &lt;ip-address-regex&gt;</code>	Regular expression to match ipv6 addresses
<code>--flavor &lt;flavor&gt;</code>	Search by flavor (name or id)
<code>--instance-name &lt;server-name&gt;</code>	Regular expression to match instance name (admin only)

## 57.19. SERVER LOCK

Lock server(s). A non-admin user will not be able to execute actions

### Usage:

```
openstack server lock [-h] <server> [<server> ...]
```

**Table 57.71. Positional Arguments**

Value	Summary
<server>	Server(s) to lock (name or id)

**Table 57.72. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 57.20. SERVER MIGRATE

Migrate server to different host

### Usage:

```
openstack server migrate [-h] [--live <hostname>]
                        [--shared-migration | --block-migration]
                        [--disk-overcommit | --no-disk-overcommit]
                        [--wait]
                        <server>
```

**Table 57.73. Positional Arguments**

Value	Summary
<server>	Server (name or id)

**Table 57.74. Optional Arguments**

Value	Summary
--wait	Wait for migrate to complete
--disk-overcommit	Allow disk over-commit on the destination host
--block-migration	Perform a block live migration
--no-disk-overcommit	Do not over-commit disk on the destination host (default)

Value	Summary
-h, --help	Show this help message and exit
--shared-migration	Perform a shared live migration (default)
--live <hostname>	Target hostname

## 57.21. SERVER PAUSE

Pause server(s)

### Usage:

```
openstack server pause [-h] <server> [<server> ...]
```

Table 57.75. Positional Arguments

Value	Summary
<server>	Server(s) to pause (name or id)

Table 57.76. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.22. SERVER REBOOT

Perform a hard or soft server reboot

### Usage:

```
openstack server reboot [-h] [--hard | --soft] [--wait] <server>
```

Table 57.77. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 57.78. Optional Arguments



Value	Summary
--soft	Perform a soft reboot
-h, --help	Show this help message and exit
--hard	Perform a hard reboot
--wait	Wait for reboot to complete

## 57.23. SERVER REBUILD

Rebuild server

### Usage:

```
openstack server rebuild [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--image <image>]
                        [--password <password>] [--wait]
                        <server>
```

Table 57.79. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 57.80. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 57.81. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 57.82. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 57.83. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for rebuild to complete
--image <image>	Recreate server from the specified image (name or id). Defaults to the currently used one.
--password <password>	Set the password on the rebuilt instance

**Table 57.84. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 57.24. SERVER REMOVE FIXED IP

Remove fixed IP address from server

### Usage:

```
openstack server remove fixed ip [-h] <server> <ip-address>
```

**Table 57.85. Positional Arguments**

Value	Summary
<server>	Server to remove the fixed ip address from (name or id)
<ip-address>	Fixed ip address to remove from the server (ip only)

Table 57.86. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.25. SERVER REMOVE FLOATING IP

Remove floating IP address from server

### Usage:

```
openstack server remove floating ip [-h] <server> <ip-address>
```

Table 57.87. Positional Arguments

Value	Summary
<server>	Server to remove the floating ip address from (name or id)
<ip-address>	Floating ip address to remove from server (ip only)

Table 57.88. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.26. SERVER REMOVE NETWORK

Remove all ports of a network from server

### Usage:

```
openstack server remove network [-h] <server> <network>
```

Table 57.89. Positional Arguments

Value	Summary
<server>	Server to remove the port from (name or id)
<network>	Network to remove from the server (name or id)

Table 57.90. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.27. SERVER REMOVE PORT

Remove port from server

### Usage:

```
openstack server remove port [-h] <server> <port>
```

Table 57.91. Positional Arguments

Value	Summary
<server>	Server to remove the port from (name or id)
<port>	Port to remove from the server (name or id)

Table 57.92. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.28. SERVER REMOVE SECURITY GROUP

Remove security group from server

### Usage:

```
openstack server remove security group [-h] <server> <group>
```

Table 57.93. Positional Arguments

Value	Summary
<server>	Name or id of server to use
<group>	Name or id of security group to remove from server

Table 57.94. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.29. SERVER REMOVE VOLUME

Remove volume from server

### Usage:

```
openstack server remove volume [-h] <server> <volume>
```

Table 57.95. Positional Arguments

Value	Summary
<volume>	Volume to remove (name or id)
<server>	Server (name or id)

Table 57.96. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.30. SERVER RESCUE

Put server in rescue mode

### Usage:

```
openstack server rescue [-h] [--image <image>] [--password <password>]
                        <server>
```

Table 57.97. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 57.98. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--image <image>	Image (name or id) to use for the rescue mode. Defaults to the currently used one.
--password <password>	Set the password on the rescued instance

## 57.31. SERVER RESIZE

Scale server to a new flavor. A resize operation is implemented by creating a new server and copying the contents of the original disk into a new one. It is also a two-step process for the user: the first is to perform the resize, the second is to either confirm (verify) success and release the old server, or to declare a revert to release the new server and restart the old one.

### Usage:

```
openstack server resize [-h] [--flavor <flavor> | --confirm | --revert]
                        [--wait]
                        <server>
```

Table 57.99. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 57.100. Optional Arguments

Value	Summary
--revert	Restore server state before resize
-h, --help	Show this help message and exit
--confirm	Confirm server resize is complete
--flavor <flavor>	Resize server to specified flavor
--wait	Wait for resize to complete

## 57.32. SERVER RESTORE

Restore server(s)

### Usage:

```
openstack server restore [-h] <server> [<server> ...]
```

Table 57.101. Positional Arguments

Value	Summary
<server>	Server(s) to restore (name or id)

Table 57.102. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.33. SERVER RESUME

Resume server(s)

### Usage:

```
openstack server resume [-h] <server> [<server> ...]
```

Table 57.103. Positional Arguments

Value	Summary
<server>	Server(s) to resume (name or id)

Table 57.104. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.34. SERVER SET

Set server properties

### Usage:

```
openstack server set [-h] [--name <new-name>] [--root-password]
                    [--property <key=value>] [--state <state>]
                    <server>
```

Table 57.105. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 57.106. Optional Arguments

Value	Summary
--state <state>	New server state (valid value: active, error)
-h, --help	Show this help message and exit
--name <new-name>	New server name
--property <key=value>	Property to add/change for this server (repeat option to set multiple properties)
--root-password	Set new root password (interactive only)

## 57.35. SERVER SHELVE

Shelve server(s)

### Usage:

```
openstack server shelve [-h] <server> [<server> ...]
```

Table 57.107. Positional Arguments

Value	Summary
<server>	Server(s) to shelve (name or id)

Table 57.108. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.36. SERVER SHOW



Show server details

### Usage:

```
openstack server show [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--max-width <integer>] [--fit-width]
                       [--print-empty] [--noindent] [--prefix PREFIX]
                       [--diagnostics]
                       <server>
```

**Table 57.109. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 57.110. Positional Arguments**

Value	Summary
<server>	Server (name or id)

**Table 57.111. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 57.112. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 57.113. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--diagnostics	Display server diagnostics information

Table 57.114. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 57.37. SERVER SSH

SSH to server

### Usage:

```
openstack server ssh [-h] [--login <login-name>] [--port <port>]
                    [--identity <keyfile>] [--option <config-options>]
                    [-4 | -6]
                    [--public | --private | --address-type <address-type>]
                    <server>
```

Table 57.115. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 57.116. Optional Arguments

Value	Summary
--login <login-name>	Login name (ssh -l option)
-6	Use only ipv6 addresses
--public	Use public ip address
--private	Use private ip address
--address-type <address-type>	Use other ip address (public, private, etc)
-4	Use only ipv4 addresses

Value	Summary
--identity <keyfile>	Private key file (ssh -i option)
--port <port>	Destination port (ssh -p option)
--option <config-options>	Options in ssh_config(5) format (ssh -o option)
-h, --help	Show this help message and exit

## 57.38. SERVER START

Start server(s).

### Usage:

```
openstack server start [-h] <server> [<server> ...]
```

Table 57.117. Positional Arguments

Value	Summary
<server>	Server(s) to start (name or id)

Table 57.118. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.39. SERVER STOP

Stop server(s).

### Usage:

```
openstack server stop [-h] <server> [<server> ...]
```

Table 57.119. Positional Arguments

Value	Summary
<server>	Server(s) to stop (name or id)

Table 57.120. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.40. SERVER SUSPEND

Suspend server(s)

### Usage:

```
openstack server suspend [-h] <server> [<server> ...]
```

Table 57.121. Positional Arguments

Value	Summary
<server>	Server(s) to suspend (name or id)

Table 57.122. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.41. SERVER UNLOCK

Unlock server(s)

### Usage:

```
openstack server unlock [-h] <server> [<server> ...]
```

Table 57.123. Positional Arguments

Value	Summary
<server>	Server(s) to unlock (name or id)

Table 57.124. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 57.42. SERVER UNPAUSE

Unpause server(s)

### Usage:

```
openstack server unpause [-h] <server> [<server> ...]
```

**Table 57.125. Positional Arguments**

Value	Summary
<server>	Server(s) to unpause (name or id)

**Table 57.126. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 57.43. SERVER UNRESCUE

Restore server from rescue mode

### Usage:

```
openstack server unrescue [-h] <server>
```

**Table 57.127. Positional Arguments**

Value	Summary
<server>	Server (name or id)

**Table 57.128. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## 57.44. SERVER UNSET

Unset server properties

### Usage:

```
openstack server unset [-h] [--property <key>] <server>
```

**Table 57.129. Positional Arguments**

Value	Summary
<server>	Server (name or id)

Table 57.130. Optional Arguments

Value	Summary
--property <key>	Property key to remove from server (repeat option to remove multiple values)
-h, --help	Show this help message and exit

## 57.45. SERVER UNSHELVE

Unshelve server(s)

### Usage:

```
openstack server unshelve [-h] <server> [<server> ...]
```

Table 57.131. Positional Arguments

Value	Summary
<server>	Server(s) to unshelve (name or id)

Table 57.132. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## CHAPTER 58. SERVICE

This chapter describes the commands under the **service** command.

### 58.1. SERVICE CREATE

Create new service

#### Usage:

```
openstack service create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--name <name>]
                        [--description <description>]
                        <type>
```

Table 58.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 58.2. Positional Arguments

Value	Summary
<type>	New service type (compute, image, identity, volume, etc)

Table 58.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 58.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 58.5. Optional Arguments**

Value	Summary
<code>--name &lt;name&gt;</code>	New service name
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	New service description

**Table 58.6. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 58.2. SERVICE DELETE

Delete service(s)

### Usage:

```
openstack service delete [-h] <service> [<service> ...]
```

**Table 58.7. Positional Arguments**

Value	Summary
<code>&lt;service&gt;</code>	Service(s) to delete (type, name or id)

**Table 58.8. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 58.3. SERVICE LIST

List services

### Usage:



```

openstack service list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--long]

```

Table 58.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 58.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 58.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 58.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 58.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

## 58.4. SERVICE SHOW

Display service details

### Usage:

```
openstack service show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--catalog]
                        <service>
```

Table 58.14. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 58.15. Positional Arguments

Value	Summary
<service>	Service to display (type, name or id)

Table 58.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 58.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 58.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--catalog	Show service catalog information

Table 58.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 59. SFC

This chapter describes the commands under the **sfc** command.

### 59.1. SFC FLOW CLASSIFIER CREATE

Create a flow classifier

#### Usage:

```
openstack sfc flow classifier create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent] [--prefix PREFIX]
                                   [--description <description>]
                                   [--protocol <protocol>]
                                   [--ethertype {IPv4,IPv6}]
                                   [--source-port <min-port>:<max-port>]
                                   [--destination-port <min-port>:<max-port>]
                                   [--source-ip-prefix <source-ip-prefix>]
                                   [--destination-ip-prefix <destination-ip-prefix>]
                                   [--logical-source-port <logical-source-port>]
                                   [--logical-destination-port <logical-destination-port>]
                                   [--l7-parameters L7_PARAMETERS]
                                   <name>
```

Table 59.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.2. Positional Arguments

Value	Summary
<name>	Name of the flow classifier

Table 59.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 59.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.5. Optional Arguments

Value	Summary
--source-ip-prefix <source-ip-prefix>	Source ip address in cidr notation
--destination-port <min-port>:<max-port>	Destination protocol port (allowed range [1,65535]. Must be specified as a:b, where a=min-port and b=max-port) in the allowed range.
--logical-destination-port <logical-destination-port>	Neutron destination port (name or id)
--source-port <min-port>:<max-port>	Source protocol port (allowed range [1,65535]. must be specified as a:b, where a=min-port and b=max-port) in the allowed range.
--logical-source-port <logical-source-port>	Neutron source port (name or id)
--protocol <protocol>	Ip protocol name. protocol name should be as per iana standard.
--l7-parameters L7_PARAMETERS	Dictionary of l7 parameters. currently, no value is supported for this option.
-h, --help	Show this help message and exit
--description <description>	Description for the flow classifier
--destination-ip-prefix <destination-ip-prefix>	Destination ip address in cidr notation
--ethertype {IPv4,IPv6}	L2 ethertype, default is ipv4

Table 59.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 59.2. SFC FLOW CLASSIFIER DELETE

Delete a given flow classifier

### Usage:

```
openstack sfc flow classifier delete [-h] <flow-classifier>
```

Table 59.7. Positional Arguments

Value	Summary
<flow-classifier>	Flow classifier to delete (name or id)

Table 59.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 59.3. SFC FLOW CLASSIFIER LIST

List flow classifiers

### Usage:

```
openstack sfc flow classifier list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN] [--long]
```

Table 59.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 59.10. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 59.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 59.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 59.13. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

## 59.4. SFC FLOW CLASSIFIER SET

Set flow classifier properties

**Usage:**

```
openstack sfc flow classifier set [-h] [--name <name>]
                                [--description <description>]
                                <flow-classifier>
```

Table 59.14. Positional Arguments

Value	Summary
<flow-classifier>	Flow classifier to modify (name or id)

Table 59.15. Optional Arguments

Value	Summary
--name <name>	Name of the flow classifier
-h, --help	Show this help message and exit
--description <description>	Description for the flow classifier

## 59.5. SFC FLOW CLASSIFIER SHOW

Display flow classifier details

### Usage:

```
openstack sfc flow classifier show [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent] [--prefix PREFIX]
                                   <flow-classifier>
```

Table 59.16. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.17. Positional Arguments



Value	Summary
<flow-classifier>	Flow classifier to display (name or id)

Table 59.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 59.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 59.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 59.6. SFC PORT CHAIN CREATE

Create a port chain

### Usage:

```
openstack sfc port chain create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--description <description>]
                                [--flow-classifier <flow-classifier>]
```

```
[--chain-parameters correlation=<correlation-type>,symmetric=<boolean>]
--port-pair-group <port-pair-group>
<name>
```

Table 59.22. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.23. Positional Arguments

Value	Summary
<name>	Name of the port chain

Table 59.24. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 59.25. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.26. Optional Arguments

Value	Summary
--chain-parameters correlation=<correlation-type>,symmetric=<boolean>	Dictionary of chain parameters. supports correlation=(mpls

Value	Summary
nsh) (default is mpls) and symmetric=(true	false).
-h, --help	Show this help message and exit
--description <description>	Description for the port chain
--port-pair-group <port-pair-group>	Add port pair group (name or id). this option can be repeated.
--flow-classifier <flow-classifier>	Add flow classifier (name or id). this option can be repeated.

Table 59.27. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 59.7. SFC PORT CHAIN DELETE

Delete a given port chain

### Usage:

```
openstack sfc port chain delete [-h] <port-chain>
```

Table 59.28. Positional Arguments

Value	Summary
<port-chain>	Port chain to delete (name or id)

Table 59.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 59.8. SFC PORT CHAIN LIST

List port chains

### Usage:

```

openstack sfc port chain list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN] [--long]

```

Table 59.30. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.31. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 59.32. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 59.33. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.34. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

## 59.9. SFC PORT CHAIN SET

Set port chain properties

### Usage:

```
openstack sfc port chain set [-h] [--name <name>]
                             [--description <description>]
                             [--flow-classifier <flow-classifier>]
                             [--no-flow-classifier]
                             [--port-pair-group <port-pair-group>]
                             [--no-port-pair-group]
                             <port-chain>
```

Table 59.35. Positional Arguments

Value	Summary
<port-chain>	Port chain to modify (name or id)

Table 59.36. Optional Arguments

Value	Summary
--no-flow-classifier	Remove associated flow classifiers from the port chain
--name <name>	Name of the port chain
--flow-classifier <flow-classifier>	Add flow classifier (name or id). this option can be repeated.
--no-port-pair-group	Remove associated port pair groups from the port chain. At least one --port-pair-group must be specified together.
-h, --help	Show this help message and exit
--description <description>	Description for the port chain

Value	Summary
<code>--port-pair-group &lt;port-pair-group&gt;</code>	Add port pair group (name or id). current port pair groups order is kept, the added port pair group will be placed at the end of the port chain. This option can be repeated.

## 59.10. SFC PORT CHAIN SHOW

Display port chain details

### Usage:

```
openstack sfc port chain show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               <port-chain>
```

Table 59.37. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.38. Positional Arguments

Value	Summary
<code>&lt;port-chain&gt;</code>	Port chain to display (name or id)

Table 59.39. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 59.40. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.41. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 59.42. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 59.11. SFC PORT CHAIN UNSET

Unset port chain properties

### Usage:

```
openstack sfc port chain unset [-h]
                               [--flow-classifier <flow-classifier> | --all-flow-classifier]
                               [--port-pair-group <port-pair-group>]
                               <port-chain>
```

Table 59.43. Positional Arguments

Value	Summary
<port-chain>	Port chain to unset (name or id)

Table 59.44. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-flow-classifier	Remove all flow classifiers from the port chain
--port-pair-group <port-pair-group>	Remove port pair group(s) from the port chain (name or ID). This option can be repeated.

Value	Summary
<code>--flow-classifier &lt;flow-classifier&gt;</code>	Remove flow classifier(s) from the port chain (name or ID). This option can be repeated.

## 59.12. SFC PORT PAIR CREATE

Create a port pair

### Usage:

```
openstack sfc port pair create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--description <description>]
                               [--service-function-parameters correlation=<correlation-type>,weight=
<weight>]
                               --ingress <ingress> --egress <egress>
                               <name>
```

Table 59.45. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.46. Positional Arguments

Value	Summary
<code>&lt;name&gt;</code>	Name of the port pair

Table 59.47. Output Formatters



Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 59.48. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.49. Optional Arguments

Value	Summary
--ingress <ingress>	Ingress neutron port (name or id)
-h, --help	Show this help message and exit
--description <description>	Description for the port pair
--service-function-parameters correlation= <correlation-type>,weight=<weight>	Dictionary of service function parameters. currently, correlation=(None
mpls	nsh) and weight are supported. Weight is an integer that influences the selection of a port pair within a port pair group for a flow. The higher the weight, the more flows will hash to the port pair. The default weight is 1.
--egress <egress>	Egress neutron port (name or id)

Table 59.50. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 59.13. SFC PORT PAIR DELETE

Delete a given port pair

**Usage:**

```
openstack sfc port pair delete [-h] <port-pair>
```

Table 59.51. Positional Arguments

Value	Summary
<port-pair>	Port pair to delete (name or id)

Table 59.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 59.14. SFC PORT PAIR GROUP CREATE

Create a port pair group

### Usage:

```
openstack sfc port pair group create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--description <description>]
                                     [--port-pair <port-pair>]
                                     [--enable-tap | --disable-tap]
                                     [--port-pair-group-parameters lb-fields=<lb-fields>]
                                     <name>
```

Table 59.53. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.54. Positional Arguments

Value	Summary
<name>	Name of the port pair group

**Table 59.55. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 59.56. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 59.57. Optional Arguments**

Value	Summary
--enable-tap	Port pairs of this port pair group are deployed as passive tap service function
--port-pair <port-pair>	Port pair (name or id). this option can be repeated.
--disable-tap	Port pairs of this port pair group are deployed as l3 service function (default)
--port-pair-group-parameters lb-fields=<lb-fields>	Dictionary of port pair group parameters. currently only one parameter lb-fields is supported. <lb-fields> is a & separated list of load-balancing fields.
-h, --help	Show this help message and exit
--description <description>	Description for the port pair group

**Table 59.58. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 59.15. SFC PORT PAIR GROUP DELETE

Delete a given port pair group

### Usage:

```
openstack sfc port pair group delete [-h] <port-pair-group>
```

Table 59.59. Positional Arguments

Value	Summary
<port-pair-group>	Port pair group to delete (name or id)

Table 59.60. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 59.16. SFC PORT PAIR GROUP LIST

List port pair group

### Usage:

```
openstack sfc port pair group list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN] [--long]
```

Table 59.61. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.62. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 59.63. Output Formatters**

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 59.64. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 59.65. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

## 59.17. SFC PORT PAIR GROUP SET

Set port pair group properties

### Usage:

```
openstack sfc port pair group set [-h] [--name <name>]
                                [--description <description>]
                                [--port-pair <port-pair>]
                                [--no-port-pair]
                                <port-pair-group>
```

**Table 59.66. Positional Arguments**

Value	Summary
<port-pair-group>	Port pair group to modify (name or id)

Table 59.67. Optional Arguments

Value	Summary
--no-port-pair	Remove all port pair from port pair group
--name <name>	Name of the port pair group
-h, --help	Show this help message and exit
--description <description>	Description for the port pair group
--port-pair <port-pair>	Port pair (name or id). this option can be repeated.

## 59.18. SFC PORT PAIR GROUP SHOW

Display port pair group details

### Usage:

```

openstack sfc port pair group show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--noindent] [--prefix PREFIX]
                                  <port-pair-group>

```

Table 59.68. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.69. Positional Arguments

Value	Summary
<port-pair-group>	Port pair group to display (name or id)

**Table 59.70. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 59.71. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 59.72. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 59.73. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 59.19. SFC PORT PAIR GROUP UNSET

Unset port pairs from port pair group

### Usage:

```
openstack sfc port pair group unset [-h]
                                [--port-pair <port-pair> | --all-port-pair]
                                <port-pair-group>
```

**Table 59.74. Positional Arguments**

Value	Summary
<port-pair-group>	Port pair group to unset (name or id)

Table 59.75. Optional Arguments

Value	Summary
--all-port-pair	Remove all port pairs from the port pair group
-h, --help	Show this help message and exit
--port-pair <port-pair>	Remove port pair(s) from the port pair group (name or ID). This option can be repeated.

## 59.20. SFC PORT PAIR LIST

List port pairs

### Usage:

```
openstack sfc port pair list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN] [--long]
```

Table 59.76. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.77. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric



Table 59.78. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 59.79. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.80. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

## 59.21. SFC PORT PAIR SET

Set port pair properties

### Usage:

```
openstack sfc port pair set [-h] [--name <name>]
                             [--description <description>]
                             <port-pair>
```

Table 59.81. Positional Arguments

Value	Summary
<port-pair>	Port pair to modify (name or id)

Table 59.82. Optional Arguments

Value	Summary
<code>--name &lt;name&gt;</code>	Name of the port pair
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	Description for the port pair

## 59.22. SFC PORT PAIR SHOW

Display port pair details

### Usage:

```
openstack sfc port pair show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <port-pair>
```

Table 59.83. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.84. Positional Arguments

Value	Summary
<code>&lt;port-pair&gt;</code>	Port pair to display (name or id)

Table 59.85. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 59.86. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.87. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 59.88. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 59.23. SFC SERVICE GRAPH CREATE

Create a service graph.

### Usage:

```
openstack sfc service graph create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent] [--prefix PREFIX]
                                   [--description DESCRIPTION]
                                   --branching-point
                                   SRC_CHAIN:DST_CHAIN_1,DST_CHAIN_2,DST_CHAIN_N
                                   <name>
```

Table 59.89. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 59.90. Positional Arguments**

Value	Summary
<code>&lt;name&gt;</code>	Name of the service graph.

**Table 59.91. Output Formatters**

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 59.92. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 59.93. Optional Arguments**

Value	Summary
<code>--branching-point SRC_CHAIN:DST_CHAIN_1,DST_CHAIN_2,DST_CHAI N_N</code>	Service graph branching point: the key is the source Port Chain while the value is a list of destination Port Chains. This option can be repeated.
<code>-h, --help</code>	Show this help message and exit
<code>--description DESCRIPTION</code>	Description for the service graph.

**Table 59.94. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 59.24. SFC SERVICE GRAPH DELETE

Delete a given service graph.

### Usage:

```
openstack sfc service graph delete [-h] <service-graph>
```

Table 59.95. Positional Arguments

Value	Summary
<service-graph>	Id or name of the service graph to delete.

Table 59.96. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 59.25. SFC SERVICE GRAPH LIST

List service graphs

### Usage:

```
openstack sfc service graph list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent]
    [--quote {all,minimal,none,nonnumeric}]
    [--sort-column SORT_COLUMN] [--long]
```

Table 59.97. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 59.98. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 59.99. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 59.100. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 59.101. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

## 59.26. SFC SERVICE GRAPH SET

Set service graph properties

Usage:

```
openstack sfc service graph set [-h] [--name <name>]
                                [--description <description>]
                                <service-graph>
```

Table 59.102. Positional Arguments

Value	Summary
<service-graph>	Service graph to modify (name or id)

Table 59.103. Optional Arguments

Value	Summary
--name <name>	Name of the service graph
-h, --help	Show this help message and exit
--description <description>	Description for the service graph

## 59.27. SFC SERVICE GRAPH SHOW

Show information of a given service graph.

### Usage:

```
openstack sfc service graph show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--noindent] [--prefix PREFIX]
                                  <service-graph>
```

Table 59.104. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 59.105. Positional Arguments

Value	Summary
<service-graph>	Id or name of the service graph to display.

**Table 59.106. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 59.107. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 59.108. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 59.109. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names



## CHAPTER 60. SNAPSHOT

This chapter describes the commands under the **snapshot** command.

### 60.1. SNAPSHOT CREATE

Create new snapshot

#### Usage:

```
openstack snapshot create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX] [--name <name>]
                          [--description <description>] [--force]
                          [--property <key=value>]
                          <volume>
```

Table 60.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 60.2. Positional Arguments

Value	Summary
<volume>	Volume to snapshot (name or id)

Table 60.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 60.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 60.5. Optional Arguments**

Value	Summary
<code>--force</code>	Create a snapshot attached to an instance. default is False
<code>--name &lt;name&gt;</code>	Name of the snapshot
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	Description of the snapshot
<code>--property &lt;key=value&gt;</code>	Set a property to this snapshot (repeat option to set multiple properties)

**Table 60.6. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 60.2. SNAPSHOT DELETE

Delete volume snapshot(s)

### Usage:

```
openstack snapshot delete [-h] <snapshot> [<snapshot> ...]
```

**Table 60.7. Positional Arguments**

Value	Summary
<code>&lt;snapshot&gt;</code>	Snapshot(s) to delete (name or id)

**Table 60.8. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 60.3. SNAPSHOT LIST

List snapshots

### Usage:

```
openstack snapshot list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--all-projects]
                        [--long] [--marker <snapshot>]
                        [--limit <num-snapshots>]
```

Table 60.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 60.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 60.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 60.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 60.13. Optional Arguments

Value	Summary
--all-projects	Include all projects (admin only)
--marker <snapshot>	The last snapshot id of the previous page
-h, --help	Show this help message and exit
--limit <num-snapshots>	Maximum number of snapshots to display
--long	List additional fields in output

## 60.4. SNAPSHOT SET

Set snapshot properties

### Usage:

```
openstack snapshot set [-h] [--name <name>]
                        [--description <description>]
                        [--property <key=value>] [--state <state>]
                        <snapshot>
```

Table 60.14. Positional Arguments

Value	Summary
<snapshot>	Snapshot to modify (name or id)

Table 60.15. Optional Arguments

Value	Summary
--name <name>	New snapshot name
-h, --help	Show this help message and exit
--description <description>	New snapshot description
--property <key=value>	Property to add/change for this snapshot (repeat option to set multiple properties)

Value	Summary
<code>--state &lt;state&gt;</code>	New snapshot state. ("available", "error", "creating", "deleting", or "error_deleting") (admin only) (This option simply changes the state of the snapshot in the database with no regard to actual status, exercise caution when using)

## 60.5. SNAPSHOT SHOW

Display snapshot details

### Usage:

```
openstack snapshot show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        <snapshot>
```

Table 60.16. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 60.17. Positional Arguments

Value	Summary
<code>&lt;snapshot&gt;</code>	Snapshot to display (name or id)

Table 60.18. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 60.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 60.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 60.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 60.6. SNAPSHOT UNSET

Unset snapshot properties

### Usage:

```
openstack snapshot unset [-h] [--property <key>] <snapshot>
```

Table 60.22. Positional Arguments

Value	Summary
<snapshot>	Snapshot to modify (name or id)

Table 60.23. Optional Arguments

Value	Summary
--property <key>	Property to remove from snapshot (repeat option to remove multiple properties)
-h, --help	Show this help message and exit

## CHAPTER 61. SOFTWARE

This chapter describes the commands under the **software** command.

### 61.1. SOFTWARE CONFIG CREATE

Create software config

#### Usage:

```
openstack software config create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--config-file <config-file>]
                                [--definition-file <destination-file>]
                                [--group <group>]
                                <config-name>
```

Table 61.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 61.2. Positional Arguments

Value	Summary
<config-name>	Name of the software config to create

Table 61.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to json
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 61.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 61.5. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--group &lt;group&gt;</code>	Group name of tool expected by the software config
<code>--config-file &lt;config-file&gt;</code>	Path to json/yaml containing map defining <inputs>, <outputs>, and <options>
<code>--definition-file &lt;destination-file&gt;</code>	Path to software config script/data

Table 61.6. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 61.2. SOFTWARE CONFIG DELETE

Delete software configs

### Usage:

```
openstack software config delete [-h] <config> [<config> ...]
```

Table 61.7. Positional Arguments

Value	Summary
<code>&lt;config&gt;</code>	Ids of the software configs to delete

Table 61.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit



## 61.3. SOFTWARE CONFIG LIST

List software configs

### Usage:

```
openstack software config list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]
                               [--limit <limit>] [--marker <id>]
```

Table 61.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 61.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 61.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 61.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 61.13. Optional Arguments

Value	Summary
--limit <limit>	Limit the number of configs returned
-h, --help	Show this help message and exit
--marker <id>	Return configs that appear after the given config id

## 61.4. SOFTWARE CONFIG SHOW

Show software config details

### Usage:

```

openstack software config show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--config-only]
                               <config>

```

Table 61.14. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 61.15. Positional Arguments

Value	Summary
<config>	Id of the config

Table 61.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 61.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 61.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--config-only	Only display the value of the <config> property.

Table 61.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 61.5. SOFTWARE DEPLOYMENT CREATE

Create a software deployment.

### Usage:

```

openstack software deployment create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--input-value <key=value>]
                                     [--action <action>]
                                     [--config <config>]
                                     [--signal-transport <signal-transport>]
                                     [--container <container>]

```

```
[--timeout <timeout>] --server
<server>
<deployment-name>
```

Table 61.20. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 61.21. Positional Arguments

Value	Summary
<deployment-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.

Table 61.22. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 61.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 61.24. Optional Arguments

Value	Summary
--timeout <timeout>	Deployment timeout in minutes

Value	Summary
<code>--signal-transport &lt;signal-transport&gt;</code>	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. ZAQAR_SIGNAL will create a dedicated zaqar queue to be signaled using the provided keystone credentials.NO_SIGNAL will result in the resource going to the COMPLETE state without waiting for any signal
<code>--container &lt;container&gt;</code>	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
<code>--action &lt;action&gt;</code>	Name of an action for this deployment. this can be a custom action, or one of CREATE, UPDATE, DELETE, SUSPEND, RESUME. Default is UPDATE
<code>-h, --help</code>	Show this help message and exit
<code>--server &lt;server&gt;</code>	Id of the server being deployed to
<code>--input-value &lt;key=value&gt;</code>	Input value to set on the deployment. this can be specified multiple times.
<code>--config &lt;config&gt;</code>	Id of the configuration to deploy

Table 61.25. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 61.6. SOFTWARE DEPLOYMENT DELETE

Delete software deployment(s) and correlative config(s).

### Usage:

```
openstack software deployment delete [-h]
                                     <deployment> [<deployment> ...]
```

Table 61.26. Positional Arguments

Value	Summary
-------	---------

Value	Summary
<deployment>	Id of the deployment(s) to delete.

Table 61.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 61.7. SOFTWARE DEPLOYMENT LIST

List software deployments.

### Usage:

```

openstack software deployment list [-h]
                                  [-f {csv,json,table,value,yaml}]
                                  [-c COLUMN] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--noindent]
                                  [--quote {all,minimal,none,nonnumeric}]
                                  [--sort-column SORT_COLUMN]
                                  [--server <server>] [--long]

```

Table 61.28. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 61.29. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 61.30. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 61.31. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 61.32. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--server <server>	Id of the server to fetch deployments for
--long	List more fields in output

## 61.8. SOFTWARE DEPLOYMENT METADATA SHOW

Get deployment configuration metadata for the specified server.

### Usage:

```
openstack software deployment metadata show [-h] <server>
```

Table 61.33. Positional Arguments

Value	Summary
<server>	Id of the server to fetch deployments for

Table 61.34. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 61.9. SOFTWARE DEPLOYMENT OUTPUT SHOW

Show a specific deployment output.

### Usage:

```
openstack software deployment output show [-h] [--all] [--long]
    <deployment> [<output-name>]
```

Table 61.35. Positional Arguments

Value	Summary
<deployment>	Id of deployment to show the output for
<output-name>	Name of an output to display

Table 61.36. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Display all deployment outputs
--long	Show full deployment logs in output

## 61.10. SOFTWARE DEPLOYMENT SHOW

Show SoftwareDeployment Details.

### Usage:

```
openstack software deployment show [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    [--long]
    <deployment>
```

Table 61.37. Table Formatter



Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 61.38. Positional Arguments

Value	Summary
<code>&lt;deployment&gt;</code>	Id of the deployment

Table 61.39. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 61.40. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 61.41. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	Show more fields in output

Table 61.42. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 62. STACK

This chapter describes the commands under the **stack** command.

### 62.1. STACK ABANDON

Abandon stack and output results.

#### Usage:

```
openstack stack abandon [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--output-file <output-file>]
                        <stack>
```

Table 62.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.2. Positional Arguments

Value	Summary
<stack>	Name or id of stack to abandon

Table 62.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to json
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.5. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--output-file &lt;output-file&gt;</code>	File to output abandon results

Table 62.6. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 62.2. STACK ADOPT

Adopt a stack.

### Usage:

```
openstack stack adopt [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [-e <environment>] [--timeout <timeout>]
                    [--enable-rollback] [--parameter <key=value>]
                    [--wait] --adopt-file <adopt-file>
                    <stack-name>
```

Table 62.7. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.8. Positional Arguments

Value	Summary
<stack-name>	Name of the stack to adopt

**Table 62.9. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 62.10. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 62.11. Optional Arguments**

Value	Summary
--timeout <timeout>	Stack creation timeout in minutes
--wait	Wait until stack adopt completes
-e <environment>, --environment <environment>	Path to the environment. can be specified multiple times
--adopt-file <adopt-file>	Path to adopt stack data file
--parameter <key=value>	Parameter values used to create the stack. can be specified multiple times
-h, --help	Show this help message and exit
--enable-rollback	Enable rollback on create/update failure

**Table 62.12. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.3. STACK CANCEL

Cancel current task for a stack. Supported tasks for cancellation: \* update \* create

### Usage:

```
openstack stack cancel [-h] [-f {csv,json,table,value,yaml}]
                       [-c COLUMN] [--max-width <integer>]
                       [--fit-width] [--print-empty] [--noindent]
                       [--quote {all,minimal,none,nonnumeric}]
                       [--sort-column SORT_COLUMN] [--wait]
                       [--no-rollback]
                       <stack> [<stack> ...]
```

Table 62.13. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.14. Positional Arguments

Value	Summary
<stack>	Stack(s) to cancel (name or id)

Table 62.15. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 62.16. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.17. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.18. Optional Arguments

Value	Summary
<code>--no-rollback</code>	Cancel without rollback
<code>-h, --help</code>	Show this help message and exit
<code>--wait</code>	Wait for cancel to complete

## 62.4. STACK CHECK

Check a stack.

### Usage:

```
openstack stack check [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN] [--wait]
                    <stack> [<stack> ...]
```

Table 62.19. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 62.20. Positional Arguments

Value	Summary
<stack>	Stack(s) to check update (name or id)

Table 62.21. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 62.22. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.24. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for check to complete

## 62.5. STACK CREATE

Create a stack.

### Usage:

```
openstack stack create [-h] [-f {json,shell,table,value,yaml}]
```



```

[-c COLUMN] [--max-width <integer>]
[--fit-width] [--print-empty] [--noindent]
[--prefix PREFIX] [-e <environment>]
[--timeout <timeout>] [--pre-create <resource>]
[--enable-rollback] [--parameter <key=value>]
[--parameter-file <key=file>] [--wait]
[--tags <tag1,tag2...>] [--dry-run] -t
<template>
<stack-name>

```

Table 62.25. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.26. Positional Arguments

Value	Summary
<stack-name>	Name of the stack to create

Table 62.27. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.28. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.29. Optional Arguments

Value	Summary
<code>--parameter-file &lt;key=file&gt;</code>	Parameter values from file used to create the stack. This can be specified multiple times. Parameter values would be the content of the file
<code>--timeout &lt;timeout&gt;</code>	Stack creating timeout in minutes
<code>--wait</code>	Wait until stack goes to <code>create_complete</code> or <code>CREATE_FAILED</code>
<code>-t &lt;template&gt;, --template &lt;template&gt;</code>	Path to the template
<code>--dry-run</code>	Do not actually perform the stack create, but show what would be created
<code>-e &lt;environment&gt;, --environment &lt;environment&gt;</code>	Path to the environment. can be specified multiple times
<code>--pre-create &lt;resource&gt;</code>	Name of a resource to set a pre-create hook to. Resources in nested stacks can be set using slash as a separator: <code>nested_stack/another/my_resource</code> . You can use wildcards to match multiple stacks or resources: <code>nested_stack/an*/*_resource</code> . This can be specified multiple times
<code>--parameter &lt;key=value&gt;</code>	Parameter values used to create the stack. this can be specified multiple times
<code>-h, --help</code>	Show this help message and exit
<code>--tags &lt;tag1,tag2...&gt;</code>	A list of tags to associate with the stack
<code>--enable-rollback</code>	Enable rollback on create/update failure

Table 62.30. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 62.6. STACK DELETE

Delete stack(s).

**Usage:**

```
openstack stack delete [-h] [-y] [--wait] <stack> [<stack> ...]
```

Table 62.31. Positional Arguments

Value	Summary
<stack>	Stack(s) to delete (name or id)

Table 62.32. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-y, --yes	Skip yes/no prompt (assume yes)
--wait	Wait for stack delete to complete

## 62.7. STACK ENVIRONMENT SHOW

Show a stack's environment.

### Usage:

```
openstack stack environment show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <NAME or ID>
```

Table 62.33. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.34. Positional Arguments

Value	Summary
<NAME or ID>	Name or id of stack to query

Table 62.35. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.36. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.37. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 62.38. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.8. STACK EVENT LIST

List events.

### Usage:

```
openstack stack event list [-h] [-f {csv,json,log,table,value,yaml}]
                          [-c COLUMN] [--noindent]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN]
                          [--resource <resource>]
                          [--filter <key=value>] [--limit <limit>]
```

```

[--marker <id>] [--nested-depth <depth>]
[--sort <key>[:<direction>]] [--follow]
<stack>

```

Table 62.39. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.40. Positional Arguments

Value	Summary
<stack>	Name or id of stack to show events for

Table 62.41. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 62.42. Output Formatters

Value	Summary
output formatter options-f {csv,json,log,table,value,yaml}, --format {csv,json,log,table,value,yaml}	The output format, defaults to log
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.43. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.44. Optional Arguments

Value	Summary
--filter <key=value>	Filter parameters to apply on returned events
--nested-depth <depth>	Depth of nested stacks from which to display events. Note: this cannot be specified with --resource
--follow	Print events until process is halted
--resource <resource>	Name of resource to show events for. note: this cannot be specified with --nested-depth
--limit <limit>	Limit the number of events returned
--sort <key>[:<direction>]	Sort output by selected keys and directions (asc or desc) (default: asc). Specify multiple times to sort on multiple keys. Sort key can be: "event_time" (default), "resource_name", "links", "logical_resource_id", "resource_status", "resource_status_reason", "physical_resource_id", or "id". You can leave the key empty and specify ".desc" for sorting by reverse time.
-h, --help	Show this help message and exit
--marker <id>	Only return events that appear after the given id

## 62.9. STACK EVENT SHOW

Show event details.

### Usage:

```
openstack stack event show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          <stack> <resource> <event>
```

Table 62.45. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 62.46. Positional Arguments

Value	Summary
<code>&lt;resource&gt;</code>	Name of the resource event belongs to
<code>&lt;stack&gt;</code>	Name or id of stack to show events for
<code>&lt;event&gt;</code>	Id of event to display details for

Table 62.47. Output Formatters

Value	Summary
output formatter options- <code>f</code> <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 62.48. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.49. Optional Arguments

Value	Summary
<code>-h</code> , <code>--help</code>	Show this help message and exit

Table 62.50. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.10. STACK EXPORT

Export stack data json.

### Usage:

```
openstack stack export [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--output-file <output-file>]
                        <stack>
```

Table 62.51. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.52. Positional Arguments

Value	Summary
<stack>	Name or id of stack to export

Table 62.53. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to json
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.54. JSON Formatter



Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.55. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--output-file &lt;output-file&gt;</code>	File to output export data

Table 62.56. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 62.11. STACK FAILURES LIST

Show information about failed stack resources.

### Usage:

```
openstack stack failures list [-h] [--long] <stack>
```

Table 62.57. Positional Arguments

Value	Summary
<code>&lt;stack&gt;</code>	Stack to display (name or id)

Table 62.58. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	Show full deployment logs in output

## 62.12. STACK FILE LIST

Show a stack's files map.

### Usage:

```

openstack stack file list [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          <NAME or ID>

```

Table 62.59. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.60. Positional Arguments

Value	Summary
<NAME or ID>	Name or id of stack to query

Table 62.61. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.62. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.63. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 62.64. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.13. STACK HOOK CLEAR

Clear resource hooks on a given stack.

### Usage:

```
openstack stack hook clear [-h] [--pre-create] [--pre-update]
                          [--pre-delete]
                          <stack> <resource> [<resource> ...]
```

Table 62.65. Positional Arguments

Value	Summary
<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
<stack>	Stack to display (name or id)

Table 62.66. Optional Arguments

Value	Summary
--pre-update	Clear the pre-update hooks
-h, --help	Show this help message and exit
--pre-create	Clear the pre-create hooks
--pre-delete	Clear the pre-delete hooks

## 62.14. STACK HOOK POLL

List resources with pending hook for a stack.

### Usage:

```
openstack stack hook poll [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
```

```

[--fit-width] [--print-empty] [--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]
[--nested-depth <nested-depth>]
<stack>

```

**Table 62.67. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 62.68. Positional Arguments**

Value	Summary
<stack>	Stack to display (name or id)

**Table 62.69. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 62.70. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

**Table 62.71. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.72. Optional Arguments

Value	Summary
<code>--nested-depth &lt;nested-depth&gt;</code>	Depth of nested stacks from which to display hooks
<code>-h, --help</code>	Show this help message and exit

## 62.15. STACK LIST

List stacks.

### Usage:

```

openstack stack list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN] [--deleted] [--nested]
                    [--hidden] [--property <key=value>]
                    [--tags <tag1,tag2...>] [--tag-mode <mode>]
                    [--limit <limit>] [--marker <id>]
                    [--sort <key>[:<direction>]] [--all-projects]
                    [--short] [--long]

```

Table 62.73. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.74. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 62.75. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.76. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.77. Optional Arguments

Value	Summary
--all-projects	Include all projects (admin only)
--hidden	Include hidden stacks in the stack listing
--property <key=value>	Filter properties to apply on returned stacks (repeat to filter on multiple properties)
--short	List fewer fields in output
--limit <limit>	The number of stacks returned
--long	List additional fields in output, this is implied by --all-projects
--nested	Include nested stacks in the stack listing
--deleted	Include soft-deleted stacks in the stack listing
--marker <id>	Only return stacks that appear after the given id
--sort <key>[:<direction>]	Sort output by selected keys and directions (asc or desc) (default: asc). Specify multiple times to sort on multiple properties

Value	Summary
-h, --help	Show this help message and exit
--tags <tag1,tag2...>	List of tags to filter by. can be combined with --tag-mode to specify how to filter tags
--tag-mode <mode>	Method of filtering tags. must be one of "any", "not", or "not-any". If not specified, multiple tags will be combined with the boolean AND expression

## 62.16. STACK OUTPUT LIST

List stack outputs.

### Usage:

```
openstack stack output list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             <stack>
```

Table 62.78. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.79. Positional Arguments

Value	Summary
<stack>	Name or id of stack to query

Table 62.80. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 62.81. Output Formatters

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.82. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.83. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 62.17. STACK OUTPUT SHOW

Show stack output.

### Usage:

```
openstack stack output show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] [--all]
                             <stack> [<output>]
```

Table 62.84. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.



Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 62.85. Positional Arguments

Value	Summary
<code>&lt;stack&gt;</code>	Name or id of stack to query
<code>&lt;output&gt;</code>	Name of an output to display

Table 62.86. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 62.87. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.88. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all</code>	Display all stack outputs

Table 62.89. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.18. STACK RESOURCE LIST

List stack resources.

### Usage:

```
openstack stack resource list [-h] [-f {csv,dot,json,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN] [--long]
                             [-n <nested-depth>]
                             [--filter <key=value>]
                             <stack>
```

Table 62.90. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.91. Positional Arguments

Value	Summary
<stack>	Name or id of stack to query

Table 62.92. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 62.93. Output Formatters

Value	Summary
output formatter options-f {csv,dot,json,table,value,yaml}, --format {csv,dot,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.94. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.95. Optional Arguments

Value	Summary
--filter <key=value>	Filter parameters to apply on returned resources based on their name, status, type, action, id and physical_resource_id
-h, --help	Show this help message and exit
-n <nested-depth>, --nested-depth <nested-depth>	Depth of nested stacks from which to display resources
--long	Enable detailed information presented for each resource in resource list

## 62.19. STACK RESOURCE MARK UNHEALTHY

Set resource's health.

### Usage:

```
openstack stack resource mark unhealthy [-h] [--reset]
    <stack> <resource> [reason]
```

Table 62.96. Positional Arguments

Value	Summary
reason	Reason for state change
<resource>	Name of the resource
<stack>	Name or id of stack the resource belongs to

Table 62.97. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--reset	Set the resource as healthy

## 62.20. STACK RESOURCE METADATA

Show resource metadata

### Usage:

```

openstack stack resource metadata [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <stack> <resource>

```

Table 62.98. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.99. Positional Arguments

Value	Summary
<resource>	Name of the resource to show the metadata for
<stack>	Stack to display (name or id)

**Table 62.100. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to json
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 62.101. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 62.102. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 62.103. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.21. STACK RESOURCE SHOW

Display stack resource.

### Usage:

```
openstack stack resource show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--with-attr <attribute>]
                               <stack> <resource>
```

Table 62.104. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 62.105. Positional Arguments

Value	Summary
<code>&lt;resource&gt;</code>	Name of resource
<code>&lt;stack&gt;</code>	Name or id of stack to query

Table 62.106. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 62.107. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.108. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--with-attr &lt;attribute&gt;</code>	Attribute to show, can be specified multiple times

Table 62.109. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.22. STACK RESOURCE SIGNAL

Signal a resource with optional data.

### Usage:

```
openstack stack resource signal [-h] [--data <data>]
                               [--data-file <data-file>]
                               <stack> <resource>
```

Table 62.110. Positional Arguments

Value	Summary
<resource>	Name of the resource to signal
<stack>	Name or id of stack the resource belongs to

Table 62.111. Optional Arguments

Value	Summary
--data <data>	Json data to send to the signal handler
-h, --help	Show this help message and exit
--data-file <data-file>	File containing json data to send to the signal handler

## 62.23. STACK RESUME

Resume a stack.

### Usage:

```
openstack stack resume [-h] [-f {csv,json,table,value,yaml}]
                       [-c COLUMN] [--max-width <integer>]
                       [--fit-width] [--print-empty] [--noindent]
                       [--quote {all,minimal,none,nonnumeric}]
                       [--sort-column SORT_COLUMN] [--wait]
                       <stack> [<stack> ...]
```

Table 62.112. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 62.113. Positional Arguments

Value	Summary
<code>&lt;stack&gt;</code>	Stack(s) to resume (name or id)

Table 62.114. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 62.115. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.116. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.117. Optional Arguments



Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for resume to complete

## 62.24. STACK SHOW

Show stack details.

### Usage:

```
openstack stack show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--no-resolve-outputs]
                    <stack>
```

Table 62.118. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.119. Positional Arguments

Value	Summary
<stack>	Stack to display (name or id)

Table 62.120. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.121. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.122. Optional Arguments

Value	Summary
--no-resolve-outputs	Do not resolve outputs of the stack.
-h, --help	Show this help message and exit

Table 62.123. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.25. STACK SNAPSHOT CREATE

Create stack snapshot.

### Usage:

```
openstack stack snapshot create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--name <name>]
                                <stack>
```

Table 62.124. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.125. Positional Arguments

Value	Summary
<stack>	Name or id of stack

Table 62.126. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.127. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.128. Optional Arguments

Value	Summary
--name <name>	Name of snapshot
-h, --help	Show this help message and exit

Table 62.129. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.26. STACK SNAPSHOT DELETE

Delete stack snapshot.

### Usage:

```
openstack stack snapshot delete [-h] [-y] <stack> <snapshot>
```

Table 62.130. Positional Arguments

Value	Summary
<snapshot>	Id of stack snapshot
<stack>	Name or id of stack

Table 62.131. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-y, --yes	Skip yes/no prompt (assume yes)

## 62.27. STACK SNAPSHOT LIST

List stack snapshots.

### Usage:

```
openstack stack snapshot list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             <stack>
```

Table 62.132. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.133. Positional Arguments

Value	Summary
<stack>	Name or id of stack containing the snapshots

Table 62.134. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 62.135. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.136. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.137. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 62.28. STACK SNAPSHOT RESTORE

Restore stack snapshot

### Usage:

```
openstack stack snapshot restore [-h] <stack> <snapshot>
```

Table 62.138. Positional Arguments

Value	Summary
<code>&lt;snapshot&gt;</code>	Id of the snapshot to restore
<code>&lt;stack&gt;</code>	Name or id of stack containing the snapshot

Table 62.139. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 62.29. STACK SNAPSHOT SHOW

Show stack snapshot.

### Usage:

```
openstack stack snapshot show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               <stack> <snapshot>
```

Table 62.140. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.141. Positional Arguments

Value	Summary
<snapshot>	Id of the snapshot to show
<stack>	Name or id of stack containing the snapshot

Table 62.142. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.143. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.144. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 62.145. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.30. STACK SUSPEND

Suspend a stack.

### Usage:

```
openstack stack suspend [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--wait]
                        <stack> [<stack> ...]
```

Table 62.146. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 62.147. Positional Arguments

Value	Summary
<code>&lt;stack&gt;</code>	Stack(s) to suspend (name or id)

Table 62.148. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 62.149. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.150. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.151. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit



Value	Summary
--wait	Wait for suspend to complete

## 62.31. STACK TEMPLATE SHOW

Display stack template.

### Usage:

```
openstack stack template show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               <stack>
```

Table 62.152. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 62.153. Positional Arguments

Value	Summary
<stack>	Name or id of stack to query

Table 62.154. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.155. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.156. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 62.157. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 62.32. STACK UPDATE

Update a stack.

### Usage:

```

openstack stack update [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [-t <template>]
                        [-e <environment>] [--pre-update <resource>]
                        [--timeout <timeout>] [--rollback <value>]
                        [--dry-run] [--show-nested]
                        [--parameter <key=value>]
                        [--parameter-file <key=file>] [--existing]
                        [--clear-parameter <parameter>]
                        [--tags <tag1,tag2...>] [--wait] [--converge]
                        <stack>

```

Table 62.158. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 62.159. Positional Arguments

Value	Summary
<code>&lt;stack&gt;</code>	Name or id of stack to update

Table 62.160. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 62.161. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.162. Optional Arguments

Value	Summary
<code>--parameter &lt;key=value&gt;</code>	Parameter values used to create the stack. this can be specified multiple times
<code>--parameter-file &lt;key=file&gt;</code>	Parameter values from file used to create the stack. This can be specified multiple times. Parameter value would be the content of the file
<code>--timeout &lt;timeout&gt;</code>	Stack update timeout in minutes
<code>--wait</code>	Wait until stack goes to <code>update_complete</code> or <code>UPDATE_FAILED</code>
<code>-t &lt;template&gt;, --template &lt;template&gt;</code>	Path to the template

Value	Summary
<code>--pre-update &lt;resource&gt;</code>	Name of a resource to set a pre-update hook to. Resources in nested stacks can be set using slash as a separator: <code>nested_stack/another/my_resource</code> . You can use wildcards to match multiple stacks or resources: <code>nested_stack/an*/*_resource</code> . This can be specified multiple times
<code>-e &lt;environment&gt;</code> , <code>--environment &lt;environment&gt;</code>	Path to the environment. can be specified multiple times
<code>--rollback &lt;value&gt;</code>	Set rollback on update failure. value "enabled" sets rollback to enabled. Value "disabled" sets rollback to disabled. Value "keep" uses the value of existing stack to be updated (default)
<code>--converge</code>	Stack update with observe on reality.
<code>--dry-run</code>	Do not actually perform the stack update, but show what would be changed
<code>-h, --help</code>	Show this help message and exit
<code>--clear-parameter &lt;parameter&gt;</code>	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
<code>--tags &lt;tag1,tag2...&gt;</code>	An updated list of tags to associate with the stack
<code>--show-nested</code>	Show nested stacks when performing <code>--dry-run</code>
<code>--existing</code>	Re-use the template, parameters and environment of the current stack. If the template argument is omitted then the existing template is used. If no <code>--environment</code> is specified then the existing environment is used. Parameters specified in <code>--parameter</code> will patch over the existing values in the current stack. Parameters omitted will keep the existing values

Table 62.163. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

## CHAPTER 63. SUBNET

This chapter describes the commands under the **subnet** command.

### 63.1. SUBNET CREATE

Create a subnet

#### Usage:

```
openstack subnet create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--project <project>]
                        [--project-domain <project-domain>]
                        [--subnet-pool <subnet-pool> | --use-prefix-delegation
                        USE_PREFIX_DELEGATION | --use-default-subnet-pool]
                        [--prefix-length <prefix-length>]
                        [--subnet-range <subnet-range>]
                        [--dhcp | --no-dhcp] [--gateway <gateway>]
                        [--ip-version {4,6}]
                        [--ipv6-ra-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}]
                        [--ipv6-address-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}]
                        [--network-segment <network-segment>] --network
                        <network> [--description <description>]
                        [--allocation-pool start=<ip-address>,end=<ip-address>]
                        [--dns-nameserver <dns-nameserver>]
                        [--host-route destination=<subnet>,gateway=<ip-address>]
                        [--service-type <service-type>]
                        [--tag <tag> | --no-tag]
                        name
```

Table 63.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 63.2. Positional Arguments

Value	Summary
name	New subnet name

Table 63.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 63.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 63.5. Optional Arguments

Value	Summary
--ip-version {4,6}	Ip version (default is 4). note that when subnet pool is specified, IP version is determined from the subnet pool and this option is ignored.
--host-route destination=<subnet>,gateway=<ip-address>	Additional route for this subnet e.g.: destination=10.10.0.0/16,gateway=192.168.71.254 destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to add multiple routes)
--gateway <gateway>	Specify a gateway for the subnet. the three options are: <ip-address>: Specific IP address to use as the gateway, <i>auto</i> : Gateway address should automatically be chosen from within the subnet itself, <i>none</i> : This subnet will not use a gateway, e.g.: --gateway 192.168.9.1, --gateway auto, --gateway none (default is <i>auto</i> ).
--ipv6-ra-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}	Ipv6 ra (router advertisement) mode, valid modes: [dhcpv6-stateful, dhcpv6-stateless, slaac]
--service-type <service-type>	Service type for this subnet e.g.: network:floatingip_agent_gateway. Must be a valid device owner value for a network port (repeat option to set multiple service types)
--subnet-range <subnet-range>	Subnet range in cidr notation (required if --subnet-pool is not specified, optional otherwise)

Value	Summary
<code>--project &lt;project&gt;</code>	Owner's project (name or id)
<code>--network &lt;network&gt;</code>	Network this subnet belongs to (name or id)
<code>--prefix-length &lt;prefix-length&gt;</code>	Prefix length for subnet allocation from subnet pool
<code>--use-prefix-delegation</code> <code>USE_PREFIX_DELEGATION</code>	Use <i>prefix-delegation</i> if ip is ipv6 format and ip would be delegated externally
<code>--ipv6-address-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}</code>	Ipv6 address mode, valid modes: [dhcpv6-stateful, dhcpv6-stateless, slaac]
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	Set subnet description
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--use-default-subnet-pool</code>	Use default subnet pool for <code>--ip-version</code>
<code>--no-dhcp</code>	Disable dhcp
<code>--dhcp</code>	Enable dhcp (default)
<code>--no-tag</code>	No tags associated with the subnet
<code>--allocation-pool start=&lt;ip-address&gt;,end=&lt;ip-address&gt;</code>	Allocation pool ip addresses for this subnet e.g.: start=192.168.199.2,end=192.168.199.254 (repeat option to add multiple IP addresses)
<code>--subnet-pool &lt;subnet-pool&gt;</code>	Subnet pool from which this subnet will obtain a cidr (Name or ID)
<code>--tag &lt;tag&gt;</code>	Tag to be added to the subnet (repeat option to set multiple tags)
<code>--dns-nameserver &lt;dns-nameserver&gt;</code>	Dns server for this subnet (repeat option to set multiple DNS servers)
<code>--network-segment &lt;network-segment&gt;</code>	Network segment to associate with this subnet (name or ID)

Table 63.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 63.2. SUBNET DELETE

Delete subnet(s)

### Usage:

```
openstack subnet delete [-h] <subnet> [<subnet> ...]
```

Table 63.7. Positional Arguments

Value	Summary
<subnet>	Subnet(s) to delete (name or id)

Table 63.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 63.3. SUBNET LIST

List subnets

### Usage:

```
openstack subnet list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--long]
                        [--ip-version <ip-version>] [--dhcp | --no-dhcp]
                        [--service-type <service-type>]
                        [--project <project>]
                        [--project-domain <project-domain>]
                        [--network <network>] [--gateway <gateway>]
                        [--name <name>] [--subnet-range <subnet-range>]
                        [--tags <tag>[,<tag>,...]]
                        [--any-tags <tag>[,<tag>,...]]
                        [--not-tags <tag>[,<tag>,...]]
                        [--not-any-tags <tag>[,<tag>,...]]
```

Table 63.9. Table Formatter



Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 63.10. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 63.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 63.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 63.13. Optional Arguments

Value	Summary
<code>--no-dhcp</code>	List subnets which have dhcp disabled
<code>--ip-version &lt;ip-version&gt;</code>	List only subnets of given ip version in output. Allowed values for IP version are 4 and 6.

Value	Summary
<code>--not-any-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	Exclude subnets which have any given tag(s) (comma-separated list of tags)
<code>--name &lt;name&gt;</code>	List only subnets of given name in output
<code>--tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	List subnets which have all given tag(s) (comma-separated list of tags)
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--subnet-range &lt;subnet-range&gt;</code>	List only subnets of given subnet range (in cidr notation) in output e.g.: <code>--subnet-range 10.10.0.0/16</code>
<code>--long</code>	List additional fields in output
<code>--project &lt;project&gt;</code>	List only subnets which belong to a given project in output (name or ID)
<code>--any-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	List subnets which have any given tag(s) (comma-separated list of tags)
<code>--network &lt;network&gt;</code>	List only subnets which belong to a given network in output (name or ID)
<code>--not-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	Exclude subnets which have all given tag(s) (comma-separated list of tags)
<code>--gateway &lt;gateway&gt;</code>	List only subnets of given gateway ip in output
<code>-h, --help</code>	Show this help message and exit
<code>--service-type &lt;service-type&gt;</code>	List only subnets of a given service type in output e.g.: <code>network:floatingip_agent_gateway</code> . Must be a valid device owner value for a network port (repeat option to list multiple service types)
<code>--dhcp</code>	List subnets which have dhcp enabled

## 63.4. SUBNET POOL CREATE

Create subnet pool

**Usage:**

```

openstack subnet pool create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] --pool-prefix
                             <pool-prefix>
                             [--default-prefix-length <default-prefix-length>]
                             [--min-prefix-length <min-prefix-length>]
                             [--max-prefix-length <max-prefix-length>]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             [--address-scope <address-scope>]
                             [--default | --no-default]
                             [--share | --no-share]
                             [--description <description>]
                             [--default-quota <num-ip-addresses>]
                             [--tag <tag> | --no-tag]
                             <name>

```

Table 63.14. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 63.15. Positional Arguments

Value	Summary
<name>	Name of the new subnet pool

Table 63.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 63.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

**Table 63.18. Optional Arguments**

Value	Summary
--share	Set this subnet pool as shared
--no-share	Set this subnet pool as not shared
--min-prefix-length <min-prefix-length>	Set subnet pool minimum prefix length
--no-tag	No tags associated with the subnet pool
--default-quota <num-ip-addresses>	Set default quota for subnet pool as the number of ip addresses allowed in a subnet
--tag <tag>	Tag to be added to the subnet pool (repeat option to set multiple tags)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--address-scope <address-scope>	Set address scope associated with the subnet pool (name or ID), prefixes must be unique across address scopes
--max-prefix-length <max-prefix-length>	Set subnet pool maximum prefix length
--pool-prefix <pool-prefix>	Set subnet pool prefixes (in cidr notation) (repeat option to set multiple prefixes)
--no-default	Set this as a non-default subnet pool
--default	Set this as a default subnet pool
-h, --help	Show this help message and exit
--description <description>	Set subnet pool description
--project <project>	Owner's project (name or id)
--default-prefix-length <default-prefix-length>	Set subnet pool default prefix length

Table 63.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 63.5. SUBNET POOL DELETE

Delete subnet pool(s)

### Usage:

```
openstack subnet pool delete [-h] <subnet-pool> [<subnet-pool> ...]
```

Table 63.20. Positional Arguments

Value	Summary
<subnet-pool>	Subnet pool(s) to delete (name or id)

Table 63.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 63.6. SUBNET POOL LIST

List subnet pools

### Usage:

```
openstack subnet pool list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN] [--long]
                          [--share | --no-share]
                          [--default | --no-default]
                          [--project <project>]
                          [--project-domain <project-domain>]
                          [--name <name>]
                          [--address-scope <address-scope>]
                          [--tags <tag>[,<tag>,...]]
                          [--any-tags <tag>[,<tag>,...]]
                          [--not-tags <tag>[,<tag>,...]]
                          [--not-any-tags <tag>[,<tag>,...]]
```

Table 63.22. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 63.23. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 63.24. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 63.25. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 63.26. Optional Arguments

Value	Summary
<code>--share</code>	List subnet pools shared between projects
<code>--not-any-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	Exclude subnet pools which have any given tag(s) (Comma-separated list of tags)

Value	Summary
<code>--name &lt;name&gt;</code>	List only subnet pools of given name in output
<code>--tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	List subnet pools which have all given tag(s) (comma-separated list of tags)
<code>--long</code>	List additional fields in output
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--any-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	List subnet pools which have any given tag(s) (comma-separated list of tags)
<code>--address-scope &lt;address-scope&gt;</code>	List only subnet pools of given address scope in output (name or ID)
<code>--no-share</code>	List subnet pools not shared between projects
<code>--not-tags &lt;tag&gt;[,&lt;tag&gt;,...]</code>	Exclude subnet pools which have all given tag(s) (Comma-separated list of tags)
<code>--no-default</code>	List subnet pools not used as the default external subnet pool
<code>--default</code>	List subnet pools used as the default external subnet pool
<code>-h, --help</code>	Show this help message and exit
<code>--project &lt;project&gt;</code>	List subnet pools according to their project (name or ID)

## 63.7. SUBNET POOL SET

Set subnet pool properties

### Usage:

```
openstack subnet pool set [-h] [--name <name>]
                          [--pool-prefix <pool-prefix>]
                          [--default-prefix-length <default-prefix-length>]
                          [--min-prefix-length <min-prefix-length>]
                          [--max-prefix-length <max-prefix-length>]
                          [--address-scope <address-scope> | --no-address-scope]
                          [--default | --no-default]
                          [--description <description>]
```

```

[--default-quota <num-ip-addresses>]
[--tag <tag>] [--no-tag]
<subnet-pool>

```

**Table 63.27. Positional Arguments**

Value	Summary
<subnet-pool>	Subnet pool to modify (name or id)

**Table 63.28. Optional Arguments**

Value	Summary
--no-address-scope	Remove address scope associated with the subnet pool
--min-prefix-length <min-prefix-length>	Set subnet pool minimum prefix length
--no-tag	Clear tags associated with the subnet pool. specify both --tag and --no-tag to overwrite current tags
--name <name>	Set subnet pool name
--default-quota <num-ip-addresses>	Set default quota for subnet pool as the number of ip addresses allowed in a subnet
--tag <tag>	Tag to be added to the subnet pool (repeat option to set multiple tags)
--address-scope <address-scope>	Set address scope associated with the subnet pool (name or ID), prefixes must be unique across address scopes
--max-prefix-length <max-prefix-length>	Set subnet pool maximum prefix length
--pool-prefix <pool-prefix>	Set subnet pool prefixes (in cidr notation) (repeat option to set multiple prefixes)
--no-default	Set this as a non-default subnet pool
--default	Set this as a default subnet pool
-h, --help	Show this help message and exit
--description <description>	Set subnet pool description
--default-prefix-length <default-prefix-length>	Set subnet pool default prefix length



## 63.8. SUBNET POOL SHOW

Display subnet pool details

### Usage:

```
openstack subnet pool show [-h] [-f {json,shell,table,value,yaml}]
                           [-c COLUMN] [--max-width <integer>]
                           [--fit-width] [--print-empty] [--noindent]
                           [--prefix PREFIX]
                           <subnet-pool>
```

**Table 63.29. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 63.30. Positional Arguments**

Value	Summary
<subnet-pool>	Subnet pool to display (name or id)

**Table 63.31. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 63.32. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

Table 63.33. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 63.34. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 63.9. SUBNET POOL UNSET

Unset subnet pool properties

### Usage:

```
openstack subnet pool unset [-h] [--pool-prefix <pool-prefix>]
                             [--tag <tag> | --all-tag]
                             <subnet-pool>
```

Table 63.35. Positional Arguments

Value	Summary
<subnet-pool>	Subnet pool to modify (name or id)

Table 63.36. Optional Arguments

Value	Summary
--all-tag	Clear all tags associated with the subnet pool
-h, --help	Show this help message and exit
--pool-prefix <pool-prefix>	Remove subnet pool prefixes (in cidr notation). (repeat option to unset multiple prefixes).
--tag <tag>	Tag to be removed from the subnet pool (repeat option to remove multiple tags)

## 63.10. SUBNET SET

Set subnet properties

### Usage:

```

openstack subnet set [-h] [--name <name>] [--dhcp | --no-dhcp]
                    [--gateway <gateway>]
                    [--description <description>] [--tag <tag>]
                    [--no-tag]
                    [--allocation-pool start=<ip-address>,end=<ip-address>]
                    [--no-allocation-pool]
                    [--dns-nameserver <dns-nameserver>]
                    [--no-dns-nameservers]
                    [--host-route destination=<subnet>,gateway=<ip-address>]
                    [--no-host-route] [--service-type <service-type>]
                    <subnet>

```

Table 63.37. Positional Arguments

Value	Summary
<subnet>	Subnet to modify (name or id)

Table 63.38. Optional Arguments

Value	Summary
--no-allocation-pool	Clear associated allocation-pools from the subnet. Specify both --allocation-pool and --no-allocation-pool to overwrite the current allocation pool information.
--no-dhcp	Disable dhcp
--dhcp	Enable dhcp
--allocation-pool start=<ip-address>,end=<ip-address>	Allocation pool ip addresses for this subnet e.g.: start=192.168.199.2,end=192.168.199.254 (repeat option to add multiple IP addresses)
--no-tag	Clear tags associated with the subnet. specify both -tag and --no-tag to overwrite current tags
--name <name>	Updated name of the subnet
--no-host-route	Clear associated host-routes from the subnet. specify both --host-route and --no-host-route to overwrite the current host route information.
--host-route destination=<subnet>,gateway=<ip-address>	Additional route for this subnet e.g.: destination=10.10.0.0/16,gateway=192.168.71.254 destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to add multiple routes)

Value	Summary
<code>--dns-nameserver &lt;dns-nameserver&gt;</code>	Dns server for this subnet (repeat option to set multiple DNS servers)
<code>--gateway &lt;gateway&gt;</code>	Specify a gateway for the subnet. the options are: <code>&lt;ip-address&gt;</code> : Specific IP address to use as the gateway, <code>none</code> : This subnet will not use a gateway, e.g.: <code>--gateway 192.168.9.1</code> , <code>--gateway none</code> .
<code>--no-dns-nameservers</code>	Clear existing information of dns nameservers. specify both <code>--dns-nameserver</code> and <code>--no-dns-nameserver</code> to overwrite the current DNS Nameserver information.
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	Set subnet description
<code>--service-type &lt;service-type&gt;</code>	Service type for this subnet e.g.: <code>network:floatingip_agent_gateway</code> . Must be a valid device owner value for a network port (repeat option to set multiple service types)
<code>--tag &lt;tag&gt;</code>	Tag to be added to the subnet (repeat option to set multiple tags)

## 63.11. SUBNET SHOW

Display subnet details

### Usage:

```
openstack subnet show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    <subnet>
```

Table 63.39. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 63.40. Positional Arguments**

Value	Summary
<code>&lt;subnet&gt;</code>	Subnet to display (name or id)

**Table 63.41. Output Formatters**

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 63.42. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 63.43. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

**Table 63.44. Shell Formatter**

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## 63.12. SUBNET UNSET

Unset subnet properties

**Usage:**

```

openstack subnet unset [-h]
                        [--allocation-pool start=<ip-address>,end=<ip-address>]
                        [--dns-nameserver <dns-nameserver>]
                        [--host-route destination=<subnet>,gateway=<ip-address>]
                        [--service-type <service-type>]
                        [--tag <tag> | --all-tag]
                        <subnet>

```

**Table 63.45. Positional Arguments**

Value	Summary
<subnet>	Subnet to modify (name or id)

**Table 63.46. Optional Arguments**

Value	Summary
--allocation-pool start=<ip-address>,end=<ip-address>	Allocation pool ip addresses to be removed from this subnet e.g.: start=192.168.199.2,end=192.168.199.254 (repeat option to unset multiple allocation pools)
--host-route destination=<subnet>,gateway=<ip-address>	Route to be removed from this subnet e.g.: destination=10.10.0.0/16,gateway=192.168.71.254 destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to unset multiple host routes)
--dns-nameserver <dns-nameserver>	Dns server to be removed from this subnet (repeat option to unset multiple DNS servers)
--all-tag	Clear all tags associated with the subnet
-h, --help	Show this help message and exit
--service-type <service-type>	Service type to be removed from this subnet e.g.: network:floatingip_agent_gateway. Must be a valid device owner value for a network port (repeat option to unset multiple service types)
--tag <tag>	Tag to be removed from the subnet (repeat option to remove multiple tags)

## CHAPTER 64. TASK

This chapter describes the commands under the **task** command.

### 64.1. TASK EXECUTION LIST

List all tasks.

#### Usage:

```
openstack task execution list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--filter FILTERS] [--limit [LIMIT]]
                             [workflow_execution]
```

Table 64.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 64.2. Positional Arguments

Value	Summary
workflow_execution	Workflow execution id associated with list of tasks.

Table 64.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 64.4. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 64.5. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 64.6. Optional Arguments

Value	Summary
--filter FILTERS	Filters. can be repeated.
-h, --help	Show this help message and exit
--limit [LIMIT]	Maximum number of tasks to return in a single result. limit is set to 100 by default. Use --limit -1 to fetch the full result set.

## 64.2. TASK EXECUTION PUBLISHED SHOW

Show task published variables.

### Usage:

```
openstack task execution published show [-h] id
```

Table 64.7. Positional Arguments

Value	Summary
id	Task id

Table 64.8. Optional Arguments



Value	Summary
-h, --help	Show this help message and exit

### 64.3. TASK EXECUTION RERUN

Rerun an existing task.

#### Usage:

```
openstack task execution rerun [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--resume] [-e ENV]
                               id
```

Table 64.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 64.10. Positional Arguments

Value	Summary
id	Task identifier

Table 64.11. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 64.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 64.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resume	Rerun only failed or unstarted action executions for with-items task
-e ENV, --env ENV	Environment variables

Table 64.14. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 64.4. TASK EXECUTION RESULT SHOW

Show task output data.

### Usage:

```
openstack task execution result show [-h] id
```

Table 64.15. Positional Arguments

Value	Summary
id	Task id

Table 64.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 64.5. TASK EXECUTION SHOW

Show specific task.

**Usage:**

```

openstack task execution show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               task

```

**Table 64.17. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 64.18. Positional Arguments**

Value	Summary
task	Task identifier

**Table 64.19. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 64.20. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 64.21. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 64.22. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 65. TLD

This chapter describes the commands under the **tld** command.

### 65.1. TLD CREATE

Create new tld

#### Usage:

```
openstack tld create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    --name NAME [--description DESCRIPTION]
                    [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
```

**Table 65.1. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 65.2. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 65.3. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 65.4. Optional Arguments**

Value	Summary
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--all-projects	Show results from all projects. default: false
--name NAME	Tld name
--description DESCRIPTION	Description
-h, --help	Show this help message and exit

Table 65.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 65.2. TLD DELETE

Delete tld

### Usage:

```
openstack tld delete [-h] [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```

Table 65.6. Positional Arguments

Value	Summary
id	Tld id

Table 65.7. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false

Value	Summary
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

## 65.3. TLD LIST

List tlds

**Usage:**

```
openstack tld list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--noindent]
                  [--quote {all,minimal,none,nonnumeric}]
                  [--sort-column SORT_COLUMN] [--name NAME]
                  [--description DESCRIPTION] [--all-projects]
                  [--edit-managed] [--sudo-project-id SUDO_PROJECT_ID]
```

**Table 65.8. Table Formatter**

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 65.9. CSV Formatter**

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

**Table 65.10. Output Formatters**

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 65.11. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 65.12. Optional Arguments

Value	Summary
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None
<code>--all-projects</code>	Show results from all projects. default: false
<code>--name NAME</code>	Tld name
<code>--description DESCRIPTION</code>	Tld description
<code>-h, --help</code>	Show this help message and exit

## 65.4. TLD SET

Set tld properties

### Usage:

```
openstack tld set [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                 [--max-width <integer>] [--fit-width] [--print-empty]
                 [--noindent] [--prefix PREFIX] [--name NAME]
                 [--description DESCRIPTION | --no-description]
                 [--all-projects] [--edit-managed]
                 [--sudo-project-id SUDO_PROJECT_ID]
                 id
```

Table 65.13. Table Formatter



Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 65.14. Positional Arguments

Value	Summary
<code>id</code>	Tld id

Table 65.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 65.16. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 65.17. Optional Arguments

Value	Summary
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None
<code>--name NAME</code>	Tld name
<code>--description DESCRIPTION</code>	Description

Value	Summary
-h, --help	Show this help message and exit
--no-description--all-projects	Show results from all projects. default: false

Table 65.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 65.5. TLD SHOW

Show tld details

### Usage:

```

openstack tld show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--noindent] [--prefix PREFIX]
                  [--all-projects] [--edit-managed]
                  [--sudo-project-id SUDO_PROJECT_ID]
                  id

```

Table 65.19. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 65.20. Positional Arguments

Value	Summary
id	Tld id

Table 65.21. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 65.22. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 65.23. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 65.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 66. TOKEN

This chapter describes the commands under the **token** command.

### 66.1. TOKEN ISSUE

Issue new token

#### Usage:

```
openstack token issue [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
```

Table 66.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 66.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 66.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 66.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

**Table 66.5. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 66.2. TOKEN REVOKE

Revoke existing token

### Usage:

```
openstack token revoke [-h] <token>
```

**Table 66.6. Positional Arguments**

Value	Summary
<token>	Token to be deleted

**Table 66.7. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

## CHAPTER 67. TSIGKEY

This chapter describes the commands under the **tsigkey** command.

### 67.1. TSIGKEY CREATE

Create new tsigkey

#### Usage:

```
openstack tsigkey create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] --name NAME --algorithm
                        ALGORITHM --secret SECRET --scope SCOPE
                        --resource-id RESOURCE_ID [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
```

**Table 67.1. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 67.2. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 67.3. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

Table 67.4. Optional Arguments

Value	Summary
--resource-id RESOURCE_ID	Tsigkey resource_id
--scope SCOPE	Tsigkey scope
--edit-managed	Edit resources marked as managed. default: false
--algorithm ALGORITHM	Tsigkey algorithm
--all-projects	Show results from all projects. default: false
--secret SECRET	Tsigkey secret
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--name NAME	Tsigkey name
-h, --help	Show this help message and exit

Table 67.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 67.2. TSIGKEY DELETE

Delete tsigkey

### Usage:

```
openstack tsigkey delete [-h] [--all-projects] [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        id
```

Table 67.6. Positional Arguments

Value	Summary
id	Tsigkey id

Table 67.7. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

## 67.3. TSIGKEY LIST

List tsigkeys

### Usage:

```
openstack tsigkey list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--name NAME]
                        [--algorithm ALGORITHM] [--scope SCOPE]
                        [--all-projects] [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
```

Table 67.8. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 67.9. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 67.10. Output Formatters



Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 67.11. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 67.12. Optional Arguments

Value	Summary
--scope SCOPE	Tsigkey scope
--edit-managed	Edit resources marked as managed. default: false
--algorithm ALGORITHM	Tsigkey algorithm
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--name NAME	Tsigkey name
-h, --help	Show this help message and exit

## 67.4. TSIGKEY SET

Set tsigkey properties

### Usage:

```
openstack tsigkey set [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--name NAME] [--algorithm ALGORITHM]
                    [--secret SECRET] [--scope SCOPE]
```

```

[--all-projects] [--edit-managed]
[--sudo-project-id SUDO_PROJECT_ID]
id

```

Table 67.13. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 67.14. Positional Arguments

Value	Summary
id	Tsigkey id

Table 67.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 67.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 67.17. Optional Arguments

Value	Summary
--scope SCOPE	Tsigkey scope
--edit-managed	Edit resources marked as managed. default: false

Value	Summary
--algorithm ALGORITHM	Tsigkey algorithm
--all-projects	Show results from all projects. default: false
--secret SECRET	Tsigkey secret
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--name NAME	Tsigkey name
-h, --help	Show this help message and exit

Table 67.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 67.5. TSIGKEY SHOW

Show tsigkey details

### Usage:

```
openstack tsigkey show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        id
```

Table 67.19. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 67.20. Positional Arguments

Value	Summary
<code>id</code>	Tsigkey id

Table 67.21. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 67.22. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 67.23. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 67.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 68. UNDERCLOUD

This chapter describes the commands under the **undercloud** command.

### 68.1. UNDERCLOUD BACKUP

Backup the undercloud

**Usage:**

```
openstack undercloud backup [--add-path ADD_PATH]
                             [--exclude-path EXCLUDE_PATH]
```

**Table 68.1. Optional Arguments**

Value	Summary
--exclude-path EXCLUDE_PATH	Exclude path when performing the undercloud backup, this option can be specified multiple times. Defaults to: none i.e. --exclude-path /this/is/a/folder/ --exclude-path /this/is/a/textfile.txt
--add-path ADD_PATH	Add additional files to backup. defaults to: /home/stack/ i.e. --add-path /this/is/a/folder/ --add-path /this/is/a/textfile.txt

### 68.2. UNDERCLOUD DEPLOY

Deploy Undercloud (experimental feature)

**Usage:**

```
openstack undercloud deploy [--templates [TEMPLATES]] [--stack STACK]
                             [--output-dir OUTPUT_DIR] [-t <TIMEOUT>]
                             [-e <HEAT ENVIRONMENT FILE>]
                             [--roles-file ROLES_FILE]
                             [--heat-api-port <HEAT_API_PORT>]
                             [--heat-user <HEAT_USER>]
                             [--heat-container-image <HEAT_CONTAINER_IMAGE>]
                             [--heat-native] [--local-ip <LOCAL_IP>]
                             [--local-domain <LOCAL_DOMAIN>] [-k]
```

**Table 68.2. Optional Arguments**

Value	Summary
-e <HEAT ENVIRONMENT FILE>, --environment-file <HEAT ENVIRONMENT FILE>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)

Value	Summary
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy
<code>--local-domain &lt;LOCAL_DOMAIN&gt;</code>	Local domain for undercloud and its api endpoints
<code>-k, --keep-running</code>	Keep the process running on failures for debugging
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data_undercloud.yaml</code> in the <code>--templates</code> directory
<code>--local-ip &lt;LOCAL_IP&gt;</code>	Local ip/cidr for undercloud traffic. required.
<code>--heat-container-image &lt;HEAT_CONTAINER_IMAGE&gt;</code>	The container image to use when launching the heat-all process. Defaults to: <code>tripleomaster/centos-binary-heat-all</code>
<code>--stack STACK</code>	Stack name to create
<code>--output-dir OUTPUT_DIR</code>	Directory to output state and ansible deployment files.
<code>-t &lt;TIMEOUT&gt;, --timeout &lt;TIMEOUT&gt;</code>	Deployment timeout in minutes.
<code>--heat-api-port &lt;HEAT_API_PORT&gt;</code>	Heat api port to use for the installers private heat API instance. Optional. Default: 8006.)
<code>--heat-native</code>	Execute the heat-all process natively on this host. This option requires that the heat-all binaries be installed locally on this machine. This option is enabled by default which means heat-all is executed on the host OS directly.
<code>--heat-user &lt;HEAT_USER&gt;</code>	User to execute the non-privileged heat-all process. Defaults to heat.

## 68.3. UNDERCLOUD INSTALL

Install and setup the undercloud

### Usage:

```
openstack undercloud install [--use-heat] [--no-validations]
```

Table 68.3. Optional Arguments

Value	Summary
--use-heat	Perform undercloud deploy using heat
--no-validations	Do not perform undercloud configuration validations

## 68.4. UNDERCLOUD UPGRADE

Upgrade undercloud

### Usage:

```
openstack undercloud upgrade [--use-heat] [--no-validations] [--force]
```

**Table 68.4. Optional Arguments**

Value	Summary
--use-heat	Perform undercloud deploy using heat
--no-validations	Do not perform undercloud configuration validations
--force	No to be used in normal update/upgrade! this helps getting out of an error loop when the overcloud is in error and it needs new code to work again.



## CHAPTER 69. USAGE

This chapter describes the commands under the **usage** command.

### 69.1. USAGE LIST

List resource usage per project

#### Usage:

```
openstack usage list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN] [--start <start>]
                    [--end <end>]
```

**Table 69.1. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 69.2. CSV Formatter**

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

**Table 69.3. Output Formatters**

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 69.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 69.5. Optional Arguments

Value	Summary
<code>--end &lt;end&gt;</code>	Usage range end date, ex 2012-01-20 (default: tomorrow)
<code>-h, --help</code>	Show this help message and exit
<code>--start &lt;start&gt;</code>	Usage range start date, ex 2012-01-20 (default: 4 weeks ago)

## 69.2. USAGE SHOW

Show resource usage for a single project

### Usage:

```
openstack usage show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--project <project>] [--start <start>]
                    [--end <end>]
```

Table 69.6. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 69.7. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 69.8. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 69.9. Optional Arguments**

Value	Summary
<code>--end &lt;end&gt;</code>	Usage range end date, ex 2012-01-20 (default: tomorrow)
<code>-h, --help</code>	Show this help message and exit
<code>--start &lt;start&gt;</code>	Usage range start date, ex 2012-01-20 (default: 4 weeks ago)
<code>--project &lt;project&gt;</code>	Name or id of project to show usage for

**Table 69.10. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 70. USER

This chapter describes the commands under the **user** command.

### 70.1. USER CREATE

Create new user

#### Usage:

```
openstack user create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--project <project>] [--password <password>]
                    [--password-prompt] [--email <email-address>]
                    [--enable | --disable] [--or-show]
                    <name>
```

Table 70.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 70.2. Positional Arguments

Value	Summary
<name>	New user name

Table 70.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 70.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.5. Optional Arguments

Value	Summary
--enable	Enable user (default)
--or-show	Return existing user
--password <password>	Set user password
--email <email-address>	Set user email address
--password-prompt	Prompt interactively for password
-h, --help	Show this help message and exit
--disable	Disable user
--project <project>	Default project (name or id)

Table 70.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 70.2. USER DELETE

Delete user(s)

### Usage:

```
openstack user delete [-h] <user> [<user> ...]
```

Table 70.7. Positional Arguments

Value	Summary
<user>	User(s) to delete (name or id)

Table 70.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 70.3. USER LIST

List users

### Usage:

```
openstack user list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN] [--project <project>]
                    [--long]
```

Table 70.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 70.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 70.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 70.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.13. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project &lt;project&gt;</code>	Filter users by project (name or id)
<code>--long</code>	List additional fields in output

## 70.4. USER ROLE LIST

List user-role assignments

### Usage:

```
openstack user role list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]
                        [--project <project>]
                        [<user>]
```

Table 70.14. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 70.15. Positional Arguments

Value	Summary
<code>&lt;user&gt;</code>	User to list (name or id)

Table 70.16. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 70.17. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 70.18. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.19. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project &lt;project&gt;</code>	Filter users by <code>&lt;project&gt;</code> (name or id)



## 70.5. USER SET

Set user properties

### Usage:

```
openstack user set [-h] [--name <name>] [--project <project>]
                  [--password <user-password>] [--password-prompt]
                  [--email <email-address>] [--enable | --disable]
                  <user>
```

Table 70.20. Positional Arguments

Value	Summary
<user>	User to modify (name or id)

Table 70.21. Optional Arguments

Value	Summary
--password <user-password>	Set user password
--enable	Enable user (default)
--name <name>	Set user name
--email <email-address>	Set user email address
--password-prompt	Prompt interactively for password
-h, --help	Show this help message and exit
--disable	Disable user
--project <project>	Set default project (name or id)

## 70.6. USER SHOW

Display user details

### Usage:

```
openstack user show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                   [--max-width <integer>] [--fit-width]
                   [--print-empty] [--noindent] [--prefix PREFIX]
                   <user>
```

Table 70.22. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 70.23. Positional Arguments

Value	Summary
<code>&lt;user&gt;</code>	User to display (name or id)

Table 70.24. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 70.25. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.26. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 70.27. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 71. VOLUME

This chapter describes the commands under the **volume** command.

### 71.1. VOLUME BACKUP CREATE

Create new volume backup

#### Usage:

```
openstack volume backup create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--name <name>]
                               [--description <description>]
                               [--container <container>]
                               [--snapshot <snapshot>] [--force]
                               [--incremental]
                               <volume>
```

Table 71.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.2. Positional Arguments

Value	Summary
<volume>	Volume to backup (name or id)

Table 71.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 71.4. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 71.5. Optional Arguments**

Value	Summary
--force	Allow to back up an in-use volume
--incremental	Perform an incremental backup
--name <name>	Name of the backup
--container <container>	Optional backup container name
--snapshot <snapshot>	Snapshot to backup (name or id)
-h, --help	Show this help message and exit
--description <description>	Description of the backup

**Table 71.6. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.2. VOLUME BACKUP DELETE

Delete volume backup(s)

### Usage:

```
openstack volume backup delete [-h] [--force] <backup> [<backup> ...]
```

**Table 71.7. Positional Arguments**

Value	Summary
<backup>	Backup(s) to delete (name or id)

Table 71.8. Optional Arguments

Value	Summary
--force	Allow delete in state other than error or available
-h, --help	Show this help message and exit

## 71.3. VOLUME BACKUP LIST

List volume backups

### Usage:

```

openstack volume backup list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN] [--long]
                             [--name <name>] [--status <status>]
                             [--volume <volume>]
                             [--marker <volume-backup>]
                             [--limit <num-backups>] [--all-projects]

```

Table 71.9. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 71.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 71.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.13. Optional Arguments

Value	Summary
--marker <volume-backup>	The last backup of the previous page (name or id)
--limit <num-backups>	Maximum number of backups to display
--all-projects	Include all projects (admin only)
--volume <volume>	Filters results by the volume which they backup (name or ID)
--long	List additional fields in output
--status <status>	Filters results by the backup status ( <i>creating, available, deleting, error, restoring or error_restoring</i> )
--name <name>	Filters results by the backup name
-h, --help	Show this help message and exit

## 71.4. VOLUME BACKUP RESTORE

Restore volume backup

**Usage:**

```

openstack volume backup restore [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                <backup> <volume>

```

Table 71.14. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.15. Positional Arguments

Value	Summary
<volume>	Volume to restore to (name or id)
<backup>	Backup to restore (name or id)

Table 71.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 71.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 71.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.5. VOLUME BACKUP SET

Set volume backup properties

### Usage:

```
openstack volume backup set [-h] [--name <name>]
                             [--description <description>]
                             [--state <state>]
                             <backup>
```

Table 71.20. Positional Arguments

Value	Summary
<backup>	Backup to modify (name or id)

Table 71.21. Optional Arguments

Value	Summary
--name <name>	New backup name
-h, --help	Show this help message and exit
--description <description>	New backup description
--state <state>	New backup state ("available" or "error") (admin only) (This option simply changes the state of the backup in the database with no regard to actual status, exercise caution when using)

## 71.6. VOLUME BACKUP SHOW

Display volume backup details



**Usage:**

```

openstack volume backup show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             <backup>

```

**Table 71.22. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 71.23. Positional Arguments**

Value	Summary
<backup>	Backup to display (name or id)

**Table 71.24. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 71.25. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 71.26. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

Table 71.27. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.7. VOLUME CREATE

Create new volume

### Usage:

```

openstack volume create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX] [--size <size>]
                        [--type <volume-type>]
                        [--image <image> | --snapshot <snapshot> | --source <volume> | --source-
replicated <replicated-volume>]
                        [--description <description>] [--user <user>]
                        [--project <project>]
                        [--availability-zone <availability-zone>]
                        [--consistency-group consistency-group]
                        [--property <key=value>] [--hint <key=value>]
                        [--multi-attach] [--bootable | --non-bootable]
                        [--read-only | --read-write]
                        <name>

```

Table 71.28. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.29. Positional Arguments

Value	Summary
<name>	Volume name

**Table 71.30. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 71.31. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 71.32. Optional Arguments**

Value	Summary
--property <key=value>	Set a property to this volume (repeat option to set multiple properties)
--bootable	Mark volume as bootable
--non-bootable	Mark volume as non-bootable (default)
--type <volume-type>	Set the type of volume
--availability-zone <availability-zone>	Create volume in <availability-zone>
--read-only	Set volume to read-only access mode
--consistency-group consistency-group>	Consistency group where the new volume belongs to
--size <size>	Volume size in gb (required unless --snapshot or --source or --source-replicated is specified)
--hint <key=value>	Arbitrary scheduler hint key-value pairs to help boot an instance (repeat option to set multiple hints)

Value	Summary
--multi-attach	Allow volume to be attached more than once (default to False)
--read-write	Set volume to read-write access mode (default)
--image <image>	Use <image> as source of volume (name or id)
--source <volume>	Volume to clone (name or id)
--user <user>	Specify an alternate user (name or id)
--snapshot <snapshot>	Use <snapshot> as source of volume (name or id)
-h, --help	Show this help message and exit
--description <description>	Volume description
--project <project>	Specify an alternate project (name or id)
--source-replicated <replicated-volume>	Replicated volume to clone (name or id)

Table 71.33. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.8. VOLUME DELETE

Delete volume(s)

### Usage:

```
openstack volume delete [-h] [--force | --purge]
                        <volume> [<volume> ...]
```

Table 71.34. Positional Arguments

Value	Summary
<volume>	Volume(s) to delete (name or id)

Table 71.35. Optional Arguments

Value	Summary
--force	Attempt forced removal of volume(s), regardless of state (defaults to False)
-h, --help	Show this help message and exit
--purge	Remove any snapshots along with volume(s) (defaults to false)

## 71.9. VOLUME HOST FAILOVER

Failover volume host to different backend

### Usage:

```
openstack volume host failover [-h] --volume-backend <backend-id>
                               <host-name>
```

**Table 71.36. Positional Arguments**

Value	Summary
<host-name>	Name of volume host

**Table 71.37. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit
--volume-backend <backend-id>	The id of the volume backend replication target where the host will failover to (required)

## 71.10. VOLUME HOST SET

Set volume host properties

### Usage:

```
openstack volume host set [-h] [--disable | --enable] <host-name>
```

**Table 71.38. Positional Arguments**

Value	Summary
<host-name>	Name of volume host

Table 71.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--disable	Freeze and disable the specified volume host
--enable	Thaw and enable the specified volume host

## 71.11. VOLUME LIST

List volumes

### Usage:

```

openstack volume list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--project <project>]
                        [--project-domain <project-domain>]
                        [--user <user>] [--user-domain <user-domain>]
                        [--name <name>] [--status <status>]
                        [--all-projects] [--long] [--marker <volume>]
                        [--limit <num-volumes>]

```

Table 71.40. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.41. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 71.42. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 71.43. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.44. Optional Arguments

Value	Summary
--limit <num-volumes>	Maximum number of volumes to display
--name <name>	Filter results by volume name
--all-projects	Include all projects (admin only)
--user <user>	Filter results by user (name or id) (admin only)
--long	List additional fields in output
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--status <status>	Filter results by status
--marker <volume>	The last volume id of the previous page
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
-h, --help	Show this help message and exit
--project <project>	Filter results by project (name or id) (admin only)

## 71.12. VOLUME MIGRATE

Migrate volume to a new host

### Usage:

```
openstack volume migrate [-h] --host <host> [--force-host-copy]
                        [--lock-volume | --unlock-volume]
                        <volume>
```

Table 71.45. Positional Arguments

Value	Summary
<volume>	Volume to migrate (name or id)

Table 71.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--lock-volume	If specified, the volume state will be locked and will not allow a migration to be aborted (possibly by another operation)
--host <host>	Destination host (takes the form: host@backend-name#pool)
--unlock-volume	If specified, the volume state will not be locked and the a migration can be aborted (default) (possibly by another operation)
--force-host-copy	Enable generic host-based force-migration, which bypasses driver optimizations

## 71.13. VOLUME QOS ASSOCIATE

Associate a QoS specification to a volume type

### Usage:

```
openstack volume qos associate [-h] <qos-spec> <volume-type>
```

Table 71.47. Positional Arguments

Value	Summary
<volume-type>	Volume type to associate the qos (name or id)



Value	Summary
<qos-spec>	Qos specification to modify (name or id)

Table 71.48. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 71.14. VOLUME QOS CREATE

Create new QoS specification

### Usage:

```
openstack volume qos create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] [--consumer <consumer>]
                             [--property <key=value>]
                             <name>
```

Table 71.49. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.50. Positional Arguments

Value	Summary
<name>	New qos specification name

Table 71.51. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 71.52. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.53. Optional Arguments

Value	Summary
--consumer <consumer>	Consumer of the qos. valid consumers: back-end, both, front-end (defaults to <i>both</i> )
-h, --help	Show this help message and exit
--property <key=value>	Set a qos specification property (repeat option to set multiple properties)

Table 71.54. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.15. VOLUME QOS DELETE

Delete QoS specification

### Usage:

```
openstack volume qos delete [-h] [--force] <qos-spec> [<qos-spec> ...]
```

Table 71.55. Positional Arguments

Value	Summary
<qos-spec>	Qos specification(s) to delete (name or id)

Table 71.56. Optional Arguments

Value	Summary
--force	Allow to delete in-use qos specification(s)
-h, --help	Show this help message and exit

## 71.16. VOLUME QOS DISASSOCIATE

Disassociate a QoS specification from a volume type

### Usage:

```
openstack volume qos disassociate [-h]
                                [--volume-type <volume-type> | --all]
                                <qos-spec>
```

Table 71.57. Positional Arguments

Value	Summary
<qos-spec>	Qos specification to modify (name or id)

Table 71.58. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--volume-type <volume-type>	Volume type to disassociate the qos from (name or id)
--all	Disassociate the qos from every volume type

## 71.17. VOLUME QOS LIST

List QoS specifications

### Usage:

```
openstack volume qos list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
```

```

[--fit-width] [--print-empty] [--noindent]
[--quote {all,minimal,none,nonnumeric}]
[--sort-column SORT_COLUMN]

```

Table 71.59. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.60. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 71.61. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 71.62. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.63. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 71.18. VOLUME QOS SET

Set QoS specification properties

### Usage:

```
openstack volume qos set [-h] [--property <key=value>] <qos-spec>
```

Table 71.64. Positional Arguments

Value	Summary
<qos-spec>	Qos specification to modify (name or id)

Table 71.65. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Property to add or modify for this qos specification (repeat option to set multiple properties)

## 71.19. VOLUME QOS SHOW

Display QoS specification details

### Usage:

```
openstack volume qos show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          <qos-spec>
```

Table 71.66. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 71.67. Positional Arguments**

Value	Summary
<code>&lt;qos-spec&gt;</code>	Qos specification to display (name or id)

**Table 71.68. Output Formatters**

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 71.69. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 71.70. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

**Table 71.71. Shell Formatter**

Value	Summary
a format a UNIX shell can parse ( <code>variable="value"</code> )-- prefix PREFIX	Add a prefix to all variable names

## 71.20. VOLUME QOS UNSET

Unset QoS specification properties

### Usage:

```
openstack volume qos unset [-h] [--property <key>] <qos-spec>
```

Table 71.72. Positional Arguments

Value	Summary
<qos-spec>	Qos specification to modify (name or id)

Table 71.73. Optional Arguments

Value	Summary
--property <key>	Property to remove from the qos specification. (repeat option to unset multiple properties)
-h, --help	Show this help message and exit

## 71.21. VOLUME SERVICE LIST

List service command

### Usage:

```
openstack volume service list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--sort-column SORT_COLUMN]
                               [--host <host>] [--service <service>]
                               [--long]
```

Table 71.74. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 71.75. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 71.76. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 71.77. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.78. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--host &lt;host&gt;</code>	List services on specified host (name only)
<code>--long</code>	List additional fields in output
<code>--service &lt;service&gt;</code>	List only specified service (name only)



## 71.22. VOLUME SERVICE SET

Set volume service properties

### Usage:

```
openstack volume service set [-h] [--enable | --disable]
                             [--disable-reason <reason>]
                             <host> <service>
```

Table 71.79. Positional Arguments

Value	Summary
<service>	Name of service (binary name)
<host>	Name of host

Table 71.80. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--disable	Disable volume service
--disable-reason <reason>	Reason for disabling the service (should be used with --disable option)
--enable	Enable volume service

## 71.23. VOLUME SET

Set volume properties

### Usage:

```
openstack volume set [-h] [--name <name>] [--size <size>]
                    [--description <description>] [--no-property]
                    [--property <key=value>]
                    [--image-property <key=value>] [--state <state>]
                    [--type <volume-type>]
                    [--retype-policy <retype-policy>]
                    [--bootable | --non-bootable]
                    [--read-only | --read-write]
                    <volume>
```

Table 71.81. Positional Arguments

Value	Summary
<volume>	Volume to modify (name or id)

Table 71.82. Optional Arguments

Value	Summary
--bootable	Mark volume as bootable
--non-bootable	Mark volume as non-bootable
--state <state>	New volume state ("available", "error", "creating", "deleting", "in-use", "attaching", "detaching", "error_deleting" or "maintenance") (admin only) (This option simply changes the state of the volume in the database with no regard to actual status, exercise caution when using)
--name <name>	New volume name
--property <key=value>	Set a property on this volume (repeat option to set multiple properties)
--size <size>	Extend volume size in gb
--read-only	Set volume to read-only access mode
--read-write	Set volume to read-write access mode
--no-property	Remove all properties from <volume> (specify both --no-property and --property to remove the current properties before setting new properties.)
--type <volume-type>	New volume type (name or id)
--image-property <key=value>	Set an image property on this volume (repeat option to set multiple image properties)
-h, --help	Show this help message and exit
--description <description>	New volume description
--retype-policy <retype-policy>	Migration policy while re-typing volume ("never" or "on-demand", default is "never" ) (available only when --type option is specified)

## 71.24. VOLUME SHOW

Display volume details

### Usage:

```
openstack volume show [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--max-width <integer>] [--fit-width]
                       [--print-empty] [--noindent] [--prefix PREFIX]
                       <volume>
```

**Table 71.83. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 71.84. Positional Arguments**

Value	Summary
<volume>	Volume to display (name or id)

**Table 71.85. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 71.86. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 71.87. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

Table 71.88. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.25. VOLUME SNAPSHOT CREATE

Create new volume snapshot

### Usage:

```
openstack volume snapshot create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [--volume <volume>]
                                [--description <description>]
                                [--force] [--property <key=value>]
                                [--remote-source <key=value>]
                                <snapshot-name>
```

Table 71.89. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.90. Positional Arguments

Value	Summary
<snapshot-name>	Name of the new snapshot

Table 71.91. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 71.92. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.93. Optional Arguments

Value	Summary
--force	Create a snapshot attached to an instance. default is False
--volume <volume>	Volume to snapshot (name or id) (default is <snapshot- name>)
--property <key=value>	Set a property to this snapshot (repeat option to set multiple properties)
--remote-source <key=value>	The attribute(s) of the existing remote volume snapshot (admin required) (repeat option to specify multiple attributes) e.g.: <i>--remote-source source-name=test_name --remote-source source-id=test_id</i>
-h, --help	Show this help message and exit
--description <description>	Description of the snapshot

Table 71.94. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.26. VOLUME SNAPSHOT DELETE

Delete volume snapshot(s)

**Usage:**

```
openstack volume snapshot delete [-h] [--force]
                                <snapshot> [<snapshot> ...]
```

**Table 71.95. Positional Arguments**

Value	Summary
<snapshot>	Snapshot(s) to delete (name or id)

**Table 71.96. Optional Arguments**

Value	Summary
--force	Attempt forced removal of snapshot(s), regardless of state (defaults to False)
-h, --help	Show this help message and exit

**71.27. VOLUME SNAPSHOT LIST**

List volume snapshots

**Usage:**

```
openstack volume snapshot list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--all-projects] [--project <project>]
                                [--project-domain <project-domain>]
                                [--long] [--marker <volume-snapshot>]
                                [--limit <num-snapshots>]
                                [--name <name>] [--status <status>]
                                [--volume <volume>]
```

**Table 71.97. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 71.98. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 71.99. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 71.100. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.101. Optional Arguments

Value	Summary
<code>--status &lt;status&gt;</code>	Filters results by a status. ( <i>available, error, creating, deleting or error-deleting</i> )
<code>--all-projects</code>	Include all projects (admin only)
<code>--name &lt;name&gt;</code>	Filters results by a name.
<code>--long</code>	List additional fields in output

Value	Summary
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--marker <volume-snapshot>	The last snapshot id of the previous page
--limit <num-snapshots>	Maximum number of snapshots to display
--volume <volume>	Filters results by a volume (name or id).
-h, --help	Show this help message and exit
--project <project>	Filter results by project (name or id) (admin only)

## 71.28. VOLUME SNAPSHOT SET

Set volume snapshot properties

### Usage:

```
openstack volume snapshot set [-h] [--name <name>]
                               [--description <description>]
                               [--no-property] [--property <key=value>]
                               [--state <state>]
                               <snapshot>
```

**Table 71.102. Positional Arguments**

Value	Summary
<snapshot>	Snapshot to modify (name or id)

**Table 71.103. Optional Arguments**

Value	Summary
--name <name>	New snapshot name
--property <key=value>	Property to add/change for this snapshot (repeat option to set multiple properties)



Value	Summary
<code>--state &lt;state&gt;</code>	New snapshot state. ("available", "error", "creating", "deleting", or "error_deleting") (admin only) (This option simply changes the state of the snapshot in the database with no regard to actual status, exercise caution when using)
<code>--no-property</code>	Remove all properties from <snapshot> (specify both <code>--no-property</code> and <code>--property</code> to remove the current properties before setting new properties.)
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	New snapshot description

## 71.29. VOLUME SNAPSHOT SHOW

Display volume snapshot details

### Usage:

```
openstack volume snapshot show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               <snapshot>
```

Table 71.104. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.105. Positional Arguments

Value	Summary
<snapshot>	Snapshot to display (name or id)

Table 71.106. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 71.107. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.108. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 71.109. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.30. VOLUME SNAPSHOT UNSET

Unset volume snapshot properties

### Usage:

```
openstack volume snapshot unset [-h] [--property <key>] <snapshot>
```

Table 71.110. Positional Arguments

Value	Summary
<snapshot>	Snapshot to modify (name or id)

Table 71.111. Optional Arguments

Value	Summary
<code>--property &lt;key&gt;</code>	Property to remove from snapshot (repeat option to remove multiple properties)
<code>-h, --help</code>	Show this help message and exit

## 71.31. VOLUME TRANSFER REQUEST ACCEPT

Accept volume transfer request.

### Usage:

```
openstack volume transfer request accept [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent] [--prefix PREFIX]
                                         [--auth-key <key>]
                                         <transfer-request-id>
```

Table 71.112. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 71.113. Positional Arguments

Value	Summary
<code>&lt;transfer-request-id&gt;</code>	Volume transfer request to accept (id only)

Table 71.114. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 71.115. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.116. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--auth-key <key>	Volume transfer request authentication key

Table 71.117. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.32. VOLUME TRANSFER REQUEST CREATE

Create volume transfer request.

### Usage:

```

openstack volume transfer request create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent] [--prefix PREFIX]
                                         [--name <name>]
                                         <volume>

```

Table 71.118. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 71.119. Positional Arguments

Value	Summary
<code>&lt;volume&gt;</code>	Volume to transfer (name or id)

Table 71.120. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 71.121. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.122. Optional Arguments

Value	Summary
<code>--name &lt;name&gt;</code>	New transfer request name (default to none)
<code>-h, --help</code>	Show this help message and exit

Table 71.123. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.33. VOLUME TRANSFER REQUEST DELETE

Delete volume transfer request(s).

### Usage:

```
openstack volume transfer request delete [-h]
                                     <transfer-request>
                                     [<transfer-request> ...]
```

Table 71.124. Positional Arguments

Value	Summary
<transfer-request>	Volume transfer request(s) to delete (name or id)

Table 71.125. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 71.34. VOLUME TRANSFER REQUEST LIST

Lists all volume transfer requests.

### Usage:

```
openstack volume transfer request list [-h]
                                       [-f {csv,json,table,value,yaml}]
                                       [-c COLUMN]
                                       [--max-width <integer>]
                                       [--fit-width] [--print-empty]
                                       [--noindent]
                                       [--quote {all,minimal,none,nonnumeric}]
                                       [--sort-column SORT_COLUMN]
                                       [--all-projects]
```

Table 71.126. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 71.127. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 71.128. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 71.129. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.130. Optional Arguments

Value	Summary
<code>--all-projects</code>	Include all projects (admin only)
<code>-h, --help</code>	Show this help message and exit

## 71.35. VOLUME TRANSFER REQUEST SHOW

Show volume transfer request details.

### Usage:

```
openstack volume transfer request show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--noindent] [--prefix PREFIX]
                                         <transfer-request>
```

Table 71.131. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.132. Positional Arguments

Value	Summary
<transfer-request>	Volume transfer request to display (name or id)

Table 71.133. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 71.134. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json



Table 71.135. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 71.136. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.36. VOLUME TYPE CREATE

Create new volume type

### Usage:

```
openstack volume type create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             [--description <description>]
                             [--public | --private]
                             [--property <key=value>]
                             [--project <project>]
                             [--encryption-provider <provider>]
                             [--encryption-cipher <cipher>]
                             [--encryption-key-size <key-size>]
                             [--encryption-control-location <control-location>]
                             [--project-domain <project-domain>]
                             <name>
```

Table 71.137. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.138. Positional Arguments

Value	Summary
<name>	Volume type name

**Table 71.139. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 71.140. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 71.141. Optional Arguments**

Value	Summary
--public	Volume type is accessible to the public
--private	Volume type is not accessible to the public
--encryption-key-size <key-size>	Set the size of the encryption key of this volume type (e.g "128" or "256") (admin only)
--property <key=value>	Set a property on this volume type (repeat option to set multiple properties)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--encryption-control-location <control-location>	Set the notional service where the encryption is performed ("front-end" or "back-end") (admin only) (The default value for this option is "front-end" when setting encryption type of a volume. Consider using other encryption options such as: "--encryption-cipher", "--encryption-key-size" and "--encryption-provider")

Value	Summary
<code>--encryption-provider &lt;provider&gt;</code>	Set the class that provides encryption support for this volume type (e.g "LuksEncryptor") (admin only) (This option is required when setting encryption type of a volume. Consider using other encryption options such as: "--encryption-cipher", "--encryption-key-size" and "--encryption-control-location")
<code>--encryption-cipher &lt;cipher&gt;</code>	Set the encryption algorithm or mode for this volume type (e.g "aes-xts-plain64") (admin only)
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	Volume type description
<code>--project &lt;project&gt;</code>	Allow <project> to access private type (name or id) (Must be used with --private option)

Table 71.142. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

## 71.37. VOLUME TYPE DELETE

Delete volume type(s)

### Usage:

```
openstack volume type delete [-h] <volume-type> [<volume-type> ...]
```

Table 71.143. Positional Arguments

Value	Summary
<code>&lt;volume-type&gt;</code>	Volume type(s) to delete (name or id)

Table 71.144. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 71.38. VOLUME TYPE LIST

List volume types

### Usage:

```
openstack volume type list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN] [--long]
                          [--default | --public | --private]
                          [--encryption-type]
```

Table 71.145. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 71.146. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 71.147. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 71.148. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.149. Optional Arguments

Value	Summary
--public	List only public types
--private	List only private types (admin only)
--long	List additional fields in output
--default	List the default volume type
-h, --help	Show this help message and exit
--encryption-type	Display encryption information for each volume type (admin only)

## 71.39. VOLUME TYPE SET

Set volume type properties

### Usage:

```
openstack volume type set [-h] [--name <name>]
                        [--description <description>]
                        [--property <key=value>]
                        [--project <project>]
                        [--project-domain <project-domain>]
                        [--encryption-provider <provider>]
                        [--encryption-cipher <cipher>]
                        [--encryption-key-size <key-size>]
                        [--encryption-control-location <control-location>]
                        <volume-type>
```

Table 71.150. Positional Arguments

Value	Summary
<volume-type>	Volume type to modify (name or id)

Table 71.151. Optional Arguments

Value	Summary
<code>--encryption-key-size &lt;key-size&gt;</code>	Set the size of the encryption key of this volume type (e.g "128" or "256") (admin only)
<code>--name &lt;name&gt;</code>	Set volume type name
<code>--property &lt;key=value&gt;</code>	Set a property on this volume type (repeat option to set multiple properties)
<code>--project-domain &lt;project-domain&gt;</code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--encryption-control-location &lt;control-location&gt;</code>	Set the notional service where the encryption is performed ("front-end" or "back-end") (admin only) (The default value for this option is "front-end" when setting encryption type of a volume for the first time. Consider using other encryption options such as: "--encryption-cipher", "--encryption-key-size" and "--encryption-provider")
<code>--encryption-provider &lt;provider&gt;</code>	Set the class that provides encryption support for this volume type (e.g "LuksEncryptor") (admin only) (This option is required when setting encryption type of a volume for the first time. Consider using other encryption options such as: "--encryption-cipher", "--encryption-key-size" and "--encryption-control-location")
<code>--encryption-cipher &lt;cipher&gt;</code>	Set the encryption algorithm or mode for this volume type (e.g "aes-xts-plain64") (admin only)
<code>-h, --help</code>	Show this help message and exit
<code>--description &lt;description&gt;</code>	Set volume type description
<code>--project &lt;project&gt;</code>	Set volume type access to project (name or id) (admin only)

## 71.40. VOLUME TYPE SHOW

Display volume type details

### Usage:

```
openstack volume type show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
```

```
[--prefix PREFIX] [--encryption-type]
<volume-type>
```

Table 71.152. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 71.153. Positional Arguments

Value	Summary
<code>&lt;volume-type&gt;</code>	Volume type to display (name or id)

Table 71.154. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 71.155. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.156. Optional Arguments

Value	Summary
<code>-h</code> , <code>--help</code>	Show this help message and exit
<code>--encryption-type</code>	Display encryption information of this volume type (admin only)

Table 71.157. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 71.41. VOLUME TYPE UNSET

Unset volume type properties

### Usage:

```
openstack volume type unset [-h] [--property <key>]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             [--encryption-type]
                             <volume-type>
```

Table 71.158. Positional Arguments

Value	Summary
<volume-type>	Volume type to modify (name or id)

Table 71.159. Optional Arguments

Value	Summary
--property <key>	Remove a property from this volume type (repeat option to remove multiple properties)
-h, --help	Show this help message and exit
--encryption-type	Remove the encryption type for this volume type (admin only)
--project <project>	Removes volume type access to project (name or id) (admin only)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

## 71.42. VOLUME UNSET

Unset volume properties

### Usage:



```
openstack volume unset [-h] [--property <key>] [--image-property <key>]
                        <volume>
```

Table 71.160. Positional Arguments

Value	Summary
<volume>	Volume to modify (name or id)

Table 71.161. Optional Arguments

Value	Summary
--property <key>	Remove a property from volume (repeat option to remove multiple properties)
-h, --help	Show this help message and exit
--image-property <key>	Remove an image property from volume (repeat option to remove multiple image properties)

## CHAPTER 72. WORKBOOK

This chapter describes the commands under the **workbook** command.

### 72.1. WORKBOOK CREATE

Create new workbook.

#### Usage:

```
openstack workbook create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          definition
```

Table 72.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 72.2. Positional Arguments

Value	Summary
definition	Workbook definition file

Table 72.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.5. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 72.6. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 72.2. WORKBOOK DEFINITION SHOW

Show workbook definition.

### Usage:

```
openstack workbook definition show [-h] name
```

Table 72.7. Positional Arguments

Value	Summary
name	Workbook name

Table 72.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 72.3. WORKBOOK DELETE

Delete workbook.

### Usage:

```
openstack workbook delete [-h] workbook [workbook ...]
```

Table 72.9. Positional Arguments

Value	Summary
workbook	Name of workbook(s).

Table 72.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 72.4. WORKBOOK LIST

List all workbooks.

### Usage:

```

openstack workbook list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]

```

Table 72.11. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 72.12. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 72.13. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 72.14. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 72.5. WORKBOOK SHOW

Show specific workbook.

### Usage:

```
openstack workbook show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        workbook
```

Table 72.16. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

**Table 72.17. Positional Arguments**

Value	Summary
<code>workbook</code>	Workbook name

**Table 72.18. Output Formatters**

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

**Table 72.19. JSON Formatter**

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

**Table 72.20. Optional Arguments**

Value	Summary
<code>-h, --help</code>	Show this help message and exit

**Table 72.21. Shell Formatter**

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

## 72.6. WORKBOOK UPDATE

Update workbook.

**Usage:**

```

openstack workbook update [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX]
                          definition

```

**Table 72.22. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 72.23. Positional Arguments**

Value	Summary
definition	Workbook definition file

**Table 72.24. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 72.25. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 72.26. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

Table 72.27. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 72.7. WORKBOOK VALIDATE

Validate workbook.

### Usage:

```
openstack workbook validate [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             definition
```

Table 72.28. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 72.29. Positional Arguments

Value	Summary
definition	Workbook definition file

Table 72.30. Output Formatters



Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.31. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.32. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 72.33. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## CHAPTER 73. WORKFLOW

This chapter describes the commands under the **workflow** command.

### 73.1. WORKFLOW CREATE

Create new workflow.

#### Usage:

```
openstack workflow create [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN]
                        [--namespace [NAMESPACE]] [--public]
                        definition
```

Table 73.1. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 73.2. Positional Arguments

Value	Summary
definition	Workflow definition file.

Table 73.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 73.4. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 73.5. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.6. Optional Arguments

Value	Summary
--namespace [NAMESPACE]	Namespace to create the workflow within.
-h, --help	Show this help message and exit
--public	With this flag workflow will be marked as "public".

## 73.2. WORKFLOW DEFINITION SHOW

Show workflow definition.

### Usage:

```
openstack workflow definition show [-h] identifier
```

Table 73.7. Positional Arguments

Value	Summary
identifier	Workflow id or name.

Table 73.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

### 73.3. WORKFLOW DELETE

Delete workflow.

#### Usage:

```
openstack workflow delete [-h] [--namespace [NAMESPACE]]
                        workflow [workflow ...]
```

Table 73.9. Positional Arguments

Value	Summary
workflow	Name or id of workflow(s).

Table 73.10. Optional Arguments

Value	Summary
--namespace [NAMESPACE]	Parent task execution id associated with workflow execution list.
-h, --help	Show this help message and exit

### 73.4. WORKFLOW ENGINE SERVICE LIST

List all services.

#### Usage:

```
openstack workflow engine service list [-h]
                                       [-f {csv,json,table,value,yaml}]
                                       [-c COLUMN]
                                       [--max-width <integer>]
                                       [--fit-width] [--print-empty]
                                       [--noindent]
                                       [--quote {all,minimal,none,nonnumeric}]
                                       [--sort-column SORT_COLUMN]
```

Table 73.11. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 73.12. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 73.13. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 73.14. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

## 73.5. WORKFLOW ENV CREATE

Create new environment.

**Usage:**

```

openstack workflow env create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent] [--prefix PREFIX]
                             file

```

Table 73.16. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 73.17. Positional Arguments

Value	Summary
file	Environment configuration file in json or yaml

Table 73.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 73.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 73.6. WORKFLOW ENV DELETE

Delete environment.

### Usage:

```
openstack workflow env delete [-h] environment [environment ...]
```

Table 73.22. Positional Arguments

Value	Summary
environment	Name of environment(s).

Table 73.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 73.7. WORKFLOW ENV LIST

List all environments.

### Usage:

```
openstack workflow env list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
```

Table 73.24. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 73.25. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 73.26. Output Formatters

Value	Summary
output formatter options- <code>{csv,json,table,value,yaml}</code> , <code>--format</code> <code>{csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 73.27. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.28. Optional Arguments

Value	Summary
<code>-h</code> , <code>--help</code>	Show this help message and exit

## 73.8. WORKFLOW ENV SHOW

Show specific environment.

### Usage:

```
openstack workflow env show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
```



`[--prefix PREFIX]`  
environment

Table 73.29. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 73.30. Positional Arguments

Value	Summary
environment	Environment name

Table 73.31. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 73.32. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.33. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 73.34. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 73.9. WORKFLOW ENV UPDATE

Update environment.

### Usage:

```
openstack workflow env update [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    file
```

Table 73.35. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 73.36. Positional Arguments

Value	Summary
file	Environment configuration file in json or yaml

Table 73.37. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 73.38. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.40. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 73.10. WORKFLOW EXECUTION CREATE

Create new execution.

### Usage:

```
openstack workflow execution create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent] [--prefix PREFIX]
                                   [--namespace [NAMESPACE]]
                                   [-d DESCRIPTION]
                                   [-s [SOURCE_EXECUTION_ID]]
                                   [workflow_identifier]
                                   [workflow_input] [params]
```

Table 73.41. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 73.42. Positional Arguments**

Value	Summary
workflow_input	Workflow input
params	Workflow additional parameters
workflow_identifier	Workflow id or name. workflow name will be deprecated since Mitaka.

**Table 73.43. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 73.44. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 73.45. Optional Arguments**

Value	Summary
--namespace [NAMESPACE]	Workflow namespace.
-h, --help	Show this help message and exit
-d DESCRIPTION, --description DESCRIPTION	Execution description
-s [SOURCE_EXECUTION_ID]	Workflow execution id which will allow operators to create a new workflow execution based on the previously successful executed workflow. Example: mistral execution-create -s 123e4567-e89b-12d3-a456-426655440000

**Table 73.46. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 73.11. WORKFLOW EXECUTION DELETE

Delete execution.

### Usage:

```
openstack workflow execution delete [-h] execution [execution ...]
```

Table 73.47. Positional Arguments

Value	Summary
execution	Id of execution identifier(s).

Table 73.48. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 73.12. WORKFLOW EXECUTION INPUT SHOW

Show execution input data.

### Usage:

```
openstack workflow execution input show [-h] id
```

Table 73.49. Positional Arguments

Value	Summary
id	Execution id

Table 73.50. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 73.13. WORKFLOW EXECUTION LIST

List all executions.

### Usage:

```

openstack workflow execution list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--sort-column SORT_COLUMN]
                                [--task [TASK]] [--marker [MARKER]]
                                [--limit [LIMIT]]
                                [--sort_keys [SORT_KEYS]]
                                [--sort_dirs [SORT_DIRS]]
                                [--filter FILTERS]

```

Table 73.51. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 73.52. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 73.53. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 73.54. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.55. Optional Arguments

Value	Summary
<code>--marker [MARKER]</code>	The last execution uuid of the previous page, displays list of executions after "marker".
<code>--sort_keys [SORT_KEYS]</code>	Comma-separated list of sort keys to sort results by. Default: <code>created_at</code> . Example: <code>mistral execution-list --sort_keys=id,description</code>
<code>--sort_dirs [SORT_DIRS]</code>	Comma-separated list of sort directions. default: <code>asc</code> . Example: <code>mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc</code>
<code>--limit [LIMIT]</code>	Maximum number of executions to return in a single result. limit is set to 100 by default. Use <code>--limit -1</code> to fetch the full result set.
<code>--filter FILTERS</code>	Filters. can be repeated.
<code>-h, --help</code>	Show this help message and exit
<code>--task [TASK]</code>	Parent task execution id associated with workflow execution list.

## 73.14. WORKFLOW EXECUTION OUTPUT SHOW

Show execution output data.

### Usage:

```
openstack workflow execution output show [-h] id
```

Table 73.56. Positional Arguments

Value	Summary
id	Execution id

Table 73.57. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

## 73.15. WORKFLOW EXECUTION SHOW

Show specific execution.

### Usage:

```

openstack workflow execution show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                execution

```

Table 73.58. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 73.59. Positional Arguments

Value	Summary
execution	Execution identifier

Table 73.60. Output Formatters



Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 73.61. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.62. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.63. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 73.16. WORKFLOW EXECUTION UPDATE

Update execution.

### Usage:

```

openstack workflow execution update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                [-s {RUNNING,PAUSED,SUCCESS,ERROR,CANCELLED}]
                                [-e ENV] [-d DESCRIPTION]
                                id

```

Table 73.64. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 73.65. Positional Arguments

Value	Summary
<code>id</code>	Execution identifier

Table 73.66. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 73.67. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.68. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-d DESCRIPTION, --description DESCRIPTION</code>	Execution description
<code>-e ENV, --env ENV</code>	Environment variables
<code>-s {RUNNING,PAUSED,SUCCESS,ERROR,CANCELLED} , --state {RUNNING,PAUSED,SUCCESS,ERROR,CANCELLED}</code>	Execution state

Table 73.69. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 73.17. WORKFLOW LIST

List all workflows.

### Usage:

```
openstack workflow list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--sort-column SORT_COLUMN] [--filter FILTERS]
```

Table 73.70. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 73.71. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 73.72. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 73.73. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.74. Optional Arguments

Value	Summary
<code>--filter FILTERS</code>	Filters. can be repeated.
<code>-h, --help</code>	Show this help message and exit

## 73.18. WORKFLOW SHOW

Show specific workflow.

### Usage:

```

openstack workflow show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--max-width <integer>]
                        [--fit-width] [--print-empty] [--noindent]
                        [--prefix PREFIX]
                        workflow

```

Table 73.75. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 73.76. Positional Arguments

Value	Summary
workflow	Workflow id or name.

Table 73.77. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 73.78. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.79. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.80. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 73.19. WORKFLOW UPDATE

Update workflow.

### Usage:

```
openstack workflow update [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN] [--id ID]
                          [--namespace [NAMESPACE]] [--public]
                          definition
```

Table 73.81. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 73.82. Positional Arguments

Value	Summary
definition	Workflow definition

Table 73.83. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 73.84. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 73.85. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.86. Optional Arguments

Value	Summary
--namespace [NAMESPACE]	Parent task execution id associated with workflow execution list.
-h, --help	Show this help message and exit
--id ID	Workflow id.
--public	With this flag workflow will be marked as "public".

## 73.20. WORKFLOW VALIDATE

Validate workflow.

### Usage:

```
openstack workflow validate [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX]
                             definition
```

**Table 73.87. Table Formatter**

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 73.88. Positional Arguments**

Value	Summary
definition	Workflow definition file

**Table 73.89. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 73.90. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 73.91. Optional Arguments**

Value	Summary
-h, --help	Show this help message and exit

**Table 73.92. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names



## CHAPTER 74. ZONE

This chapter describes the commands under the **zone** command.

### 74.1. ZONE ABANDON

Abandon a zone

#### Usage:

```
openstack zone abandon [-h] [--all-projects] [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        id
```

Table 74.1. Positional Arguments

Value	Summary
id	Zone id

Table 74.2. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

### 74.2. ZONE AXFR

AXFR a zone

#### Usage:

```
openstack zone axfr [-h] [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```

Table 74.3. Positional Arguments

Value	Summary
id	Zone id

Table 74.4. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

## 74.3. ZONE BLACKLIST CREATE

Create new blacklist

### Usage:

```

openstack zone blacklist create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--noindent] [--prefix PREFIX]
                                --pattern PATTERN
                                [--description DESCRIPTION]
                                [--all-projects] [--edit-managed]
                                [--sudo-project-id SUDO_PROJECT_ID]

```

Table 74.5. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.6. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.7. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.8. Optional Arguments

Value	Summary
--pattern PATTERN	Blacklist pattern
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--all-projects	Show results from all projects. default: false
--description DESCRIPTION	Description
-h, --help	Show this help message and exit

Table 74.9. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.4. ZONE BLACKLIST DELETE

Delete blacklist

### Usage:

```
openstack zone blacklist delete [-h] [--all-projects] [--edit-managed]
                                [--sudo-project-id SUDO_PROJECT_ID]
                                id
```

Table 74.10. Positional Arguments

Value	Summary
id	Blacklist id

Table 74.11. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

## 74.5. ZONE BLACKLIST LIST

List blacklists

### Usage:

```

openstack zone blacklist list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--noindent]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--sort-column SORT_COLUMN]
                             [--all-projects] [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]

```

Table 74.12. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.13. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 74.14. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.15. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.16. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

## 74.6. ZONE BLACKLIST SET

Set blacklist properties

### Usage:

```
openstack zone blacklist set [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] [--pattern PATTERN]
```

```

[--description DESCRIPTION | --no-description]
[--all-projects] [--edit-managed]
[--sudo-project-id SUDO_PROJECT_ID]
id

```

Table 74.17. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.18. Positional Arguments

Value	Summary
id	Blacklist id

Table 74.19. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.20. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.21. Optional Arguments

Value	Summary
--pattern PATTERN	Blacklist pattern

Value	Summary
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None
<code>--description DESCRIPTION</code>	Description
<code>-h, --help</code>	Show this help message and exit
<code>--no-description--all-projects</code>	Show results from all projects. default: false

Table 74.22. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

## 74.7. ZONE BLACKLIST SHOW

Show blacklist details

### Usage:

```
openstack zone blacklist show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--all-projects] [--edit-managed]
                               [--sudo-project-id SUDO_PROJECT_ID]
                               id
```

Table 74.23. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

**Table 74.24. Positional Arguments**

Value	Summary
id	Blacklist id

**Table 74.25. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 74.26. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 74.27. Optional Arguments**

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

**Table 74.28. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.8. ZONE CREATE

Create new zone

**Usage:**



```

openstack zone create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--email EMAIL] [--type TYPE] [--ttl TTL]
                    [--description DESCRIPTION]
                    [--masters MASTERS [MASTERS ...]]
                    [--attributes ATTRIBUTES [ATTRIBUTES ...]]
                    [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    name

```

Table 74.29. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.30. Positional Arguments

Value	Summary
name	Zone name

Table 74.31. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.32. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.33. Optional Arguments

Value	Summary
--email EMAIL	Zone email
--edit-managed	Edit resources marked as managed. default: false
--ttl TTL	Time to live (seconds)
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--attributes ATTRIBUTES [ATTRIBUTES ...]	Zone attributes
--type TYPE	Zone type
--description DESCRIPTION	Description
-h, --help	Show this help message and exit
--masters MASTERS [MASTERS ...]	Zone masters

Table 74.34. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.9. ZONE DELETE

Delete zone

### Usage:

```

openstack zone delete [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id

```

Table 74.35. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.36. Positional Arguments

Value	Summary
<code>id</code>	Zone id

Table 74.37. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.38. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.39. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 74.40. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.10. ZONE EXPORT CREATE

Export a Zone

### Usage:

```
openstack zone export create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] [--all-projects]
                             [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_id
```

Table 74.41. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.42. Positional Arguments

Value	Summary
zone_id	Zone id

Table 74.43. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.44. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.45. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 74.46. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.11. ZONE EXPORT DELETE

Delete a Zone Export

### Usage:

```
openstack zone export delete [-h] [--all-projects] [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_export_id
```

Table 74.47. Positional Arguments

Value	Summary
zone_export_id	Zone export id

Table 74.48. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

## 74.12. ZONE EXPORT LIST

List Zone Exports

### Usage:

```

openstack zone export list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--sort-column SORT_COLUMN] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]

```

Table 74.49. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.50. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 74.51. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.52. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.53. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

## 74.13. ZONE EXPORT SHOW

Show a Zone Export

### Usage:

```
openstack zone export show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          zone_export_id
```

Table 74.54. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.55. Positional Arguments

Value	Summary
<code>zone_export_id</code>	Zone export id

Table 74.56. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.57. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.58. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None



Table 74.59. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.14. ZONE EXPORT SHOWFILE

Show the zone file for the Zone Export

### Usage:

```
openstack zone export showfile [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--noindent] [--prefix PREFIX]
                               [--all-projects] [--edit-managed]
                               [--sudo-project-id SUDO_PROJECT_ID]
                               zone_export_id
```

Table 74.60. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.61. Positional Arguments

Value	Summary
zone_export_id	Zone export id

Table 74.62. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.63. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.64. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 74.65. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.15. ZONE IMPORT CREATE

Import a Zone from a file on the filesystem

### Usage:

```
openstack zone import create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--noindent]
                             [--prefix PREFIX] [--all-projects]
                             [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_file_path
```

Table 74.66. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.67. Positional Arguments

Value	Summary
<code>zone_file_path</code>	Path to a zone file

Table 74.68. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.69. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.70. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 74.71. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.16. ZONE IMPORT DELETE

Delete a Zone Import

### Usage:

```
openstack zone import delete [-h] [--all-projects] [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_import_id
```

Table 74.72. Positional Arguments

Value	Summary
zone_import_id	Zone import id

Table 74.73. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

## 74.17. ZONE IMPORT LIST

List Zone Imports

### Usage:

```
openstack zone import list [-h] [-f {csv,json,table,value,yaml}]
                           [-c COLUMN] [--max-width <integer>]
                           [--fit-width] [--print-empty] [--noindent]
                           [--quote {all,minimal,none,nonnumeric}]
                           [--sort-column SORT_COLUMN] [--all-projects]
                           [--edit-managed]
                           [--sudo-project-id SUDO_PROJECT_ID]
```

Table 74.74. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.75. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 74.76. Output Formatters

Value	Summary
output formatter options- <code>-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.77. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.78. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

## 74.18. ZONE IMPORT SHOW

Show a Zone Import

### Usage:

```
openstack zone import show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--max-width <integer>]
                          [--fit-width] [--print-empty] [--noindent]
                          [--prefix PREFIX] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          zone_import_id
```

Table 74.79. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.80. Positional Arguments

Value	Summary
<code>zone_import_id</code>	Zone import id

Table 74.81. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.82. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.83. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 74.84. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.19. ZONE LIST

List zones

### Usage:

```
openstack zone list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--sort-column SORT_COLUMN] [--name NAME]
                    [--email EMAIL] [--type TYPE] [--ttl TTL]
                    [--description DESCRIPTION] [--status STATUS]
                    [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
```

Table 74.85. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.86. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 74.87. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.88. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.89. Optional Arguments

Value	Summary
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None
<code>--email EMAIL</code>	Zone email



Value	Summary
--edit-managed	Edit resources marked as managed. default: false
--ttl TTL	Time to live (seconds)
--all-projects	Show results from all projects. default: false
--name NAME	Zone name
--type TYPE	Zone type
--description DESCRIPTION	Description
--status STATUS	Zone status
-h, --help	Show this help message and exit

## 74.20. ZONE SET

Set zone properties

### Usage:

```
openstack zone set [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--noindent] [--prefix PREFIX]
                  [--email EMAIL] [--ttl TTL]
                  [--description DESCRIPTION | --no-description]
                  [--masters MASTERS [MASTERS ...]] [--all-projects]
                  [--edit-managed] [--sudo-project-id SUDO_PROJECT_ID]
                  id
```

Table 74.90. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.91. Positional Arguments

Value	Summary
id	Zone id

**Table 74.92. Output Formatters**

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 74.93. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 74.94. Optional Arguments**

Value	Summary
--email EMAIL	Zone email
--edit-managed	Edit resources marked as managed. default: false
--ttl TTL	Time to live (seconds)
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--description DESCRIPTION	Description
--no-description--masters MASTERS [MASTERS ...]	Zone masters
-h, --help	Show this help message and exit

**Table 74.95. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.21. ZONE SHOW

Show zone details

### Usage:

```
openstack zone show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--noindent] [--prefix PREFIX]
                    [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```

Table 74.96. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.97. Positional Arguments

Value	Summary
id	Zone id

Table 74.98. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.99. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.100. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 74.101. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.22. ZONE TRANSFER ACCEPT LIST

List Zone Transfer Accepts

### Usage:

```

openstack zone transfer accept list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--noindent]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--sort-column SORT_COLUMN]
                                   [--all-projects] [--edit-managed]
                                   [--sudo-project-id SUDO_PROJECT_ID]

```

Table 74.102. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.103. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 74.104. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.105. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.106. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

## 74.23. ZONE TRANSFER ACCEPT REQUEST

Accept a Zone Transfer Request

### Usage:

```

openstack zone transfer accept request [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     --transfer-id TRANSFER_ID --key
                                     KEY [--all-projects]
                                     [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]

```

Table 74.107. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.108. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.109. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.110. Optional Arguments

Value	Summary
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--all-projects	Show results from all projects. default: false
--key KEY	Transfer key
--transfer-id TRANSFER_ID	Transfer id
-h, --help	Show this help message and exit

Table 74.111. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.24. ZONE TRANSFER ACCEPT SHOW

Show Zone Transfer Accept

### Usage:

```

openstack zone transfer accept show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--all-projects] [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]
                                     id

```

Table 74.112. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.113. Positional Arguments

Value	Summary
<code>id</code>	Zone tranfer accept id

Table 74.114. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.115. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.116. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None



Table 74.117. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.25. ZONE TRANSFER REQUEST CREATE

Create new zone transfer request

### Usage:

```
openstack zone transfer request create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--target-project-id TARGET_PROJECT_ID]
                                     [--description DESCRIPTION]
                                     [--all-projects]
                                     [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]
zone_id
```

Table 74.118. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.119. Positional Arguments

Value	Summary
zone_id	Zone id to transfer.

Table 74.120. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

**Table 74.121. JSON Formatter**

Value	Summary
--noindent	Whether to disable indenting the json

**Table 74.122. Optional Arguments**

Value	Summary
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--all-projects	Show results from all projects. default: false
--description DESCRIPTION	Description
-h, --help	Show this help message and exit
--target-project-id TARGET_PROJECT_ID	Target project id to transfer to.

**Table 74.123. Shell Formatter**

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

## 74.26. ZONE TRANSFER REQUEST DELETE

Delete a Zone Transfer Request

### Usage:

```
openstack zone transfer request delete [-h] [--all-projects]
                                     [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]
```

id

Table 74.124. Positional Arguments

Value	Summary
id	Zone transfer request id

Table 74.125. Optional Arguments

Value	Summary
--all-projects	Show results from all projects. default: false
-h, --help	Show this help message and exit
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

## 74.27. ZONE TRANSFER REQUEST LIST

List Zone Transfer Requests

### Usage:

```

openstack zone transfer request list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--sort-column SORT_COLUMN]
                                     [--all-projects] [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]

```

Table 74.126. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.127. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 74.128. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.129. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.130. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

## 74.28. ZONE TRANSFER REQUEST SET

Set a Zone Transfer Request

### Usage:

```
openstack zone transfer request set [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--noindent] [--prefix PREFIX]
    [--description DESCRIPTION | --no-description]
    [--all-projects] [--edit-managed]
    [--sudo-project-id SUDO_PROJECT_ID]
    id
```

Table 74.131. Table Formatter

Value	Summary
--print-empty	Print empty table if there is no data to show.
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Table 74.132. Positional Arguments

Value	Summary
id	Zone transfer request id

Table 74.133. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.134. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.135. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--no-description--all-projects</code>	Show results from all projects. default: false
<code>--description DESCRIPTION</code>	Description

Table 74.136. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

## 74.29. ZONE TRANSFER REQUEST SHOW

Show Zone Transfer Request Details

### Usage:

```

openstack zone transfer request show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--noindent] [--prefix PREFIX]
                                     [--all-projects] [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]
                                     id

```

Table 74.137. Table Formatter

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

Value	Summary
<code>--max-width &lt;integer&gt;</code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Table 74.138. Positional Arguments

Value	Summary
<code>id</code>	Zone tranfer request id

Table 74.139. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.140. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.141. Optional Arguments

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>-h, --help</code>	Show this help message and exit
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 74.142. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names