



Red Hat OpenStack Platform 17.0

Command Line Interface Reference

Command-line clients for Red Hat OpenStack Platform

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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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MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see [our CTO Chris Wright's message](#).

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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 5.5.1.

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-identity-api-version <identity-api-version>]
  [--os-image-api-version <image-api-version>]
  [--os-network-api-version <network-api-version>]
  [--os-object-api-version <object-api-version>]
  [--os-volume-api-version <volume-api-version>]
  [--os-metrics-api-version <metrics-api-version>]
  [--os-dns-api-version <dns-api-version>]
  [--os-key-manager-api-version <key-manager-api-version>]
  [--os-orchestration-api-version <orchestration-api-version>]
  [--os-loadbalancer-api-version <loadbalancer-api-version>]
  [--os-data-processing-api-version <data-processing-api-version>]
  [--os-data-processing-url OS_DATA_PROCESSING_URL]
  [--os-workflow-api-version <workflow-api-version>]
  [--os-database-api-version <database-api-version>]
  [--os-share-api-version <shared-file-system-api-version>]
  [--os-tripleoclient-api-version <tripleoclient-api-version>]
  [--os-queues-api-version <queues-api-version>]
  [--os-container-infra-api-version <container-infra-api-version>]
  [--os-baremetal-api-version <baremetal-api-version>]
  [--inspector-api-version INSPECTOR_API_VERSION]
  [--inspector-url INSPECTOR_URL]
  [--os-alarming-api-version <alarming-api-version>]
  [--os-auth-type <auth-type>] [--os-auth-url <auth-auth-url>]
  [--os-consumer-key <auth-consumer-key>]
  [--os-consumer-secret <auth-consumer-secret>]
  [--os-access-key <auth-access-key>]
  [--os-access-secret <auth-access-secret>]
  [--os-username <auth-username>]
  [--os-password <auth-password>]
  [--os-endpoint <auth-endpoint>]
  [--os-trust-id <auth-trust-id>] [--os-user-id <auth-user-id>]
  [--os-token <auth-token>]
  [--os-system-scope <auth-system-scope>]
```

```

[--os-domain-id <auth-domain-id>]
[--os-domain-name <auth-domain-name>]
[--os-project-id <auth-project-id>]
[--os-project-name <auth-project-name>]
[--os-project-domain-id <auth-project-domain-id>]
[--os-project-domain-name <auth-project-domain-name>]
[--os-auth-methods <auth-auth-methods>]
[--os-identity-provider <auth-identity-provider>]
[--os-protocol <auth-protocol>]
[--os-identity-provider-url <auth-identity-provider-url>]
[--os-service-provider-endpoint <auth-service-provider-endpoint>]
[--os-service-provider-entity-id <auth-service-provider-entity-id>]
[--os-access-token <auth-access-token>]
[--os-default-domain-id <auth-default-domain-id>]
[--os-default-domain-name <auth-default-domain-name>]
[--os-client-id <auth-client-id>]
[--os-client-secret <auth-client-secret>]
[--os-openid-scope <auth-openid-scope>]
[--os-access-token-endpoint <auth-access-token-endpoint>]
[--os-discovery-endpoint <auth-discovery-endpoint>]
[--os-access-token-type <auth-access-token-type>]
[--os-redirect-uri <auth-redirect-uri>]
[--os-code <auth-code>] [--os-user <auth-user>]
[--os-user-domain-id <auth-user-domain-id>]
[--os-user-domain-name <auth-user-domain-name>]
[--os-passcode <auth-passcode>]
[--os-application-credential-secret <auth-application-credential-secret>]
[--os-application-credential-id <auth-application-credential-id>]
[--os-application-credential-name <auth-application-credential-name>]
[--os-roles <auth-roles>]
[--os-aodh-endpoint <auth-aodh-endpoint>]

```

Table 1.1. Command arguments

Value	Summary
--version	Show program's version number and exit
-v, --verbose	Increase verbosity of output. can be repeated.
-q, --quiet	Suppress output except warnings and errors.
--log-file LOG_FILE	Specify a file to log output. disabled by default.
-h, --help	Show help message and exit.
--debug	Show tracebacks on errors.
--os-cloud <cloud-config-name>	Cloud name in clouds.yaml (env: os_cloud)
--os-region-name <auth-region-name>	Authentication region name (env: os_region_name)

Value	Summary
--os-cacert <ca-bundle-file>	Ca certificate bundle file (env: os_cacert)
--os-cert <certificate-file>	Client certificate bundle file (env: os_cert)
--os-key <key-file>	Client certificate key file (env: os_key)
--verify	Verify server certificate (default)
--insecure	Disable server certificate verification
--os-default-domain <auth-domain>	Default domain id, default=default. (env: OS_DEFAULT_DOMAIN)
--os-interface <interface>	Select an interface type. valid interface types: [admin, public, internal]. default=public, (Env: OS_INTERFACE)
--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.
--os-remote-project-name <remote_project_name>	Project name when authenticating to a service provider if using Keystone-to-Keystone federation.
--os-remote-project-id <remote_project_id>	Project id when authenticating to a service provider if using Keystone-to-Keystone federation.
--os-remote-project-domain-name <remote_project_domain_name>	Domain name of the project when authenticating to a service provider if using Keystone-to-Keystone federation.
--os-remote-project-domain-id <remote_project_domain_id>	Domain id of the project when authenticating to a service provider if using Keystone-to-Keystone federation.
--timing	Print api call timing info
--os-beta-command	Enable beta commands which are subject to change
--os-profile hmac-key	Hmac key for encrypting profiling context data
--os-compute-api-version <compute-api-version>	Compute api version, default=2.1 (env: OS_COMPUTE_API_VERSION)
--os-identity-api-version <identity-api-version>	Identity api version, default=3 (env: OS_IDENTITY_API_VERSION)

Value	Summary
<code>--os-image-api-version <image-api-version></code>	Image api version, default=2 (env: OS_IMAGE_API_VERSION)
<code>--os-network-api-version <network-api-version></code>	Network api version, default=2.0 (env: OS_NETWORK_API_VERSION)
<code>--os-object-api-version <object-api-version></code>	Object api version, default=1 (env: OS_OBJECT_API_VERSION)
<code>--os-volume-api-version <volume-api-version></code>	Volume api version, default=3 (env: OS_VOLUME_API_VERSION)
<code>--os-metrics-api-version <metrics-api-version></code>	Metrics api version, default=1 (env: OS_METRICS_API_VERSION)
<code>--os-dns-api-version <dns-api-version></code>	Dns api version, default=2 (env: os_dns_api_version)
<code>--os-key-manager-api-version <key-manager-api-version></code>	Barbican api version, default=1 (env: OS_KEY_MANAGER_API_VERSION)
<code>--os-orchestration-api-version <orchestration-api-version></code>	Orchestration api version, default=1 (env: OS_ORCHESTRATION_API_VERSION)
<code>--os-loadbalancer-api-version <loadbalancer-api-version></code>	Osc plugin api version, default=2.0 (env: OS_LOADBALANCER_API_VERSION)
<code>--os-data-processing-api-version <data-processing-api-version></code>	Data processing api version, default=1.1 (env: OS_DATA_PROCESSING_API_VERSION)
<code>--os-data-processing-url</code> <code>OS_DATA_PROCESSING_URL</code>	Data processing api url, (env: OS_DATA_PROCESSING_API_URL)
<code>--os-workflow-api-version <workflow-api-version></code>	Workflow api version, default=2 (env: OS_WORKFLOW_API_VERSION)
<code>--os-database-api-version <database-api-version></code>	Database api version, default=1 (env: OS_DATABASE_API_VERSION)
<code>--os-share-api-version <shared-file-system-api-version></code>	Shared file system api version, default=2.63version supported by both the client and the server). (Env: OS_SHARE_API_VERSION)
<code>--os-tripleoclient-api-version <tripleoclient-api-version></code>	Tripleo client api version, default=2 (env: OS_TRIPLEOCLIENT_API_VERSION)
<code>--os-queues-api-version <queues-api-version></code>	Queues api version, default=2 (env: OS_QUEUES_API_VERSION)

Value	Summary
<code>--os-container-infra-api-version <container-infra-api-version></code>	Container-infra api version, default=1 (env: OS_CONTAINER_INFRA_API_VERSION)
<code>--os-baremetal-api-version <baremetal-api-version></code>	Bare metal api version, default="latest" (the maximum version supported by both the client and the server). (Env: OS_BAREMETAL_API_VERSION)
<code>--inspector-api-version INSPECTOR_API_VERSION</code>	Inspector api version, only 1 is supported now (env: INSPECTOR_VERSION).
<code>--inspector-url INSPECTOR_URL</code>	Inspector url, defaults to localhost (env: INSPECTOR_URL).
<code>--os-alarming-api-version <alarming-api-version></code>	Queues api version, default=2 (env: OS_ALARMING_API_VERSION)
<code>--os-auth-type <auth-type></code>	Select an authentication type. available types: v3oauth1, http_basic, v2password, v2token, v3token, v3multifactor, v3adfspassword, v3oidcacesstoken, token, v3oidcauthcode, v3samlpassword, v3oidcclientcredentials, none, gnocchi-basic, v3password, password, v3tokenlessauth, noauth, v3totp, admin_token, v3applicationcredential, gnocchi-noauth, aodh-noauth, v1password, v3oidcpassword. Default: selected based on --os-username/--os-token (Env: OS_AUTH_TYPE)
<code>--os-auth-url <auth-auth-url></code>	With v3oauth1: authentication url with v2password: Authentication URL With v2token: Authentication URL With v3token: Authentication URL With v3multifactor: Authentication URL With v3adfspassword: Authentication URL With v3oidcacesstoken: Authentication URL With token: Authentication URL With v3oidcauthcode: Authentication URL With v3samlpassword: Authentication URL With v3oidcclientcredentials: Authentication URL With v3password: Authentication URL With password: Authentication URL With v3tokenlessauth: Authentication URL With v3totp: Authentication URL With v3applicationcredential: Authentication URL With v1password: Authentication URL With v3oidcpassword: Authentication URL (Env: OS_AUTH_URL)
<code>--os-consumer-key <auth-consumer-key></code>	With v3oauth1: oauth consumer id/key (env: OS_CONSUMER_KEY)
<code>--os-consumer-secret <auth-consumer-secret></code>	With v3oauth1: oauth consumer secret (env: OS_CONSUMER_SECRET)

Value	Summary
<code>--os-access-key <auth-access-key></code>	With v3oauth1: oauth access key (env: <code>os_access_key</code>)
<code>--os-access-secret <auth-access-secret></code>	With v3oauth1: oauth access secret (env: <code>OS_ACCESS_SECRET</code>)
<code>--os-username <auth-username></code>	With http_basic: username with v2password: username to login with With v3adfspassword: Username With v3samlpassword: Username With v3password: Username With password: Username With v3totp: Username With v3applicationcredential: Username With v1password: Username to login with With v3oidcpassword: Username (Env: <code>OS_USERNAME</code>)
<code>--os-password <auth-password></code>	With http_basic: user's password with v2password: Password to use With v3adfspassword: Password With v3samlpassword: Password With v3password: User's password With password: User's password With v1password: Password to use With v3oidcpassword: Password (Env: <code>OS_PASSWORD</code>)
<code>--os-endpoint <auth-endpoint></code>	With http_basic: the endpoint that will always be used With none: The endpoint that will always be used With gnocchi-basic: Gnocchi endpoint With noauth: Cinder endpoint With admin_token: The endpoint that will always be used With gnocchi-noauth: Gnocchi endpoint (Env: <code>OS_ENDPOINT</code>)
<code>--os-trust-id <auth-trust-id></code>	With v2password: trust id with v2token: trust id with v3token: Trust ID With v3multifactor: Trust ID With v3adfspassword: Trust ID With v3oidcaccessstoken: Trust ID With token: Trust ID With v3oidcauthcode: Trust ID With v3samlpassword: Trust ID With v3oidcclientcredentials: Trust ID With v3password: Trust ID With password: Trust ID With v3totp: Trust ID With v3applicationcredential: Trust ID With v3oidcpassword: Trust ID (Env: <code>OS_TRUST_ID</code>)
<code>--os-user-id <auth-user-id></code>	With v2password: user id to login with with v3password: User ID With password: User id With noauth: User ID With v3totp: User ID With v3applicationcredential: User ID With gnocchi-noauth: User ID With aodh-noauth: User ID (Env: <code>OS_USER_ID</code>)
<code>--os-token <auth-token></code>	With v2token: token with v3token: token to authenticate with With token: Token to authenticate with With admin_token: The token that will always be used (Env: <code>OS_TOKEN</code>)

Value	Summary
--os-system-scope <auth-system-scope>	<p>With v3token: scope for system operations with v3multifactor: Scope for system operations With v3adfspassword: Scope for system operations With v3oidcaccessstoken: Scope for system operations With token: Scope for system operations With v3oidcauthcode: Scope for system operations With v3samlpassword: Scope for system operations With v3oidcclientcredentials: Scope for system operations With v3password: Scope for system operations With password: Scope for system operations With v3totp: Scope for system operations With v3applicationcredential: Scope for system operations With v3oidcpassword: Scope for system operations (Env: OS_SYSTEM_SCOPE)</p>
--os-domain-id <auth-domain-id>	<p>With v3token: domain id to scope to with v3multifactor: Domain ID to scope to With v3adfspassword: Domain ID to scope to With v3oidcaccessstoken: Domain ID to scope to With token: Domain ID to scope to With v3oidcauthcode: Domain ID to scope to With v3samlpassword: Domain ID to scope to With v3oidcclientcredentials: Domain ID to scope to With v3password: Domain ID to scope to With password: Domain ID to scope to With v3tokenlessauth: Domain ID to scope to With v3totp: Domain ID to scope to With v3applicationcredential: Domain ID to scope to With v3oidcpassword: Domain ID to scope to (Env: OS_DOMAIN_ID)</p>
--os-domain-name <auth-domain-name>	<p>With v3token: domain name to scope to with v3multifactor: Domain name to scope to With v3adfspassword: Domain name to scope to With v3oidcaccessstoken: Domain name to scope to With token: Domain name to scope to With v3oidcauthcode: Domain name to scope to With v3samlpassword: Domain name to scope to With v3oidcclientcredentials: Domain name to scope to With v3password: Domain name to scope to With password: Domain name to scope to With v3tokenlessauth: Domain name to scope to With v3totp: Domain name to scope to With v3applicationcredential: Domain name to scope to With v3oidcpassword: Domain name to scope to (Env: OS_DOMAIN_NAME)</p>

Value	Summary
--os-project-id <auth-project-id>	<p>With v3token: project id to scope to with v3multifactor: Project ID to scope to With v3adfspassword: Project ID to scope to With v3oidcaccessstoken: Project ID to scope to With token: Project ID to scope to With v3oidcauthcode: Project ID to scope to With v3samlpassword: Project ID to scope to With v3oidcclientcredentials: Project ID to scope to With v3password: Project ID to scope to With password: Project ID to scope to With v3tokenlessauth: Project ID to scope to With noauth: Project ID With v3totp: Project ID to scope to With v3applicationcredential: Project ID to scope to With gnocchi-noauth: Project ID With aodh-noauth: Project ID With v3oidcpassword: Project ID to scope to (Env: OS_PROJECT_ID)</p>
--os-project-name <auth-project-name>	<p>With v3token: project name to scope to with v3multifactor: Project name to scope to With v3adfspassword: Project name to scope to With v3oidcaccessstoken: Project name to scope to With token: Project name to scope to With v3oidcauthcode: Project name to scope to With v3samlpassword: Project name to scope to With v3oidcclientcredentials: Project name to scope to With v3password: Project name to scope to With password: Project name to scope to With v3tokenlessauth: Project name to scope to With v3totp: Project name to scope to With v3applicationcredential: Project name to scope to With v1password: Swift account to use With v3oidcpassword: Project name to scope to (Env: OS_PROJECT_NAME)</p>
--os-project-domain-id <auth-project-domain-id>	<p>With v3token: domain id containing project with v3multifactor: Domain ID containing project With v3adfspassword: Domain ID containing project With v3oidcaccessstoken: Domain ID containing project With token: Domain ID containing project With v3oidcauthcode: Domain ID containing project With v3samlpassword: Domain ID containing project With v3oidcclientcredentials: Domain ID containing project With v3password: Domain ID containing project With password: Domain ID containing project With v3tokenlessauth: Domain ID containing project With v3totp: Domain ID containing project With v3applicationcredential: Domain ID containing project With v3oidcpassword: Domain ID containing project (Env: OS_PROJECT_DOMAIN_ID)</p>

Value	Summary
<code>--os-project-domain-name <auth-project-domain-name></code>	With v3token: domain name containing project with v3multifactor: Domain name containing project With v3adfspassword: Domain name containing project With v3oidcaccessesstoken: Domain name containing project With token: Domain name containing project With v3oidcauthcode: Domain name containing project With v3samlpassword: Domain name containing project With v3oidcclientcredentials: Domain name containing project With v3password: Domain name containing project With password: Domain name containing project With v3tokenlessauth: Domain name containing project With v3totp: Domain name containing project With v3applicationcredential: Domain name containing project With v3oidcpassword: Domain name containing project (Env: OS_PROJECT_DOMAIN_NAME)
<code>--os-auth-methods <auth-auth-methods></code>	With v3multifactor: methods to authenticate with. (Env: OS_AUTH_METHODS)
<code>--os-identity-provider <auth-identity-provider></code>	With v3adfspassword: identity provider's name with v3oidcaccessesstoken: Identity Provider's name With v3oidcauthcode: Identity Provider's name With v3samlpassword: Identity Provider's name With v3oidcclientcredentials: Identity Provider's name With v3oidcpassword: Identity Provider's name (Env: OS_IDENTITY_PROVIDER)
<code>--os-protocol <auth-protocol></code>	With v3adfspassword: protocol for federated plugin With v3oidcaccessesstoken: Protocol for federated plugin With v3oidcauthcode: Protocol for federated plugin With v3samlpassword: Protocol for federated plugin With v3oidcclientcredentials: Protocol for federated plugin With v3oidcpassword: Protocol for federated plugin (Env: OS_PROTOCOL)
<code>--os-identity-provider-url <auth-identity-provider-url></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-service-provider-endpoint <auth-service-provider-endpoint></code>	With v3adfspassword: service provider's endpoint (env: OS_SERVICE_PROVIDER_ENDPOINT)
<code>--os-service-provider-entity-id <auth-service-provider-entity-id></code>	With v3adfspassword: service provider's saml entity id (Env: OS_SERVICE_PROVIDER_ENTITY_ID)

Value	Summary
<code>--os-access-token <auth-access-token></code>	With <code>v3oidcaccessstoken</code> : oauth 2.0 access token (env: <code>OS_ACCESS_TOKEN</code>)
<code>--os-default-domain-id <auth-default-domain-id></code>	With <code>token</code> : 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 <code>password</code> : 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: <code>OS_DEFAULT_DOMAIN_ID</code>)
<code>--os-default-domain-name <auth-default-domain-name></code>	With <code>token</code> : 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 <code>password</code> : 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: <code>OS_DEFAULT_DOMAIN_NAME</code>)
<code>--os-client-id <auth-client-id></code>	With <code>v3oidcauthcode</code> : oauth 2.0 client id with <code>v3oidcclientcredentials</code> : OAuth 2.0 Client ID With <code>v3oidcpassword</code> : OAuth 2.0 Client ID (Env: <code>OS_CLIENT_ID</code>)
<code>--os-client-secret <auth-client-secret></code>	With <code>v3oidcauthcode</code> : oauth 2.0 client secret with <code>v3oidcclientcredentials</code> : OAuth 2.0 Client Secret With <code>v3oidcpassword</code> : OAuth 2.0 Client Secret (Env: <code>OS_CLIENT_SECRET</code>)
<code>--os-openid-scope <auth-openid-scope></code>	With <code>v3oidcauthcode</code> : openid connect scope that is requested from authorization server. Note that the OpenID Connect specification states that "openid" must be always specified. With <code>v3oidcclientcredentials</code> : OpenID Connect scope that is requested from authorization server. Note that the OpenID Connect specification states that "openid" must be always specified. With <code>v3oidcpassword</code> : OpenID Connect scope that is requested from authorization server. Note that the OpenID Connect specification states that "openid" must be always specified. (Env: <code>OS_OPENID_SCOPE</code>)

Value	Summary
<code>--os-access-token-endpoint <auth-access-token-endpoint></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-discovery-endpoint <auth-discovery-endpoint></code>	<p>With <code>v3oidcauthcode</code>: 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 https://idp.example.org/.well-known/openid-configuration With <code>v3oidcclientcredentials</code>: 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 https://idp.example.org/.well-known/openid-configuration With <code>v3oidcpassword</code>: 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 https://idp.example.org/.well-known/openid-configuration (Env: <code>OS_DISCOVERY_ENDPOINT</code>)</p>
<code>--os-access-token-type <auth-access-token-type></code>	<p>With <code>v3oidcauthcode</code>: 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 <code>v3oidcclientcredentials</code>: 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 <code>v3oidcpassword</code>: 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: <code>OS_ACCESS_TOKEN_TYPE</code>)</p>

Value	Summary
<code>--os-redirect-uri <auth-redirect-uri></code>	With v3oidcauthcode: openid connect redirect url (env: OS_REDIRECT_URI)
<code>--os-code <auth-code></code>	With v3oidcauthcode: oauth 2.0 authorization code (Env: OS_CODE)
<code>--os-user <auth-user></code>	With gnocchi-basic: user (env: os_user)
<code>--os-user-domain-id <auth-user-domain-id></code>	With v3password: user's domain id with password: User's domain id With v3totp: User's domain id With v3applicationcredential: User's domain id (Env: OS_USER_DOMAIN_ID)
<code>--os-user-domain-name <auth-user-domain-name></code>	With v3password: user's domain name with password: User's domain name With v3totp: User's domain name With v3applicationcredential: User's domain name (Env: OS_USER_DOMAIN_NAME)
<code>--os-passcode <auth-passcode></code>	With v3totp: user's totp passcode (env: os_passcode)
<code>--os-application-credential-secret <auth-application-credential-secret></code>	With v3applicationcredential: application credential auth secret (Env: OS_APPLICATION_CREDENTIAL_SECRET)
<code>--os-application-credential-id <auth-application-credential-id></code>	With v3applicationcredential: application credential ID (Env: OS_APPLICATION_CREDENTIAL_ID)
<code>--os-application-credential-name <auth-application-credential-name></code>	With v3applicationcredential: application credential name (Env: OS_APPLICATION_CREDENTIAL_NAME)
<code>--os-roles <auth-roles></code>	With gnocchi-noauth: roles with aodh-noauth: roles (Env: OS_ROLES)
<code>--os-aodh-endpoint <auth-aodh-endpoint></code>	With aodh-noauth: aodh endpoint (env: OS_AODH_ENDPOINT)

CHAPTER 2. ACCESS

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

2.1. ACCESS RULE DELETE

Delete access rule(s)

Usage:

```
openstack access rule delete [-h] <access-rule> [<access-rule> ...]
```

Table 2.1. Positional arguments

Value	Summary
<access-rule>	Access rule(s) to delete (name or id)

Table 2.2. Command arguments

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

2.2. ACCESS RULE LIST

List access rules

Usage:

```
openstack access rule list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--user <user>]
                          [--user-domain <user-domain>]
```

Table 2.3. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	User whose access rules to list (name or id)

Value	Summary
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Table 2.4. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 2.5. CSV formatter options

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

Table 2.6. JSON formatter options

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

Table 2.7. Table formatter options

Value	Summary
<code>--max-width <integer></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

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

2.3. ACCESS RULE SHOW

Display access rule details

Usage:

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

Table 2.8. Positional arguments

Value	Summary
<code><access-rule></code>	Access rule to display (name or id)

Table 2.9. Command arguments

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

Table 2.10. Output formatter options

Value	Summary
<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 to show multiple columns

Table 2.11. JSON formatter options

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

Table 2.12. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 2.13. Table formatter options

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

2.4. ACCESS TOKEN CREATE

Create an access token

Usage:

```
openstack access token create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             --consumer-key <consumer-key>
                             --consumer-secret <consumer-secret>
                             --request-key <request-key>
                             --request-secret <request-secret>
                             --verifier <verifier>
```

Table 2.14. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--consumer-key <consumer-key>	Consumer key (required)
--consumer-secret <consumer-secret>	Consumer secret (required)
--request-key <request-key>	Request token to exchange for access token (required)
--request-secret <request-secret>	Secret associated with <request-key> (required)

Value	Summary
<code>--verifier <verifier></code>	Verifier associated with <request-key> (required)

Table 2.15. Output formatter options

Value	Summary
<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 to show multiple columns

Table 2.16. JSON formatter options

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

Table 2.17. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 2.18. Table formatter options

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

CHAPTER 3. ACL

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

3.1. ACL DELETE

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

Usage:

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

Table 3.1. Positional arguments

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

Table 3.2. Command arguments

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

3.2. 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]
  [--quote {all,minimal,none,nonnumeric}] [--noindent]
  [--max-width <integer>] [--fit-width] [--print-empty]
  [--sort-column SORT_COLUMN]
  [--sort-ascending | --sort-descending]
  URI
```

Table 3.3. Positional arguments

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

Table 3.4. Command arguments

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

Table 3.5. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 3.6. CSV formatter options

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

Table 3.7. JSON formatter options

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

Table 3.8. Table formatter options

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

3.3. 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]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--user [USERS]]
                    [--project-access | --no-project-access]
                    [--operation-type {read}]
                    URI

```

Table 3.9. Positional arguments

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

Table 3.10. Command arguments

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

Table 3.11. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
--sort-descending	Sort the column(s) in descending order

Table 3.12. CSV formatter options

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

Table 3.13. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 3.14. Table formatter options

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

3.4. 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]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--user [USERS]]
                        [--project-access | --no-project-access]
                        [--operation-type {read}]
                        URI
```

Table 3.15. Positional arguments

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

Table 3.16. Command arguments

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

Table 3.17. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 3.18. CSV formatter options

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

Table 3.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 3.20. Table formatter options

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

3.5. 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]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--user [USERS]]
                        [--project-access | --no-project-access]
                        [--operation-type {read}]
                        URI

```

Table 3.21. Positional arguments

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

Table 3.22. Command arguments

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

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

Table 3.23. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 3.24. CSV formatter options

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

Table 3.25. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 3.26. Table formatter options

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

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

CHAPTER 4. ACTION

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

4.1. ACTION DEFINITION CREATE

Create new action.

Usage:

```
openstack action definition create [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--marker [MARKER]]
                                [--limit [LIMIT]]
                                [--sort_keys [SORT_KEYS]]
                                [--sort_dirs [SORT_DIRS]]
                                [--filter FILTERS] [--public]
                                [--namespace [NAMESPACE]]
                                definition
```

Table 4.1. Positional arguments

Value	Summary
definition	Action definition file

Table 4.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc

Value	Summary
<code>--filter FILTERS</code>	Filters. can be repeated.
<code>--public</code>	With this flag action will be marked as "public".
<code>--namespace [NAMESPACE]</code>	Namespace to create the action within.

Table 4.3. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 4.4. CSV formatter options

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

Table 4.5. JSON formatter options

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

Table 4.6. Table formatter options

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

4.2. ACTION DEFINITION DEFINITION SHOW

Show action definition.

Usage:

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

Table 4.7. Positional arguments

Value	Summary
name	Action name

Table 4.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--namespace [NAMESPACE]</code>	Namespace of the action.

4.3. ACTION DEFINITION DELETE

Delete action.

Usage:

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

Table 4.9. Positional arguments

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

Table 4.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace of the action(s).

4.4. ACTION DEFINITION LIST

List all actions.

Usage:

```

openstack action definition list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--marker [MARKER]] [--limit [LIMIT]]
                                [--sort_keys [SORT_KEYS]]
                                [--sort_dirs [SORT_DIRS]]
                                [--filter FILTERS]
                                [--namespace [NAMESPACE]]

```

Table 4.11. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description

Value	Summary
<code>--sort_dirs [SORT_DIRS]</code>	Comma-separated list of sort directions. default: asc. Example: <code>mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc</code>
<code>--filter FILTERS</code>	Filters. can be repeated.
<code>--namespace [NAMESPACE]</code>	Namespace of the actions.

Table 4.12. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 4.13. CSV formatter options

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

Table 4.14. JSON formatter options

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

Table 4.15. Table formatter options

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

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

4.5. ACTION DEFINITION SHOW

Show specific action.

Usage:

```

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

```

Table 4.16. Positional arguments

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

Table 4.17. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--namespace [NAMESPACE]</code>	Namespace to create the action within.

Table 4.18. Output formatter options

Value	Summary
<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 to show multiple columns

Table 4.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 4.21. Table formatter options

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

4.6. ACTION DEFINITION UPDATE

Update action.

Usage:

```

openstack action definition update [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--marker [MARKER]]
                                [--limit [LIMIT]]
                                [--sort_keys [SORT_KEYS]]

```



```

[--sort_dirs [SORT_DIRS]]
[--filter FILTERS] [--id ID]
[--public] [--namespace [NAMESPACE]]
definition

```

Table 4.22. Positional arguments

Value	Summary
definition	Action definition file

Table 4.23. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.
--id ID	Action id.
--public	With this flag action will be marked as "public".
--namespace [NAMESPACE]	Namespace of the action.

Table 4.24. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 4.25. CSV formatter options

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

Table 4.26. JSON formatter options

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

Table 4.27. Table formatter options

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

4.7. ACTION EXECUTION DELETE

Delete action execution.

Usage:

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

Table 4.28. Positional arguments

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

Table 4.29. Command arguments

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

4.8. ACTION EXECUTION INPUT SHOW

Show Action execution input data.

Usage:

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

Table 4.30. Positional arguments

Value	Summary
id	Action execution id.

Table 4.31. Command arguments

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

4.9. ACTION EXECUTION LIST

List all Action executions.

Usage:

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

```

[--sort_dirs [SORT_DIRS]]
[--filter FILTERS] [--oldest]
[task_execution_id]

```

Table 4.32. Positional arguments

Value	Summary
task_execution_id	Task execution id.

Table 4.33. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.
--oldest	Display the executions starting from the oldest entries instead of the newest

Table 4.34. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 4.35. CSV formatter options

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

Table 4.36. JSON formatter options

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

Table 4.37. Table formatter options

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

4.10. ACTION EXECUTION OUTPUT SHOW

Show Action execution output data.

Usage:

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

Table 4.38. Positional arguments

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

Table 4.39. Command arguments

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

4.11. 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] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [-s] [--run-sync]
                               [-t TARGET] [--namespace [NAMESPACE]]
                               name [input]
```

Table 4.40. Positional arguments

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

Table 4.41. Command arguments

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

Table 4.42. Output formatter options

Value	Summary
-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 to show multiple columns

Table 4.43. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.44. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 4.45. Table formatter options

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

4.12. ACTION EXECUTION SHOW

Show specific Action execution.

Usage:

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

Table 4.46. Positional arguments

Value	Summary
action_execution	Action execution id.

Table 4.47. Command arguments

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

Table 4.48. Output formatter options

Value	Summary
-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 to show multiple columns

Table 4.49. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.50. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 4.51. Table formatter options

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

4.13. ACTION EXECUTION UPDATE

Update specific Action execution.

Usage:

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

Table 4.52. Positional arguments

Value	Summary
id	Action execution id.

Table 4.53. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--state {PAUSED,RUNNING,SUCCESS,ERROR,CANCELLED}	Action execution state
--output OUTPUT	Action execution output

Table 4.54. Output formatter options

Value	Summary
-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 to show multiple columns

Table 4.55. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.56. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 4.57. Table formatter options

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

CHAPTER 5. ADDRESS

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

5.1. ADDRESS GROUP CREATE

Create a new Address Group

Usage:

```
openstack address group create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description <description>]
                               [--address <ip-address>]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               <name>
```

Table 5.1. Positional arguments

Value	Summary
<name>	New address group name

Table 5.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	New address group description
--address <ip-address>	Ip address or cidr (repeat option to set multiple addresses)
--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 5.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 5.4. JSON formatter options

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

Table 5.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 5.6. Table formatter options

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

5.2. ADDRESS GROUP DELETE

Delete address group(s)

Usage:

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

Table 5.7. Positional arguments

Value	Summary
<address-group>	Address group(s) to delete (name or id)

Table 5.8. Command arguments

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

5.3. ADDRESS GROUP LIST

List address groups

Usage:

```

openstack address group list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--name <name>] [--project <project>]
                             [--project-domain <project-domain>]

```

Table 5.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List only address groups of given name in output
--project <project>	List address groups 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.

Table 5.10. Output formatter options

Value	Summary
-f {csv,json,table,value,yaml}, --format {csv,json,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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 5.11. CSV formatter options

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

Table 5.12. JSON formatter options

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

Table 5.13. Table formatter options

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

5.4. ADDRESS GROUP SET

Set address group properties

Usage:

```
openstack address group set [-h] [--name <name>]
                             [--description <description>]
```

```

[--address <ip-address>]
<address-group>

```

Table 5.14. Positional arguments

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

Table 5.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set address group name
--description <description>	Set address group description
--address <ip-address>	Ip address or cidr (repeat option to set multiple addresses)

5.5. ADDRESS GROUP SHOW

Display address group details

Usage:

```

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

```

Table 5.16. Positional arguments

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

Table 5.17. Command arguments

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

Table 5.18. Output formatter options

Value	Summary
<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 to show multiple columns

Table 5.19. JSON formatter options

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

Table 5.20. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 5.21. Table formatter options

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

5.6. ADDRESS GROUP UNSET

Unset address group properties

Usage:

```
openstack address group unset [-h] [--address <ip-address>]
                               <address-group>
```

Table 5.22. Positional arguments

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

Table 5.23. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--address <ip-address>	Ip address or cidr (repeat option to unset multiple addresses)

5.7. ADDRESS SCOPE CREATE

Create a new Address Scope

Usage:

```

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

```

Table 5.24. Positional arguments

Value	Summary
<name>	New address scope name

Table 5.25. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--ip-version {4,6}	Ip version (default is 4)
--project <project>	Owner's project (name or id)

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--share</code>	Share the address scope between projects
<code>--no-share</code>	Do not share the address scope between projects (default)

Table 5.26. Output formatter options

Value	Summary
<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 to show multiple columns

Table 5.27. JSON formatter options

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

Table 5.28. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 5.29. Table formatter options

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

5.8. ADDRESS SCOPE DELETE

Delete address scope(s)

Usage:

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

Table 5.30. Positional arguments

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

Table 5.31. Command arguments

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

5.9. ADDRESS SCOPE LIST

List address scopes

Usage:

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

Table 5.32. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List only address scopes of given name in output
--ip-version <ip-version>	List address scopes of given ip version networks (4 or 6)

Value	Summary
<code>--project <project></code>	List address scopes according to their project (name or ID)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--share</code>	List address scopes shared between projects
<code>--no-share</code>	List address scopes not shared between projects

Table 5.33. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 5.34. CSV formatter options

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

Table 5.35. JSON formatter options

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

Table 5.36. Table formatter options

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

5.10. ADDRESS SCOPE SET

Set address scope properties

Usage:

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

Table 5.37. Positional arguments

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

Table 5.38. Command arguments

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

5.11. ADDRESS SCOPE SHOW

Display address scope details

Usage:

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

```
[--print-empty]
<address-scope>
```

Table 5.39. Positional arguments

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

Table 5.40. Command arguments

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

Table 5.41. Output formatter options

Value	Summary
-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 to show multiple columns

Table 5.42. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 5.43. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 5.44. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 6. AGGREGATE

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

6.1. AGGREGATE ADD HOST

Add host to aggregate

Usage:

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

Table 6.1. Positional arguments

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

Table 6.2. Command arguments

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

Table 6.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 6.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 6.6. Table formatter options

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

6.2. AGGREGATE CACHE IMAGE

Request image caching for aggregate

Usage:

```
openstack aggregate cache image [-h] <aggregate> <image> [<image> ...]
```

Table 6.7. Positional arguments

Value	Summary
<aggregate>	Aggregate (name or id)
<image>	Image id to request caching for aggregate (name or id). may be specified multiple times.

Table 6.8. Command arguments

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

6.3. AGGREGATE CREATE

Create a new aggregate

Usage:

```

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

```

Table 6.9. Positional arguments

Value	Summary
<name>	New aggregate name

Table 6.10. Command 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 6.11. Output formatter options

Value	Summary
-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 to show multiple columns

Table 6.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.13. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 6.14. Table formatter options

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

6.4. AGGREGATE DELETE

Delete existing aggregate(s)

Usage:

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

Table 6.15. Positional arguments

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

Table 6.16. Command arguments

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

6.5. AGGREGATE LIST

List all aggregates

Usage:

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

Table 6.17. Command arguments

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

Table 6.18. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 6.19. CSV formatter options

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

Table 6.20. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.21. Table formatter options

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

6.6. AGGREGATE REMOVE HOST

Remove host from aggregate

Usage:

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

Table 6.22. Positional arguments

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

Table 6.23. Command arguments

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

Table 6.24. Output formatter options

Value	Summary
<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 to show multiple columns

Table 6.25. JSON formatter options

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

Table 6.26. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 6.27. Table formatter options

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

6.7. AGGREGATE SET

Set aggregate properties

Usage:

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

Table 6.28. Positional arguments

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

Table 6.29. Command arguments

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

Value	Summary
<code>--name <name></code>	Set aggregate name
<code>--zone <availability-zone></code>	Set availability zone name
<code>--property <key=value></code>	Property to set on <aggregate> (repeat option to set multiple properties)
<code>--no-property</code>	Remove all properties from <aggregate> (specify both <code>--property</code> and <code>--no-property</code> to overwrite the current properties)

6.8. AGGREGATE SHOW

Display aggregate details

Usage:

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

Table 6.30. Positional arguments

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

Table 6.31. Command arguments

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

Table 6.32. Output formatter options

Value	Summary
<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 to show multiple columns

Table 6.33. JSON formatter options

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

Table 6.34. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 6.35. Table formatter options

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

6.9. AGGREGATE UNSET

Unset aggregate properties

Usage:

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

Table 6.36. Positional arguments

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

Table 6.37. Command arguments

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

Value	Summary
--property <key>	Property to remove from aggregate (repeat option to remove multiple properties)

CHAPTER 7. ALARM

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

7.1. ALARM CREATE

Create an alarm

Usage:

```
openstack alarm create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] --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>]
                        [--event-type <EVENT_TYPE>] [-m <METER NAME>]
                        [--period <PERIOD>] [--statistic <STATISTIC>]
                        [--granularity <GRANULARITY>]
                        [--aggregation-method <AGGR_METHOD>]
                        [--metric <METRIC>]
                        [--resource-type <RESOURCE_TYPE>]
                        [--resource-id <RESOURCE_ID>]
                        [--composite-rule <COMPOSITE_RULE>]
                        [--stack-id <STACK_NAME_OR_ID>]
                        [--pool-id <LOADBALANCER_POOL_NAME_OR_ID>]
                        [--autoscaling-group-id <AUTOSCALING_GROUP_NAME_OR_ID>]
```

Table 7.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <NAME>	Name of the alarm
-t <TYPE>, --type <TYPE>	Type of alarm, should be one of: event, composite, threshold, gnocchi_resources_threshold, gnocchi_aggregation_by_metrics_threshold, gnocchi_aggregation_by_resources_threshold, loadbalancer_member_health.

Value	Summary
<code>--project-id <PROJECT_ID></code>	Project to associate with alarm (configurable by admin users only)
<code>--user-id <USER_ID></code>	User to associate with alarm (configurable by admin users only)
<code>--description <DESCRIPTION></code>	Free text description of the alarm
<code>--state <STATE></code>	State of the alarm, one of: [<i>ok, alarm, insufficient data</i>]
<code>--severity <SEVERITY></code>	Severity of the alarm, one of: [<i>low, moderate, critical</i>]
<code>--enabled {True False}</code>	True if alarm evaluation is enabled
<code>--alarm-action <Webhook URL></code>	Url to invoke when state transitions to alarm. may be used multiple times
<code>--ok-action <Webhook URL></code>	Url to invoke when state transitions to ok. may be used multiple times
<code>--insufficient-data-action <Webhook URL></code>	Url to invoke when state transitions to insufficient data. May be used multiple times
<code>--time-constraint <Time Constraint></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: <code>name=<CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;[description=<DESCRIPTION>;[timezone=<IANA Timezone>]]</code>
<code>--repeat-actions {True False}</code>	True if actions should be repeatedly notified while alarm remains in target state

Table 7.2. Output formatter options

Value	Summary
<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 to show multiple columns

Table 7.3. JSON formatter options

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

Table 7.4. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 7.5. Table formatter options

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

Table 7.6. common alarm rules

Value	Summary
<code>--query <QUERY></code>	For alarms of type threshold or 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 <OPERATOR></code>	Operator to compare with, one of: <code>[lt, le, eq, ne, ge, gt]</code>
<code>--evaluation-periods <EVAL_PERIODS></code>	Number of periods to evaluate over
<code>--threshold <THRESHOLD></code>	Threshold to evaluate against.

Table 7.7. event alarm

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

Table 7.8. threshold alarm

Value	Summary
<code>-m <METER NAME>, --meter-name <METER NAME></code>	Meter to evaluate against
<code>--period <PERIOD></code>	Length of each period (seconds) to evaluate over.
<code>--statistic <STATISTIC></code>	Statistic to evaluate, one of: [<i>max, min, avg, sum, count</i>]

Table 7.9. common gnocchi alarm rules

Value	Summary
<code>--granularity <GRANULARITY></code>	The time range in seconds over which to query.
<code>--aggregation-method <AGGR_METHOD></code>	The aggregation_method to compare to the threshold.
<code>--metric <METRIC>, --metrics <METRIC></code>	The metric id or name depending of the alarm type

Table 7.10. gnocchi resource threshold alarm

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

Table 7.11. composite alarm

Value	Summary
<code>--composite-rule <COMPOSITE_RULE></code>	Composite threshold rule with json format, the form can be a nested dict which combine threshold/gnocchi rules by "and", "or". For example, the form is like: <code>{"or": [RULE1, RULE2, {"and": [RULE3, RULE4]}]}</code> , The RULEx can be basic threshold rules but must include a "type" field, like this: <code>{"threshold": 0.8, "meter_name": "cpu_util", "type": "threshold"}</code>

Table 7.12. loadbalancer member health alarm

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

Value	Summary
<code>--stack-id <STACK_NAME_OR_ID></code>	Name or id of the root / top level heat stack containing the loadbalancer pool and members. An update will be triggered on the root Stack if an unhealthy member is detected in the loadbalancer pool.
<code>--pool-id <LOADBALANCER_POOL_NAME_OR_ID></code>	Name or id of the loadbalancer pool for which the health of each member will be evaluated.
<code>--autoscaling-group-id <AUTOSCALING_GROUP_NAME_OR_ID></code>	Id of the heat autoscaling group that contains the loadbalancer members. Unhealthy members will be marked as such before an update is triggered on the root stack.

7.2. ALARM DELETE

Delete an alarm

Usage:

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

Table 7.13. Positional arguments

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

Table 7.14. Command arguments

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

7.3. 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]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--query QUERY]

```

Table 7.15. Command 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

Table 7.16. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 7.17. CSV formatter options

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

Table 7.18. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 7.19. Table formatter options

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

7.4. ALARM-HISTORY SHOW

Show history for an alarm

Usage:

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

Table 7.20. Positional arguments

Value	Summary
<code><alarm-id></code>	Id of an alarm

Table 7.21. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--limit <LIMIT></code>	Number of resources to return (default is server default)
<code>--marker <MARKER></code>	Last item of the previous listing. return the next results after this value,the supported marker is <code>event_id</code> .
<code>--sort <SORT_KEY:SORT_DIR></code>	Sort of resource attribute. e.g. <code>timestamp:desc</code>

Table 7.22. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 7.23. CSV formatter options

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

Table 7.24. JSON formatter options

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

Table 7.25. Table formatter options

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

7.5. ALARM LIST

List alarms

Usage:

```

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

```

Table 7.26. Command 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
--filter <KEY1=VALUE1;KEY2=VALUE2...>	Filter parameters to apply on returned alarms.
--limit <LIMIT>	Number of resources to return (default is server default)
--marker <MARKER>	Last item of the previous listing. return the next results after this value, the supported marker is alarm_id.
--sort <SORT_KEY:SORT_DIR>	Sort of resource attribute, e.g. name:asc

Table 7.27. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 7.28. CSV formatter options

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

Table 7.29. JSON formatter options

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

Table 7.30. Table formatter options

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

7.6. ALARM QUOTA SET

Command base class for displaying data about a single object.

Usage:

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

Table 7.31. Positional arguments

Value	Summary
project	Project id.

Table 7.32. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--alarm ALARM	New value for the alarm quota. value -1 means unlimited.

Table 7.33. Output formatter options

Value	Summary
-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 to show multiple columns

Table 7.34. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 7.35. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 7.36. Table formatter options

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

7.7. ALARM QUOTA SHOW

Show quota for a project

Usage:

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

Table 7.37. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project PROJECT	Project id. if not specified, get quota for the current project.

Table 7.38. Output formatter options

Value	Summary
-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 to show multiple columns

Table 7.39. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 7.40. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 7.41. Table formatter options

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

7.8. ALARM SHOW

Show an alarm

Usage:

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

Table 7.42. Positional arguments

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

Table 7.43. Command arguments

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

Table 7.44. Output formatter options

Value	Summary
<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 to show multiple columns

Table 7.45. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 7.46. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 7.47. Table formatter options

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

7.9. ALARM STATE GET

Get state of an alarm

Usage:

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

Table 7.48. Positional arguments

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

Table 7.49. Command arguments

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

Value	Summary
<code>--name <NAME></code>	Name of the alarm

Table 7.50. Output formatter options

Value	Summary
<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 to show multiple columns

Table 7.51. JSON formatter options

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

Table 7.52. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 7.53. Table formatter options

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

7.10. ALARM STATE SET

Set state of an alarm

Usage:


```

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

```

Table 7.54. Positional arguments

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

Table 7.55. Command arguments

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

Table 7.56. Output formatter options

Value	Summary
-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 to show multiple columns

Table 7.57. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 7.58. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 7.59. Table formatter options

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

7.11. ALARM UPDATE

Update an alarm

Usage:

```

openstack alarm update [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--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>]
                        [--event-type <EVENT_TYPE>] [-m <METER NAME>]
                        [--period <PERIOD>] [--statistic <STATISTIC>]
                        [--granularity <GRANULARITY>]
                        [--aggregation-method <AGGR_METHOD>]
                        [--metric <METRIC>]
                        [--resource-type <RESOURCE_TYPE>]
                        [--resource-id <RESOURCE_ID>]
                        [--composite-rule <COMPOSITE_RULE>]
                        [--stack-id <STACK_NAME_OR_ID>]
                        [--pool-id <LOADBALANCER_POOL_NAME_OR_ID>]
                        [--autoscaling-group-id <AUTOSCALING_GROUP_NAME_OR_ID>]
                        [<ALARM ID or NAME>]

```

Table 7.60. Positional arguments

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

Table 7.61. Command arguments

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

Value	Summary
<code>--time-constraint <Time Constraint></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: <code>name=<CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;[description=<DESCRIPTION>;[timezone=<IANA Timezone>]]</code>
<code>--repeat-actions {True False}</code>	True if actions should be repeatedly notified while alarm remains in target state

Table 7.62. Output formatter options

Value	Summary
<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 to show multiple columns

Table 7.63. JSON formatter options

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

Table 7.64. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 7.65. Table formatter options

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

Table 7.66. common alarm rules

Value	Summary
<code>--query <QUERY></code>	For alarms of type <code>threshold</code> or <code>event</code> : <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 <OPERATOR></code>	Operator to compare with, one of: <code>[lt, le, eq, ne, ge, gt]</code>
<code>--evaluation-periods <EVAL_PERIODS></code>	Number of periods to evaluate over
<code>--threshold <THRESHOLD></code>	Threshold to evaluate against.

Table 7.67. event alarm

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

Table 7.68. threshold alarm

Value	Summary
<code>-m <METER NAME>, --meter-name <METER NAME></code>	Meter to evaluate against
<code>--period <PERIOD></code>	Length of each period (seconds) to evaluate over.
<code>--statistic <STATISTIC></code>	Statistic to evaluate, one of: <code>[max, min, avg, sum, count]</code>

Table 7.69. common gnocchi alarm rules

Value	Summary
<code>--granularity <GRANULARITY></code>	The time range in seconds over which to query.
<code>--aggregation-method <AGGR_METHOD></code>	The aggregation_method to compare to the threshold.
<code>--metric <METRIC>, --metrics <METRIC></code>	The metric id or name depending of the alarm type

Table 7.70. gnocchi resource threshold alarm

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

Table 7.71. composite alarm

Value	Summary
<code>--composite-rule <COMPOSITE_RULE></code>	Composite threshold rule with json format, the form can be a nested dict which combine threshold/gnocchi rules by "and", "or". For example, the form is like: {"or":[RULE1, RULE2, {"and": [RULE3, RULE4]}]}, The RULEx can be basic threshold rules but must include a "type" field, like this: {"threshold": 0.8, "meter_name": "cpu_util", "type": "threshold"}

Table 7.72. loadbalancer member health alarm

Value	Summary
<code>--stack-id <STACK_NAME_OR_ID></code>	Name or id of the root / top level heat stack containing the loadbalancer pool and members. An update will be triggered on the root Stack if an unhealthy member is detected in the loadbalancer pool.
<code>--pool-id <LOADBALANCER_POOL_NAME_OR_ID></code>	Name or id of the loadbalancer pool for which the health of each member will be evaluated.
<code>--autoscaling-group-id <AUTOSCALING_GROUP_NAME_OR_ID></code>	Id of the heat autoscaling group that contains the loadbalancer members. Unhealthy members will be marked as such before an update is triggered on the root stack.

CHAPTER 8. ALARMING

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

8.1. ALARMING CAPABILITIES LIST

List capabilities of alarming service

Usage:

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

Table 8.1. Command arguments

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

Table 8.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 8.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 8.4. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 8.5. Table formatter options

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

CHAPTER 9. APPLICATION

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

9.1. APPLICATION CREDENTIAL CREATE

Create new application credential

Usage:

```
openstack application credential create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--secret <secret>]
                                     [--role <role>]
                                     [--expiration <expiration>]
                                     [--description <description>]
                                     [--unrestricted] [--restricted]
                                     [--access-rules <access-rules>]
                                     <name>
```

Table 9.1. Positional arguments

Value	Summary
<name>	Name of the application credential

Table 9.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--secret <secret>	Secret to use for authentication (if not provided, one will be generated)
--role <role>	Roles to authorize (name or id) (repeat option to set multiple values)
--expiration <expiration>	Sets an expiration date for the application credential, format of YYYY-mm-ddTHH:MM:SS (if not provided, the application credential will not expire)
--description <description>	Application credential description

Value	Summary
<code>--unrestricted</code>	Enable application credential to create and delete other application credentials and trusts (this is potentially dangerous behavior and is disabled by default)
<code>--restricted</code>	Prohibit application credential from creating and deleting other application credentials and trusts (this is the default behavior)
<code>--access-rules <access-rules></code>	Either a string or file path containing a json-formatted list of access rules, each containing a request method, path, and service, for example <code>[{"method": "GET", "path": "/v2.1/servers", "service": "compute"}]</code>

Table 9.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 9.4. JSON formatter options

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

Table 9.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 9.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

9.2. APPLICATION CREDENTIAL DELETE

Delete application credentials(s)

Usage:

```
openstack application credential delete [-h]
                                     <application-credential>
                                     [<application-credential> ...]
```

Table 9.7. Positional arguments

Value	Summary
<application-credential>	Application credentials(s) to delete (name or id)

Table 9.8. Command arguments

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

9.3. APPLICATION CREDENTIAL LIST

List application credentials

Usage:

```
openstack application credential list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]
                                     [--user <user>]
                                     [--user-domain <user-domain>]
```

Table 9.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	User whose application credentials to list (name or ID)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Table 9.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 9.11. CSV formatter options

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

Table 9.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.13. Table formatter options

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

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

9.4. APPLICATION CREDENTIAL SHOW

Display application credential details

Usage:

```

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

```

Table 9.14. Positional arguments

Value	Summary
<code><application-credential></code>	Application credential to display (name or id)

Table 9.15. Command arguments

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

Table 9.16. Output formatter options

Value	Summary
<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 to show multiple columns

Table 9.17. JSON formatter options

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

Table 9.18. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 9.19. Table formatter options

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

CHAPTER 10. AVAILABILITY

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

10.1. AVAILABILITY ZONE LIST

List availability zones and their status

Usage:

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

Table 10.1. Command arguments

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

Table 10.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 10.3. CSV formatter options

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

Table 10.4. JSON formatter options

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

Table 10.5. Table formatter options

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

CHAPTER 11. BAREMETAL

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

11.1. BAREMETAL ALLOCATION CREATE

Create a new baremetal allocation.

Usage:

```
openstack baremetal allocation create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--resource-class RESOURCE_CLASS]
                                     [--trait TRAITS]
                                     [--candidate-node CANDIDATE_NODES]
                                     [--name NAME] [--uuid UUID]
                                     [--owner OWNER]
                                     [--extra <key=value>]
                                     [--wait [<time-out>]]
                                     [--node NODE]
```

Table 11.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-class RESOURCE_CLASS	Resource class to request.
--trait TRAITS	A trait to request. can be specified multiple times.
--candidate-node CANDIDATE_NODES	A candidate node for this allocation. can be specified multiple times. If at least one is specified, only the provided candidate nodes are considered for the allocation.
--name NAME	Unique name of the allocation.
--uuid UUID	Uuid of the allocation.
--owner OWNER	Owner of the allocation.
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.

Value	Summary
<code>--wait [<time-out>]</code>	Wait for the new allocation to become active. an error is returned if allocation fails and <code>--wait</code> is used. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.
<code>--node NODE</code>	Backfill this allocation from the provided node that has already been deployed. Bypasses the normal allocation process.

Table 11.2. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.3. JSON formatter options

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

Table 11.4. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.5. Table formatter options

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

11.2. BAREMETAL ALLOCATION DELETE

Unregister baremetal allocation(s).

Usage:

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

Table 11.6. Positional arguments

Value	Summary
<allocation>	Allocations(s) to delete (name or uuid).

Table 11.7. Command arguments

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

11.3. BAREMETAL ALLOCATION LIST

List baremetal allocations.

Usage:

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

Table 11.8. Command arguments

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

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

Table 11.9. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.10. CSV formatter options

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

Table 11.11. JSON formatter options

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

Table 11.12. Table formatter options

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

11.4. BAREMETAL ALLOCATION SET

Set baremetal allocation properties.

Usage:

```
openstack baremetal allocation set [-h] [--name <name>]
    [--extra <key=value>]
    <allocation>
```

Table 11.13. Positional arguments

Value	Summary
<code><allocation></code>	Name or uuid of the allocation

Table 11.14. Command arguments

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

Value	Summary
<code>--name <name></code>	Set the name of the allocation
<code>--extra <key=value></code>	Extra property to set on this allocation (repeat option to set multiple extra properties)

11.5. BAREMETAL ALLOCATION SHOW

Show baremetal allocation details.

Usage:

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

Table 11.15. Positional arguments

Value	Summary
<code><id></code>	Uuid or name of the allocation

Table 11.16. Command arguments

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

Table 11.17. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.18. JSON formatter options

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

Table 11.19. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.20. Table formatter options

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

11.6. BAREMETAL ALLOCATION UNSET

Unset baremetal allocation properties.

Usage:

```
openstack baremetal allocation unset [-h] [--name] [--extra <key>]
                                     <allocation>
```

Table 11.21. Positional arguments

Value	Summary
<code><allocation></code>	Name or uuid of the allocation

Table 11.22. Command arguments

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

Value	Summary
--name	Unset the name of the allocation
--extra <key>	Extra property to unset on this baremetal allocation (repeat option to unset multiple extra property).

11.7. BAREMETAL CHASSIS CREATE

Create a new chassis.

Usage:

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

Table 11.23. Command arguments

Value	Summary
-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.
--uuid <uuid>	Unique uuid of the chassis

Table 11.24. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.25. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.26. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.27. Table formatter options

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

11.8. BAREMETAL CHASSIS DELETE

Delete a chassis.

Usage:

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

Table 11.28. Positional arguments

Value	Summary
<chassis>	Uuids of chassis to delete

Table 11.29. Command arguments

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

11.9. BAREMETAL CHASSIS LIST

List the chassis.

Usage:

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

Table 11.30. Command 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. Cannot be used when <i>--long</i> is specified.
--limit <limit>	Maximum number of chassis to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--long	Show detailed information about the chassis
--marker <chassis>	Chassis uuid (for example, of the last chassis in the list from a previous request). Returns the list of chassis after this UUID.
--sort <key>[:<direction>]	Sort output by specified chassis fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.

Table 11.31. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.32. CSV formatter options

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

Table 11.33. JSON formatter options

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

Table 11.34. Table formatter options

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

11.10. BAREMETAL CHASSIS SET

Set chassis properties.

Usage:

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

Table 11.35. Positional arguments

Value	Summary
<chassis>	Uuid of the chassis

Table 11.36. Command 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)

11.11. BAREMETAL CHASSIS SHOW

Show chassis details.

Usage:

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

Table 11.37. Positional arguments

Value	Summary
<chassis>	Uuid of the chassis

Table 11.38. Command 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 11.39. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.40. JSON formatter options

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

Table 11.41. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.42. Table formatter options

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

11.12. BAREMETAL CHASSIS UNSET

Unset chassis properties.

Usage:

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

Table 11.43. Positional arguments

Value	Summary
<chassis>	Uuid of the chassis

Table 11.44. Command arguments

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

11.13. BAREMETAL CONDUCTOR LIST

List baremetal conductors

Usage:

```

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

```

Table 11.45. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of conductors to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <conductor>	Hostname of the conductor (for example, of the last conductor in the list from a previous request). Returns the list of conductors after this conductor.

Value	Summary
<code>--sort <key>[:<direction>]</code>	Sort output by specified conductor fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
<code>--long</code>	Show detailed information about the conductors.
<code>--fields <field> [<field> ...]</code>	One or more conductor fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.

Table 11.46. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.47. CSV formatter options

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

Table 11.48. JSON formatter options

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

Table 11.49. Table formatter options

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

11.14. BAREMETAL CONDUCTOR SHOW

Show baremetal conductor details

Usage:

```

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

```

Table 11.50. Positional arguments

Value	Summary
<code><conductor></code>	Hostname of the conductor

Table 11.51. Command arguments

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

Table 11.52. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.53. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.54. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.55. Table formatter options

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

11.15. BAREMETAL CREATE

Create resources from files

Usage:

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

Table 11.56. Positional arguments

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

Table 11.57. Command arguments

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

11.16. BAREMETAL DEPLOY TEMPLATE CREATE

Create a new deploy template

Usage:

```

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

```

Table 11.58. Positional arguments

Value	Summary
<name>	Unique name for this deploy template. must be a valid trait name

Table 11.59. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--uuid <uuid>	Uuid of the deploy template.
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.
--steps <steps>	The deploy steps. may be the path to a yaml file containing the deploy steps; OR -, with the deploy steps being read from standard input; OR a JSON string. The value should be a list of deploy-step dictionaries; each dictionary should have keys <i>interface</i> , <i>step</i> , <i>args</i> and <i>priority</i> .

Table 11.60. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.61. JSON formatter options

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

Table 11.62. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.63. Table formatter options

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

11.17. BAREMETAL DEPLOY TEMPLATE DELETE

Delete deploy template(s).

Usage:

```
openstack baremetal deploy template delete [-h]
      <template> [<template> ...]
```

Table 11.64. Positional arguments

Value	Summary
<template>	Name(s) or uuid(s) of the deploy template(s) to delete.

Table 11.65. Command arguments

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

11.18. BAREMETAL DEPLOY TEMPLATE LIST

List baremetal deploy templates.

Usage:

```

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

```

Table 11.66. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of deploy templates to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <template>	Deploytemplate uuid (for example, of the last deploy template in the list from a previous request). Returns the list of deploy templates after this UUID.
--sort <key>[:<direction>]	Sort output by specified deploy template fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.

Value	Summary
<code>--long</code>	Show detailed information about deploy templates.
<code>--fields <field> [<field> ...]</code>	One or more deploy template fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.

Table 11.67. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.68. CSV formatter options

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

Table 11.69. JSON formatter options

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

Table 11.70. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.19. BAREMETAL DEPLOY TEMPLATE SET

Set baremetal deploy template properties.

Usage:

```
openstack baremetal deploy template set [-h] [--name <name>]
                                     [--steps <steps>]
                                     [--extra <key=value>]
                                     <template>
```

Table 11.71. Positional arguments

Value	Summary
<template>	Name or uuid of the deploy template

Table 11.72. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set unique name of the deploy template. must be a valid trait name.
--steps <steps>	The deploy steps. may be the path to a yaml file containing the deploy steps; OR -, with the deploy steps being read from standard input; OR a JSON string. The value should be a list of deploy-step dictionaries; each dictionary should have keys <i>interface</i> , <i>step</i> , <i>args</i> and <i>priority</i> .
--extra <key=value>	Extra to set on this baremetal deploy template (repeat option to set multiple extras).

11.20. BAREMETAL DEPLOY TEMPLATE SHOW

Show baremetal deploy template details.

Usage:

```

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

```

Table 11.73. Positional arguments

Value	Summary
<template>	Name or uuid of the deploy template.

Table 11.74. Command arguments

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

Table 11.75. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.76. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.77. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.78. Table formatter options

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

11.21. BAREMETAL DEPLOY TEMPLATE UNSET

Unset baremetal deploy template properties.

Usage:

```
openstack baremetal deploy template unset [-h] [--extra <key>]
                                     <template>
```

Table 11.79. Positional arguments

Value	Summary
<code><template></code>	Name or uuid of the deploy template

Table 11.80. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--extra <key></code>	Extra to unset on this baremetal deploy template (repeat option to unset multiple extras).

11.22. BAREMETAL DRIVER LIST

List the enabled drivers.

Usage:

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



```

[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--type <type>] [--long]

```

Table 11.81. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--type <type>	Type of driver ("classic" or "dynamic"). the default is to list all of them.
--long	Show detailed information about the drivers.

Table 11.82. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.83. CSV formatter options

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

Table 11.84. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.85. Table formatter options

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

11.23. 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] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--arg <key=value>]
    [--http-method <http-method>]
    <driver> <method>
```

Table 11.86. Positional arguments

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

Table 11.87. Command arguments

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

Table 11.88. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.89. JSON formatter options

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

Table 11.90. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.91. Table formatter options

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

11.24. 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]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
<driver>

```

Table 11.92. Positional arguments

Value	Summary
<driver>	Name of the driver.

Table 11.93. Command arguments

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

Table 11.94. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.95. CSV formatter options

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

Table 11.96. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.97. Table formatter options

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

11.25. BAREMETAL DRIVER PROPERTY LIST

List the driver properties.

Usage:

```

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

```

Table 11.98. Positional arguments

Value	Summary
<code><driver></code>	Name of the driver.

Table 11.99. Command arguments

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

Table 11.100. Output formatter options

Value	Summary
<code>-f {csv,json,table,value,yaml}, --format {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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.101. CSV formatter options

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

Table 11.102. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.103. Table formatter options

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

11.26. 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]
[--quote {all,minimal,none,nonnumeric}]
[--noindent]
[--max-width <integer>]
[--fit-width]
[--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
<driver>

```

Table 11.104. Positional arguments

Value	Summary
<driver>	Name of the driver.

Table 11.105. Command arguments

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

Table 11.106. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.107. CSV formatter options

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

Table 11.108. JSON formatter options

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

Table 11.109. Table formatter options

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

11.27. BAREMETAL DRIVER SHOW

Show information about a driver.

Usage:

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

Table 11.110. Positional arguments

Value	Summary
<code><driver></code>	Name of the driver.

Table 11.111. Command arguments

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

Table 11.112. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.113. JSON formatter options

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

Table 11.114. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.115. Table formatter options

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

11.28. BAREMETAL INTROSPECTION ABORT

Abort running introspection for node.

Usage:

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

Table 11.116. Positional arguments

Value	Summary
node	Baremetal node uuid or name

Table 11.117. Command arguments

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

11.29. BAREMETAL INTROSPECTION DATA SAVE

Save or display raw introspection data.

Usage:

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

Table 11.118. Positional arguments

Value	Summary
node	Baremetal node uuid or name

Table 11.119. Command arguments

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

11.30. 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]
                                                  [--quote {all,minimal,none,nonnumeric}]
```

```

[--noindent]
[--max-width <integer>]
[--fit-width]
[--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--vlan VLAN]
[--long | --fields <field> [<field> ...]]
node_ident

```

Table 11.120. Positional arguments

Value	Summary
node_ident	Baremetal node uuid or name

Table 11.121. Command 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

Table 11.122. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.123. CSV formatter options

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

Table 11.124. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.125. Table formatter options

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

11.31. 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]
          [--noindent]
          [--prefix PREFIX]
          [--max-width <integer>]
          [--fit-width]
          [--print-empty]
          [--fields <field> [<field> ...]]
node_id interface
```

Table 11.126. Positional arguments

Value	Summary
node_id	Baremetal node uuid or name
interface	Interface name

Table 11.127. Command arguments

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

Table 11.128. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.129. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.130. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.131. Table formatter options

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

11.32. BAREMETAL INTROSPECTION LIST

List introspection statuses

Usage:

```

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

```

Table 11.132. Command arguments

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

Table 11.133. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.134. CSV formatter options

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

Table 11.135. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.136. Table formatter options

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

11.33. BAREMETAL INTROSPECTION REPROCESS

Reprocess stored introspection data

Usage:

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

Table 11.137. Positional arguments

Value	Summary
node	Baremetal node uuid or name

Table 11.138. Command arguments

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

11.34. BAREMETAL INTROSPECTION RULE DELETE

Delete an introspection rule.

Usage:

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

Table 11.139. Positional arguments

Value	Summary
uuid	Rule uuid

Table 11.140. Command arguments

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

11.35. BAREMETAL INTROSPECTION RULE IMPORT

Import one or several introspection rules from a JSON/YAML file.

Usage:

```

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

```

Table 11.141. Positional arguments

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

Table 11.142. Command arguments

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

Table 11.143. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.144. CSV formatter options

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

Table 11.145. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.146. Table formatter options

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

11.36. BAREMETAL INTROSPECTION RULE LIST

List all introspection rules.

Usage:

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

```

[-c COLUMN]
[--quote {all,minimal,none,nonnumeric}]
[--noindent]
[--max-width <integer>]
[--fit-width]
[--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]

```

Table 11.147. Command arguments

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

Table 11.148. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.149. CSV formatter options

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

Table 11.150. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.151. Table formatter options

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

11.37. BAREMETAL INTROSPECTION RULE PURGE

Drop all introspection rules.

Usage:

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

Table 11.152. Command arguments

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

11.38. BAREMETAL INTROSPECTION RULE SHOW

Show an introspection rule.

Usage:

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

Table 11.153. Positional arguments

Value	Summary
<code>uuid</code>	Rule uuid

Table 11.154. Command arguments

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

Table 11.155. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.156. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.157. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.158. Table formatter options

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

11.39. BAREMETAL INTROSPECTION START

Start the introspection.

Usage:

```

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

```

Table 11.159. Positional arguments

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

Table 11.160. Command 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
--check-errors	Check if errors occurred during the introspection; if any error occurs only the errors are displayed; can only be used with --wait

Table 11.161. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.162. CSV formatter options

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

Table 11.163. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.164. Table formatter options

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

11.40. BAREMETAL INTROSPECTION STATUS

Get introspection status.

Usage:

```

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

```

Table 11.165. Positional arguments

Value	Summary
node	Baremetal node uuid or name

Table 11.166. Command arguments

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

Table 11.167. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.168. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.169. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.170. Table formatter options

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

11.41. BAREMETAL NODE ABORT

Set provision state of baremetal node to *abort*

Usage:

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

Table 11.171. Positional arguments

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

Table 11.172. Command arguments

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

11.42. BAREMETAL NODE ADD TRAIT

Add traits to a node.

Usage:

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

Table 11.173. Positional arguments

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

Table 11.174. Command arguments

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

11.43. BAREMETAL NODE ADOPT

Set provision state of baremetal node to *adopt*

Usage:

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

Table 11.175. Positional arguments

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

Table 11.176. Command 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.

11.44. BAREMETAL NODE BIOS SETTING LIST

List a node's BIOS settings.

Usage:

```

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

```

Table 11.177. Positional arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.178. Command arguments

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

Table 11.179. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.180. CSV formatter options

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

Table 11.181. JSON formatter options

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

Table 11.182. Table formatter options

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

11.45. BAREMETAL NODE BIOS SETTING SHOW

Show a specific BIOS setting for a node.

Usage:

```

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

```

Table 11.183. Positional arguments

Value	Summary
<node>	Name or uuid of the node
<setting name>	Setting name to show

Table 11.184. Command arguments

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

Table 11.185. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.186. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.187. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.188. Table formatter options

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

11.46. BAREMETAL NODE BOOT DEVICE SET

Set the boot device for a node

Usage:

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

Table 11.189. Positional arguments

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

Table 11.190. Command arguments

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

11.47. 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] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--supported]
<node>

```

Table 11.191. Positional arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.192. Command arguments

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

Table 11.193. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.194. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.195. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.196. Table formatter options

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

11.48. 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 11.197. Positional arguments

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

Table 11.198. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--wait [<time-out>]</code>	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.
<code>--clean-steps <clean-steps></code>	The clean steps. may be the path to a yaml file containing the clean steps; OR <code>-</code> , with the clean steps being read from standard input; OR a JSON 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> .

11.49. BAREMETAL NODE CONSOLE DISABLE

Disable console access for a node

Usage:

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

Table 11.199. Positional arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.200. Command arguments

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

11.50. BAREMETAL NODE CONSOLE ENABLE

Enable console access for a node

Usage:

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

Table 11.201. Positional arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.202. Command arguments

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

11.51. 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] [--noindent]
                                         [--prefix PREFIX]
```

```

[--max-width <integer>]
[--fit-width] [--print-empty]
<node>

```

Table 11.203. Positional arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.204. Command arguments

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

Table 11.205. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.206. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.207. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.208. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.52. 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] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--chassis-uuid <chassis>] --driver
                                <driver> [--driver-info <key=value>]
                                [--property <key=value>]
                                [--extra <key=value>] [--uuid <uuid>]
                                [--name <name>]
                                [--bios-interface <bios_interface>]
                                [--boot-interface <boot_interface>]
                                [--console-interface <console_interface>]
                                [--deploy-interface <deploy_interface>]
                                [--inspect-interface <inspect_interface>]
                                [--management-interface <management_interface>]
                                [--network-data <network data>]
                                [--network-interface <network_interface>]
                                [--power-interface <power_interface>]
                                [--raid-interface <raid_interface>]
                                [--rescue-interface <rescue_interface>]
                                [--storage-interface <storage_interface>]
                                [--vendor-interface <vendor_interface>]
                                [--resource-class <resource_class>]
                                [--conductor-group <conductor_group>]
                                [--automated-clean | --no-automated-clean]
                                [--owner <owner>] [--lessee <lessee>]
                                [--description <description>]
```

Table 11.209. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--chassis-uuid <chassis>	Uuid of the chassis that this node belongs to.

Value	Summary
<code>--driver <driver></code>	Driver used to control the node [required].
<code>--driver-info <key=value></code>	Key/value pair used by the driver, such as out-of-band management credentials. Can be specified multiple times.
<code>--property <key=value></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>--extra <key=value></code>	Record arbitrary key/value metadata. can be specified multiple times.
<code>--uuid <uuid></code>	Unique uuid for the node.
<code>--name <name></code>	Unique name for the node.
<code>--bios-interface <bios_interface></code>	Bios interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--boot-interface <boot_interface></code>	Boot interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--console-interface <console_interface></code>	Console interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--deploy-interface <deploy_interface></code>	Deploy interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--inspect-interface <inspect_interface></code>	Inspect interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--management-interface <management_interface></code>	Management interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.

Value	Summary
<code>--network-data <network data></code>	Json string or a yaml file or - for stdin to read static network configuration for the baremetal node associated with this ironic node. Format of this file should comply with Nova network data metadata (network_data.json). Depending on ironic boot interface capabilities being used, network configuration may or may not be served to the node for offline network configuration.
<code>--network-interface <network_interface></code>	Network interface used for switching node to cleaning/provisioning networks.
<code>--power-interface <power_interface></code>	Power interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--raid-interface <raid_interface></code>	Raid interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--rescue-interface <rescue_interface></code>	Rescue interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--storage-interface <storage_interface></code>	Storage interface used by the node's driver.
<code>--vendor-interface <vendor_interface></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 <resource_class></code>	Resource class for mapping nodes to nova flavors
<code>--conductor-group <conductor_group></code>	Conductor group the node will belong to
<code>--automated-clean</code>	Enable automated cleaning for the node
<code>--no-automated-clean</code>	Explicitly disable automated cleaning for the node
<code>--owner <owner></code>	Owner of the node.
<code>--lessee <lessee></code>	Lessee of the node.
<code>--description <description></code>	Description for the node.

Table 11.210. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.211. JSON formatter options

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

Table 11.212. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.213. Table formatter options

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

11.53. BAREMETAL NODE DELETE

Unregister baremetal node(s)

Usage:

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

Table 11.214. Positional arguments

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

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

Table 11.215. Command arguments

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

11.54. BAREMETAL NODE DEPLOY

Set provision state of baremetal node to *deploy*

Usage:

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

Table 11.216. Positional arguments

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

Table 11.217. Command 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 OR a JSON object to build config drive from. In case it's a directory, a config drive will be generated from it. In case it's a JSON object with optional keys meta_data , user_data and network_data , a config drive will be generated on the server side (see the bare metal API reference for more details).

Value	Summary
<code>--deploy-steps <deploy-steps></code>	The deploy steps. may be the path to a yaml file containing the deploy steps; OR -, with the deploy steps being read from standard input; OR a JSON string. The value should be a list of deploy-step dictionaries; each dictionary should have keys <i>interface</i> and <i>step</i> , and optional <i>keyargs</i> .

11.55. BAREMETAL NODE INJECT NMI

Inject NMI to baremetal node

Usage:

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

Table 11.218. Positional arguments

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

Table 11.219. Command arguments

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

11.56. BAREMETAL NODE INSPECT

Set provision state of baremetal node to *inspect*

Usage:

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

Table 11.220. Positional arguments

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

Table 11.221. Command 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.

11.57. BAREMETAL NODE LIST

List baremetal nodes

Usage:

```
openstack baremetal node list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--limit <limit>] [--marker <node>]
                               [--sort <key>[:<direction>]]
                               [--maintenance | --no-maintenance]
                               [--retired | --no-retired]
                               [--fault <fault>]
                               [--associated | --unassociated]
                               [--provision-state <provision state>]
                               [--driver <driver>]
                               [--resource-class <resource class>]
                               [--conductor-group <conductor_group>]
                               [--conductor <conductor>]
                               [--chassis <chassis UUID>]
                               [--owner <owner>] [--lessee <lessee>]
                               [--description-contains <description_contains>]
                               [--long | --fields <field> [<field> ...]]
```

Table 11.222. Command arguments

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

Value	Summary
<code>--sort <key>[:<direction>]</code>	Sort output by specified node fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
<code>--maintenance</code>	Limit list to nodes in maintenance mode
<code>--no-maintenance</code>	Limit list to nodes not in maintenance mode
<code>--retired</code>	Limit list to retired nodes.
<code>--no-retired</code>	Limit list to not retired nodes.
<code>--fault <fault></code>	List nodes in specified fault.
<code>--associated</code>	List only nodes associated with an instance.
<code>--unassociated</code>	List only nodes not associated with an instance.
<code>--provision-state <provision state></code>	List nodes in specified provision state.
<code>--driver <driver></code>	Limit list to nodes with driver <driver>
<code>--resource-class <resource class></code>	Limit list to nodes with resource class <resource class>
<code>--conductor-group <conductor_group></code>	Limit list to nodes with conductor group <conductor group>
<code>--conductor <conductor></code>	Limit list to nodes with conductor <conductor>
<code>--chassis <chassis UUID></code>	Limit list to nodes of this chassis
<code>--owner <owner></code>	Limit list to nodes with owner <owner>
<code>--lessee <lessee></code>	Limit list to nodes with lessee <lessee>
<code>--description-contains <description_contains></code>	Limit list to nodes with description contains <description_contains>
<code>--long</code>	Show detailed information about the nodes.
<code>--fields <field> [<field> ...]</code>	One or more node fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.

Table 11.223. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.224. CSV formatter options

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

Table 11.225. JSON formatter options

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

Table 11.226. Table formatter options

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

11.58. BAREMETAL NODE MAINTENANCE SET

Set baremetal node to maintenance mode

Usage:

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

Table 11.227. Positional arguments

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

Table 11.228. Command arguments

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

11.59. BAREMETAL NODE MAINTENANCE UNSET

Unset baremetal node from maintenance mode

Usage:

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

Table 11.229. Positional arguments

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

Table 11.230. Command arguments

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

11.60. BAREMETAL NODE MANAGE

Set provision state of baremetal node to *manage*

Usage:

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

Table 11.231. Positional arguments

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

Table 11.232. Command 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.

11.61. 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 11.233. Positional arguments

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

Table 11.234. Command arguments

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

11.62. 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]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]
                                     <node>
```

Table 11.235. Positional arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.236. Command arguments

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

Table 11.237. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.238. CSV formatter options

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

Table 11.239. JSON formatter options

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

Table 11.240. Table formatter options

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

11.63. BAREMETAL NODE POWER OFF

Power off a node

Usage:

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

Table 11.241. Positional arguments

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

Table 11.242. Command arguments

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

Value	Summary
<code>--power-timeout <power-timeout></code>	Timeout (in seconds, positive integer) to wait for the target power state before erroring out.
<code>--soft</code>	Request graceful power-off.

11.64. BAREMETAL NODE POWER ON

Power on a node

Usage:

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

Table 11.243. Positional arguments

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

Table 11.244. Command arguments

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

11.65. BAREMETAL NODE PROVIDE

Set provision state of baremetal node to *provide*

Usage:

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

Table 11.245. Positional arguments

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

Table 11.246. Command 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.

11.66. BAREMETAL NODE REBOOT

Reboot baremetal node

Usage:

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

Table 11.247. Positional arguments

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

Table 11.248. Command arguments

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

11.67. BAREMETAL NODE REBUILD

Set provision state of baremetal node to *rebuild*

Usage:

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

Table 11.249. Positional arguments

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

Table 11.250. Command 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 OR a JSON object to build config drive from. In case it's a directory, a config drive will be generated from it. In case it's a JSON object with optional keys meta_data , user_data and network_data , a config drive will be generated on the server side (see the bare metal API reference for more details).
--deploy-steps <deploy-steps>	The deploy steps in json format. may be the path to a file containing the deploy steps; OR -, with the deploy steps being read from standard input; OR a string. The value should be a list of deploy-step dictionaries; each dictionary should have keys <i>interface</i> , <i>step</i> , <i>priority</i> and optional key <i>args</i> .

11.68. BAREMETAL NODE REMOVE TRAIT

Remove trait(s) from a node.

Usage:

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

Table 11.251. Positional arguments

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

Table 11.252. Command arguments

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

11.69. BAREMETAL NODE RESCUE

Set provision state of baremetal node to *rescue*

Usage:

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

Table 11.253. Positional arguments

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

Table 11.254. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, rescue. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.
--rescue-password <rescue-password>	The password that will be used to login to the rescue ramdisk. The value should be a non-empty string.

11.70. BAREMETAL NODE SET

Set baremetal properties

Usage:

```
openstack baremetal node set [-h] [--instance-uuid <uuid>]
    [--name <name>]
    [--chassis-uuid <chassis UUID>]
    [--driver <driver>]
    [--bios-interface <bios_interface> | --reset-bios-interface]
    [--boot-interface <boot_interface> | --reset-boot-interface]
    [--console-interface <console_interface> | --reset-console-interface]
    [--deploy-interface <deploy_interface> | --reset-deploy-interface]
```

```

interface]
    [--inspect-interface <inspect_interface> | --reset-inspect-interface]
    [--management-interface <management_interface> | --reset-management-
interface]
    [--network-interface <network_interface> | --reset-network-interface]
    [--network-data <network data>]
    [--power-interface <power_interface> | --reset-power-interface]
    [--raid-interface <raid_interface> | --reset-raid-interface]
    [--rescue-interface <rescue_interface> | --reset-rescue-interface]
    [--storage-interface <storage_interface> | --reset-storage-interface]
    [--vendor-interface <vendor_interface> | --reset-vendor-interface]
    [--reset-interfaces]
    [--resource-class <resource_class>]
    [--conductor-group <conductor_group>]
    [--automated-clean | --no-automated-clean]
    [--protected]
    [--protected-reason <protected_reason>]
    [--retired]
    [--retired-reason <retired_reason>]
    [--target-raid-config <target_raid_config>]
    [--property <key=value>]
    [--extra <key=value>]
    [--driver-info <key=value>]
    [--instance-info <key=value>]
    [--owner <owner>] [--lessee <lessee>]
    [--description <description>]
    <node>

```

Table 11.255. Positional arguments

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

Table 11.256. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--instance-uuid <uuid>	Set instance uuid of node to <uuid>
--name <name>	Set the name of the node
--chassis-uuid <chassis UUID>	Set the chassis for the node
--driver <driver>	Set the driver for the node
--bios-interface <bios_interface>	Set the bios interface for the node
--reset-bios-interface	Reset the bios interface to its hardware type default

Value	Summary
<code>--boot-interface <boot_interface></code>	Set the boot interface for the node
<code>--reset-boot-interface</code>	Reset the boot interface to its hardware type default
<code>--console-interface <console_interface></code>	Set the console interface for the node
<code>--reset-console-interface</code>	Reset the console interface to its hardware type default
<code>--deploy-interface <deploy_interface></code>	Set the deploy interface for the node
<code>--reset-deploy-interface</code>	Reset the deploy interface to its hardware type default
<code>--inspect-interface <inspect_interface></code>	Set the inspect interface for the node
<code>--reset-inspect-interface</code>	Reset the inspect interface to its hardware type default
<code>--management-interface <management_interface></code>	Set the management interface for the node
<code>--reset-management-interface</code>	Reset the management interface to its hardware type default
<code>--network-interface <network_interface></code>	Set the network interface for the node
<code>--reset-network-interface</code>	Reset the network interface to its hardware type default
<code>--network-data <network data></code>	Json string or a yaml file or - for stdin to read static network configuration for the baremetal node associated with this ironic node. Format of this file should comply with Nova network data metadata (<code>network_data.json</code>). Depending on ironic boot interface capabilities being used, network configuration may or may not be served to the node for offline network configuration.
<code>--power-interface <power_interface></code>	Set the power interface for the node
<code>--reset-power-interface</code>	Reset the power interface to its hardware type default
<code>--raid-interface <raid_interface></code>	Set the raid interface for the node
<code>--reset-raid-interface</code>	Reset the raid interface to its hardware type default

Value	Summary
<code>--rescue-interface <rescue_interface></code>	Set the rescue interface for the node
<code>--reset-rescue-interface</code>	Reset the rescue interface to its hardware type default
<code>--storage-interface <storage_interface></code>	Set the storage interface for the node
<code>--reset-storage-interface</code>	Reset the storage interface to its hardware type default
<code>--vendor-interface <vendor_interface></code>	Set the vendor interface for the node
<code>--reset-vendor-interface</code>	Reset the vendor interface to its hardware type default
<code>--reset-interfaces</code>	Reset all interfaces not specified explicitly to their default implementations. Only valid with <code>--driver</code> .
<code>--resource-class <resource_class></code>	Set the resource class for the node
<code>--conductor-group <conductor_group></code>	Set the conductor group for the node
<code>--automated-clean</code>	Enable automated cleaning for the node
<code>--no-automated-clean</code>	Explicitly disable automated cleaning for the node
<code>--protected</code>	Mark the node as protected
<code>--protected-reason <protected_reason></code>	Set the reason of marking the node as protected
<code>--retired</code>	Mark the node as retired
<code>--retired-reason <retired_reason></code>	Set the reason of marking the node as retired
<code>--target-raid-config <target_raid_config></code>	Set the target raid configuration (json) for the node. This can be one of: 1. a file containing YAML data of the RAID configuration; 2. "-" to read the contents from standard input; or 3. a valid JSON string.
<code>--property <key=value></code>	Property to set on this baremetal node (repeat option to set multiple properties)
<code>--extra <key=value></code>	Extra to set on this baremetal node (repeat option to set multiple extras)

Value	Summary
<code>--driver-info <key=value></code>	Driver information to set on this baremetal node (repeat option to set multiple driver infos)
<code>--instance-info <key=value></code>	Instance information to set on this baremetal node (repeat option to set multiple instance infos)
<code>--owner <owner></code>	Set the owner for the node
<code>--lessee <lessee></code>	Set the lessee for the node
<code>--description <description></code>	Set the description for the node

11.71. BAREMETAL NODE SHOW

Show baremetal node details

Usage:

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

Table 11.257. Positional arguments

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

Table 11.258. Command arguments

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

Table 11.259. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.260. JSON formatter options

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

Table 11.261. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.262. Table formatter options

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

11.72. BAREMETAL NODE TRAIT LIST

List a node's traits.

Usage:

```

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

```

```
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
<node>
```

Table 11.263. Positional arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.264. Command arguments

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

Table 11.265. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.266. CSV formatter options

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

Table 11.267. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.268. Table formatter options

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

11.73. BAREMETAL NODE UNDEPLOY

Set provision state of baremetal node to *deleted*

Usage:

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

Table 11.269. Positional arguments

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

Table 11.270. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--wait [<time-out>]</code>	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.

11.74. BAREMETAL NODE UNRESCUE

Set provision state of baremetal node to *unrescue*

Usage:

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

Table 11.271. Positional arguments

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

Table 11.272. Command 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.

11.75. 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]
                               [--bios-interface] [--boot-interface]
                               [--console-interface]
                               [--deploy-interface]
                               [--inspect-interface] [--network-data]
                               [--management-interface]
                               [--network-interface]
                               [--power-interface] [--raid-interface]
                               [--rescue-interface]
                               [--storage-interface]
                               [--vendor-interface] [--conductor-group]
                               [--automated-clean] [--protected]
                               [--protected-reason] [--retired]
                               [--retired-reason] [--owner] [--lessee]
                               [--description]
                               <node>

```

Table 11.273. Positional arguments

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

Table 11.274. Command arguments

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

Value	Summary
--rescue-interface	Unset rescue interface on this baremetal node
--storage-interface	Unset storage interface on this baremetal node
--vendor-interface	Unset vendor interface on this baremetal node
--conductor-group	Unset conductor group for this baremetal node (the default group will be used)
--automated-clean	Unset automated clean option on this baremetal node (the value from configuration will be used)
--protected	Unset the protected flag on the node
--protected-reason	Unset the protected reason (gets unset automatically when protected is unset)
--retired	Unset the retired flag on the node
--retired-reason	Unset the retired reason (gets unset automatically when retired is unset)
--owner	Unset the owner field of the node
--lessee	Unset the lessee field of the node
--description	Unset the description field of the node

11.76. BAREMETAL NODE VALIDATE

Validate a node's driver interfaces

Usage:

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

Table 11.275. Positional arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.276. Command arguments

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

Table 11.277. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 11.278. CSV formatter options

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

Table 11.279. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.280. Table formatter options

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

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

11.77. BAREMETAL NODE VIF ATTACH

Attach VIF to a given node

Usage:

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

Table 11.281. Positional arguments

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

Table 11.282. Command arguments

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

11.78. BAREMETAL NODE VIF DETACH

Detach VIF from a given node

Usage:

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

Table 11.283. 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 11.284. Command arguments

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

11.79. 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]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    <node>
```

Table 11.285. Positional arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.286. Command arguments

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

Table 11.287. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.288. CSV formatter options

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

Table 11.289. JSON formatter options

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

Table 11.290. Table formatter options

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

11.80. BAREMETAL PORT CREATE

Create a new port

Usage:

```

openstack baremetal port create [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty] --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>]
    [--is-smartnic]
    <address>

```

Table 11.291. Positional arguments

Value	Summary
<address>	Mac address for this port.

Table 11.292. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Uuid of the node that this port belongs to.
--uuid <uuid>	Uuid of the port.
--extra <key=value>	Record arbitrary key/value metadata. argument can be specified multiple times.
--local-link-connection <key=value>	Key/value metadata describing local link connection information. Valid keys are <i>switch_info</i> , <i>switch_id</i> , <i>port_id</i> and <i>hostname</i> . The keys <i>switch_id</i> and <i>port_id</i> are required. In case of a Smart NIC port, the required keys are <i>port_id</i> and <i>hostname</i> . Argument can be specified multiple times.
-l <key=value>	Deprecated. please use --local-link-connection 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.
--pxe-enabled <boolean>	Indicates whether this port should be used when pxe booting this Node.
--port-group <uuid>	Uuid of the port group that this port belongs to.

Value	Summary
<code>--physical-network <physical network></code>	Name of the physical network to which this port is connected.
<code>--is-smartnic</code>	Indicates whether this port is a smart nic port

Table 11.293. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.294. JSON formatter options

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

Table 11.295. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.296. Table formatter options

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

11.81. BAREMETAL PORT DELETE

Delete port(s).

Usage:

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

Table 11.297. Positional arguments

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

Table 11.298. Command arguments

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

11.82. 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] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     --node <uuid>
                                     [--address <mac-address>]
                                     [--name NAME] [--uuid UUID]
                                     [--extra <key=value>]
                                     [--mode MODE]
                                     [--property <key=value>]
                                     [--support-standalone-ports | --unsupport-standalone-ports]
```

Table 11.299. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Uuid of the node that this port group belongs to.
--address <mac-address>	Mac address for this port group.
--name NAME	Name of the port group.
--uuid UUID	Uuid of the port group.

Value	Summary
<code>--extra <key=value></code>	Record arbitrary key/value metadata. can be specified multiple times.
<code>--mode MODE</code>	Mode of the port group. for possible values, refer to https://www.kernel.org/doc/Documentation/networking/bonding.txt .
<code>--property <key=value></code>	Key/value property related to this port group's configuration. Can be specified multiple times.
<code>--support-standalone-ports</code>	Ports that are members of this port group can be used as stand-alone ports. (default)
<code>--unsupport-standalone-ports</code>	Ports that are members of this port group cannot be used as stand-alone ports.

Table 11.300. Output formatter options

Value	Summary
<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 to show multiple columns

Table 11.301. JSON formatter options

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

Table 11.302. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 11.303. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.83. BAREMETAL PORT GROUP DELETE

Unregister baremetal port group(s).

Usage:

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

Table 11.304. Positional arguments

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

Table 11.305. Command arguments

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

11.84. BAREMETAL PORT GROUP LIST

List baremetal port groups.

Usage:

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

```

[--address <mac-address>]
[--node <node>]
[--long | --fields <field> [<field> ...]]

```

Table 11.306. Command arguments

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

Table 11.307. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.308. CSV formatter options

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

Table 11.309. JSON formatter options

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

Table 11.310. Table formatter options

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

11.85. 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 11.311. Positional arguments

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

Table 11.312. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Update uuid of the node that this port group belongs to.
--address <mac-address>	Mac address for this port group.
--name <name>	Name of the port group.
--extra <key=value>	Extra to set on this baremetal port group (repeat option to set multiple extras).
--mode MODE	Mode of the port group. for possible values, refer to https://www.kernel.org/doc/Documentation/networking/bonding.txt .
--property <key=value>	Key/value property related to this port group's configuration (repeat option to set multiple properties).
--support-standalone-ports	Ports that are members of this port group can be used as stand-alone ports.
--unsupport-standalone-ports	Ports that are members of this port group cannot be used as stand-alone ports.

11.86. BAREMETAL PORT GROUP SHOW

Show baremetal port group details.

Usage:

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

Table 11.313. Positional arguments

Value	Summary
<id>	Uuid or name of the port group (or mac address if --address is specified).

Table 11.314. Command 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 11.315. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.316. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.317. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.318. Table formatter options

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

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

11.87. 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 11.319. Positional arguments

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

Table 11.320. Command arguments

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

11.88. BAREMETAL PORT LIST

List baremetal ports.

Usage:

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

Table 11.321. Command arguments

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

Table 11.322. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.323. CSV formatter options

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

Table 11.324. JSON formatter options

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

Table 11.325. Table formatter options

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

11.89. 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>]
                             [--is-smartnic]
                             <port>

```

Table 11.326. Positional arguments

Value	Summary
<port>	Uuid of the port

Table 11.327. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Set uuid of the node that this port belongs to
--address <address>	Set mac address for this port
--extra <key=value>	Extra to set on this baremetal port (repeat option to set multiple extras)
--port-group <uuid>	Set uuid of the port group that this port belongs to.
--local-link-connection <key=value>	Key/value metadata describing local link connection information. Valid keys are <i>switch_info</i> , <i>switch_id</i> , <i>port_id</i> and <i>hostname</i> . The keys <i>switch_id</i> and <i>port_id</i> are required. In case of a Smart NIC port, the required keys are <i>port_id</i> and <i>hostname</i> . Argument can be specified multiple times.
--pxe-enabled	Indicates that this port should be used when pxe booting this node (default)
--pxe-disabled	Indicates that this port should not be used when pxe booting this node
--physical-network <physical network>	Set the name of the physical network to which this port is connected.
--is-smartnic	Set port to be smart nic port

11.90. BAREMETAL PORT SHOW

Show baremetal port details.

Usage:

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

Table 11.328. Positional arguments

Value	Summary
<id>	Uuid of the port (or mac address if --address is specified).

Table 11.329. Command arguments

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

Table 11.330. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.331. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.332. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.333. Table formatter options

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

11.91. BAREMETAL PORT UNSET

Unset baremetal port properties.

Usage:

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

Table 11.334. Positional arguments

Value	Summary
<port>	Uuid of the port.

Table 11.335. Command arguments

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

Value	Summary
--is-smartnic	Set port as not smart nic port

11.92. 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] [--noindent]
                                           [--prefix PREFIX]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty] --node
                                           <uuid> --type <type>
                                           --connector-id <connector
                                           id> [--uuid <uuid>]
                                           [--extra <key=value>]
```

Table 11.336. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Uuid of the node that this volume connector belongs to.
--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> .
--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> .
--uuid <uuid>	Uuid of the volume connector.
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.

Table 11.337. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.338. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.339. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.340. Table formatter options

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

11.93. BAREMETAL VOLUME CONNECTOR DELETE

Unregister baremetal volume connector(s).

Usage:

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

Table 11.341. Positional arguments

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

Table 11.342. Command arguments

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

11.94. BAREMETAL VOLUME CONNECTOR LIST

List baremetal volume connectors.

Usage:

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

Table 11.343. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--node <node>	Only list volume connectors of this node (name or UUID).
--limit <limit>	Maximum number of volume connectors to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <volume connector>	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.
--sort <key>[:<direction>]	Sort output by specified volume connector fields and directions (asc or desc) (default:asc). Multiple fields and directions can be specified, separated by comma.
--long	Show detailed information about volume connectors.

Value	Summary
<code>--fields <field> [<field> ...]</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.

Table 11.344. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.345. CSV formatter options

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

Table 11.346. JSON formatter options

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

Table 11.347. Table formatter options

Value	Summary
<code>--max-width <integer></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

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

11.95. 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 11.348. Positional arguments

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

Table 11.349. Command arguments

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

11.96. BAREMETAL VOLUME CONNECTOR SHOW

Show baremetal volume connector details.

Usage:

```
openstack baremetal volume connector show [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN] [--noindent]
```

```

[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--fields <field> [<field> ...]]
<id>

```

Table 11.350. Positional arguments

Value	Summary
<id>	Uuid of the volume connector.

Table 11.351. Command 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 11.352. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.353. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.354. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.355. Table formatter options

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

11.97. BAREMETAL VOLUME CONNECTOR UNSET

Unset baremetal volume connector properties.

Usage:

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

Table 11.356. Positional arguments

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

Table 11.357. Command arguments

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

11.98. 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] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
```

```

--node <uuid> --type <volume
type> [--property <key=value>]
--boot-index <boot index>
--volume-id <volume id>
[--uuid <uuid>]
[--extra <key=value>]

```

Table 11.358. Command arguments

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

Table 11.359. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.360. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.361. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.362. Table formatter options

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

11.99. BAREMETAL VOLUME TARGET DELETE

Unregister baremetal volume target(s).

Usage:

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

Table 11.363. Positional arguments

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

Table 11.364. Command arguments

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

11.100. BAREMETAL VOLUME TARGET LIST

List baremetal volume targets.

Usage:

```
openstack baremetal volume target list [-h]
```

```

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

```

Table 11.365. Command arguments

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

Table 11.366. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 11.367. CSV formatter options

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

Table 11.368. JSON formatter options

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

Table 11.369. Table formatter options

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

11.101. 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 11.370. Positional arguments

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

Table 11.371. Command arguments

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

11.102. BAREMETAL VOLUME TARGET SHOW

Show baremetal volume target details.

Usage:

```

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

```

Table 11.372. Positional arguments

Value	Summary
<id>	Uuid of the volume target.

Table 11.373. Command 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 11.374. Output formatter options

Value	Summary
-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 to show multiple columns

Table 11.375. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.376. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 11.377. Table formatter options

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

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

11.103. BAREMETAL VOLUME TARGET UNSET

Unset baremetal volume target properties.

Usage:

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

Table 11.378. Positional arguments

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

Table 11.379. Command arguments

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

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

Table 12.1. Positional arguments

Value	Summary
URI	The uri reference for the ca.

Table 12.2. Command arguments

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

Table 12.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 12.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 12.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 12.6. Table formatter options

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

12.2. CA LIST

List CAs.

Usage:

```
openstack ca list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                  [--quote {all,minimal,none,nonnumeric}] [--noindent]
                  [--max-width <integer>] [--fit-width] [--print-empty]
                  [--sort-column SORT_COLUMN]
                  [--sort-ascending | --sort-descending]
                  [--limit LIMIT] [--offset OFFSET] [--name NAME]
```

Table 12.7. Command 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)
--name NAME, -n NAME	Specify the ca name (default: none)

Table 12.8. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 12.9. CSV formatter options

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

Table 12.10. JSON formatter options

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

Table 12.11. Table formatter options

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

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]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
```

Table 13.1. Command arguments

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

Table 13.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 13.3. CSV formatter options

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

Table 13.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.5. Table formatter options

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

13.2. CATALOG SHOW

Display service catalog details

Usage:

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

Table 13.6. Positional arguments

Value	Summary
<service>	Service to display (type or name)

Table 13.7. Command arguments

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

Table 13.8. Output formatter options

Value	Summary
<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 to show multiple columns

Table 13.9. JSON formatter options

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

Table 13.10. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 13.11. Table formatter options

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

CHAPTER 14. CODE

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

14.1. CODE SOURCE CONTENT SHOW

Show workflow definition.

Usage:

```
openstack code source content show [-h] [--namespace [NAMESPACE]]
                                identifier
```

Table 14.1. Positional arguments

Value	Summary
identifier	Code source id or name.

Table 14.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to get the code source from.

14.2. CODE SOURCE CREATE

Create new code source.

Usage:

```
openstack code source create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--namespace [NAMESPACE]]
                             [--public]
                             name content
```

Table 14.3. Positional arguments

Value	Summary
name	Code source name.
content	Code source content file.

Table 14.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to create the code source within.
--public	With this flag the code source will be marked as "public".

Table 14.5. Output formatter options

Value	Summary
-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 to show multiple columns

Table 14.6. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 14.7. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 14.8. Table formatter options

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

14.3. CODE SOURCE DELETE

Delete workflow.

Usage:

```
openstack code source delete [-h] [--namespace [NAMESPACE]]
                             identifier [identifier ...]
```

Table 14.9. Positional arguments

Value	Summary
identifier	Code source name or id (can be repeated multiple times).

Table 14.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to delete the code source(s) from.

14.4. CODE SOURCE LIST

List all workflows.

Usage:

```
openstack code source list [-h] [-f {csv,json,table,value,yaml}]
                           [-c COLUMN]
                           [--quote {all,minimal,none,nonnumeric}]
                           [--noindent] [--max-width <integer>]
                           [--fit-width] [--print-empty]
                           [--sort-column SORT_COLUMN]
                           [--sort-ascending | --sort-descending]
                           [--marker [MARKER]] [--limit [LIMIT]]
                           [--sort_keys [SORT_KEYS]]
                           [--sort_dirs [SORT_DIRS]] [--filter FILTERS]
```

Table 14.11. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".

Value	Summary
<code>--limit [LIMIT]</code>	Maximum number of entries to return in a single result.
<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>--filter FILTERS</code>	Filters. can be repeated.

Table 14.12. Output formatter options

Value	Summary
<code>-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to <code>table</code>
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 14.13. CSV formatter options

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

Table 14.14. JSON formatter options

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

Table 14.15. Table formatter options

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

14.5. CODE SOURCE SHOW

Show specific code source.

Usage:

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

Table 14.16. Positional arguments

Value	Summary
identifier	Code source id or name.

Table 14.17. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--namespace [NAMESPACE]</code>	Namespace to get the code source from.

Table 14.18. Output formatter options

Value	Summary
<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 to show multiple columns

Table 14.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 14.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 14.21. Table formatter options

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

14.6. CODE SOURCE UPDATE

Update workflow.

Usage:

```
openstack code source update [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--id ID]
                             [--namespace [NAMESPACE]] [--public]
                             identifier content
```

Table 14.22. Positional arguments

Value	Summary
identifier	Code source identifier (name or id).
content	Code source content

Table 14.23. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--id ID	Workflow id.
--namespace [NAMESPACE]	Namespace of the workflow.
--public	With this flag workflow will be marked as "public".

Table 14.24. Output formatter options

Value	Summary
-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 to show multiple columns

Table 14.25. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 14.26. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 14.27. Table formatter options

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

CHAPTER 15. COE

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

15.1. COE CA ROTATE

Rotate the CA certificate for cluster to revoke access.

Usage:

```
openstack coe ca rotate [-h] <cluster>
```

Table 15.1. Positional arguments

Value	Summary
<cluster>	Id or name of the cluster

Table 15.2. Command arguments

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

15.2. COE CA SHOW

Show details about the CA certificate for a cluster.

Usage:

```
openstack coe ca show [-h] <cluster>
```

Table 15.3. Positional arguments

Value	Summary
<cluster>	Id or name of the cluster

Table 15.4. Command arguments

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

15.3. COE CA SIGN

Generate the CA certificate for a cluster.

Usage:

```
openstack coe ca sign [-h] <cluster> <csr>
```

Table 15.5. 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 15.6. Command arguments

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

15.4. COE CLUSTER CONFIG

Get Configuration for a Cluster

Usage:

```
openstack coe cluster config [-h] [--dir <dir>] [--force]
                             [--output-certs] [--use-certificate]
                             [--use-keystone]
                             <cluster>
```

Table 15.7. Positional arguments

Value	Summary
<cluster>	The name or uuid of cluster to update

Table 15.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--dir <dir>	Directory to save the certificate and config files.
--force	Overwrite files if existing.
--output-certs	Output certificates in separate files.

Value	Summary
--use-certificate	Use certificate in config files.
--use-keystone	Use keystone token in config files.

15.5. 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>]
                             [--fixed-network <fixed-network>]
                             [--fixed-subnet <fixed-subnet>]
                             [--floating-ip-enabled]
                             [--floating-ip-disabled] [--merge-labels]
                             [--master-lb-enabled]
                             <name>
```

Table 15.9. Positional arguments

Value	Summary
<name>	Name of the cluster to create.

Table 15.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--cluster-template <cluster-template>	Id or name of the cluster template.
--discovery-url <discovery-url>	Specifies custom delivery url for node discovery.
--docker-volume-size <docker-volume-size>	The size in gb for the docker volume to use.

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.
--keypair <keypair>	Uuid or name of the keypair to use.
--master-count <master-count>	The number of master nodes for the cluster.
--node-count <node-count>	The cluster node count.
--timeout <timeout>	The timeout for cluster creation time. the default is 60 minutes.
--master-flavor <master-flavor>	The nova flavor name or uuid to use when launching the master node of the Cluster.
--flavor <flavor>	The nova flavor name or uuid to use when launching the Cluster.
--fixed-network <fixed-network>	The private neutron network name to connect to this Cluster template.
--fixed-subnet <fixed-subnet>	The private neutron subnet name to connect to cluster.
--floating-ip-enabled	Indicates whether created clusters should have a floating ip.
--floating-ip-disabled	Disables floating ip creation on the new cluster
--merge-labels	The labels provided will be merged with the labels configured in the specified cluster template.
--master-lb-enabled	Indicates whether created clusters should have a loadbalancer for API.

15.6. COE CLUSTER DELETE

Delete a cluster

Usage:

```
openstack coe cluster delete [-h] <cluster> [<cluster> ...]
```

Table 15.11. Positional arguments

Value	Summary
<cluster>	Id or name of the cluster(s) to delete.

Table 15.12. Command arguments

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

15.7. COE CLUSTER LIST

List clusters

Usage:

```

openstack coe cluster list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--limit <limit>] [--sort-key <sort-key>]
                          [--sort-dir <sort-dir>]

```

Table 15.13. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of clusters to return
--sort-key <sort-key>	Column to sort results by
--sort-dir <sort-dir>	Direction to sort. "asc" or "desc".

Table 15.14. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 15.15. CSV formatter options

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

Table 15.16. JSON formatter options

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

Table 15.17. Table formatter options

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

15.8. COE CLUSTER RESIZE

Resize a Cluster

Usage:

```
openstack coe cluster resize [-h] [--nodes-to-remove <Server UUID>]
                             [--nodegroup <nodegroup>]
                             <cluster> node_count
```

Table 15.18. Positional arguments

Value	Summary
<cluster>	The name or uuid of cluster to update
node_count	Desired node count of the cluser.

Table 15.19. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--nodes-to-remove <Server UUID>	Server id of the nodes to be removed. repeat to addmore server ID
--nodegroup <nodegroup>	The name or uuid of the nodegroup of current cluster.

15.9. COE CLUSTER SHOW

Show a Cluster

Usage:

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

Table 15.20. Positional arguments

Value	Summary
<cluster>	Id or name of the cluster to show.

Table 15.21. Command arguments

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

Table 15.22. Output formatter options

Value	Summary
<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 to show multiple columns

Table 15.23. JSON formatter options

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

Table 15.24. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 15.25. Table formatter options

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

15.10. COE CLUSTER TEMPLATE CREATE

Create a Cluster Template.

Usage:

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

```

--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]
[--hidden] [--visible]
[--tags <--tags tag1 --tags tag2,tag3->]
<name>

```

Table 15.26. Positional arguments

Value	Summary
<name>	Name of the cluster template to create.

Table 15.27. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--coe <coe>	Specify the container orchestration engine to use.
--image <image>	The name or uuid of the base image to customize for the Cluster.
--external-network <external-network>	The external neutron network name or uuid to connect to this Cluster Template.
--keypair <keypair>	The name or uuid of the ssh keypair to load into the Cluster nodes.

Value	Summary
<code>--fixed-network <fixed-network></code>	The private neutron network name to connect to this Cluster model.
<code>--fixed-subnet <fixed-subnet></code>	The private neutron subnet name to connect to cluster.
<code>--network-driver <network-driver></code>	The network driver name for instantiating container networks.
<code>--volume-driver <volume-driver></code>	The volume driver name for instantiating container volume.
<code>--dns-nameserver <dns-nameserver></code>	The dns nameserver to use for this cluster template.
<code>--flavor <flavor></code>	The nova flavor name or uuid to use when launching the Cluster.
<code>--master-flavor <master-flavor></code>	The nova flavor name or uuid to use when launching the master node of the Cluster.
<code>--docker-volume-size <docker-volume-size></code>	Specify the number of size in gb for the docker volume to use.
<code>--docker-storage-driver <docker-storage-driver></code>	Select a docker storage driver. supported: devicemapper, overlay, overlay2. Default: overlay2
<code>--http-proxy <http-proxy></code>	The http_proxy address to use for nodes in cluster.
<code>--https-proxy <https-proxy></code>	The https_proxy address to use for nodes in cluster.
<code>--no-proxy <no-proxy></code>	The no_proxy address to use for nodes in cluster.
<code>--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...></code>	Arbitrary labels in the form of key=value pairs to associate with a cluster template. May be used multiple times.
<code>--tls-disabled</code>	Disable tls in the cluster.
<code>--public</code>	Make cluster template public.
<code>--registry-enabled</code>	Enable docker registry in the cluster
<code>--server-type <server-type></code>	Specify the server type to be used for example vm. for this release default server type will be vm.

Value	Summary
<code>--master-lb-enabled</code>	Indicates whether created clusters should have a load balancer for master nodes or not.
<code>--floating-ip-enabled</code>	Indicates whether created clusters should have a floating ip.
<code>--floating-ip-disabled</code>	Disables floating ip creation on the new cluster
<code>--hidden</code>	Indicates the cluster template should be hidden.
<code>--visible</code>	Indicates the cluster template should be visible.
<code>--tags <--tags tag1 --tags tag2,tag3></code>	Tags to be added to the cluster template.

Table 15.28. Output formatter options

Value	Summary
<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 to show multiple columns

Table 15.29. JSON formatter options

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

Table 15.30. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 15.31. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

15.11. COE CLUSTER TEMPLATE DELETE

Delete a Cluster Template.

Usage:

```
openstack coe cluster template delete [-h]
                                     <cluster-templates>
                                     [<cluster-templates> ...]
```

Table 15.32. Positional arguments

Value	Summary
<cluster-templates>	Id or name of the (cluster template)s to delete.

Table 15.33. Command arguments

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

15.12. COE CLUSTER TEMPLATE LIST

List Cluster Templates.

Usage:

```
openstack coe cluster template list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]
                                     [--limit <limit>]
```

```

[--sort-key <sort-key>]
[--sort-dir <sort-dir>]
[--fields <fields>]

```

Table 15.34. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of cluster templates to return
--sort-key <sort-key>	Column to sort results by
--sort-dir <sort-dir>	Direction to sort. "asc" or "desc".
--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

Table 15.35. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 15.36. CSV formatter options

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

Table 15.37. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 15.38. Table formatter options

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

15.13. COE CLUSTER TEMPLATE SHOW

Show a Cluster Template.

Usage:

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

Table 15.39. Positional arguments

Value	Summary
<cluster-template>	Id or name of the cluster template to show.

Table 15.40. Command arguments

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

Table 15.41. Output formatter options

Value	Summary
<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 to show multiple columns

Table 15.42. JSON formatter options

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

Table 15.43. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 15.44. Table formatter options

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

15.14. COE CLUSTER TEMPLATE UPDATE

Update a Cluster Template.

Usage:

```

openstack coe cluster template update [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    <cluster-template> <op>
    <path=value> [<path=value> ...]

```


Table 15.45. Positional arguments

Value	Summary
<cluster-template>	The name or uuid of cluster template to update
<op>	Operations: one of <i>add</i> , <i>replace</i> or <i>remove</i>
<path=value>	Attributes to add/replace or remove (only path is necessary on remove)

Table 15.46. Command arguments

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

Table 15.47. Output formatter options

Value	Summary
-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 to show multiple columns

Table 15.48. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 15.49. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 15.50. Table formatter options

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

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

15.15. COE CLUSTER UPDATE

Update a Cluster

Usage:

```
openstack coe cluster update [-h] [--rollback]
                             <cluster> <op> <path=value>
                             [<path=value> ...]
```

Table 15.51. Positional arguments

Value	Summary
<code><cluster></code>	The name or uuid of cluster to update
<code><op></code>	Operations: one of <i>add</i> , <i>replace</i> or <i>remove</i>
<code><path=value></code>	Attributes to add/replace or remove (only path is necessary on remove)

Table 15.52. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--rollback</code>	Rollback cluster on update failure.

15.16. COE CLUSTER UPGRADE

Upgrade a Cluster

Usage:

```

openstack coe cluster upgrade [-h] [--max-batch-size <max_batch_size>]
                               [--nodegroup <nodegroup>]
                               <cluster> cluster_template

```

Table 15.53. Positional arguments

Value	Summary
<cluster>	The name or uuid of cluster to update
cluster_template	The new cluster template id will be upgraded to.

Table 15.54. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--max-batch-size <max_batch_size>	The max batch size for upgrading each time.
--nodegroup <nodegroup>	The name or uuid of the nodegroup of current cluster.

15.17. COE NODEGROUP CREATE

Create a nodegroup

Usage:

```

openstack coe nodegroup create [-h]
                               [--docker-volume-size <docker-volume-size>]
                               [--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...>]
                               [--node-count <node-count>]
                               [--min-nodes <min-nodes>]
                               [--max-nodes <max-nodes>]
                               [--role <role>] [--image <image>]
                               [--flavor <flavor>] [--merge-labels]
                               <cluster> <name>

```

Table 15.55. Positional arguments

Value	Summary
<cluster>	Name of the nodegroup to create.
<name>	Name of the nodegroup to create.

Table 15.56. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--docker-volume-size <docker-volume-size>	The size in gb for the docker volume to use.
--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...>	Arbitrary labels in the form of key=valuepairs to associate with a nodegroup. May be used multiple times.
--node-count <node-count>	The nodegroup node count.
--min-nodes <min-nodes>	The nodegroup minimum node count.
--max-nodes <max-nodes>	The nodegroup maximum node count.
--role <role>	The role of the nodegroup
--image <image>	The name or uuid of the base image to customize for the NodeGroup.
--flavor <flavor>	The nova flavor name or uuid to use when launching the nodes in this NodeGroup.
--merge-labels	The labels provided will be merged with the labels configured in the specified cluster.

15.18. COE NODEGROUP DELETE

Delete a nodegroup

Usage:

```
openstack coe nodegroup delete [-h]
                               <cluster> <nodegroup> [<nodegroup> ...]
```

Table 15.57. Positional arguments

Value	Summary
<cluster>	Id or name of the cluster where the nodegroup(s) belong(s).
<nodegroup>	Id or name of the nodegroup(s) to delete.

Table 15.58. Command arguments

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

15.19. COE NODEGROUP LIST

List nodegroups

Usage:

```
openstack coe nodegroup list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--limit <limit>] [--sort-key <sort-key>]
                             [--sort-dir <sort-dir>] [--role <role>]
                             <cluster>
```

Table 15.59. Positional arguments

Value	Summary
<cluster>	Id or name of the cluster where the nodegroup belongs.

Table 15.60. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of nodegroups to return
--sort-key <sort-key>	Column to sort results by
--sort-dir <sort-dir>	Direction to sort. "asc" or "desc".
--role <role>	List the nodegroups in the cluster with this role

Table 15.61. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 15.62. CSV formatter options

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

Table 15.63. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 15.64. Table formatter options

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

15.20. COE NODEGROUP SHOW

Show a nodegroup

Usage:

```
openstack coe nodegroup show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty]
<cluster> <nodegroup>

```

Table 15.65. Positional arguments

Value	Summary
<cluster>	Id or name of the cluster where the nodegroup belongs.
<nodegroup>	Id or name of the nodegroup to show.

Table 15.66. Command arguments

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

Table 15.67. Output formatter options

Value	Summary
-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 to show multiple columns

Table 15.68. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 15.69. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 15.70. Table formatter options

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

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

15.21. COE NODEGROUP UPDATE

Update a Nodegroup

Usage:

```
openstack coe nodegroup update [-h]
                               <cluster> <nodegroup> <op> <path=value>
                               [<path=value> ...]
```

Table 15.71. Positional arguments

Value	Summary
<code><cluster></code>	Id or name of the cluster where the nodegroup belongs.
<code><nodegroup></code>	The name or uuid of cluster to update
<code><op></code>	Operations: one of <i>add</i> , <i>replace</i> or <i>remove</i>
<code><path=value></code>	Attributes to add/replace or remove (only path is necessary on remove)

Table 15.72. Command arguments

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

15.22. COE QUOTAS CREATE

Create a quota.

Usage:


```
openstack coe quotas create [-h] --project-id <project-id> --resource
                             <resource> [--hard-limit <hard-limit>]
```

Table 15.73. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project-id <project-id>	Project id
--resource <resource>	Resource name.
--hard-limit <hard-limit>	Max resource limit (default: hard-limit=1)

15.23. COE QUOTAS DELETE

Delete specified resource quota.

Usage:

```
openstack coe quotas delete [-h] --project-id <project-id> --resource
                             <resource>
```

Table 15.74. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project-id <project-id>	Project id
--resource <resource>	Resource name.

15.24. 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 15.75. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker <marker>	The last quota uuid of the previous page; displays list of quotas after "marker".
--limit <limit>	Maximum number of quotas to return.
--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.

15.25. COE QUOTAS SHOW

Show details about the given project resource quota.

Usage:

```
openstack coe quotas show [-h] --project-id <project-id> --resource
                           <resource>
```

Table 15.76. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project-id <project-id>	Project id
--resource <resource>	Resource name.

15.26. 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 15.77. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project-id <project-id>	Project id
--resource <resource>	Resource name.
--hard-limit <hard-limit>	Max resource limit (default: hard-limit=1)

15.27. COE SERVICE LIST

Print a list of Magnum services.

Usage:

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

Table 15.78. Command arguments

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

Table 15.79. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 15.80. CSV formatter options

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

Table 15.81. JSON formatter options

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

Table 15.82. Table formatter options

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

15.28. COE STATS LIST

Show stats for the given `project_id`

Usage:

```
openstack coe stats list [-h] <project>
```

Table 15.83. Positional arguments

Value	Summary
<code><project></code>	Project id

Table 15.84. Command arguments

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

CHAPTER 16. COMMAND

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

16.1. COMMAND LIST

List recognized commands by group

Usage:

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

Table 16.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--group <group-keyword>	Show commands filtered by a command group, for example: identity, volume, compute, image, network and other keywords

Table 16.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 16.3. CSV formatter options

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

Table 16.4. JSON formatter options

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

Table 16.5. Table formatter options

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

CHAPTER 17. COMPLETE.ADOC

This chapter describes the commands under the **complete.adoc** command.

17.1. COMPLETE

print bash completion command

Usage:

```
openstack complete [-h] [--name <command_name>] [--shell <shell>]
```

Table 17.1. Command 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 18. COMPUTE

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

18.1. COMPUTE AGENT CREATE

Create compute agent. The compute agent functionality is hypervisor specific and is only supported by the XenAPI hypervisor driver. It was removed from nova in the 23.0.0 (Wallaby) release.

Usage:

```
openstack compute agent create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <os> <architecture> <version> <url>
                               <md5hash> <hypervisor>
```

Table 18.1. Positional arguments

Value	Summary
<os>	Type of os
<architecture>	Type of architecture
<version>	Version
<url>	Url
<md5hash>	Md5 hash
<hypervisor>	Type of hypervisor

Table 18.2. Command arguments

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

Table 18.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 18.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 18.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 18.6. Table formatter options

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

18.2. COMPUTE AGENT DELETE

Delete compute agent(s). The compute agent functionality is hypervisor specific and is only supported by the XenAPI hypervisor driver. It was removed from nova in the 23.0.0 (Wallaby) release.

Usage:

```
openstack compute agent delete [-h] <id> [<id> ...]
```

Table 18.7. Positional arguments

Value	Summary
<id>	Id of agent(s) to delete

Table 18.8. Command arguments

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

18.3. COMPUTE AGENT LIST

List compute agents. The compute agent functionality is hypervisor specific and is only supported by the XenAPI hypervisor driver. It was removed from nova in the 23.0.0 (Wallaby) release.

Usage:

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

Table 18.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--hypervisor <hypervisor>	Type of hypervisor

Table 18.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 18.11. CSV formatter options

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

Table 18.12. JSON formatter options

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

Table 18.13. Table formatter options

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

18.4. COMPUTE AGENT SET

Set compute agent properties. The compute agent functionality is hypervisor specific and is only supported by the XenAPI hypervisor driver. It was removed from nova in the 23.0.0 (Wallaby) release.

Usage:

```
openstack compute agent set [-h] [--agent-version <version>]
                             [--url <url>] [--md5hash <md5hash>]
                             <id>
```

Table 18.14. Positional arguments

Value	Summary
<code><id></code>	Id of the agent

Table 18.15. Command arguments

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

Value	Summary
<code>--agent-version <version></code>	Version of the agent
<code>--url <url></code>	Url of the agent
<code>--md5hash <md5hash></code>	Md5 hash of the agent

18.5. COMPUTE SERVICE DELETE

Delete compute service(s)

Usage:

```
openstack compute service delete [-h] <service> [<service> ...]
```

Table 18.16. Positional arguments

Value	Summary
<code><service></code>	Compute service(s) to delete (id only). if using ``--os-compute-api-version`` 2.53 or greater, the ID is a UUID which can be retrieved by listing compute services using the same 2.53+ microversion.

Table 18.17. Command arguments

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

18.6. COMPUTE SERVICE LIST

List compute services. Using ``--os-compute-api-version`` 2.53 or greater will return the ID as a UUID value which can be used to uniquely identify the service in a multi-cell deployment.

Usage:

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

Table 18.18. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--host <host>	List services on specified host (name only)
--service <service>	List only specified service binaries (name only). for example, ``nova-compute``, ``nova-conductor``, etc.
--long	List additional fields in output

Table 18.19. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 18.20. CSV formatter options

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

Table 18.21. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 18.22. Table formatter options

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

18.7. COMPUTE SERVICE SET

Set compute service properties

Usage:

```
openstack compute service set [-h] [--enable | --disable]
                               [--disable-reason <reason>]
                               [--up | --down]
                               <host> <service>
```

Table 18.23. Positional arguments

Value	Summary
<code><host></code>	Name of host
<code><service></code>	Name of service (binary name), for example <code>``nova-compute``</code>

Table 18.24. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--enable</code>	Enable service
<code>--disable</code>	Disable service
<code>--disable-reason <reason></code>	Reason for disabling the service (in quotes). should be used with <code>--disable</code> option.
<code>--up</code>	Force up service. requires <code>``--os-compute-api-version`` 2.11</code> or greater.

Value	Summary
--down	Force down service. requires ``--os-compute-api-version`` 2.11 or greater.

CHAPTER 19. CONFIGURATION

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

19.1. CONFIGURATION SHOW

Display configuration details

Usage:

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

Table 19.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--mask	Attempt to mask passwords (default)
--unmask	Show password in clear text

Table 19.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 19.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 19.4. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 19.5. Table formatter options

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

CHAPTER 20. CONSISTENCY

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

20.1. CONSISTENCY GROUP ADD VOLUME

Add volume(s) to consistency group

Usage:

```
openstack consistency group add volume [-h]
                                     <consistency-group> <volume>
                                     [<volume> ...]
```

Table 20.1. Positional arguments

Value	Summary
<consistency-group>	Consistency group to contain <volume> (name or id)
<volume>	Volume(s) to add to <consistency-group> (name or id) (repeat option to add multiple volumes)

Table 20.2. Command arguments

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

20.2. CONSISTENCY GROUP CREATE

Create new consistency group.

Usage:

```
openstack consistency group create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   (--volume-type <volume-type> | --consistency-group-source <consistency-
group> | --consistency-group-snapshot <consistency-group-snapshot>)
                                   [--description <description>]
                                   [--availability-zone <availability-zone>]
                                   [<name>]
```

Table 20.3. Positional arguments

Value	Summary
<name>	Name of new consistency group (default to none)

Table 20.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--volume-type <volume-type>	Volume type of this consistency group (name or id)
--consistency-group-source <consistency-group>	Existing consistency group (name or id)
--consistency-group-snapshot <consistency-group-snapshot>	Existing consistency group snapshot (name or id)
--description <description>	Description of this consistency group
--availability-zone <availability-zone>	Availability zone for this consistency group (not available if creating consistency group from source)

Table 20.5. Output formatter options

Value	Summary
-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 to show multiple columns

Table 20.6. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 20.7. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 20.8. Table formatter options

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

20.3. CONSISTENCY GROUP DELETE

Delete consistency group(s).

Usage:

```
openstack consistency group delete [-h] [--force]
    <consistency-group>
    [<consistency-group> ...]
```

Table 20.9. Positional arguments

Value	Summary
<code><consistency-group></code>	Consistency group(s) to delete (name or id)

Table 20.10. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--force</code>	Allow delete in state other than error or available

20.4. CONSISTENCY GROUP LIST

List consistency groups.

Usage:

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

```

[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--all-projects] [--long]

```

Table 20.11. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show details for all projects. admin only. (defaults to False)
--long	List additional fields in output

Table 20.12. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 20.13. CSV formatter options

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

Table 20.14. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 20.15. Table formatter options

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

20.5. CONSISTENCY GROUP REMOVE VOLUME

Remove volume(s) from consistency group

Usage:

```
openstack consistency group remove volume [-h]
      <consistency-group> <volume>
      [<volume> ...]
```

Table 20.16. Positional arguments

Value	Summary
<code><consistency-group></code>	Consistency group containing <code><volume></code> (name or id)
<code><volume></code>	Volume(s) to remove from <code><consistency-group></code> (name or ID) (repeat option to remove multiple volumes)

Table 20.17. Command arguments

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

20.6. CONSISTENCY GROUP SET

Set consistency group properties

Usage:

```
openstack consistency group set [-h] [--name <name>]
      [--description <description>]
      <consistency-group>
```

Table 20.18. Positional arguments

Value	Summary
<consistency-group>	Consistency group to modify (name or id)

Table 20.19. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New consistency group name
--description <description>	New consistency group description

20.7. CONSISTENCY GROUP SHOW

Display consistency group details.

Usage:

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

Table 20.20. Positional arguments

Value	Summary
<consistency-group>	Consistency group to display (name or id)

Table 20.21. Command arguments

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

Table 20.22. Output formatter options

Value	Summary
<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 to show multiple columns

Table 20.23. JSON formatter options

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

Table 20.24. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 20.25. Table formatter options

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

20.8. CONSISTENCY GROUP SNAPSHOT CREATE

Create new consistency group snapshot.

Usage:

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



```

[--consistency-group <consistency-group>]
[--description <description>]
[<snapshot-name>]

```

Table 20.26. Positional arguments

Value	Summary
<snapshot-name>	Name of new consistency group snapshot (default to None)

Table 20.27. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--consistency-group <consistency-group>	Consistency group to snapshot (name or id) (default to be the same as <snapshot-name>)
--description <description>	Description of this consistency group snapshot

Table 20.28. Output formatter options

Value	Summary
-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 to show multiple columns

Table 20.29. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 20.30. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 20.31. Table formatter options

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

20.9. CONSISTENCY GROUP SNAPSHOT DELETE

Delete consistency group snapshot(s).

Usage:

```
openstack consistency group snapshot delete [-h]
      <consistency-group-snapshot>
      [<consistency-group-snapshot> ...]
```

Table 20.32. Positional arguments

Value	Summary
<code><consistency-group-snapshot></code>	Consistency group snapshot(s) to delete (name or id)

Table 20.33. Command arguments

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

20.10. CONSISTENCY GROUP SNAPSHOT LIST

List consistency group snapshots.

Usage:

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

```

[--sort-ascending | --sort-descending]
[--all-projects] [--long]
[--status <status>]
[--consistency-group <consistency-group>]

```

Table 20.34. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show detail for all projects (admin only) (defaults to False)
--long	List additional fields in output
--status <status>	Filters results by a status ("available", "error", "creating", "deleting" or "error_deleting")
--consistency-group <consistency-group>	Filters results by a consistency group (name or id)

Table 20.35. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 20.36. CSV formatter options

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

Table 20.37. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 20.38. Table formatter options

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

20.11. CONSISTENCY GROUP SNAPSHOT SHOW

Display consistency group snapshot details

Usage:

```

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

```

Table 20.39. Positional arguments

Value	Summary
<consistency-group-snapshot>	Consistency group snapshot to display (name or id)

Table 20.40. Command arguments

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

Table 20.41. Output formatter options

Value	Summary
<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 to show multiple columns

Table 20.42. JSON formatter options

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

Table 20.43. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 20.44. Table formatter options

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

CHAPTER 21. CONSOLE

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

21.1. CONSOLE LOG SHOW

Show server's console output

Usage:

```
openstack console log show [-h] [--lines <num-lines>] <server>
```

Table 21.1. Positional arguments

Value	Summary
<server>	Server to show console log (name or id)

Table 21.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--lines <num-lines>	Number of lines to display from the end of the log (default=all)

21.2. CONSOLE URL SHOW

Show server's remote console URL

Usage:

```
openstack console url show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             [--novnc | --xvpvnc | --spice | --rdp | --serial | --mks]
                             <server>
```

Table 21.3. Positional arguments

Value	Summary
<server>	Server to show url (name or id)

Table 21.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--novnc	Show novnc console url (default)
--xvpng	Show xvpng console url
--spice	Show spice console url
--rdp	Show rdp console url
--serial	Show serial console url
--mks	Show webmks console url

Table 21.5. Output formatter options

Value	Summary
-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 to show multiple columns

Table 21.6. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 21.7. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 21.8. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 22. CONSUMER

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

22.1. CONSUMER CREATE

Create new consumer

Usage:

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

Table 22.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	New consumer description

Table 22.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 22.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 22.4. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 22.5. Table formatter options

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

22.2. CONSUMER DELETE

Delete consumer(s)

Usage:

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

Table 22.6. Positional arguments

Value	Summary
<code><consumer></code>	Consumer(s) to delete

Table 22.7. Command arguments

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

22.3. CONSUMER LIST

List consumers

Usage:

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

Table 22.8. Command arguments

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

Table 22.9. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 22.10. CSV formatter options

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

Table 22.11. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 22.12. Table formatter options

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

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

22.4. CONSUMER SET

Set consumer properties

Usage:

```
openstack consumer set [-h] [--description <description>] <consumer>
```

Table 22.13. Positional arguments

Value	Summary
<code><consumer></code>	Consumer to modify

Table 22.14. Command arguments

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

22.5. CONSUMER SHOW

Display consumer details

Usage:

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

Table 22.15. Positional arguments

Value	Summary
<code><consumer></code>	Consumer to display

Table 22.16. Command arguments

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

Table 22.17. Output formatter options

Value	Summary
-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 to show multiple columns

Table 22.18. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 22.19. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 22.20. Table formatter options

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

CHAPTER 23. CONTAINER

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

23.1. CONTAINER CREATE

Create new container

Usage:

```
openstack container create [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--public] [--storage-policy STORAGE_POLICY]
                          <container-name> [<container-name> ...]
```

Table 23.1. Positional arguments

Value	Summary
<container-name>	New container name(s)

Table 23.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--public	Make the container publicly accessible
--storage-policy STORAGE_POLICY	Specify a particular storage policy to use.

Table 23.3. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 23.4. CSV formatter options

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

Table 23.5. JSON formatter options

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

Table 23.6. Table formatter options

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

23.2. CONTAINER DELETE

Delete container

Usage:

```
openstack container delete [-h] [--recursive]
                           <container> [<container> ...]
```

Table 23.7. Positional arguments

Value	Summary
<code><container></code>	Container(s) to delete

Table 23.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--recursive, -r	Recursively delete objects and container

23.3. CONTAINER LIST

List containers

Usage:

```
openstack container list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--prefix <prefix>] [--marker <marker>]
                        [--end-marker <end-marker>]
                        [--limit <num-containers>] [--long] [--all]
```

Table 23.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--prefix <prefix>	Filter list using <prefix>
--marker <marker>	Anchor for paging
--end-marker <end-marker>	End anchor for paging
--limit <num-containers>	Limit the number of containers returned
--long	List additional fields in output
--all	List all containers (default is 10000)

Table 23.10. Output formatter options

Value	Summary
-f {csv,json,table,value,yaml}, --format {csv,json,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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 23.11. CSV formatter options

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

Table 23.12. JSON formatter options

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

Table 23.13. Table formatter options

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

23.4. CONTAINER SAVE

Save container contents locally

Usage:

```
openstack container save [-h] <container>
```

Table 23.14. Positional arguments

Value	Summary
<container>	Container to save

Table 23.15. Command arguments

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

23.5. CONTAINER SET

Set container properties

Usage:

```
openstack container set [-h] --property <key=value> <container>
```

Table 23.16. Positional arguments

Value	Summary
<container>	Container to modify

Table 23.17. Command 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)

23.6. CONTAINER SHOW

Display container details

Usage:

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

Table 23.18. Positional arguments

Value	Summary
<container>	Container to display

Table 23.19. Command arguments

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

Table 23.20. Output formatter options

Value	Summary
-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 to show multiple columns

Table 23.21. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 23.22. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 23.23. Table formatter options

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

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

23.7. CONTAINER UNSET

Unset container properties

Usage:

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

Table 23.24. Positional arguments

Value	Summary
<code><container></code>	Container to modify

Table 23.25. Command arguments

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

CHAPTER 24. CREDENTIAL

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

24.1. CREDENTIAL CREATE

Create new credential

Usage:

```
openstack credential create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--type <type>]
                             [--project <project>]
                             <user> <data>
```

Table 24.1. Positional arguments

Value	Summary
<user>	User that owns the credential (name or id)
<data>	New credential data

Table 24.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--type <type>	New credential type: cert, ec2, totp and so on
--project <project>	Project which limits the scope of the credential (name or ID)

Table 24.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 24.4. JSON formatter options

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

Table 24.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 24.6. Table formatter options

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

24.2. CREDENTIAL DELETE

Delete credential(s)

Usage:

```
openstack credential delete [-h] <credential-id> [<credential-id> ...]
```

Table 24.7. Positional arguments

Value	Summary
<code><credential-id></code>	Id of credential(s) to delete

Table 24.8. Command arguments

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

24.3. CREDENTIAL LIST

List credentials

Usage:

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

Table 24.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	Filter credentials by <user> (name or id)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--type <type>	Filter credentials by type: cert, ec2, totp and so on

Table 24.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 24.11. CSV formatter options

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

Table 24.12. JSON formatter options

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

Table 24.13. Table formatter options

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

24.4. CREDENTIAL SET

Set credential properties

Usage:

```
openstack credential set [-h] --user <user> --type <type> --data <data>
                        [--project <project>]
                        <credential-id>
```

Table 24.14. Positional arguments

Value	Summary
<code><credential-id></code>	Id of credential to change

Table 24.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--user <user></code>	User that owns the credential (name or id)

Value	Summary
<code>--type <type></code>	New credential type: cert, ec2, totp and so on
<code>--data <data></code>	New credential data
<code>--project <project></code>	Project which limits the scope of the credential (name or ID)

24.5. CREDENTIAL SHOW

Display credential details

Usage:

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

Table 24.16. Positional arguments

Value	Summary
<code><credential-id></code>	Id of credential to display

Table 24.17. Command arguments

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

Table 24.18. Output formatter options

Value	Summary
<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 to show multiple columns

Table 24.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 24.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 24.21. Table formatter options

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

CHAPTER 25. CRON

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

25.1. CRON TRIGGER CREATE

Create new trigger.

Usage:

```
openstack cron trigger create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--params PARAMS] [--pattern <* * * * *>]
                             [--first-time <YYYY-MM-DD HH:MM>]
                             [--count <integer>] [--utc]
                             name workflow_identifier [workflow_input]
```

Table 25.1. Positional arguments

Value	Summary
name	Cron trigger name
workflow_identifier	Workflow name or id
workflow_input	Workflow input

Table 25.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--params PARAMS	Workflow params
--pattern <* * * * *>	Cron trigger pattern
--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
--count <integer>	Number of wanted executions
--utc	All times specified should be treated as utc

Table 25.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 25.4. JSON formatter options

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

Table 25.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 25.6. Table formatter options

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

25.2. CRON TRIGGER DELETE

Delete trigger.

Usage:

```
openstack cron trigger delete [-h] cron_trigger [cron_trigger ...]
```

Table 25.7. Positional arguments

Value	Summary
<code>cron_trigger</code>	Name of cron trigger(s).

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

Table 25.8. Command arguments

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

25.3. CRON TRIGGER LIST

List all cron triggers.

Usage:

```

openstack cron trigger list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--marker [MARKER]] [--limit [LIMIT]]
                             [--sort_keys [SORT_KEYS]]
                             [--sort_dirs [SORT_DIRS]]
                             [--filter FILTERS]

```

Table 25.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Table 25.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 25.11. CSV formatter options

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

Table 25.12. JSON formatter options

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

Table 25.13. Table formatter options

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

25.4. CRON TRIGGER SHOW

Show specific cron trigger.

Usage:

```

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

```

Table 25.14. Positional arguments

Value	Summary
cron_trigger	Cron trigger name

Table 25.15. Command arguments

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

Table 25.16. Output formatter options

Value	Summary
-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 to show multiple columns

Table 25.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 25.18. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 25.19. Table formatter options

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

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

CHAPTER 26. DATASTORE

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

26.1. DATASTORE DELETE

Deletes a datastore

Usage:

```
openstack datastore delete [-h] <datastore>
```

Table 26.1. Positional arguments

Value	Summary
<datastore>	Id or name of the datastore

Table 26.2. Command arguments

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

26.2. DATASTORE LIST

List available datastores

Usage:

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

Table 26.3. Command arguments

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

Table 26.4. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 26.5. CSV formatter options

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

Table 26.6. JSON formatter options

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

Table 26.7. Table formatter options

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

26.3. DATASTORE SHOW

Shows details of a datastore

Usage:

```

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

```

Table 26.8. Positional arguments

Value	Summary
<datastore>	Id of the datastore

Table 26.9. Command arguments

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

Table 26.10. Output formatter options

Value	Summary
-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 to show multiple columns

Table 26.11. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 26.12. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 26.13. Table formatter options

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

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

26.4. DATASTORE VERSION CREATE

Creates a datastore version.

Usage:

```
openstack datastore version create [-h] [--active]
                                   [--image-tags IMAGE_TAGS]
                                   [--default]
                                   [--version-number VERSION_NUMBER]
                                   version_name datastore_name
                                   datastore_manager image_id
```

Table 26.14. Positional arguments

Value	Summary
<code>version_name</code>	Datastore version name.
<code>datastore_name</code>	Datastore name. the datastore is created automatically if does not exist.
<code>datastore_manager</code>	Datastore manager, e.g. mysql
<code>image_id</code>	Id of the datastore image in glance. this can be empty string if <code>--image-tags</code> is specified.

Table 26.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--active</code>	Enable the datastore version.

Value	Summary
<code>--image-tags IMAGE_TAGS</code>	List of image tags separated by comma, e.g. <code>trove,mysql</code>
<code>--default</code>	If set the datastore version as default.
<code>--version-number VERSION_NUMBER</code>	The version number for the database. if not specified, use the version name as the default value.

26.5. DATASTORE VERSION DELETE

Deletes a datastore version.

Usage:

```
openstack datastore version delete [-h] <datastore_version>
```

Table 26.16. Positional arguments

Value	Summary
<code><datastore_version></code>	Id of the datastore version.

Table 26.17. Command arguments

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

26.6. DATASTORE VERSION LIST

Lists available versions for a datastore

Usage:

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

Table 26.18. Positional arguments

Value	Summary
<datastore>	Id or name of the datastore

Table 26.19. Command arguments

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

Table 26.20. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 26.21. CSV formatter options

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

Table 26.22. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 26.23. Table formatter options

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

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

26.7. DATASTORE VERSION SET

Updates a datastore version.

Usage:

```

openstack datastore version set [-h]
                                [--datastore-manager DATASTORE_MANAGER]
                                [--image IMAGE]
                                [--image-tags IMAGE_TAGS]
                                [--version-name VERSION_NAME]
                                [--enable | --disable]
                                [--default | --non-default]
                                datastore_version_id

```

Table 26.24. Positional arguments

Value	Summary
<code>datastore_version_id</code>	Datastore version id.

Table 26.25. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--datastore-manager DATASTORE_MANAGER</code>	Datastore manager name.
<code>--image IMAGE</code>	Id of the datastore image in glance.
<code>--image-tags IMAGE_TAGS</code>	List of image tags separated by comma, e.g. <code>trove,mysql</code>

Value	Summary
<code>--version-name VERSION_NAME</code>	New datastore version name.
<code>--enable--disable--default--non-default</code>	None

26.8. DATASTORE VERSION SHOW

Shows details of a datastore version.

Usage:

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

Table 26.26. Positional arguments

Value	Summary
<code><datastore_version></code>	Id or name of the datastore version.

Table 26.27. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--datastore <datastore></code>	Id or name of the datastore. optional if the id of the <code>datastore_version</code> is provided.

Table 26.28. Output formatter options

Value	Summary
<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 to show multiple columns

Table 26.29. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 26.30. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 26.31. Table formatter options

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

CHAPTER 27. DNS

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

27.1. DNS QUOTA LIST

List quotas

Usage:

```
openstack dns quota list [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        [--project-id PROJECT_ID]
```

Table 27.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--project-id PROJECT_ID	Project id default: current project

Table 27.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 27.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 27.4. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 27.5. Table formatter options

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

27.2. DNS QUOTA RESET

Reset quotas

Usage:

```
openstack dns quota reset [-h] [--all-projects]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          [--project-id PROJECT_ID]
```

Table 27.6. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--project-id PROJECT_ID	Project id

27.3. DNS QUOTA SET

Set quotas

Usage:

```
openstack dns quota set [-h] [-f {json,shell,table,value,yaml}]
```

```

[-c COLUMN] [--noindent] [--prefix PREFIX]
[--max-width <integer>] [--fit-width]
[--print-empty] [--all-projects]
[--sudo-project-id SUDO_PROJECT_ID]
[--project-id PROJECT_ID]
[--api-export-size <api-export-size>]
[--recordset-records <recordset-records>]
[--zone-records <zone-records>]
[--zone-recordsets <zone-recordsets>]
[--zones <zones>]

```

Table 27.7. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--project-id PROJECT_ID	Project id
--api-export-size <api-export-size>	New value for the api-export-size quota
--recordset-records <recordset-records>	New value for the recordset-records quota
--zone-records <zone-records>	New value for the zone-records quota
--zone-recordsets <zone-recordsets>	New value for the zone-recordsets quota
--zones <zones>	New value for the zones quota

Table 27.8. Output formatter options

Value	Summary
-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 to show multiple columns

Table 27.9. JSON formatter options

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

Table 27.10. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 27.11. Table formatter options

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

27.4. DNS SERVICE LIST

List service statuses

Usage:

```
openstack dns service list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--hostname HOSTNAME]
                          [--service_name SERVICE_NAME]
                          [--status STATUS] [--all-projects]
                          [--sudo-project-id SUDO_PROJECT_ID]
```

Table 27.12. Command arguments

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

Value	Summary
<code>--hostname HOSTNAME</code>	Hostname
<code>--service_name SERVICE_NAME</code>	Service name
<code>--status STATUS</code>	Status
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 27.13. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 27.14. CSV formatter options

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

Table 27.15. JSON formatter options

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

Table 27.16. Table formatter options

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

27.5. DNS SERVICE SHOW

Show service status details

Usage:

```
openstack dns service show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--all-projects]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          id
```

Table 27.17. Positional arguments

Value	Summary
<code>id</code>	Service status id

Table 27.18. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 27.19. Output formatter options

Value	Summary
<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 to show multiple columns

Table 27.20. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 27.21. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 27.22. Table formatter options

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

CHAPTER 28. DOMAIN

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

28.1. DOMAIN CREATE

Create new domain

Usage:

```
openstack domain create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--description <description>]
                        [--enable | --disable] [--or-show]
                        [--immutable | --no-immutable]
                        <domain-name>
```

Table 28.1. Positional arguments

Value	Summary
<domain-name>	New domain name

Table 28.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	New domain description
--enable	Enable domain (default)
--disable	Disable domain
--or-show	Return existing domain
--immutable	Make resource immutable. an immutable project may not be deleted or modified except to remove the immutable flag
--no-immutable	Make resource mutable (default)

Table 28.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 28.4. JSON formatter options

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

Table 28.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 28.6. Table formatter options

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

28.2. DOMAIN DELETE

Delete domain(s)

Usage:

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

Table 28.7. Positional arguments

Value	Summary
<domain>	Domain(s) to delete (name or id)

Table 28.8. Command arguments

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

28.3. DOMAIN LIST

List domains

Usage:

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

Table 28.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	The domain name
--enabled	The domains that are enabled will be returned

Table 28.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 28.11. CSV formatter options

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

Table 28.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 28.13. Table formatter options

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

28.4. DOMAIN SET

Set domain properties

Usage:

```

openstack domain set [-h] [--name <name>] [--description <description>]
                    [--enable | --disable]
                    [--immutable | --no-immutable]
                    <domain>

```

Table 28.14. Positional arguments

Value	Summary
<domain>	Domain to modify (name or id)

Table 28.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New domain name
--description <description>	New domain description
--enable	Enable domain
--disable	Disable domain
--immutable	Make resource immutable. an immutable project may not be deleted or modified except to remove the immutable flag
--no-immutable	Make resource mutable (default)

28.5. DOMAIN SHOW

Display domain details

Usage:

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

Table 28.16. Positional arguments

Value	Summary
<domain>	Domain to display (name or id)

Table 28.17. Command arguments

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

Table 28.18. Output formatter options

Value	Summary
<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 to show multiple columns

Table 28.19. JSON formatter options

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

Table 28.20. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 28.21. Table formatter options

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

CHAPTER 29. DYNAMIC

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

29.1. DYNAMIC ACTION CREATE

Create new action.

Usage:

```
openstack dynamic action create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--public]
                                [--namespace [NAMESPACE]]
                                name class_name code_source
```

Table 29.1. Positional arguments

Value	Summary
name	Dynamic action name
class_name	Dynamic action class name
code_source	Code source id or name

Table 29.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--public	With this flag an action will be marked as "public".
--namespace [NAMESPACE]	Namespace to create the action within.

Table 29.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 29.4. JSON formatter options

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

Table 29.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 29.6. Table formatter options

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

29.2. DYNAMIC ACTION DELETE

Delete action.

Usage:

```
openstack dynamic action delete [-h] [--namespace [NAMESPACE]]
                                identifier [identifier ...]
```

Table 29.7. Positional arguments

Value	Summary
identifier	Dynamic action name or id (can be repeated multiple times).

Table 29.8. Command arguments

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

Value	Summary
<code>--namespace [NAMESPACE]</code>	Namespace of the dynamic action(s).

29.3. DYNAMIC ACTION LIST

List all dynamic actions.

Usage:

```

openstack dynamic action list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--marker [MARKER]] [--limit [LIMIT]]
                             [--sort_keys [SORT_KEYS]]
                             [--sort_dirs [SORT_DIRS]]
                             [--filter FILTERS]
                             [--namespace [NAMESPACE]]

```

Table 29.9. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--marker [MARKER]</code>	The last execution uuid of the previous page, displays list of executions after "marker".
<code>--limit [LIMIT]</code>	Maximum number of entries to return in a single result.
<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>--filter FILTERS</code>	Filters. can be repeated.
<code>--namespace [NAMESPACE]</code>	Namespace of dynamic actions.

Table 29.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 29.11. CSV formatter options

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

Table 29.12. JSON formatter options

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

Table 29.13. Table formatter options

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

29.4. DYNAMIC ACTION SHOW

Show specific dynamic action.

Usage:

```

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

```

Table 29.14. Positional arguments

Value	Summary
identifier	Dynamic action identifier (name or id)

Table 29.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to create the dynamic action within.

Table 29.16. Output formatter options

Value	Summary
-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 to show multiple columns

Table 29.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 29.18. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 29.19. Table formatter options

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

29.5. DYNAMIC ACTION UPDATE

Update dynamic action.

Usage:

```

openstack dynamic action update [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--class-name [CLASS_NAME]]
                                [--code-source [CODE_SOURCE]]
                                [--public] [--namespace [NAMESPACE]]
                                identifier

```

Table 29.20. Positional arguments

Value	Summary
identifier	Dynamic action identifier (id or name)

Table 29.21. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--class-name [CLASS_NAME]</code>	Dynamic action class name.
<code>--code-source [CODE_SOURCE]</code>	Code source identifier (id or name).
<code>--public</code>	With this flag action will be marked as "public".
<code>--namespace [NAMESPACE]</code>	Namespace of the action.

Table 29.22. Output formatter options

Value	Summary
<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 to show multiple columns

Table 29.23. JSON formatter options

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

Table 29.24. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 29.25. Table formatter options

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

CHAPTER 30. EC2

This chapter describes the commands under the **ec2** command.

30.1. EC2 CREDENTIALS CREATE

Create EC2 credentials

Usage:

```
openstack ec2 credentials create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--project <project>]
                                [--user <user>]
                                [--user-domain <user-domain>]
                                [--project-domain <project-domain>]
```

Table 30.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Create credentials in project (name or id; default: current authenticated project)
--user <user>	Create credentials for user (name or id; default: current authenticated user)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 30.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 30.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 30.4. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 30.5. Table formatter options

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

30.2. EC2 CREDENTIALS DELETE

Delete EC2 credentials

Usage:

```
openstack ec2 credentials delete [-h] [--user <user>]
                                [--user-domain <user-domain>]
                                <access-key> [<access-key> ...]
```

Table 30.6. Positional arguments

Value	Summary
<access-key>	Credentials access key(s)

Table 30.7. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	Delete credentials for user (name or id)

Value	Summary
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

30.3. EC2 CREDENTIALS LIST

List EC2 credentials

Usage:

```
openstack ec2 credentials list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--user <user>]
                               [--user-domain <user-domain>]
```

Table 30.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--user <user></code>	Filter list by user (name or id)
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Table 30.9. Output formatter options

Value	Summary
<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 to show multiple columns
<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

Value	Summary
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 30.10. CSV formatter options

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

Table 30.11. JSON formatter options

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

Table 30.12. Table formatter options

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

30.4. EC2 CREDENTIALS SHOW

Display EC2 credentials details

Usage:

```
openstack ec2 credentials show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--user <user>]
                               [--user-domain <user-domain>]
                               <access-key>
```

Table 30.13. Positional arguments

Value	Summary
<access-key>	Credentials access key

Table 30.14. Command arguments

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

Table 30.15. Output formatter options

Value	Summary
-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 to show multiple columns

Table 30.16. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 30.17. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 30.18. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 31. ENDPOINT

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

31.1. ENDPOINT ADD PROJECT

Associate a project to an endpoint

Usage:

```
openstack endpoint add project [-h] [--project-domain <project-domain>]
                               <endpoint> <project>
```

Table 31.1. Positional arguments

Value	Summary
<endpoint>	Endpoint to associate with specified project (name or ID)
<project>	Project to associate with specified endpoint name or ID)

Table 31.2. Command 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.

31.2. ENDPOINT CREATE

Create new endpoint

Usage:

```
openstack endpoint create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--region <region-id>]
                          [--enable | --disable]
                          <service> <interface> <url>
```

Table 31.3. Positional arguments

Value	Summary
<service>	Service to be associated with new endpoint (name or ID)
<interface>	New endpoint interface type (admin, public or internal)
<url>	New endpoint url

Table 31.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--region <region-id>	New endpoint region id
--enable	Enable endpoint (default)
--disable	Disable endpoint

Table 31.5. Output formatter options

Value	Summary
-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 to show multiple columns

Table 31.6. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.7. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 31.8. Table formatter options

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

31.3. ENDPOINT DELETE

Delete endpoint(s)

Usage:

```
openstack endpoint delete [-h] <endpoint-id> [<endpoint-id> ...]
```

Table 31.9. Positional arguments

Value	Summary
<code><endpoint-id></code>	Endpoint(s) to delete (id only)

Table 31.10. Command arguments

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

31.4. ENDPOINT GROUP ADD PROJECT

Add a project to an endpoint group

Usage:

```
openstack endpoint group add project [-h]
    [--project-domain <project-domain>]
    <endpoint-group> <project>
```

Table 31.11. Positional arguments

Value	Summary
<code><endpoint-group></code>	Endpoint group (name or id)

Value	Summary
<project>	Project to associate (name or id)

Table 31.12. Command 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.

31.5. ENDPOINT GROUP CREATE

Create new endpoint group

Usage:

```
openstack endpoint group create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description DESCRIPTION]
                               <name> <filename>
```

Table 31.13. Positional arguments

Value	Summary
<name>	Name of the endpoint group
<filename>	Filename that contains a new set of filters

Table 31.14. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description DESCRIPTION	Description of the endpoint group

Table 31.15. Output formatter options

Value	Summary
<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 to show multiple columns

Table 31.16. JSON formatter options

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

Table 31.17. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 31.18. Table formatter options

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

31.6. ENDPOINT GROUP DELETE

Delete endpoint group(s)

Usage:

```
openstack endpoint group delete [-h]
                                <endpoint-group> [<endpoint-group> ...]
```

Table 31.19. Positional arguments

Value	Summary
<endpoint-group>	Endpoint group(s) to delete (name or id)

Table 31.20. Command arguments

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

31.7. ENDPOINT GROUP LIST

List endpoint groups

Usage:

```
openstack endpoint group list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--endpointgroup <endpoint-group> | --project <project>]
                             [--domain <domain>]
```

Table 31.21. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--endpointgroup <endpoint-group>	Endpoint group (name or id)
--project <project>	Project (name or id)
--domain <domain>	Domain owning <project> (name or id)

Table 31.22. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 31.23. CSV formatter options

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

Table 31.24. JSON formatter options

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

Table 31.25. Table formatter options

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

31.8. ENDPOINT GROUP REMOVE PROJECT

Remove project from endpoint group

Usage:

```
openstack endpoint group remove project [-h]
                                     [--project-domain <project-domain>]
                                     <endpoint-group> <project>
```

Table 31.26. Positional arguments

Value	Summary
<endpoint-group>	Endpoint group (name or id)
<project>	Project to remove (name or id)

Table 31.27. Command 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.

31.9. ENDPOINT GROUP SET

Set endpoint group properties

Usage:

```
openstack endpoint group set [-h] [--name <name>]
                             [--filters <filename>]
                             [--description <description>]
                             <endpoint-group>
```

Table 31.28. Positional arguments

Value	Summary
<endpoint-group>	Endpoint group to modify (name or id)

Table 31.29. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New endpoint group name
--filters <filename>	Filename that contains a new set of filters
--description <description>	New endpoint group description

31.10. ENDPOINT GROUP SHOW

Display endpoint group details

Usage:

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

Table 31.30. Positional arguments

Value	Summary
<endpointgroup>	Endpoint group (name or id)

Table 31.31. Command arguments

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

Table 31.32. Output formatter options

Value	Summary
-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 to show multiple columns

Table 31.33. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.34. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 31.35. Table formatter options

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

31.11. ENDPOINT LIST

List endpoints

Usage:

```
openstack endpoint list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--service <service>] [--interface <interface>]
                        [--region <region-id>]
                        [--endpoint <endpoint-group> | --project <project>]
                        [--project-domain <project-domain>]
```

Table 31.36. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--service <service></code>	Filter by service (type, name or id)
<code>--interface <interface></code>	Filter by interface type (admin, public or internal)
<code>--region <region-id></code>	Filter by region id
<code>--endpoint <endpoint-group></code>	Endpoint to list filters
<code>--project <project></code>	Project to list filters (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 31.37. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 31.38. CSV formatter options

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

Table 31.39. JSON formatter options

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

Table 31.40. Table formatter options

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

31.12. ENDPOINT REMOVE PROJECT

Dissociate a project from an endpoint

Usage:

```
openstack endpoint remove project [-h]
                                [--project-domain <project-domain>]
                                <endpoint> <project>
```

Table 31.41. Positional arguments

Value	Summary
<endpoint>	Endpoint to dissociate from specified project (name or ID)
<project>	Project to dissociate from specified endpoint name or ID)

Table 31.42. Command 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.

31.13. ENDPOINT SET

Set endpoint properties

Usage:

```
openstack endpoint set [-h] [--region <region-id>]
                       [--interface <interface>] [--url <url>]
                       [--service <service>] [--enable | --disable]
                       <endpoint-id>
```

Table 31.43. Positional arguments

Value	Summary
<endpoint-id>	Endpoint to modify (id only)

Table 31.44. Command arguments

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

Value	Summary
--region <region-id>	New endpoint region id
--interface <interface>	New endpoint interface type (admin, public or internal)
--url <url>	New endpoint url
--service <service>	New endpoint service (name or id)
--enable	Enable endpoint
--disable	Disable endpoint

31.14. ENDPOINT SHOW

Display endpoint details

Usage:

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

Table 31.45. Positional arguments

Value	Summary
<endpoint>	Endpoint to display (endpoint id, service id, service name, service type)

Table 31.46. Command arguments

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

Table 31.47. Output formatter options

Value	Summary
-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 to show multiple columns

Table 31.48. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.49. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 31.50. Table formatter options

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

CHAPTER 32. EVENT

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

32.1. EVENT TRIGGER CREATE

Create new trigger.

Usage:

```
openstack event trigger create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--params PARAMS]
                               name workflow_id exchange topic event
                               [workflow_input]
```

Table 32.1. Positional arguments

Value	Summary
name	Event trigger name
workflow_id	Workflow id
exchange	Event trigger exchange
topic	Event trigger topic
event	Event trigger event name
workflow_input	Workflow input

Table 32.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--params PARAMS	Workflow params

Table 32.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 32.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 32.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 32.6. Table formatter options

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

32.2. EVENT TRIGGER DELETE

Delete trigger.

Usage:

```
openstack event trigger delete [-h]
                               event_trigger_id [event_trigger_id ...]
```

Table 32.7. Positional arguments

Value	Summary
event_trigger_id	Id of event trigger(s).

Table 32.8. Command arguments

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

32.3. EVENT TRIGGER LIST

List all event triggers.

Usage:

```

openstack event trigger list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--marker [MARKER]] [--limit [LIMIT]]
                             [--sort_keys [SORT_KEYS]]
                             [--sort_dirs [SORT_DIRS]]
                             [--filter FILTERS]

```

Table 32.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Table 32.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 32.11. CSV formatter options

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

Table 32.12. JSON formatter options

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

Table 32.13. Table formatter options

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

32.4. EVENT TRIGGER SHOW

Show specific event trigger.

Usage:

```

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

```

Table 32.14. Positional arguments

Value	Summary
event_trigger	Event trigger id

Table 32.15. Command arguments

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

Table 32.16. Output formatter options

Value	Summary
-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 to show multiple columns

Table 32.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 32.18. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 32.19. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 33. EXTENSION

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

33.1. EXTENSION LIST

List API extensions

Usage:

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

Table 33.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--compute	List extensions for the compute api
--identity	List extensions for the identity api
--network	List extensions for the network api
--volume	List extensions for the block storage api
--long	List additional fields in output

Table 33.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 33.3. CSV formatter options

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

Table 33.4. JSON formatter options

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

Table 33.5. Table formatter options

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

33.2. EXTENSION SHOW

Show API extension

Usage:

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

Table 33.6. Positional arguments

Value	Summary
<extension>	Extension to display. currently, only network extensions are supported. (Name or Alias)

Table 33.7. Command arguments

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

Table 33.8. Output formatter options

Value	Summary
-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 to show multiple columns

Table 33.9. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 33.10. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 33.11. Table formatter options

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

CHAPTER 34. FEDERATION

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

34.1. FEDERATION DOMAIN LIST

List accessible domains

Usage:

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

Table 34.1. Command arguments

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

Table 34.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 34.3. CSV formatter options

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

Table 34.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 34.5. Table formatter options

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

34.2. FEDERATION PROJECT LIST

List accessible projects

Usage:

```

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

```

Table 34.6. Command arguments

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

Table 34.7. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 34.8. CSV formatter options

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

Table 34.9. JSON formatter options

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

Table 34.10. Table formatter options

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

34.3. FEDERATION PROTOCOL CREATE

Create new federation protocol

Usage:

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

```

--identity-provider
<identity-provider> --mapping
<mapping>
<name>

```

Table 34.11. Positional arguments

Value	Summary
<name>	New federation protocol name (must be unique per identity provider)

Table 34.12. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--identity-provider <identity-provider>	Identity provider that will support the new federation protocol (name or ID) (required)
--mapping <mapping>	Mapping that is to be used (name or id) (required)

Table 34.13. Output formatter options

Value	Summary
-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 to show multiple columns

Table 34.14. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 34.15. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 34.16. Table formatter options

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

34.4. FEDERATION PROTOCOL DELETE

Delete federation protocol(s)

Usage:

```
openstack federation protocol delete [-h] --identity-provider
    <identity-provider>
    <federation-protocol>
    [<federation-protocol> ...]
```

Table 34.17. Positional arguments

Value	Summary
<code><federation-protocol></code>	Federation protocol(s) to delete (name or id)

Table 34.18. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--identity-provider <identity-provider></code>	Identity provider that supports <code><federation-protocol></code> (name or ID) (required)

34.5. FEDERATION PROTOCOL LIST

List federation protocols

Usage:

```
openstack federation protocol list [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
--identity-provider
<identity-provider>

```

Table 34.19. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--identity-provider <identity-provider>	Identity provider to list (name or id) (required)

Table 34.20. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 34.21. CSV formatter options

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

Table 34.22. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 34.23. Table formatter options

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

34.6. FEDERATION PROTOCOL SET

Set federation protocol properties

Usage:

```
openstack federation protocol set [-h] --identity-provider
    <identity-provider>
    [--mapping <mapping>]
    <name>
```

Table 34.24. Positional arguments

Value	Summary
<code><name></code>	Federation protocol to modify (name or id)

Table 34.25. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--identity-provider <identity-provider></code>	Identity provider that supports <federation-protocol> (name or ID) (required)
<code>--mapping <mapping></code>	Mapping that is to be used (name or id)

34.7. FEDERATION PROTOCOL SHOW

Display federation protocol details

Usage:

```
openstack federation protocol show [-h]
    [-f {json,shell,table,value,yaml}]
```

```

[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
--identity-provider
<identity-provider>
<federation-protocol>

```

Table 34.26. Positional arguments

Value	Summary
<federation-protocol>	Federation protocol to display (name or id)

Table 34.27. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--identity-provider <identity-provider>	Identity provider that supports <federation-protocol> (name or ID) (required)

Table 34.28. Output formatter options

Value	Summary
-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 to show multiple columns

Table 34.29. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 34.30. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 34.31. Table formatter options

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

CHAPTER 35. FLAVOR

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

35.1. FLAVOR CREATE

Create new flavor

Usage:

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

Table 35.1. Positional arguments

Value	Summary
<flavor-name>	New flavor name

Table 35.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--id <id>	Unique flavor id
--ram <size-mb>	Memory size in mb (default 256m)
--disk <size-gb>	Disk size in gb (default 0g)
--ephemeral <size-gb>	Ephemeral disk size in gb (default 0g)
--swap <size-mb>	Additional swap space size in mb (default 0m)
--vcpus <vcpus>	Number of vcpus (default 1)
--rxtx-factor <factor>	Rx/tx factor (default 1.0)
--public	Flavor is available to other projects (default)

Value	Summary
<code>--private</code>	Flavor is not available to other projects
<code>--property <key=value></code>	Property to add for this flavor (repeat option to set multiple properties)
<code>--project <project></code>	Allow <project> to access private flavor (name or id) (Must be used with <code>--private</code> option)
<code>--description <description></code>	Description for the flavor.(supported by api versions 2.55 - 2.latest)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 35.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 35.4. JSON formatter options

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

Table 35.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 35.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

35.2. FLAVOR DELETE

Delete flavor(s)

Usage:

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

Table 35.7. Positional arguments

Value	Summary
<flavor>	Flavor(s) to delete (name or id)

Table 35.8. Command arguments

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

35.3. FLAVOR LIST

List flavors

Usage:

```
openstack flavor list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--public | --private | --all]
                        [--min-disk <min-disk>] [--min-ram <min-ram>]
                        [--long] [--marker <flavor-id>]
                        [--limit <num-flavors>]
```

Table 35.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--public	List only public flavors (default)
--private	List only private flavors
--all	List all flavors, whether public or private
--min-disk <min-disk>	Filters the flavors by a minimum disk space, in gib.
--min-ram <min-ram>	Filters the flavors by a minimum ram, in mib.
--long	List additional fields in output
--marker <flavor-id>	The last flavor id of the previous page
--limit <num-flavors>	Maximum number of flavors to display. this is also configurable on the server. The actual limit used will be the lower of the user-supplied value and the server configuration-derived value

Table 35.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 35.11. CSV formatter options

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

Table 35.12. JSON formatter options

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

Table 35.13. Table formatter options

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

35.4. FLAVOR SET

Set flavor properties

Usage:

```

openstack flavor set [-h] [--no-property] [--property <key=value>]
                    [--project <project>]
                    [--project-domain <project-domain>]
                    [--description <description>]
                    <flavor>

```

Table 35.14. Positional arguments

Value	Summary
<code><flavor></code>	Flavor to modify (name or id)

Table 35.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--no-property</code>	Remove all properties from this flavor (specify both <code>-no-property</code> and <code>--property</code> to remove the current properties before setting new properties.)

Value	Summary
<code>--property <key=value></code>	Property to add or modify for this flavor (repeat option to set multiple properties)
<code>--project <project></code>	Set flavor access to project (name or id) (admin only)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--description <description></code>	Set description for the flavor.(supported by api versions 2.55 - 2.latest)

35.5. FLAVOR SHOW

Display flavor details

Usage:

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

Table 35.16. Positional arguments

Value	Summary
<code><flavor></code>	Flavor to display (name or id)

Table 35.17. Command arguments

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

Table 35.18. Output formatter options

Value	Summary
<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 to show multiple columns

Table 35.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 35.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 35.21. Table formatter options

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

35.6. FLAVOR UNSET

Unset flavor properties

Usage:

```
openstack flavor unset [-h] [--property <key>] [--project <project>]
                        [--project-domain <project-domain>]
                        <flavor>
```

Table 35.22. Positional arguments

Value	Summary
<flavor>	Flavor to modify (name or id)

Table 35.23. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from flavor (repeat option to unset multiple properties)
--project <project>	Remove flavor access from project (name or id) (admin only)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

CHAPTER 36. FLOATING

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

36.1. FLOATING IP CREATE

Create floating IP

Usage:

```
openstack floating ip create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--subnet <subnet>]
                             [--port <port>]
                             [--floating-ip-address <ip-address>]
                             [--fixed-ip-address <ip-address>]
                             [--qos-policy <qos-policy>]
                             [--description <description>]
                             [--project <project>]
                             [--dns-domain <dns-domain>]
                             [--dns-name <dns-name>]
                             [--project-domain <project-domain>]
                             [--tag <tag> | --no-tag]
                             <network>
```

Table 36.1. Positional arguments

Value	Summary
<network>	Network to allocate floating ip from (name or id)

Table 36.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--subnet <subnet>	Subnet on which you want to create the floating ip (name or ID)
--port <port>	Port to be associated with the floating ip (name or ID)
--floating-ip-address <ip-address>	Floating ip address
--fixed-ip-address <ip-address>	Fixed ip address mapped to the floating ip
--qos-policy <qos-policy>	Attach qos policy to the floating ip (name or id)

Value	Summary
<code>--description <description></code>	Set floating ip description
<code>--project <project></code>	Owner's project (name or id)
<code>--dns-domain <dns-domain></code>	Set dns domain for this floating ip
<code>--dns-name <dns-name></code>	Set dns name for this floating ip
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--tag <tag></code>	Tag to be added to the floating ip (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the floating ip

Table 36.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 36.4. JSON formatter options

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

Table 36.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 36.6. Table formatter options

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

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

36.2. FLOATING IP DELETE

Delete floating IP(s)

Usage:

```
openstack floating ip delete [-h] <floating-ip> [<floating-ip> ...]
```

Table 36.7. Positional arguments

Value	Summary
<code><floating-ip></code>	Floating ip(s) to delete (ip address or id)

Table 36.8. Command arguments

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

36.3. FLOATING IP LIST

List floating IP(s)

Usage:

```
openstack floating ip list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--network <network>] [--port <port>]
                          [--fixed-ip-address <ip-address>]
```

```

[--floating-ip-address <ip-address>]
[--long] [--status <status>]
[--project <project>]
[--project-domain <project-domain>]
[--router <router>]
[--tags <tag>[,<tag>,...]]
[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]

```

Table 36.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--network <network>	List floating ip(s) according to given network (name or ID)
--port <port>	List floating ip(s) according to given port (name or ID)
--fixed-ip-address <ip-address>	List floating ip(s) according to given fixed ip address
--floating-ip-address <ip-address>	List floating ip(s) according to given floating ip address
--long	List additional fields in output
--status <status>	List floating ip(s) according to given status (<i>ACTIVE</i> , <i>DOWN</i>)
--project <project>	List floating ip(s) according to given 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.
--router <router>	List floating ip(s) according to given router (name or ID)
--tags <tag>[,<tag>,...]	List floating ip which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List floating ip which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude floating ip which have all given tag(s) (Comma-separated list of tags)

Value	Summary
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude floating ip which have any given tag(s) (Comma-separated list of tags)

Table 36.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 36.11. CSV formatter options

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

Table 36.12. JSON formatter options

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

Table 36.13. Table formatter options

Value	Summary
<code>--max-width <integer></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

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

36.4. 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]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
```

Table 36.14. Command arguments

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

Table 36.15. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 36.16. CSV formatter options

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

Table 36.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 36.18. Table formatter options

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

36.5. FLOATING IP PORT FORWARDING CREATE

Create floating IP port forwarding

Usage:

```

openstack floating ip port forwarding create [-h]
      [-f {json,shell,table,value,yaml}]
      [-c COLUMN] [--noindent]
      [--prefix PREFIX]
      [--max-width <integer>]
      [--fit-width]
      [--print-empty]
      --internal-ip-address
      <internal-ip-address>
      --port <port>
      --internal-protocol-port
      <port-number>
      --external-protocol-port
      <port-number> --protocol
      <protocol>
      [--description <description>]
      <floating-ip>

```

Table 36.19. Positional arguments

Value	Summary
<floating-ip>	Floating ip that the port forwarding belongs to (ip address or ID)

Table 36.20. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--internal-ip-address <internal-ip-address>	The fixed ipv4 address of the network port associated to the floating IP port forwarding
--port <port>	The name or id of the network port associated to the floating IP port forwarding
--internal-protocol-port <port-number>	The protocol port number of the network port fixed IPv4 address associated to the floating IP port forwarding
--external-protocol-port <port-number>	The protocol port number of the port forwarding's floating IP address
--protocol <protocol>	The protocol used in the floating ip port forwarding, for instance: TCP, UDP
--description <description>	A text to describe/contextualize the use of the port forwarding configuration

Table 36.21. Output formatter options

Value	Summary
-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 to show multiple columns

Table 36.22. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 36.23. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 36.24. Table formatter options

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

36.6. FLOATING IP PORT FORWARDING DELETE

Delete floating IP port forwarding

Usage:

```
openstack floating ip port forwarding delete [-h]
                                         <floating-ip>
                                         <port-forwarding-id>
                                         [<port-forwarding-id> ...]
```

Table 36.25. Positional arguments

Value	Summary
<code><floating-ip></code>	Floating ip that the port forwarding belongs to (ip address or ID)
<code><port-forwarding-id></code>	The id of the floating ip port forwarding(s) to delete

Table 36.26. Command arguments

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

36.7. FLOATING IP PORT FORWARDING LIST

List floating IP port forwarding

Usage:

```
openstack floating ip port forwarding list [-h]
                                           [-f {csv,json,table,value,yaml}]
                                           [-c COLUMN]
                                           [--quote {all,minimal,none,nonnumeric}]
                                           [--noindent]
```

```

[--max-width <integer>]
[--fit-width]
[--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--port <port>]
[--external-protocol-port <port-number>]
[--protocol protocol]
<floating-ip>

```

Table 36.27. Positional arguments

Value	Summary
<floating-ip>	Floating ip that the port forwarding belongs to (ip address or ID)

Table 36.28. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--port <port>	Filter the list result by the id or name of the internal network port
--external-protocol-port <port-number>	Filter the list result by the protocol port number of the floating IP
--protocol protocol	Filter the list result by the port protocol

Table 36.29. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 36.30. CSV formatter options

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

Table 36.31. JSON formatter options

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

Table 36.32. Table formatter options

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

36.8. FLOATING IP PORT FORWARDING SET

Set floating IP Port Forwarding Properties

Usage:

```

openstack floating ip port forwarding set [-h] [--port <port>]
                                     [--internal-ip-address <internal-ip-address>]
                                     [--internal-protocol-port <port-number>]
                                     [--external-protocol-port <port-number>]
                                     [--protocol <protocol>]
                                     [--description <description>]
                                     <floating-ip>
                                     <port-forwarding-id>

```

Table 36.33. Positional arguments

Value	Summary
<code><floating-ip></code>	Floating ip that the port forwarding belongs to (ip address or ID)

Value	Summary
<port-forwarding-id>	The id of the floating ip port forwarding

Table 36.34. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--port <port>	The id of the network port associated to the floating IP port forwarding
--internal-ip-address <internal-ip-address>	The fixed ipv4 address of the network port associated to the floating IP port forwarding
--internal-protocol-port <port-number>	The tcp/udp/other protocol port number of the network port fixed IPv4 address associated to the floating IP port forwarding
--external-protocol-port <port-number>	The tcp/udp/other protocol port number of the port forwarding's floating IP address
--protocol <protocol>	The ip protocol used in the floating ip port forwarding
--description <description>	A text to describe/contextualize the use of the port forwarding configuration

36.9. FLOATING IP PORT FORWARDING SHOW

Display floating IP Port Forwarding details

Usage:

```

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

```

Table 36.35. Positional arguments

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

Value	Summary
<floating-ip>	Floating ip that the port forwarding belongs to (ip address or ID)
<port-forwarding-id>	The id of the floating ip port forwarding

Table 36.36. Command arguments

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

Table 36.37. Output formatter options

Value	Summary
-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 to show multiple columns

Table 36.38. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 36.39. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 36.40. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

36.10. FLOATING IP SET

Set floating IP Properties

Usage:

```
openstack floating ip set [-h] [--port <port>]
                        [--fixed-ip-address <ip-address>]
                        [--description <description>]
                        [--qos-policy <qos-policy> | --no-qos-policy]
                        [--tag <tag>] [--no-tag]
                        <floating-ip>
```

Table 36.41. Positional arguments

Value	Summary
<floating-ip>	Floating ip to modify (ip address or id)

Table 36.42. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--port <port>	Associate the floating ip with port (name or id)
--fixed-ip-address <ip-address>	Fixed ip of the port (required only if port has multiple IPs)
--description <description>	Set floating ip description
--qos-policy <qos-policy>	Attach qos policy to the floating ip (name or id)
--no-qos-policy	Remove the qos policy attached to the floating ip
--tag <tag>	Tag to be added to the floating ip (repeat option to set multiple tags)

Value	Summary
--no-tag	Clear tags associated with the floating ip. specify both --tag and --no-tag to overwrite current tags

36.11. FLOATING IP SHOW

Display floating IP details

Usage:

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

Table 36.43. Positional arguments

Value	Summary
<floating-ip>	Floating ip to display (ip address or id)

Table 36.44. Command arguments

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

Table 36.45. Output formatter options

Value	Summary
-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 to show multiple columns

Table 36.46. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 36.47. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 36.48. Table formatter options

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

36.12. FLOATING IP UNSET

Unset floating IP Properties

Usage:

```
openstack floating ip unset [-h] [--port] [--qos-policy]
                             [--tag <tag> | --all-tag]
                             <floating-ip>
```

Table 36.49. Positional arguments

Value	Summary
<floating-ip>	Floating ip to disassociate (ip address or id)

Table 36.50. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--port	Disassociate any port associated with the floating ip
--qos-policy	Remove the qos policy attached to the floating ip
--tag <tag>	Tag to be removed from the floating ip (repeat option to remove multiple tags)

Value	Summary
--all-tag	Clear all tags associated with the floating ip

CHAPTER 37. GROUP

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

37.1. GROUP ADD USER

Add user to group

Usage:

```
openstack group add user [-h] [--group-domain <group-domain>]
                        [--user-domain <user-domain>]
                        <group> <user> [<user> ...]
```

Table 37.1. Positional arguments

Value	Summary
<group>	Group to contain <user> (name or id)
<user>	User(s) to add to <group> (name or id) (repeat option to add multiple users)

Table 37.2. Command arguments

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

37.2. GROUP CONTAINS USER

Check user membership in group

Usage:

```
openstack group contains user [-h] [--group-domain <group-domain>]
                              [--user-domain <user-domain>]
                              <group> <user>
```

Table 37.3. Positional arguments

Value	Summary
<group>	Group to check (name or id)
<user>	User to check (name or id)

Table 37.4. Command arguments

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

37.3. GROUP CREATE

Create new group

Usage:

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

Table 37.5. Positional arguments

Value	Summary
<group-name>	New group name

Table 37.6. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain to contain new group (name or id)
--description <description>	New group description

Value	Summary
<code>--or-show</code>	Return existing group

Table 37.7. Output formatter options

Value	Summary
<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 to show multiple columns

Table 37.8. JSON formatter options

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

Table 37.9. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 37.10. Table formatter options

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

37.4. GROUP DELETE

Delete group(s)

Usage:

```
openstack group delete [-h] [--domain <domain>] <group> [<group> ...]
```

Table 37.11. Positional arguments

Value	Summary
<group>	Group(s) to delete (name or id)

Table 37.12. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain containing group(s) (name or id)

37.5. GROUP LIST

List groups

Usage:

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

Table 37.13. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Filter group list by <domain> (name or id)
--user <user>	Filter group list by <user> (name or id)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--long	List additional fields in output

Table 37.14. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 37.15. CSV formatter options

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

Table 37.16. JSON formatter options

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

Table 37.17. Table formatter options

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

37.6. GROUP REMOVE USER

Remove user from group

Usage:

```
openstack group remove user [-h] [--group-domain <group-domain>]
                             [--user-domain <user-domain>]
                             <group> <user> [<user> ...]
```

Table 37.18. Positional arguments

Value	Summary
<group>	Group containing <user> (name or id)
<user>	User(s) to remove from <group> (name or id) (repeat option to remove multiple users)

Table 37.19. Command arguments

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

37.7. GROUP SET

Set group properties

Usage:

```
openstack group set [-h] [--domain <domain>] [--name <name>]
                    [--description <description>]
                    <group>
```

Table 37.20. Positional arguments

Value	Summary
<group>	Group to modify (name or id)

Table 37.21. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain containing <group> (name or id)

Value	Summary
--name <name>	New group name
--description <description>	New group description

37.8. GROUP SHOW

Display group details

Usage:

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

Table 37.22. Positional arguments

Value	Summary
<group>	Group to display (name or id)

Table 37.23. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain containing <group> (name or id)

Table 37.24. Output formatter options

Value	Summary
-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 to show multiple columns

Table 37.25. JSON formatter options

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

Table 37.26. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 37.27. Table formatter options

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

CHAPTER 38. HELP.ADOC

This chapter describes the commands under the **help.adoc** command.

38.1. HELP

print detailed help for another command

Usage:

```
openstack help [-h] [cmd ...]
```

Table 38.1. Positional arguments

Value	Summary
cmd	Name of the command

Table 38.2. Command arguments

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

CHAPTER 39. HOST

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

39.1. HOST LIST

List hosts

Usage:

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

Table 39.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--zone <zone>	Only return hosts in the availability zone

Table 39.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 39.3. CSV formatter options

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

Table 39.4. JSON formatter options

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

Table 39.5. Table formatter options

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

39.2. HOST SET

Set host properties

Usage:

```
openstack host set [-h] [--enable | --disable]
                  [--enable-maintenance | --disable-maintenance]
                  <host>
```

Table 39.6. Positional arguments

Value	Summary
<code><host></code>	Host to modify (name only)

Table 39.7. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--enable</code>	Enable the host
<code>--disable</code>	Disable the host
<code>--enable-maintenance</code>	Enable maintenance mode for the host

Value	Summary
<code>--disable-maintenance</code>	Disable maintenance mode for the host

39.3. HOST SHOW

Display host details

Usage:

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

Table 39.8. Positional arguments

Value	Summary
<code><host></code>	Name of host

Table 39.9. Command arguments

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

Table 39.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 39.11. CSV formatter options

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

Table 39.12. JSON formatter options

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

Table 39.13. Table formatter options

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

CHAPTER 40. HYPERVISOR

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

40.1. HYPERVISOR LIST

List hypervisors

Usage:

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

Table 40.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--matching <hostname>	Filter hypervisors using <hostname> substring
--marker <marker>	The uuid of the last hypervisor of the previous page; displays list of hypervisors after <i>marker</i> . (supported with --os-compute-api-version 2.33 or above)
--limit <limit>	Maximum number of hypervisors to display. note that there is a configurable max limit on the server, and the limit that is used will be the minimum of what is requested here and what is configured in the server. (supported with --os-compute-api-version 2.33 or above)
--long	List additional fields in output

Table 40.2. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 40.3. CSV formatter options

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

Table 40.4. JSON formatter options

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

Table 40.5. Table formatter options

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

40.2. HYPERVISOR SHOW

Display hypervisor details

Usage:

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

Table 40.6. Positional arguments

Value	Summary
<hypervisor>	Hypervisor to display (name or id)

Table 40.7. Command arguments

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

Table 40.8. Output formatter options

Value	Summary
-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 to show multiple columns

Table 40.9. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.10. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 40.11. Table formatter options

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

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

40.3. HYPERVISOR STATS SHOW

Display hypervisor stats details

Usage:

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

Table 40.12. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 40.13. Output formatter options

Value	Summary
<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 to show multiple columns

Table 40.14. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 40.15. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 40.16. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 41. IDENTITY

This chapter describes the commands under the **identity** command.

41.1. IDENTITY PROVIDER CREATE

Create new identity provider

Usage:

```
openstack identity provider create [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]
                                  [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--remote-id <remote-id> | --remote-id-file <file-name>]
                                  [--description <description>]
                                  [--domain <domain>]
                                  [--enable | --disable]
                                  <name>
```

Table 41.1. Positional arguments

Value	Summary
<name>	New identity provider name (must be unique)

Table 41.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--remote-id <remote-id>	Remote ids to associate with the identity provider (repeat option to provide multiple values)
--remote-id-file <file-name>	Name of a file that contains many remote ids to associate with the identity provider, one per line
--description <description>	New identity provider description
--domain <domain>	Domain to associate with the identity provider. if not specified, a domain will be created automatically. (Name or ID)
--enable	Enable identity provider (default)
--disable	Disable the identity provider

Table 41.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 41.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 41.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

41.2. IDENTITY PROVIDER DELETE

Delete identity provider(s)

Usage:

```
openstack identity provider delete [-h]
                                <identity-provider>
                                [<identity-provider> ...]
```

Table 41.7. Positional arguments

Value	Summary
<identity-provider>	Identity provider(s) to delete

Table 41.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

41.3. IDENTITY PROVIDER LIST

List identity providers

Usage:

```
openstack identity provider list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--id <id>] [--enabled]
```

Table 41.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--id <id>	The identity providers' id attribute
--enabled	The identity providers that are enabled will be returned

Table 41.10. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 41.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 41.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

41.4. IDENTITY PROVIDER SET

Set identity provider properties

Usage:

```
openstack identity provider set [-h] [--description <description>]
                               [--remote-id <remote-id> | --remote-id-file <file-name>]
                               [--enable | --disable]
                               <identity-provider>
```

Table 41.14. Positional arguments

Value	Summary
<identity-provider>	Identity provider to modify

Table 41.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Set identity provider description
--remote-id <remote-id>	Remote ids to associate with the identity provider (repeat option to provide multiple values)
--remote-id-file <file-name>	Name of a file that contains many remote ids to associate with the identity provider, one per line
--enable	Enable the identity provider
--disable	Disable the identity provider

41.5. IDENTITY PROVIDER SHOW

Display identity provider details

Usage:

```
openstack identity provider show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <identity-provider>
```

Table 41.16. Positional arguments

Value	Summary
<identity-provider>	Identity provider to display

Table 41.17. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 41.18. Output formatter options

Value	Summary
-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 to show multiple columns

Table 41.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 41.21. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 42. IMAGE

This chapter describes the commands under the **image** command.

42.1. IMAGE ADD PROJECT

Associate project with image

Usage:

```
openstack image add project [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             [--project-domain <project-domain>]
                             <image> <project>
```

Table 42.1. Positional arguments

Value	Summary
<image>	Image to share (name or id)
<project>	Project to associate with image (id)

Table 42.2. Command 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.

Table 42.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 42.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 42.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 42.6. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

42.2. IMAGE CREATE

Create/upload an image

Usage:

```

openstack image create [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent] [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty] [--id <id>]
    [--container-format <container-format>]
    [--disk-format <disk-format>]
    [--min-disk <disk-gb>] [--min-ram <ram-mb>]
    [--file <file> | --volume <volume>] [--force]
    [--progress] [--sign-key-path <sign-key-path>]
    [--sign-cert-id <sign-cert-id>]
    [--protected | --unprotected]
    [--public | --private | --community | --shared]
    [--property <key=value>] [--tag <tag>]
    [--project <project>] [--import]
    [--project-domain <project-domain>]
    <image-name>

```

Table 42.7. Positional arguments

Value	Summary
<image-name>	New image name

Table 42.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--id <id>	Image id to reserve
--container-format <container-format>	Image container format. the supported options are: ami, ari, aki, bare, docker, ova, ovf. The default format is: bare
--disk-format <disk-format>	Image disk format. the supported options are: ami, ari, aki, vhd, vmdk, raw, qcow2, vhdx, vdi, iso, ploop. The default format is: raw
--min-disk <disk-gb>	Minimum disk size needed to boot image, in gigabytes
--min-ram <ram-mb>	Minimum ram size needed to boot image, in megabytes
--file <file>	Upload image from local file
--volume <volume>	Create image from a volume
--force	Force image creation if volume is in use (only meaningful with --volume)
--progress	Show upload progress bar.
--sign-key-path <sign-key-path>	Sign the image using the specified private key. only use in combination with --sign-cert-id
--sign-cert-id <sign-cert-id>	The specified certificate uuid is a reference to the certificate in the key manager that corresponds to the public key and is used for signature validation. Only use in combination with --sign-key-path
--protected	Prevent image from being deleted
--unprotected	Allow image to be deleted (default)
--public	Image is accessible to the public

Value	Summary
--private	Image is inaccessible to the public (default)
--community	Image is accessible to the community
--shared	Image can be shared
--property <key=value>	Set a property on this image (repeat option to set multiple properties)
--tag <tag>	Set a tag on this image (repeat option to set multiple tags)
--project <project>	Set an alternate project on this image (name or id)
--import	Force the use of glance image import instead of direct upload
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 42.9. Output formatter options

Value	Summary
-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 to show multiple columns

Table 42.10. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 42.11. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 42.12. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

42.3. IMAGE DELETE

Delete image(s)

Usage:

```
openstack image delete [-h] <image> [<image> ...]
```

Table 42.13. Positional arguments

Value	Summary
<code><image></code>	Image(s) to delete (name or id)

Table 42.14. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

42.4. IMAGE LIST

List available images

Usage:

```
openstack image list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--public | --private | --community | --shared]
                    [--property <key=value>] [--name <name>]
                    [--status <status>]
                    [--member-status <member-status>]
                    [--project <project>]
```

```

[--project-domain <project-domain>] [--tag <tag>]
[--long] [--sort <key>[:<direction>]]
[--limit <num-images>] [--marker <image>]

```

Table 42.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--public</code>	List only public images
<code>--private</code>	List only private images
<code>--community</code>	List only community images
<code>--shared</code>	List only shared images
<code>--property <key=value></code>	Filter output based on property (repeat option to filter on multiple properties)
<code>--name <name></code>	Filter images based on name.
<code>--status <status></code>	Filter images based on status.
<code>--member-status <member-status></code>	Filter images based on member status. the supported options are: accepted, pending, rejected, all.
<code>--project <project></code>	Search by project (admin only) (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--tag <tag></code>	Filter images based on tag.
<code>--long</code>	List additional fields in output
<code>--sort <key>[:<direction>]</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>--limit <num-images></code>	Maximum number of images to display.
<code>--marker <image></code>	The last image of the previous page. display list of images after marker. Display all images if not specified. (name or ID)

Table 42.16. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 42.17. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 42.18. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 42.19. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

42.5. IMAGE MEMBER LIST

List projects associated with image

Usage:

```

openstack image member list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--project-domain <project-domain>]
                             <image>

```

Table 42.20. Positional arguments

Value	Summary
<image>	Image (name or id)

Table 42.21. Command 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.

Table 42.22. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 42.23. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 42.24. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 42.25. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

42.6. IMAGE REMOVE PROJECT

Disassociate project with image

Usage:

```
openstack image remove project [-h] [--project-domain <project-domain>]
                               <image> <project>
```

Table 42.26. Positional arguments

Value	Summary
<code><image></code>	Image to unshare (name or id)
<code><project></code>	Project to disassociate with image (name or id)

Table 42.27. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

42.7. IMAGE SAVE

Save an image locally

Usage:

```
openstack image save [-h] [--file <filename>] <image>
```

Table 42.28. Positional arguments

Value	Summary
<code><image></code>	Image to save (name or id)

Table 42.29. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--file <filename></code>	Downloaded image save filename (default: stdout)

42.8. 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 42.30. Positional arguments

Value	Summary
<image>	Image to modify (name or id)

Table 42.31. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New image name
--min-disk <disk-gb>	Minimum disk size needed to boot image, in gigabytes
--min-ram <ram-mb>	Minimum ram size needed to boot image, in megabytes
--container-format <container-format>	Image container format. the supported options are: ami, ari, aki, bare, docker, ova, ovf
--disk-format <disk-format>	Image disk format. the supported options are: ami, ari, aki, vhd, vmdk, raw, qcow2, vhdx, vdi, iso, ploop
--protected	Prevent image from being deleted
--unprotected	Allow image to be deleted (default)
--public	Image is accessible to the public
--private	Image is inaccessible to the public (default)
--community	Image is accessible to the community
--shared	Image can be shared
--property <key=value>	Set a property on this image (repeat option to set multiple properties)
--tag <tag>	Set a tag on this image (repeat option to set multiple tags)

Value	Summary
--architecture <architecture>	Operating system architecture
--instance-id <instance-id>	Id of server instance used to create this image
--kernel-id <kernel-id>	Id of kernel image used to boot this disk image
--os-distro <os-distro>	Operating system distribution name
--os-version <os-version>	Operating system distribution version
--ramdisk-id <ramdisk-id>	Id of ramdisk image used to boot this disk image
--deactivate	Deactivate the image
--activate	Activate the image
--project <project>	Set an alternate project on this image (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.
--accept	Accept the image membership
--reject	Reject the image membership
--pending	Reset the image membership to <i>pending</i>

42.9. IMAGE SHOW

Display image details

Usage:

```
openstack image show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--human-readable]
                    <image>
```

Table 42.32. Positional arguments

Value	Summary
<image>	Image to display (name or id)

Table 42.33. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--human-readable	Print image size in a human-friendly format.

Table 42.34. Output formatter options

Value	Summary
-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 to show multiple columns

Table 42.35. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 42.36. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 42.37. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

42.10. IMAGE UNSET

Unset image tags and properties

Usage:

```
openstack image unset [-h] [--tag <tag>] [--property <property-key>]
<image>
```

Table 42.38. Positional arguments

Value	Summary
<image>	Image to modify (name or id)

Table 42.39. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--tag <tag>	Unset a tag on this image (repeat option to unset multiple tags)
--property <property-key>	Unset a property on this image (repeat option to unset multiple properties)

CHAPTER 43. IMPLIED

This chapter describes the commands under the **implied** command.

43.1. IMPLIED ROLE CREATE

Creates an association between prior and implied roles

Usage:

```
openstack implied role create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             --implied-role <role>
                             <role>
```

Table 43.1. Positional arguments

Value	Summary
<role>	Role (name or id) that implies another role

Table 43.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--implied-role <role>	<role> (name or id) implied by another role

Table 43.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 43.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 43.6. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

43.2. IMPLIED ROLE DELETE

Deletes an association between prior and implied roles

Usage:

```
openstack implied role delete [-h] --implied-role <role> <role>
```

Table 43.7. Positional arguments

Value	Summary
<role>	Role (name or id) that implies another role

Table 43.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--implied-role <role>	<role> (name or id) implied by another role

43.3. IMPLIED ROLE LIST

List implied roles

Usage:

```
openstack implied role list [-h] [-f {csv,json,table,value,yaml}]
```

```

[-c COLUMN]
[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]

```

Table 43.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 43.11. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 43.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 44. IP

This chapter describes the commands under the **ip** command.

44.1. IP AVAILABILITY LIST

List IP availability for network

Usage:

```
openstack ip availability list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--ip-version <ip-version>]
                             [--project <project>]
                             [--project-domain <project-domain>]
```

Table 44.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--ip-version <ip-version>	List ip availability of given ip version networks (default is 4)
--project <project>	List ip availability of given 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 44.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 44.3. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 44.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 44.5. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

44.2. IP AVAILABILITY SHOW

Show network IP availability details

Usage:

```
openstack ip availability show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <network>
```

Table 44.6. Positional arguments

Value	Summary
<network>	Show ip availability for a specific network (name or ID)

Table 44.7. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 44.8. Output formatter options

Value	Summary
-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 to show multiple columns

Table 44.9. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 44.10. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 44.11. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 45. KEYPAIR

This chapter describes the commands under the **keypair** command.

45.1. 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] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        [--public-key <file> | --private-key <file>]
                        [--type <type>] [--user <user>]
                        [--user-domain <user-domain>]
                        <name>
```

Table 45.1. Positional arguments

Value	Summary
<name>	New public or private key name

Table 45.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--public-key <file>	Filename for public key to add. if not used, creates a private key.
--private-key <file>	Filename for private key to save. if not used, print private key in console.
--type <type>	Keypair type. can be ssh or x509. (supported by api versions 2.2 - 2.latest)
--user <user>	The owner of the keypair. (admin only) (name or id). Requires ``--os-compute-api-version`` 2.10 or greater.
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Table 45.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 45.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 45.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 45.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

45.2. KEYPAIR DELETE

Delete public or private key(s)

Usage:

```
openstack keypair delete [-h] [--user <user>]
                        [--user-domain <user-domain>]
                        <key> [<key> ...]
```

Table 45.7. Positional arguments

Value	Summary
<key>	Name of key(s) to delete (name only)

Table 45.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	The owner of the keypair. (admin only) (name or id). Requires ``--os-compute-api-version`` 2.10 or greater.
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

45.3. KEYPAIR LIST

List key fingerprints

Usage:

```

openstack keypair list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--user <user>] [--user-domain <user-domain>]
                        [--project <project>]
                        [--project-domain <project-domain>]
                        [--marker MARKER] [--limit LIMIT]

```

Table 45.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	Show keypairs for another user (admin only) (name or ID). Requires ``--os-compute-api-version`` 2.10 or greater.
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Value	Summary
<code>--project <project></code>	Show keypairs for all users associated with project (admin only) (name or ID). Requires <code>--os-compute-api-version` ` 2.10</code> or greater.
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--marker MARKER</code>	The last keypair id of the previous page
<code>--limit LIMIT</code>	Maximum number of keypairs to display

Table 45.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 45.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 45.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 45.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

45.4. KEYPAIR SHOW

Display key details

Usage:

```
openstack keypair show [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [--public-key] [--user <user>]
                       [--user-domain <user-domain>]
                       <key>
```

Table 45.14. Positional arguments

Value	Summary
<code><key></code>	Public or private key to display (name only)

Table 45.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--public-key</code>	Show only bare public key paired with the generated key
<code>--user <user></code>	The owner of the keypair. (admin only) (name or id). Requires ``--os-compute-api-version`` 2.10 or greater.
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Table 45.16. Output formatter options

Value	Summary
<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 to show multiple columns

Table 45.17. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 45.18. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 45.19. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 46. L2GW

This chapter describes the commands under the **l2gw** command.

46.1. L2GW CONNECTION CREATE

Create l2gateway-connection

Usage:

```
openstack l2gw connection create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--default-segmentation-id SEG_ID]
                                <GATEWAY-NAME/UUID>
                                <NETWORK-NAME/UUID>
```

Table 46.1. Positional arguments

Value	Summary
<GATEWAY-NAME/UUID>	Descriptive name for logical gateway.
<NETWORK-NAME/UUID>	Network name or uuid.

Table 46.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--default-segmentation-id SEG_ID	Default segmentation-id that will be applied to the interfaces for which segmentation id was not specified in l2-gateway-create command.

Table 46.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 46.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 46.6. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

46.2. L2GW CONNECTION DELETE

Delete a given l2gateway-connection

Usage:

```
openstack l2gw connection delete [-h]
                                <L2_GATEWAY_CONNECTIONS>
                                [<L2_GATEWAY_CONNECTIONS> ...]
```

Table 46.7. Positional arguments

Value	Summary
<L2_GATEWAY_CONNECTIONS>	Id(s) of l2_gateway_connections(s) to delete.

Table 46.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

46.3. L2GW CONNECTION LIST

List l2gateway-connections

Usage:

```
openstack l2gw connection list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--project <project>]
                               [--project-domain <project-domain>]
```

Table 46.9. Command 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 46.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 46.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 46.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 46.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

46.4. L2GW CONNECTION SHOW

Show information of a given l2gateway-connection

Usage:

```
openstack l2gw connection show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <L2_GATEWAY_CONNECTION>
```

Table 46.14. Positional arguments

Value	Summary
<code><L2_GATEWAY_CONNECTION></code>	Id of l2_gateway_connection to look up.

Table 46.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 46.16. Output formatter options

Value	Summary
-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 to show multiple columns

Table 46.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.18. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 46.19. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

46.5. L2GW CREATE

Create l2gateway resource

Usage:

```

openstack l2gw create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--project <project>]
                    [--project-domain <project-domain>]
                    [--device name=name,interface_names=INTERFACE-DETAILS]
                    <GATEWAY-NAME>

```

Table 46.20. Positional arguments

Value	Summary
<GATEWAY-NAME>	Descriptive name for logical gateway.

Table 46.21. Command 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.
--device name=name,interface_names=INTERFACE-DETAILS	Device name and interface-names of l2gateway. INTERFACE-DETAILS is of form "<interface_name1>[<interface_name2>][<seg_id1>[#<seg_id2>]]" (--device option can be repeated)

Table 46.22. Output formatter options

Value	Summary
-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 to show multiple columns

Table 46.23. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.24. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 46.25. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

46.6. L2GW DELETE

Delete a given l2gateway

Usage:

```
openstack l2gw delete [-h] <L2_GATEWAY> [<L2_GATEWAY> ...]
```

Table 46.26. Positional arguments

Value	Summary
<code><L2_GATEWAY></code>	Id(s) or name(s) of l2_gateway to delete.

Table 46.27. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

46.7. L2GW LIST

List l2gateway that belongs to a given tenant

Usage:

```
openstack l2gw list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
```

```

[--print-empty] [--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--project <project>]
[--project-domain <project-domain>]

```

Table 46.28. Command 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 46.29. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 46.30. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 46.31. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.32. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

46.8. L2GW SHOW

Show information of a given l2gateway

Usage:

```
openstack l2gw show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <L2_GATEWAY>
```

Table 46.33. Positional arguments

Value	Summary
<code><L2_GATEWAY></code>	Id or name of l2_gateway to look up.

Table 46.34. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 46.35. Output formatter options

Value	Summary
<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 to show multiple columns

Table 46.36. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 46.37. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 46.38. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

46.9. L2GW UPDATE

Update a given l2gateway

Usage:

```
openstack l2gw update [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--name name]
                    [--device name=name,interface_names=INTERFACE-DETAILS]
                    <L2_GATEWAY>
```

Table 46.39. Positional arguments

Value	Summary
<code><L2_GATEWAY></code>	Id or name of l2_gateway to update.

Table 46.40. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name name	Descriptive name for logical gateway.
--device name=name,interface_names=INTERFACE-DETAILS	Device name and interface-names of l2gateway. INTERFACE-DETAILS is of form "<interface_name1>[<interface_name2>][<seg_id1>[#<seg_id2>]]" (--device option can be repeated)

Table 46.41. Output formatter options

Value	Summary
-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 to show multiple columns

Table 46.42. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.43. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 46.44. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 47. LIMIT

This chapter describes the commands under the **limit** command.

47.1. LIMIT CREATE

Create a limit

Usage:

```
openstack limit create [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [--description <description>]
                       [--region <region>] --project <project>
                       --service <service> --resource-limit
                       <resource-limit>
                       <resource-name>
```

Table 47.1. Positional arguments

Value	Summary
<resource-name>	The name of the resource to limit

Table 47.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the limit
--region <region>	Region for the limit to affect.
--project <project>	Project to associate the resource limit to
--service <service>	Service responsible for the resource to limit
--resource-limit <resource-limit>	The resource limit for the project to assume

Table 47.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 47.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 47.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 47.6. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

47.2. LIMIT DELETE

Delete a limit

Usage:

```
openstack limit delete [-h] <limit-id> [<limit-id> ...]
```

Table 47.7. Positional arguments

Value	Summary
<limit-id>	Limit to delete (id)

Table 47.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

47.3. LIMIT LIST

List limits

Usage:

```
openstack limit list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--service <service>]
                    [--resource-name <resource-name>]
                    [--region <region>] [--project <project>]
```

Table 47.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--service <service>	Service responsible for the resource to limit
--resource-name <resource-name>	The name of the resource to limit
--region <region>	Region for the registered limit to affect.
--project <project>	List resource limits associated with project

Table 47.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 47.11. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 47.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 47.13. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

47.4. LIMIT SET

Update information about a limit

Usage:

```
openstack limit set [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--description <description>]
                    [--resource-limit <resource-limit>]
                    <limit-id>
```

Table 47.14. Positional arguments

Value	Summary
<limit-id>	Limit to update (id)

Table 47.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the limit
--resource-limit <resource-limit>	The resource limit for the project to assume

Table 47.16. Output formatter options

Value	Summary
-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 to show multiple columns

Table 47.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 47.18. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 47.19. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

47.5. LIMIT SHOW

Display limit details

Usage:

```
openstack limit show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <limit-id>
```

Table 47.20. Positional arguments

Value	Summary
<code><limit-id></code>	Limit to display (id)

Table 47.21. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 47.22. Output formatter options

Value	Summary
<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 to show multiple columns

Table 47.23. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 47.24. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 47.25. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 48. LIMITS

This chapter describes the commands under the **limits** command.

48.1. LIMITS SHOW

Show compute and block storage limits

Usage:

```
openstack limits show [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        (--absolute | --rate) [--reserved]
                        [--project <project>] [--domain <domain>]
```

Table 48.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--absolute	Show absolute limits
--rate	Show rate limits
--reserved	Include reservations count [only valid with --absolute]
--project <project>	Show limits for a specific project (name or id) [only valid with --absolute]
--domain <domain>	Domain the project belongs to (name or id) [only valid with --absolute]

Table 48.2. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 48.3. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 48.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 48.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 49. LOADBALANCER

This chapter describes the commands under the **loadbalancer** command.

49.1. LOADBALANCER AMPHORA CONFIGURE

Update the amphora agent configuration

Usage:

```
openstack loadbalancer amphora configure [-h] [--wait] <amphora-id>
```

Table 49.1. Positional arguments

Value	Summary
<amphora-id>	Uuid of the amphora to configure.

Table 49.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for action to complete

49.2. LOADBALANCER AMPHORA DELETE

Delete a amphora

Usage:

```
openstack loadbalancer amphora delete [-h] [--wait] <amphora-id>
```

Table 49.3. Positional arguments

Value	Summary
<amphora-id>	Uuid of the amphora to delete.

Table 49.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for action to complete

49.3. LOADBALANCER AMPHORA FAILOVER

Force failover an amphora

Usage:

```
openstack loadbalancer amphora failover [-h] [--wait] <amphora-id>
```

Table 49.5. Positional arguments

Value	Summary
<amphora-id>	Uuid of the amphora.

Table 49.6. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for action to complete

49.4. LOADBALANCER AMPHORA LIST

List amphorae

Usage:

```
openstack loadbalancer amphora list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]
                                     [--loadbalancer <loadbalancer>]
                                     [--compute-id <compute-id>]
                                     [--role {BACKUP,MASTER,STANDALONE}]
                                     [--status
{ALLOCATED,BOOTING,DELETED,ERROR,PENDING_CREATE,PENDING_DELETE,READY}]
                                     [--long]
```

Table 49.7. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--loadbalancer <loadbalancer></code>	Filter by load balancer (name or id).
<code>--compute-id <compute-id></code>	Filter by compute id.
<code>--role {BACKUP,MASTER,STANDALONE}</code>	Filter by role.
<code>--status {ALLOCATED,BOOTING,DELETED,ERROR,PENDING_CREATE,PENDING_DELETE,READY}, --provisioning-status {ALLOCATED,BOOTING,DELETED,ERROR,PENDING_CREATE,PENDING_DELETE,READY}</code>	Filter by amphora provisioning status.
<code>--long</code>	Show additional fields.

Table 49.8. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 49.9. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 49.10. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.11. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.5. LOADBALANCER AMPHORA SHOW

Show the details of a single amphora

Usage:

```
openstack loadbalancer amphora show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <amphora-id>
```

Table 49.12. Positional arguments

Value	Summary
<code><amphora-id></code>	Uuid of the amphora.

Table 49.13. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 49.14. Output formatter options

Value	Summary
<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 to show multiple columns

Table 49.15. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.16. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.17. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.6. LOADBALANCER AMPHORA STATS SHOW

Shows the current statistics for an amphora.

Usage:

```

openstack loadbalancer amphora stats show [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--listener <listener>]
    <amphora-id>

```

Table 49.18. Positional arguments

Value	Summary
<amphora-id>	Uuid of the amphora

Table 49.19. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--listener <listener>	Filter by listener (name or id)

Table 49.20. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.21. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.22. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.23. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

49.7. LOADBALANCER AVAILABILITYZONE CREATE

Create an octavia availability zone

Usage:

```
openstack loadbalancer availabilityzone create [-h]
                                               [-f {json,shell,table,value,yaml}]
                                               [-c COLUMN] [--noindent]
                                               [--prefix PREFIX]
                                               [--max-width <integer>]
                                               [--fit-width]
                                               [--print-empty] --name
                                               <name>
                                               --availabilityzoneprofile
                                               <availabilityzone_profile>
                                               [--description <description>]
                                               [--enable | --disable]
```

Table 49.24. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	New availability zone name.
<code>--availabilityzoneprofile <availabilityzone_profile></code>	Availability zone profile to add the az to (name or ID).
<code>--description <description></code>	Set the availability zone description.
<code>--enable</code>	Enable the availability zone.
<code>--disable</code>	Disable the availability zone.

Table 49.25. Output formatter options

Value	Summary
<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 to show multiple columns

Table 49.26. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.27. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 49.28. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.8. LOADBALANCER AVAILABILITYZONE DELETE

Delete an availability zone

Usage:

```
openstack loadbalancer availabilityzone delete [-h] <availabilityzone>
```

Table 49.29. Positional arguments

Value	Summary
<code><availabilityzone></code>	Name of the availability zone to delete.

Table 49.30. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

49.9. LOADBALANCER AVAILABILITYZONE LIST

List availability zones

Usage:

```
openstack loadbalancer availabilityzone list [-h]
                                           [-f {csv,json,table,value,yaml}]
                                           [-c COLUMN]
                                           [--quote {all,minimal,none,nonnumeric}]
                                           [--noindent]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty]
                                           [--sort-column SORT_COLUMN]
                                           [--sort-ascending | --sort-descending]
                                           [--name <name>]
                                           [--availabilityzoneprofile <availabilityzone_profile>]
                                           [--enable | --disable]
```

Table 49.31. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List availability zones according to their name.
--availabilityzoneprofile <availabilityzone_profile>	List availability zones according to their az profile.
--enable	List enabled availability zones.
--disable	List disabled availability zones.

Table 49.32. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 49.33. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 49.34. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.35. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.10. LOADBALANCER AVAILABILITYZONE SET

Update an availability zone

Usage:

```
openstack loadbalancer availabilityzone set [-h]
                                     [--description <description>]
                                     [--enable | --disable]
                                     <availabilityzone>
```

Table 49.36. Positional arguments

Value	Summary
<code><availabilityzone></code>	Name of the availability zone to update.

Table 49.37. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Set the description of the availability zone.
--enable	Enable the availability zone.
--disable	Disable the availability zone.

49.11. LOADBALANCER AVAILABILITYZONE SHOW

Show the details for a single availability zone

Usage:

```
openstack loadbalancer availabilityzone show [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN] [--noindent]
                                           [--prefix PREFIX]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty]
                                           <availabilityzone>
```

Table 49.38. Positional arguments

Value	Summary
<availabilityzone>	Name of the availability zone.

Table 49.39. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.40. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.41. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.42. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.43. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.12. LOADBALANCER AVAILABILITYZONE UNSET

Clear availability zone settings

Usage:

```
openstack loadbalancer availabilityzone unset [-h] [--description]
      <availabilityzone>
```

Table 49.44. Positional arguments

Value	Summary
<availabilityzone>	Name of the availability zone to update.

Table 49.45. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
--description	Clear the availability zone description.

49.13. LOADBALANCER AVAILABILITYZONEPROFILE CREATE

Create an octavia availability zone profile

Usage:

```
openstack loadbalancer availabilityzoneprofile create
  [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN] [--noindent]
  [--prefix PREFIX] [--max-width <integer>] [--fit-width] [--print-empty]
  --name <name> --provider <provider name> --availability-zone-data
  <availability_zone_data>
```

Table 49.46. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New octavia availability zone profile name.
--provider <provider name>	Provider name for the availability zone profile.
--availability-zone-data <availability_zone_data>	The json string containing the availability zone metadata.

Table 49.47. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.48. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.49. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.50. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.14. LOADBALANCER AVAILABILITYZONEPROFILE DELETE

Delete an availability zone profile

Usage:

```
openstack loadbalancer availabilityzoneprofile delete
[-h] <availabilityzone_profile>
```

Table 49.51. Positional arguments

Value	Summary
<availabilityzone_profile>	Availability zone profile to delete (name or id)

Table 49.52. Command arguments

Value	Summary
-h, --help	Show this help message and exit

49.15. LOADBALANCER AVAILABILITYZONEPROFILE LIST

List availability zone profiles

Usage:

```
openstack loadbalancer availabilityzoneprofile list [-h]
[-f {csv,json,table,value,yaml}]
```

```

[-c COLUMN]
[--quote {all,minimal,none,nonnumeric}]
[--noindent]
[--max-width <integer>]
[--fit-width]
[--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--name <name>]
[--provider <provider_name>]

```

Table 49.53. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List availabilityzone profiles by profile name.
--provider <provider_name>	List availability zone profiles according to their provider.

Table 49.54. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 49.55. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.56. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.57. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.16. LOADBALANCER AVAILABILITYZONEPROFILE SET

Update an availability zone profile

Usage:

```
openstack loadbalancer availabilityzoneprofile set [-h] [--name <name>]
          [--provider <provider_name>]
          [--availabilityzone-data <availabilityzone_data>]
          <availabilityzone_profile>
```

Table 49.58. Positional arguments

Value	Summary
<availabilityzone_profile>	Name or uuid of the availability zone profile to update.

Table 49.59. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the name of the availability zone profile.
--provider <provider_name>	Set the provider of the availability zone profile.
--availabilityzone-data <availabilityzone_data>	Set the availability zone data of the profile.

49.17. LOADBALANCER AVAILABILITYZONEPROFILE SHOW

Show the details of a single availability zone profile

Usage:

```
openstack loadbalancer availabilityzoneprofile show [-h]
                                                    [-f {json,shell,table,value,yaml}]
                                                    [-c COLUMN]
                                                    [--noindent]
                                                    [--prefix PREFIX]
                                                    [--max-width <integer>]
                                                    [--fit-width]
                                                    [--print-empty]
                                                    <availabilityzone_profile>
```

Table 49.60. Positional arguments

Value	Summary
<availabilityzone_profile>	Name or uuid of the availability zone profile to show.

Table 49.61. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.62. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.63. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.64. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.65. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.18. LOADBALANCER CREATE

Create a load balancer

Usage:

```
openstack loadbalancer create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--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>]
                             [--provider <provider>]
                             [--availability-zone <availability_zone>]
                             [--enable | --disable]
                             [--flavor <flavor>] [--wait]
                             [--tag <tag> | --no-tag]
```

Table 49.66. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New load balancer name.

Value	Summary
--description <description>	Set load balancer description.
--vip-address <vip_address>	Set the vip ip address.
--vip-qos-policy-id <vip_qos_policy_id>	Set qos policy id for vip port. unset with <i>none</i> .
--project <project>	Project for the load balancer (name or id).
--provider <provider>	Provider name for the load balancer.
--availability-zone <availability_zone>	Availability zone for the load balancer.
--enable	Enable load balancer (default).
--disable	Disable load balancer.
--flavor <flavor>	The name or id of the flavor for the load balancer.
--wait	Wait for action to complete
--tag <tag>	Tag to be added to the load balancer (repeat option to set multiple tags)
--no-tag	No tags associated with the load balancer

Table 49.67. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.68. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.69. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.70. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

Table 49.71. VIP Network

Value	Summary
At least one of the following arguments is required.--vip-port-id <vip_port_id>	Set port for the load balancer (name or id).
--vip-subnet-id <vip_subnet_id>	Set subnet for the load balancer (name or id).
--vip-network-id <vip_network_id>	Set network for the load balancer (name or id).

49.19. LOADBALANCER DELETE

Delete a load balancer

Usage:

```
openstack loadbalancer delete [-h] [--cascade] [--wait] <load_balancer>
```

Table 49.72. Positional arguments

Value	Summary
<load_balancer>	Load balancers to delete (name or id)

Table 49.73. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--cascade	Cascade the delete to all child elements of the load balancer.
--wait	Wait for action to complete

49.20. LOADBALANCER FAILOVER

Trigger load balancer failover

Usage:

```
openstack loadbalancer failover [-h] [--wait] <load_balancer>
```

Table 49.74. Positional arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer.

Table 49.75. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for action to complete

49.21. LOADBALANCER FLAVOR CREATE

Create a octavia flavor

Usage:

```
openstack loadbalancer flavor create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    --name <name> --flavorprofile
    <flavor_profile>
    [--description <description>]
    [--enable | --disable]
```


Table 49.76. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New flavor name.
--flavorprofile <flavor_profile>	Flavor profile to add the flavor to (name or id).
--description <description>	Set flavor description.
--enable	Enable flavor.
--disable	Disable flavor.

Table 49.77. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.78. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.79. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.80. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.22. LOADBALANCER FLAVOR DELETE

Delete a flavor

Usage:

```
openstack loadbalancer flavor delete [-h] <flavor>
```

Table 49.81. Positional arguments

Value	Summary
<flavor>	Flavor to delete (name or id)

Table 49.82. Command arguments

Value	Summary
-h, --help	Show this help message and exit

49.23. LOADBALANCER FLAVOR LIST

List flavor

Usage:

```
openstack loadbalancer flavor list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--name <name>]
                                [--flavorprofile <flavor_profile>]
                                [--enable | --disable]
```

Table 49.83. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List flavors according to their name.
--flavorprofile <flavor_profile>	List flavors according to their flavor profile.
--enable	List enabled flavors.
--disable	List disabled flavors.

Table 49.84. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 49.85. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.86. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.87. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.24. LOADBALANCER FLAVOR SET

Update a flavor

Usage:

```
openstack loadbalancer flavor set [-h] [--name <name>]
                                [--enable | --disable]
                                <flavor>
```

Table 49.88. Positional arguments

Value	Summary
<code><flavor></code>	Name or uuid of the flavor to update.

Table 49.89. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Set the name of the flavor.
<code>--enable</code>	Enable flavor.
<code>--disable</code>	Disable flavor.

49.25. LOADBALANCER FLAVOR SHOW

Show the details for a single flavor

Usage:

```
openstack loadbalancer flavor show [-h]
```

```
[-f {json,shell,table,value,yaml}]
[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
<flavor>
```

Table 49.90. Positional arguments

Value	Summary
<flavor>	Name or uuid of the flavor.

Table 49.91. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.92. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.93. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.94. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.95. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.26. LOADBALANCER FLAVOR UNSET

Clear flavor settings

Usage:

```
openstack loadbalancer flavor unset [-h] [--description] <flavor>
```

Table 49.96. Positional arguments

Value	Summary
<code><flavor></code>	Flavor to update (name or id).

Table 49.97. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description</code>	Clear the flavor description.

49.27. LOADBALANCER FLAVORPROFILE CREATE

Create a octavia flavor profile

Usage:

```
openstack loadbalancer flavorprofile create [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN] [--noindent]
                                           [--prefix PREFIX]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty] --name
```

```

<name> --provider <provider
name> --flavor-data
<flavor_data>

```

Table 49.98. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New octavia flavor profile name.
--provider <provider name>	Provider name for the flavor profile.
--flavor-data <flavor_data>	The json string containing the flavor metadata.

Table 49.99. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.100. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.101. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.102. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.28. LOADBALANCER FLAVORPROFILE DELETE

Delete a flavor profile

Usage:

```
openstack loadbalancer flavorprofile delete [-h] <flavor_profile>
```

Table 49.103. Positional arguments

Value	Summary
<flavor_profile>	Flavor profiles to delete (name or id)

Table 49.104. Command arguments

Value	Summary
-h, --help	Show this help message and exit

49.29. LOADBALANCER FLAVORPROFILE LIST

List flavor profile

Usage:

```
openstack loadbalancer flavorprofile list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--sort-ascending | --sort-descending]
                                         [--name <name>]
                                         [--provider <provider_name>]
```

Table 49.105. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List flavor profiles by flavor profile name.
--provider <provider_name>	List flavor profiles according to their provider.

Table 49.106. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 49.107. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.108. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.109. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.30. LOADBALANCER FLAVORPROFILE SET

Update a flavor profile

Usage:

```
openstack loadbalancer flavorprofile set [-h] [--name <name>]
                                     [--provider <provider_name>]
                                     [--flavor-data <flavor_data>]
                                     <flavor_profile>
```

Table 49.110. Positional arguments

Value	Summary
<flavor_profile>	Name or uuid of the flavor profile to update.

Table 49.111. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the name of the flavor profile.
--provider <provider_name>	Set the provider of the flavor profile.
--flavor-data <flavor_data>	Set the flavor data of the flavor profile.

49.31. LOADBALANCER FLAVORPROFILE SHOW

Show the details for a single flavor profile

Usage:

```
openstack loadbalancer flavorprofile show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
```

```

[--max-width <integer>]
[--fit-width] [--print-empty]
<flavor_profile>

```

Table 49.112. Positional arguments

Value	Summary
<flavor_profile>	Name or uuid of the flavor profile to show.

Table 49.113. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.114. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.115. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.116. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.117. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.32. LOADBALANCER HEALTHMONITOR CREATE

Create a health monitor

Usage:

```

openstack loadbalancer healthmonitor create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--name <name>] --delay
                                         <delay>
                                         [--domain-name <domain_name>]
                                         [--expected-codes <codes>]
                                         [--http-method
{GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,CONNECT,TRACE}]
                                         [--http-version <http_version>]
                                         --timeout <timeout>
                                         --max-retries <max_retries>
                                         [--url-path <url_path>]
                                         --type
                                         {PING,HTTP,TCP,HTTPS,TLS-HELLO,UDP-CONNECT,SCTP}
                                         [--max-retries-down <max_retries_down>]
                                         [--enable | --disable]
                                         [--wait]
                                         [--tag <tag> | --no-tag]
                                         <pool>

```

Table 49.118. Positional arguments

Value	Summary
<pool>	Set the pool for the health monitor (name or id).

Table 49.119. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the health monitor name.
--delay <delay>	Set the time in seconds, between sending probes to members.
--domain-name <domain_name>	Set the domain name, which be injected into the http Host Header to the backend server for HTTP health check.
--expected-codes <codes>	Set the list of http status codes expected in response from the member to declare it healthy.
--http-method {GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,C ONNECT,TRACE}	Set the http method that the health monitor uses for requests.
--http-version <http_version>	Set the http version.
--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.
--max-retries <max_retries>	The number of successful checks before changing the operating status of the member to ONLINE.
--url-path <url_path>	Set the http url path of the request sent by the monitor to test the health of a backend member.
--type {PING,HTTP,TCP,HTTPS,TLS-HELLO,UDP- CONNECT,SCTP}	Set the health monitor type.
--max-retries-down <max_retries_down>	Set the number of allowed check failures before changing the operating status of the member to ERROR.
--enable	Enable health monitor (default).
--disable	Disable health monitor.
--wait	Wait for action to complete
--tag <tag>	Tag to be added to the health monitor (repeat option to set multiple tags)

Value	Summary
<code>--no-tag</code>	No tags associated with the health monitor

Table 49.120. Output formatter options

Value	Summary
<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 to show multiple columns

Table 49.121. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.122. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 49.123. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.33. LOADBALANCER HEALTHMONITOR DELETE

Delete a health monitor

Usage:

```
openstack loadbalancer healthmonitor delete [-h] [--wait]
<health_monitor>
```

Table 49.124. Positional arguments

Value	Summary
<health_monitor>	Health monitor to delete (name or id).

Table 49.125. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for action to complete

49.34. LOADBALANCER HEALTHMONITOR LIST

List health monitors

Usage:

```
openstack loadbalancer healthmonitor list [-h]
[-f {csv,json,table,value,yaml}]
[-c COLUMN]
[--quote {all,minimal,none,nonnumeric}]
[--noindent]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--tags <tag>[,<tag>,...]]
[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]
```

Table 49.126. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--tags <tag>[,<tag>,...]	List health monitor which have all given tag(s) (Comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List health monitor which have any given tag(s) (Comma-separated list of tags)

Value	Summary
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude health monitor which have all given tag(s) (Comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude health monitor which have any given tag(s) (Comma-separated list of tags)

Table 49.127. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 49.128. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 49.129. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.130. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.35. LOADBALANCER HEALTHMONITOR SET

Update a health monitor

Usage:

```

openstack loadbalancer healthmonitor set [-h] [--name <name>]
                                     [--delay <delay>]
                                     [--domain-name <domain_name>]
                                     [--expected-codes <codes>]
                                     [--http-method
{GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,CONNECT,TRACE}]
                                     [--http-version <http_version>]
                                     [--timeout <timeout>]
                                     [--max-retries <max_retries>]
                                     [--max-retries-down <max_retries_down>]
                                     [--url-path <url_path>]
                                     [--enable | --disable]
                                     [--wait] [--tag <tag>]
                                     [--no-tag]
                                     <health_monitor>

```

Table 49.131. Positional arguments

Value	Summary
<health_monitor>	Health monitor to update (name or id).

Table 49.132. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set health monitor name.
--delay <delay>	Set the time in seconds, between sending probes to members.

Value	Summary
<code>--domain-name <domain_name></code>	Set the domain name, which be injected into the http Host Header to the backend server for HTTP health check.
<code>--expected-codes <codes></code>	Set the list of http status codes expected in response from the member to declare it healthy.
<code>--http-method</code> {GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,C ONNECT,TRACE}	Set the http method that the health monitor uses for requests.
<code>--http-version <http_version></code>	Set the http version.
<code>--timeout <timeout></code>	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.
<code>--max-retries <max_retries></code>	Set the number of successful checks before changing the operating status of the member to ONLINE.
<code>--max-retries-down <max_retries_down></code>	Set the number of allowed check failures before changing the operating status of the member to ERROR.
<code>--url-path <url_path></code>	Set the http url path of the request sent by the monitor to test the health of a backend member.
<code>--enable</code>	Enable health monitor.
<code>--disable</code>	Disable health monitor.
<code>--wait</code>	Wait for action to complete
<code>--tag <tag></code>	Tag to be added to the health monitor (repeat option to set multiple tags)
<code>--no-tag</code>	Clear tags associated with the health monitor. specify both <code>--tag</code> and <code>--no-tag</code> to overwrite current tags

49.36. 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] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         <health_monitor>

```

Table 49.133. Positional arguments

Value	Summary
<health_monitor>	Name or uuid of the health monitor.

Table 49.134. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.135. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.136. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.137. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.138. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.37. LOADBALANCER HEALTHMONITOR UNSET

Clear health monitor settings

Usage:

```
openstack loadbalancer healthmonitor unset [-h] [--domain-name]
                                         [--expected-codes]
                                         [--http-method]
                                         [--http-version]
                                         [--max-retries-down]
                                         [--name] [--url-path]
                                         [--wait]
                                         [--tag <tag> | --all-tag]
                                         <health_monitor>
```

Table 49.139. Positional arguments

Value	Summary
<code><health_monitor></code>	Health monitor to update (name or id).

Table 49.140. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--domain-name</code>	Clear the health monitor domain name.
<code>--expected-codes</code>	Reset the health monitor expected codes to the api default.
<code>--http-method</code>	Reset the health monitor http method to the api default.

Value	Summary
--http-version	Reset the health monitor http version to the api default.
--max-retries-down	Reset the health monitor max retries down to the api default.
--name	Clear the health monitor name.
--url-path	Clear the health monitor url path.
--wait	Wait for action to complete
--tag <tag>	Tag to be removed from the health monitor (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the health monitor

49.38. LOADBALANCER L7POLICY CREATE

Create a l7policy

Usage:

```

openstack loadbalancer l7policy create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--name <name>]
                                     [--description <description>]
                                     --action

{REDIRECT_TO_URL,REDIRECT_TO_POOL,REDIRECT_PREFIX,REJECT}
  [--redirect-pool <pool> | --redirect-url <url> | --redirect-prefix <url>]
  [--redirect-http-code <redirect_http_code>]
  [--position <position>]
  [--enable | --disable] [--wait]
  [--tag <tag> | --no-tag]
  <listener>

```

Table 49.141. Positional arguments

Value	Summary
<listener>	Listener to add l7policy to (name or id).

Table 49.142. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the l7policy name.
--description <description>	Set l7policy description.
--action {REDIRECT_TO_URL,REDIRECT_TO_POOL,REDIRECT_PREFIX,REJECT}	Set the action of the policy.
--redirect-pool <pool>	Set the pool to redirect requests to (name or id).
--redirect-url <url>	Set the url to redirect requests to.
--redirect-prefix <url>	Set the url prefix to redirect requests to.
--redirect-http-code <redirect_http_code>	Set the http response code for redirect_url or REDIRECT_PREFIX action.
--position <position>	Sequence number of this l7 policy.
--enable	Enable l7policy (default).
--disable	Disable l7policy.
--wait	Wait for action to complete
--tag <tag>	Tag to be added to the l7policy (repeat option to set multiple tags)
--no-tag	No tags associated with the l7policy

Table 49.143. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.144. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.145. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.146. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.39. LOADBALANCER L7POLICY DELETE

Delete a l7policy

Usage:

```
openstack loadbalancer l7policy delete [-h] [--wait] <policy>
```

Table 49.147. Positional arguments

Value	Summary
<policy>	L7policy to delete (name or id).

Table 49.148. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for action to complete

49.40. LOADBALANCER L7POLICY LIST

List l7policies

Usage:

```
openstack loadbalancer l7policy list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]
                                     [--listener LISTENER]
                                     [--tags <tag>[,<tag>,...]]
                                     [--any-tags <tag>[,<tag>,...]]
                                     [--not-tags <tag>[,<tag>,...]]
                                     [--not-any-tags <tag>[,<tag>,...]]
```

Table 49.149. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--listener LISTENER	List l7policies that applied to the given listener (name or ID).
--tags <tag>[,<tag>,...]	List l7policy which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List l7policy which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude l7policy which have all given tag(s) (comma-separated list of tags)
--not-any-tags <tag>[,<tag>,...]	Exclude l7policy which have any given tag(s) (comma-separated list of tags)

Table 49.150. Output formatter options

Value	Summary
-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 to show multiple columns

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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 49.151. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.152. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.153. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.41. LOADBALANCER L7POLICY SET

Update a l7policy

Usage:

```
openstack loadbalancer l7policy set [-h] [--name <name>]
                                     [--description <description>]
                                     [--action
{REDIRECT_TO_URL,REDIRECT_TO_POOL,REDIRECT_PREFIX,REJECT}]
                                     [--redirect-pool <pool> | --redirect-url <url> | --redirect-prefix <url>]
                                     [--redirect-http-code <redirect_http_code>]
```

```

[--position <position>]
[--enable | --disable] [--wait]
[--tag <tag>] [--no-tag]
<policy>

```

Table 49.154. Positional arguments

Value	Summary
<policy>	L7policy to update (name or id).

Table 49.155. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set l7policy name.
--description <description>	Set l7policy description.
--action {REDIRECT_TO_URL,REDIRECT_TO_POOL,REDIRECT_PREFIX,REJECT}	Set the action of the policy.
--redirect-pool <pool>	Set the pool to redirect requests to (name or id).
--redirect-url <url>	Set the url to redirect requests to.
--redirect-prefix <url>	Set the url prefix to redirect requests to.
--redirect-http-code <redirect_http_code>	Set the http response code for redirect_url or REDIRECT_PREFIX action.
--position <position>	Set sequence number of this l7 policy.
--enable	Enable l7policy.
--disable	Disable l7policy.
--wait	Wait for action to complete
--tag <tag>	Tag to be added to the l7policy (repeat option to set multiple tags)
--no-tag	Clear tags associated with the l7policy. specify both --tag and --no-tag to overwrite current tags

49.42. LOADBALANCER L7POLICY SHOW

Show the details of a single l7policy

Usage:

```
openstack loadbalancer l7policy show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <policy>
```

Table 49.156. Positional arguments

Value	Summary
<policy>	Name or uuid of the l7policy.

Table 49.157. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.158. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.159. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.160. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.161. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.43. LOADBALANCER L7POLICY UNSET

Clear l7policy settings

Usage:

```
openstack loadbalancer l7policy unset [-h] [--description] [--name]
                                     [--redirect-http-code] [--wait]
                                     [--tag <tag> | --all-tag]
                                     <policy>
```

Table 49.162. Positional arguments

Value	Summary
<code><policy></code>	L7policy to update (name or id).

Table 49.163. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description</code>	Clear the l7policy description.
<code>--name</code>	Clear the l7policy name.
<code>--redirect-http-code</code>	Clear the l7policy redirect http code.
<code>--wait</code>	Wait for action to complete
<code>--tag <tag></code>	Tag to be removed from the l7policy (repeat option to remove multiple tags)

Value	Summary
--all-tag	Clear all tags associated with the l7policy

49.44. LOADBALANCER L7RULE CREATE

Create a l7rule

Usage:

```

openstack loadbalancer l7rule create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    --compare-type
    {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,STARTS_WITH}
    [--invert] --value <value>
    [--key <key>] --type
    {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER,SSL_CONN_HAS_CERT,SSL_VERIFY_RESU
    LT,SSL_DN_FIELD}
    [--enable | --disable] [--wait]
    [--tag <tag> | --no-tag]
    <l7policy>

```

Table 49.164. Positional arguments

Value	Summary
<l7policy>	L7policy to add l7rule to (name or id).

Table 49.165. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--compare-type {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,START S_WITH}	Set the compare type for the l7rule.
--invert	Invert l7rule.
--value <value>	Set the rule value to match on.
--key <key>	Set the key for the l7rule's value to match on.

Value	Summary
<code>--type</code> {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER,SSL_CONN_HAS_CERT,SSL_VERIFY_RESULT,SSL_DN_FIELD}	Set the type for the l7rule.
<code>--enable</code>	Enable l7rule (default).
<code>--disable</code>	Disable l7rule.
<code>--wait</code>	Wait for action to complete
<code>--tag <tag></code>	Tag to be added to the l7rule (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the l7rule

Table 49.166. Output formatter options

Value	Summary
<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 to show multiple columns

Table 49.167. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.168. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 49.169. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.45. LOADBALANCER L7RULE DELETE

Delete a l7rule

Usage:

```
openstack loadbalancer l7rule delete [-h] [--wait] <l7policy> <rule_id>
```

Table 49.170. Positional arguments

Value	Summary
<code><l7policy></code>	L7policy to delete rule from (name or id).
<code><rule_id></code>	L7rule to delete.

Table 49.171. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--wait</code>	Wait for action to complete

49.46. LOADBALANCER L7RULE LIST

List l7rules for l7policy

Usage:

```
openstack loadbalancer l7rule list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
```

```

[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--tags <tag>[,<tag>,...]]
[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]
<l7policy>

```

Table 49.172. Positional arguments

Value	Summary
<l7policy>	L7policy to list rules for (name or id).

Table 49.173. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--tags <tag>[,<tag>,...]	List l7rule which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List l7rule which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude l7rule which have all given tag(s) (comma-separated list of tags)
--not-any-tags <tag>[,<tag>,...]	Exclude l7rule which have any given tag(s) (comma-separated list of tags)

Table 49.174. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
--sort-descending	Sort the column(s) in descending order

Table 49.175. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.176. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.177. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.47. 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,SSL_CONN_HAS_CERT,SSL_VERIFY_RESULT,SSL_DN_FIELD}]
                                [--enable | --disable] [--wait]
                                [--tag <tag>] [--no-tag]
                                <l7policy> <l7rule_id>
```

Table 49.178. Positional arguments

Value	Summary
<l7policy>	L7policy to update l7rule on (name or id).
<l7rule_id>	L7rule to update.

Table 49.179. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--compare-type {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,START S_WITH}	Set the compare type for the l7rule.
--invert	Invert l7rule.
--value <value>	Set the rule value to match on.
--key <key>	Set the key for the l7rule's value to match on.
--type {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER,S SL_CONN_HAS_CERT,SSL_VERIFY_RESULT,SSL_D N_FIELD}	Set the type for the l7rule.
--enable	Enable l7rule.
--disable	Disable l7rule.
--wait	Wait for action to complete
--tag <tag>	Tag to be added to the l7rule (repeat option to set multiple tags)
--no-tag	Clear tags associated with the l7rule. specify both --tag and --no-tag to overwrite current tags

49.48. LOADBALANCER L7RULE SHOW

Show the details of a single l7rule

Usage:

```
openstack loadbalancer l7rule show [-h]
                                  [-f {json,shell,table,value,yaml}]
```

```

[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
<l7policy> <l7rule_id>

```

Table 49.180. Positional arguments

Value	Summary
<l7policy>	L7policy to show rule from (name or id).
<l7rule_id>	L7rule to show.

Table 49.181. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.182. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.183. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.184. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.185. Table formatter options

Value	Summary
-------	---------

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.49. LOADBALANCER L7RULE UNSET

Clear l7rule settings

Usage:

```
openstack loadbalancer l7rule unset [-h] [--invert] [--key] [--wait]
    [--tag <tag> | --all-tag]
    <l7policy> <l7rule_id>
```

Table 49.186. Positional arguments

Value	Summary
<l7policy>	L7policy to update (name or id).
<l7rule_id>	L7rule to update.

Table 49.187. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--invert	Reset the l7rule invert to the api default.
--key	Clear the l7rule key.
--wait	Wait for action to complete
--tag <tag>	Tag to be removed from the l7rule (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the l7rule

49.50. LOADBALANCER LIST

List load balancers

Usage:

```
openstack loadbalancer list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--name <name>] [--enable | --disable]
                             [--project <project-id>]
                             [--vip-network-id <vip_network_id>]
                             [--vip-subnet-id <vip_subnet_id>]
                             [--vip-qos-policy-id <vip_qos_policy_id>]
                             [--vip-port-id <vip_port_id>]
                             [--provisioning-status
{ACTIVE,DELETED,ERROR,PENDING_CREATE,PENDING_UPDATE,PENDING_DELETE}]
                             [--operating-status
{ONLINE,DRAINING,OFFLINE,DEGRADED,ERROR,NO_MONITOR}]
                             [--provider <provider>] [--flavor <flavor>]
                             [--availability-zone <availability_zone>]
                             [--tags <tag>[,<tag>,...]]
                             [--any-tags <tag>[,<tag>,...]]
                             [--not-tags <tag>[,<tag>,...]]
                             [--not-any-tags <tag>[,<tag>,...]]
```

Table 49.188. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List load balancers according to their name.
--enable	List enabled load balancers.
--disable	List disabled load balancers.
--project <project-id>	List load balancers according to their project (name or ID).
--vip-network-id <vip_network_id>	List load balancers according to their vip network (name or ID).
--vip-subnet-id <vip_subnet_id>	List load balancers according to their vip subnet (name or ID).

Value	Summary
<code>--vip-qos-policy-id <vip_qos_policy_id></code>	List load balancers according to their vip qos policy (name or ID).
<code>--vip-port-id <vip_port_id></code>	List load balancers according to their vip port (name or ID).
<code>--provisioning-status</code> {ACTIVE,DELETED,ERROR,PENDING_CREATE,PENDING_UPDATE,PENDING_DELETE}	List load balancers according to their provisioning status.
<code>--operating-status</code> {ONLINE,DRAINING,OFFLINE,DEGRADED,ERROR,N O_MONITOR}	List load balancers according to their operating status.
<code>--provider <provider></code>	List load balancers according to their provider.
<code>--flavor <flavor></code>	List load balancers according to their flavor.
<code>--availability-zone <availability_zone></code>	List load balancers according to their availability zone.
<code>--tags <tag>[,<tag>,...]</code>	List load balancer which have all given tag(s) (comma- separated list of tags)
<code>--any-tags <tag>[,<tag>,...]</code>	List load balancer which have any given tag(s) (comma- separated list of tags)
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude load balancer which have all given tag(s) (Comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude load balancer which have any given tag(s) (Comma-separated list of tags)

Table 49.189. Output formatter options

Value	Summary
<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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 49.190. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 49.191. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.192. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.51. LOADBALANCER LISTENER CREATE

Create a listener

Usage:

```
openstack loadbalancer listener create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
```

```

[--name <name>]
[--description <description>]
--protocol
{TCP,HTTP,HTTPS,TERMINATED_HTTPS,UDP,SCTP}
[--connection-limit <limit>]
[--default-pool <pool>]
[--default-tls-container-ref <container_ref>]
[--sni-container-refs [<container_ref> ...]]
[--insert-headers <header=value,...>]
--protocol-port <port>
[--timeout-client-data <timeout>]
[--timeout-member-connect <timeout>]
[--timeout-member-data <timeout>]
[--timeout-tcp-inspect <timeout>]
[--enable | --disable]
[--client-ca-tls-container-ref <container_ref>]
[--client-authentication {NONE,OPTIONAL,MANDATORY}]
[--client-crl-container-ref <client_crl_container_ref>]
[--allowed-cidr [<allowed_cidr>]]
[--wait]
[--tls-ciphers <tls_ciphers>]
[--tls-version [<tls_versions>]]
[--alpn-protocol [<alpn_protocols>]]
[--tag <tag> | --no-tag]
<loadbalancer>

```

Table 49.193. Positional arguments

Value	Summary
<loadbalancer>	Load balancer for the listener (name or id).

Table 49.194. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the listener name.
--description <description>	Set the description of this listener.
--protocol {TCP,HTTP,HTTPS,TERMINATED_HTTPS,UDP,SCTP}	The protocol for the listener.
--connection-limit <limit>	Set the maximum number of connections permitted for this listener.
--default-pool <pool>	Set the name or id of the pool used by the listener if no L7 policies match.

Value	Summary
<code>--default-tls-container-ref <container_ref></code>	The uri to the key manager service secrets container containing the certificate and key for TERMINATED_TLS listeners.
<code>--sni-container-refs [<container_ref> ...]</code>	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.
<code>--insert-headers <header=value,...></code>	A dictionary of optional headers to insert into the request before it is sent to the backend member.
<code>--protocol-port <port></code>	Set the protocol port number for the listener.
<code>--timeout-client-data <timeout></code>	Frontend client inactivity timeout in milliseconds. Default: 50000.
<code>--timeout-member-connect <timeout></code>	Backend member connection timeout in milliseconds. Default: 5000.
<code>--timeout-member-data <timeout></code>	Backend member inactivity timeout in milliseconds. Default: 50000.
<code>--timeout-tcp-inspect <timeout></code>	Time, in milliseconds, to wait for additional tcp packets for content inspection. Default: 0.
<code>--enable</code>	Enable listener (default).
<code>--disable</code>	Disable listener.
<code>--client-ca-tls-container-ref <container_ref></code>	The uri to the key manager service secrets container containing the CA certificate for TERMINATED_TLS listeners.
<code>--client-authentication {NONE,OPTIONAL,MANDATORY}</code>	The tls client authentication verify options for TERMINATED_TLS listeners.
<code>--client-crl-container-ref <client_crl_container_ref></code>	The uri to the key manager service secrets container containing the CA revocation list file for TERMINATED_TLS listeners.
<code>--allowed-cidr [<allowed_cidr>]</code>	Cidr to allow access to the listener (can be set multiple times).
<code>--wait</code>	Wait for action to complete

Value	Summary
<code>--tls-ciphers <tls_ciphers></code>	Set the tls ciphers to be used by the listener in OpenSSL format.
<code>--tls-version [<tls_versions>]</code>	Set the tls protocol version to be used by the listener (can be set multiple times).
<code>--alpn-protocol [<alpn_protocols>]</code>	Set the alpn protocol to be used by the listener (can be set multiple times).
<code>--tag <tag></code>	Tag to be added to the listener (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the listener

Table 49.195. Output formatter options

Value	Summary
<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 to show multiple columns

Table 49.196. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.197. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 49.198. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.52. LOADBALANCER LISTENER DELETE

Delete a listener

Usage:

```
openstack loadbalancer listener delete [-h] [--wait] <listener>
```

Table 49.199. Positional arguments

Value	Summary
<listener>	Listener to delete (name or id)

Table 49.200. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for action to complete

49.53. LOADBALANCER LISTENER LIST

List listeners

Usage:

```
openstack loadbalancer listener list [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    [--name <name>]
    [--loadbalancer <loadbalancer>]
```

```

[--enable | --disable]
[--project <project>]
[--tags <tag>[,<tag>,...]]
[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]

```

Table 49.201. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List listeners by listener name.
--loadbalancer <loadbalancer>	Filter by load balancer (name or id).
--enable	List enabled listeners.
--disable	List disabled listeners.
--project <project>	List listeners by project id.
--tags <tag>[,<tag>,...]	List listener which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List listener which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude listener which have all given tag(s) (comma-separated list of tags)
--not-any-tags <tag>[,<tag>,...]	Exclude listener which have any given tag(s) (comma-separated list of tags)

Table 49.202. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 49.203. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.204. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.205. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.54. 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> ...]]
                                     [--insert-headers <header=value>]
                                     [--timeout-client-data <timeout>]
                                     [--timeout-member-connect <timeout>]
                                     [--timeout-member-data <timeout>]
```

```

[--timeout-tcp-inspect <timeout>]
[--enable | --disable]
[--client-ca-tls-container-ref <container_ref>]
[--client-authentication {NONE,OPTIONAL,MANDATORY}]
[--client-crl-container-ref <client_crl_container_ref>]
[--allowed-cidr [<allowed_cidr>]]
[--wait]
[--tls-ciphers <tls_ciphers>]
[--tls-version [<tls_versions>]]
[--alpn-protocol [<alpn_protocols>]]
[--tag <tag>] [--no-tag]
<listener>

```

Table 49.206. Positional arguments

Value	Summary
<listener>	Listener to modify (name or id).

Table 49.207. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the listener name.
--description <description>	Set the description of this listener.
--connection-limit <limit>	The maximum number of connections permitted for this listener. Default value is -1 which represents infinite connections.
--default-pool <pool>	The id of the pool used by the listener if no l7 policies match.
--default-tls-container-ref <container-ref>	The uri to the key manager service secrets container containing the certificate and key for TERMINATED_TLSlisteners.
--sni-container-refs [<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.
--insert-headers <header=value>	A dictionary of optional headers to insert into the request before it is sent to the backend member.
--timeout-client-data <timeout>	Frontend client inactivity timeout in milliseconds. Default: 50000.

Value	Summary
<code>--timeout-member-connect <timeout></code>	Backend member connection timeout in milliseconds. Default: 5000.
<code>--timeout-member-data <timeout></code>	Backend member inactivity timeout in milliseconds. Default: 50000.
<code>--timeout-tcp-inspect <timeout></code>	Time, in milliseconds, to wait for additional tcp packets for content inspection. Default: 0.
<code>--enable</code>	Enable listener.
<code>--disable</code>	Disable listener.
<code>--client-ca-tls-container-ref <container_ref></code>	The uri to the key manager service secrets container containing the CA certificate for TERMINATED_TLS listeners.
<code>--client-authentication {NONE,OPTIONAL,MANDATORY}</code>	The tls client authentication verify options for TERMINATED_TLS listeners.
<code>--client-crl-container-ref <client_crl_container_ref></code>	The uri to the key manager service secrets container containing the CA revocation list file for TERMINATED_TLS listeners.
<code>--allowed-cidr [<allowed_cidr>]</code>	Cidr to allow access to the listener (can be set multiple times).
<code>--wait</code>	Wait for action to complete
<code>--tls-ciphers <tls_ciphers></code>	Set the tls ciphers to be used by the listener in OpenSSL format.
<code>--tls-version [<tls_versions>]</code>	Set the tls protocol version to be used by the listener (can be set multiple times).
<code>--alpn-protocol [<alpn_protocols>]</code>	Set the alpn protocol to be used by the listener (can be set multiple times).
<code>--tag <tag></code>	Tag to be added to the listener (repeat option to set multiple tags)
<code>--no-tag</code>	Clear tags associated with the listener. specify both <code>-tag</code> and <code>--no-tag</code> to overwrite current tags

49.55. LOADBALANCER LISTENER SHOW

Show the details of a single listener

Usage:

```

openstack loadbalancer listener show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <listener>

```

Table 49.208. Positional arguments

Value	Summary
<listener>	Name or uuid of the listener

Table 49.209. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.210. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.211. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.212. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.213. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.56. 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] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         <listener>
```

Table 49.214. Positional arguments

Value	Summary
<code><listener></code>	Name or uuid of the listener

Table 49.215. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 49.216. Output formatter options

Value	Summary
<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 to show multiple columns

Table 49.217. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.218. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.219. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.57. LOADBALANCER LISTENER UNSET

Clear listener settings

Usage:

```

openstack loadbalancer listener unset [-h] [--name] [--description]
                                     [--connection-limit]
                                     [--default-pool]
                                     [--default-tls-container-ref]
                                     [--sni-container-refs]
                                     [--insert-headers]
                                     [--timeout-client-data]
                                     [--timeout-member-connect]
                                     [--timeout-member-data]
                                     [--timeout-tcp-inspect]
                                     [--client-ca-tls-container-ref]
                                     [--client-authentication]
                                     [--client-crl-container-ref]
                                     [--allowed-cidrs]
                                     [--tls-versions] [--tls-ciphers]
                                     [--wait] [--alpn-protocols]
                                     [--tag <tag> | --all-tag]
                                     <listener>

```

Table 49.220. Positional arguments

Value	Summary
<listener>	Listener to modify (name or id).

Table 49.221. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name	Clear the listener name.
--description	Clear the description of this listener.
--connection-limit	Reset the connection limit to the api default.
--default-pool	Clear the default pool from the listener.
--default-tls-container-ref	Remove the default tls container reference from the listener.
--sni-container-refs	Remove the tls sni container references from the listener.
--insert-headers	Clear the insert headers from the listener.
--timeout-client-data	Reset the client data timeout to the api default.
--timeout-member-connect	Reset the member connect timeout to the api default.
--timeout-member-data	Reset the member data timeout to the api default.
--timeout-tcp-inspect	Reset the tcp inspection timeout to the api default.
--client-ca-tls-container-ref	Clear the client ca tls container reference from the listener.
--client-authentication	Reset the client authentication setting to the api default.
--client-crl-container-ref	Clear the client crl container reference from the listener.
--allowed-cidrs	Clear all allowed cidrs from the listener.

Value	Summary
--tls-versions	Clear all tls versions from the listener.
--tls-ciphers	Clear all tls ciphers from the listener.
--wait	Wait for action to complete.
--alpn-protocols	Clear all alpn protocols from the listener.
--tag <tag>	Tag to be removed from the listener (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the listener

49.58. LOADBALANCER MEMBER CREATE

Creating a member in a pool

Usage:

```

openstack loadbalancer member create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--name <name>]
    [--disable-backup | --enable-backup]
    [--weight <weight>] --address
    <ip_address>
    [--subnet-id <subnet_id>]
    --protocol-port <protocol_port>
    [--monitor-port <monitor_port>]
    [--monitor-address <monitor_address>]
    [--enable | --disable] [--wait]
    [--tag <tag> | --no-tag]
    <pool>

```

Table 49.222. Positional arguments

Value	Summary
<pool>	Id or name of the pool to create the member for.

Table 49.223. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the member.
--disable-backup	Disable member backup (default)
--enable-backup	Enable member backup
--weight <weight>	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool.
--address <ip_address>	The ip address of the backend member server
--subnet-id <subnet_id>	The subnet id the member service is accessible from.
--protocol-port <protocol_port>	The protocol port number the backend member server is listening on.
--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.
--enable	Enable member (default)
--disable	Disable member
--wait	Wait for action to complete
--tag <tag>	Tag to be added to the member (repeat option to set multiple tags)
--no-tag	No tags associated with the member

Table 49.224. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.225. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.226. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.227. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.59. LOADBALANCER MEMBER DELETE

Delete a member from a pool

Usage:

```
openstack loadbalancer member delete [-h] [--wait] <pool> <member>
```

Table 49.228. Positional arguments

Value	Summary
<pool>	Pool name or id to delete the member from.
<member>	Name or id of the member to be deleted.

Table 49.229. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
--wait	Wait for action to complete

49.60. LOADBALANCER MEMBER LIST

List members in a pool

Usage:

```

openstack loadbalancer member list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--tags <tag>[,<tag>,...]]
                                [--any-tags <tag>[,<tag>,...]]
                                [--not-tags <tag>[,<tag>,...]]
                                [--not-any-tags <tag>[,<tag>,...]]
                                <pool>

```

Table 49.230. Positional arguments

Value	Summary
<pool>	Pool name or id to list the members of.

Table 49.231. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--tags <tag>[,<tag>,...]	List member which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List member which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude member which have all given tag(s) (comma-separated list of tags)
--not-any-tags <tag>[,<tag>,...]	Exclude member which have any given tag(s) (comma-separated list of tags)

Table 49.232. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 49.233. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 49.234. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.235. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.61. LOADBALANCER MEMBER SET

Update a member

Usage:


```

openstack loadbalancer member set [-h] [--name <name>]
                                [--disable-backup | --enable-backup]
                                [--weight <weight>]
                                [--monitor-port <monitor_port>]
                                [--monitor-address <monitor_address>]
                                [--enable | --disable] [--wait]
                                [--tag <tag>] [--no-tag]
                                <pool> <member>

```

Table 49.236. Positional arguments

Value	Summary
<pool>	Pool that the member to update belongs to (name or ID).
<member>	Name or id of the member to update

Table 49.237. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the name of the member
--disable-backup	Disable member backup (default)
--enable-backup	Enable member backup
--weight <weight>	Set the weight of member in the pool
--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.
--enable	Set the admin_state_up to true
--disable	Set the admin_state_up to false
--wait	Wait for action to complete
--tag <tag>	Tag to be added to the member (repeat option to set multiple tags)
--no-tag	Clear tags associated with the member. specify both --tag and --no-tag to overwrite current tags

49.62. LOADBALANCER MEMBER SHOW

Shows details of a single Member

Usage:

```
openstack loadbalancer member show [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   <pool> <member>
```

Table 49.238. Positional arguments

Value	Summary
<pool>	Pool name or id to show the members of.
<member>	Name or id of the member to show.

Table 49.239. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.240. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.241. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.242. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.243. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.63. LOADBALANCER MEMBER UNSET

Clear member settings

Usage:

```
openstack loadbalancer member unset [-h] [--backup] [--monitor-address]
                                     [--monitor-port] [--name]
                                     [--weight] [--wait]
                                     [--tag <tag> | --all-tag]
                                     <pool> <member>
```

Table 49.244. Positional arguments

Value	Summary
<pool>	Pool that the member to update belongs to (name or id).
<member>	Member to modify (name or id).

Table 49.245. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--backup	Clear the backup member flag.

Value	Summary
--monitor-address	Clear the member monitor address.
--monitor-port	Clear the member monitor port.
--name	Clear the member name.
--weight	Reset the member weight to the api default.
--wait	Wait for action to complete
--tag <tag>	Tag to be removed from the member (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the member

49.64. LOADBALANCER POOL CREATE

Create a pool

Usage:

```

openstack loadbalancer pool create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--name <name>]
    [--description <description>]
    --protocol

{TCP,HTTP,HTTPS,TERMINATED_HTTPS,PROXY,PROXYV2,UDP,SCTP}
    (--listener <listener> | --loadbalancer <load_balancer>)
    [--session-persistence <session persistence>]
    --lb-algorithm

{SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS,SOURCE_IP_PORT}
    [--enable | --disable]
    [--tls-container-ref <container-ref>]
    [--ca-tls-container-ref <ca_tls_container_ref>]
    [--crl-container-ref <crl_container_ref>]
    [--enable-tls | --disable-tls]
    [--wait]
    [--tls-ciphers <tls_ciphers>]
    [--tls-version [<tls_versions>]]
    [--alpn-protocol [<alpn_protocols>]]
    [--tag <tag> | --no-tag]

```

Table 49.246. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set pool name.
--description <description>	Set pool description.
--protocol {TCP,HTTP,HTTPS,TERMINATED_HTTPS,PROXY,PROXYV2,UDP,SCTP}	Set the pool protocol.
--listener <listener>	Listener to add the pool to (name or id).
--loadbalancer <load_balancer>	Load balancer to add the pool to (name or id)
--session-persistence <session persistence>	Set the session persistence for the listener (key=value).
--lb-algorithm {SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS,SOURCE_IP_PORT}	Load balancing algorithm to use.
--enable	Enable pool (default).
--disable	Disable pool.
--tls-container-ref <container-ref>	The reference to the key manager service secrets container containing the certificate and key for ``tls_enabled`` pools to re-encrypt the traffic to backend member servers.
--ca-tls-container-ref <ca_tls_container_ref>	The reference to the key manager service secrets container containing the CA certificate for ``tls_enabled`` pools to check the backend member servers certificates
--crl-container-ref <crl_container_ref>	The reference to the key manager service secrets container containing the CA revocation list file for ``tls_enabled`` pools to validate the backend member servers certificates.
--enable-tls	Enable backend member re-encryption.
--disable-tls	Disable backend member re-encryption.
--wait	Wait for action to complete

Value	Summary
<code>--tls-ciphers <tls_ciphers></code>	Set the tls ciphers to be used by the pool in openssl cipher string format.
<code>--tls-version [<tls_versions>]</code>	Set the tls protocol version to be used by the pool (can be set multiple times).
<code>--alpn-protocol [<alpn_protocols>]</code>	Set the alpn protocol to be used by the pool (can be set multiple times).
<code>--tag <tag></code>	Tag to be added to the pool (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the pool

Table 49.247. Output formatter options

Value	Summary
<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 to show multiple columns

Table 49.248. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.249. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 49.250. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.65. LOADBALANCER POOL DELETE

Delete a pool

Usage:

```
openstack loadbalancer pool delete [-h] [--wait] <pool>
```

Table 49.251. Positional arguments

Value	Summary
<pool>	Pool to delete (name or id).

Table 49.252. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for action to complete

49.66. LOADBALANCER POOL LIST

List pools

Usage:

```
openstack loadbalancer pool list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    [--loadbalancer <loadbalancer>]
    [--tags <tag>[,<tag>,...]]
```

```

[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]

```

Table 49.253. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--loadbalancer <loadbalancer>	Filter by load balancer (name or id).
--tags <tag>[,<tag>,...]	List pool which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List pool which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude pool which have all given tag(s) (comma-separated list of tags)
--not-any-tags <tag>[,<tag>,...]	Exclude pool which have any given tag(s) (comma-separated list of tags)

Table 49.254. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 49.255. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.256. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.257. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.67. 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,SOURCE_IP_PORT}]
                                [--enable | --disable]
                                [--tls-container-ref <container-ref>]
                                [--ca-tls-container-ref <ca_tls_container_ref>]
                                [--crl-container-ref <crl_container_ref>]
                                [--enable-tls | --disable-tls] [--wait]
                                [--tls-ciphers <tls_ciphers>]
                                [--tls-version [<tls_versions>]]
                                [--alpn-protocol [<alpn_protocols>]]
                                [--tag <tag>] [--no-tag]
                                <pool>

```

Table 49.258. Positional arguments

Value	Summary
<pool>	Pool to update (name or id).

Table 49.259. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the name of the pool.
--description <description>	Set the description of the pool.
--session-persistence <session_persistence>	Set the session persistence for the listener (key=value).
--lb-algorithm {SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS,SOURCE_IP_PORT}	Set the load balancing algorithm to use.
--enable	Enable pool.
--disable	Disable pool.
--tls-container-ref <container-ref>	The uri to the key manager service secrets container containing the certificate and key for TERMINATED_TLS pools to re-encrypt the traffic from TERMINATED_TLS listener to backend servers.
--ca-tls-container-ref <ca_tls_container_ref>	The uri to the key manager service secrets container containing the CA certificate for TERMINATED_TLS listeners to check the backend servers certificates in ssl traffic.
--crl-container-ref <crl_container_ref>	The uri to the key manager service secrets container containing the CA revocation list file for TERMINATED_TLS listeners to validate the backend servers certificates in ssl traffic.
--enable-tls	Enable backend associated members re-encryption.
--disable-tls	Disable backend associated members re-encryption.
--wait	Wait for action to complete
--tls-ciphers <tls_ciphers>	Set the tls ciphers to be used by the pool in openssl cipher string format.
--tls-version [<tls_versions>]	Set the tls protocol version to be used by the pool (can be set multiple times).
--alpn-protocol [<alpn_protocols>]	Set the alpn protocol to be used by the pool (can be set multiple times).

Value	Summary
--tag <tag>	Tag to be added to the pool (repeat option to set multiple tags)
--no-tag	Clear tags associated with the pool. specify both --tag and --no-tag to overwrite current tags

49.68. LOADBALANCER POOL SHOW

Show the details of a single pool

Usage:

```
openstack loadbalancer pool show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <pool>
```

Table 49.260. Positional arguments

Value	Summary
<pool>	Name or uuid of the pool.

Table 49.261. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.262. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.263. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.264. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.265. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.69. LOADBALANCER POOL UNSET

Clear pool settings

Usage:

```
openstack loadbalancer pool unset [-h] [--name] [--description]
                                [--ca-tls-container-ref]
                                [--crl-container-ref]
                                [--session-persistence]
                                [--tls-container-ref]
                                [--tls-versions] [--tls-ciphers]
                                [--wait] [--alpn-protocols]
                                [--tag <tag> | --all-tag]
                                <pool>
```

Table 49.266. Positional arguments

Value	Summary
<pool>	Pool to modify (name or id).

Table 49.267. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name	Clear the pool name.
--description	Clear the description of this pool.
--ca-tls-container-ref	Clear the certificate authority certificate reference on this pool.
--crl-container-ref	Clear the certificate revocation list reference on this pool.
--session-persistence	Disables session persistence on the pool.
--tls-container-ref	Clear the certificate reference for this pool.
--tls-versions	Clear all tls versions from the pool.
--tls-ciphers	Clear all tls ciphers from the pool.
--wait	Wait for action to complete
--alpn-protocols	Clear all alpn protocols from the pool.
--tag <tag>	Tag to be removed from the pool (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the pool

49.70. LOADBALANCER PROVIDER CAPABILITY LIST

List specified provider driver's capabilities.

Usage:

```

openstack loadbalancer provider capability list [-h]
        [-f {csv,json,table,value,yaml}]
        [-c COLUMN]
        [--quote {all,minimal,none,nonnumeric}]
        [--noindent]
        [--max-width <integer>]
        [--fit-width]
        [--print-empty]
        [--sort-column SORT_COLUMN]
        [--sort-ascending | --sort-descending]
        [--flavor | --availability-zone]
        <provider_name>

```

Table 49.268. Positional arguments

Value	Summary
<provider_name>	Name of the provider driver.

Table 49.269. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--flavor	Get capabilities for flavor only.
--availability-zone	Get capabilities for availability zone only.

Table 49.270. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 49.271. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.272. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.273. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.71. LOADBALANCER PROVIDER LIST

List all providers

Usage:

```
openstack loadbalancer provider list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]
```

Table 49.274. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 49.275. Output formatter options

Value	Summary
<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 to show multiple columns
<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

Value	Summary
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 49.276. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.277. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.278. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.72. LOADBALANCER QUOTA DEFAULTS SHOW

Show quota defaults

Usage:

```

openstack loadbalancer quota defaults show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]

```

Table 49.279. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.280. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.281. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.282. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.283. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.73. LOADBALANCER QUOTA LIST

List quotas

Usage:

```

openstack loadbalancer quota list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--project <project-id>]

```

Table 49.284. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project-id>	Name or uuid of the project.

Table 49.285. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 49.286. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.287. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.288. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.74. LOADBALANCER QUOTA RESET

Resets quotas to default quotas

Usage:

```
openstack loadbalancer quota reset [-h] <project>
```

Table 49.289. Positional arguments

Value	Summary
<code><project></code>	Project to reset quotas (name or id)

Table 49.290. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

49.75. LOADBALANCER QUOTA SET

Update a quota

Usage:

```
openstack loadbalancer quota set [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty]
    [--healthmonitor <health_monitor>]
    [--listener <listener>]
    [--loadbalancer <load_balancer>]
    [--member <member>] [--pool <pool>]
```

```

[--l7policy <l7policy>]
[--l7rule <l7rule>]
<project>

```

Table 49.291. Positional arguments

Value	Summary
<project>	Name or uuid of the project.

Table 49.292. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.293. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.294. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.295. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.296. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

Table 49.297. Quota limits

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.
--listener <listener>	New value for the listener quota. value -1 means unlimited.
--loadbalancer <load_balancer>	New value for the load balancer quota limit. value -1 means unlimited.
--member <member>	New value for the member quota limit. value -1 means unlimited.
--pool <pool>	New value for the pool quota limit. value -1 means unlimited.
--l7policy <l7policy>	New value for the l7policy quota limit. value -1 means unlimited.
--l7rule <l7rule>	New value for the l7rule quota limit. value -1 means unlimited.

49.76. LOADBALANCER QUOTA SHOW

Show the quota details for a project

Usage:

```
openstack loadbalancer quota show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <project>
```

Table 49.298. Positional arguments

Value	Summary
<project>	Name or uuid of the project.

Table 49.299. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.300. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.301. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.302. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.303. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.77. LOADBALANCER QUOTA UNSET

Clear quota settings

Usage:

```
openstack loadbalancer quota unset [-h] [--loadbalancer] [--listener]
                                   [--pool] [--member]
                                   [--healthmonitor] [--l7policy]
                                   [--l7rule]
                                   <project>
```

Table 49.304. Positional arguments

Value	Summary
<project>	Name or uuid of the project.

Table 49.305. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--loadbalancer	Reset the load balancer quota to the default.
--listener	Reset the listener quota to the default.
--pool	Reset the pool quota to the default.
--member	Reset the member quota to the default.
--healthmonitor	Reset the health monitor quota to the default.
--l7policy	Reset the l7policy quota to the default.
--l7rule	Reset the l7rule quota to the default.

49.78. 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] [--wait]
[--tag <tag>] [--no-tag]
<load_balancer>

```

Table 49.306. Positional arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer to update.

Table 49.307. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set load balancer name.
--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.
--disable	Disable load balancer.
--wait	Wait for action to complete
--tag <tag>	Tag to be added to the load balancer (repeat option to set multiple tags)
--no-tag	Clear tags associated with the load balancer. specify both --tag and --no-tag to overwrite current tags

49.79. LOADBALANCER SHOW

Show the details for a single load balancer

Usage:

```

openstack loadbalancer show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <load_balancer>

```

Table 49.308. Positional arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer.

Table 49.309. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.310. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.311. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.312. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.313. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.80. 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] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <load_balancer>
```

Table 49.314. Positional arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer.

Table 49.315. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.316. Output formatter options

Value	Summary
-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 to show multiple columns

Table 49.317. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.318. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 49.319. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

49.81. LOADBALANCER STATUS SHOW

Display load balancer status tree in json format

Usage:

```
openstack loadbalancer status show [-h] <load_balancer>
```

Table 49.320. Positional arguments

Value	Summary
<code><load_balancer></code>	Name or uuid of the load balancer.

Table 49.321. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

49.82. LOADBALANCER UNSET

Clear load balancer settings

Usage:

```
openstack loadbalancer unset [-h] [--name] [--description]
                             [--vip-qos-policy-id] [--wait]
                             [--tag <tag> | --all-tag]
                             <load_balancer>
```

Table 49.322. Positional arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer to update.

Table 49.323. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name	Clear the load balancer name.
--description	Clear the load balancer description.
--vip-qos-policy-id	Clear the load balancer qos policy.
--wait	Wait for action to complete
--tag <tag>	Tag to be removed from the load balancer (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the load balancer

CHAPTER 50. MAPPING

This chapter describes the commands under the **mapping** command.

50.1. MAPPING CREATE

Create new mapping

Usage:

```
openstack mapping create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] --rules <filename>
                        <name>
```

Table 50.1. Positional arguments

Value	Summary
<name>	New mapping name (must be unique)

Table 50.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--rules <filename>	Filename that contains a set of mapping rules (required)

Table 50.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 50.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 50.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 50.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

50.2. MAPPING DELETE

Delete mapping(s)

Usage:

```
openstack mapping delete [-h] <mapping> [<mapping> ...]
```

Table 50.7. Positional arguments

Value	Summary
<code><mapping></code>	Mapping(s) to delete

Table 50.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

50.3. MAPPING LIST

List mappings

Usage:

```
openstack mapping list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
```

```

[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]

```

Table 50.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 50.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 50.11. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 50.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 50.13. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

50.4. MAPPING SET

Set mapping properties

Usage:

```
openstack mapping set [-h] [--rules <filename>] <name>
```

Table 50.14. Positional arguments

Value	Summary
<code><name></code>	Mapping to modify

Table 50.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--rules <filename></code>	Filename that contains a new set of mapping rules

50.5. MAPPING SHOW

Display mapping details

Usage:

```
openstack mapping show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <mapping>
```

Table 50.16. Positional arguments

Value	Summary
<mapping>	Mapping to display

Table 50.17. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 50.18. Output formatter options

Value	Summary
-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 to show multiple columns

Table 50.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 50.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 50.21. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 51. MESSAGING

This chapter describes the commands under the **messaging** command.

51.1. 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]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--ttl <ttl>] [--grace <grace>]
                                [--limit <limit>]
                                <queue_name>
```

Table 51.1. Positional arguments

Value	Summary
<queue_name>	Name of the queue to be claim

Table 51.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--ttl <ttl>	Time to live in seconds for claim
--grace <grace>	The message grace period in seconds
--limit <limit>	Claims a set of messages, up to limit

Table 51.3. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 51.4. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 51.5. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.2. MESSAGING CLAIM QUERY

Display claim details

Usage:

```
openstack messaging claim query [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
<queue_name> <claim_id>

```

Table 51.7. Positional arguments

Value	Summary
<code><queue_name></code>	Name of the claimed queue
<code><claim_id></code>	Id of the claim

Table 51.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 51.9. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 51.10. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 51.11. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.12. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.3. MESSAGING CLAIM RELEASE

Delete a claim

Usage:

```
openstack messaging claim release [-h] <queue_name> <claim_id>
```

Table 51.13. Positional arguments

Value	Summary
<queue_name>	Name of the claimed queue
<claim_id>	Claim id to delete

Table 51.14. Command arguments

Value	Summary
-h, --help	Show this help message and exit

51.4. MESSAGING CLAIM RENEW

Renew a claim

Usage:

```
openstack messaging claim renew [-h] [-f {csv,json,table,value,yaml}]
```

```

[-c COLUMN]
[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--ttl <ttl>] [--grace <grace>]
<queue_name> <claim_id>

```

Table 51.15. Positional arguments

Value	Summary
<queue_name>	Name of the claimed queue
<claim_id>	Claim id

Table 51.16. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--ttl <ttl>	Time to live in seconds for claim
--grace <grace>	The message grace period in seconds

Table 51.17. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 51.18. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 51.19. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.20. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.5. MESSAGING FLAVOR CREATE

Create a pool flavor

Usage:

```
openstack messaging flavor create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--pool_list <pool_list>]
                                [--capabilities <capabilities>]
                                <flavor_name>
```

Table 51.21. Positional arguments

Value	Summary
<code><flavor_name></code>	Name of the flavor

Table 51.22. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--pool_list <pool_list>	Pool list for flavor
--capabilities <capabilities>	Describes flavor-specific capabilities, this option is only available in client api version < 2 .

Table 51.23. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.24. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.25. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.26. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.6. MESSAGING FLAVOR DELETE

Delete a pool flavor

Usage:

```
openstack messaging flavor delete [-h] <flavor_name>
```

Table 51.27. Positional arguments

Value	Summary
<flavor_name>	Name of the flavor

Table 51.28. Command arguments

Value	Summary
-h, --help	Show this help message and exit

51.7. MESSAGING FLAVOR LIST

List available pool flavors

Usage:

```
openstack messaging flavor list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--marker <flavor_name>]
                                [--limit <limit>] [--detailed]
```

Table 51.29. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker <flavor_name>	Flavor's paging marker
--limit <limit>	Page size limit
--detailed	If show detailed capabilities of flavor

Table 51.30. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 51.31. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 51.32. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.33. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.8. MESSAGING FLAVOR SHOW

Display pool flavor details

Usage:

```

openstack messaging flavor show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <flavor_name>

```

Table 51.34. Positional arguments

Value	Summary
<flavor_name>	Flavor to display (name)

Table 51.35. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.36. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.37. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.38. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.39. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.9. MESSAGING FLAVOR UPDATE

Update a flavor's attributes

Usage:

```
openstack messaging flavor update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--pool_list <pool_list>]
                                [--capabilities <capabilities>]
                                <flavor_name>
```

Table 51.40. Positional arguments

Value	Summary
<code><flavor_name></code>	Name of the flavor

Table 51.41. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--pool_list <pool_list></code>	Pool list the flavor sits on
<code>--capabilities <capabilities></code>	Describes flavor-specific capabilities.

Table 51.42. Output formatter options

Value	Summary
<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 to show multiple columns

Table 51.43. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.44. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 51.45. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.10. MESSAGING HEALTH

Display detailed health status of Zaqr server

Usage:

```
openstack messaging health [-h]
```

Table 51.46. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
-------	---------

51.11. MESSAGING HOMEDOC

Display detailed resource doc of Zaqar server

Usage:

```
openstack messaging homedoc [-h]
```

Table 51.47. Command arguments

Value	Summary
-h, --help	Show this help message and exit

51.12. MESSAGING MESSAGE LIST

List all messages for a given queue

Usage:

```
openstack messaging message list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    [--message-ids <message_ids>]
    [--limit <limit>] [--echo]
    [--include-claimed]
    [--include-delayed]
    [--client-id <client_id>]
    <queue_name>
```

Table 51.48. Positional arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.49. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--message-ids <message_ids>	List of messages' ids to retrieve
--limit <limit>	Maximum number of messages to get
--echo	Whether to get this client's own messages
--include-claimed	Whether to include claimed messages
--include-delayed	Whether to include delayed messages
--client-id <client_id>	A uuid for each client instance.

Table 51.50. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 51.51. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.52. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.53. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.13. MESSAGING MESSAGE POST

Post messages for a given queue

Usage:

```
openstack messaging message post [-h] [--client-id <client_id>]
    <queue_name> <messages>
```

Table 51.54. Positional arguments

Value	Summary
<code><queue_name></code>	Name of the queue
<code><messages></code>	Messages to be posted.

Table 51.55. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--client-id <client_id></code>	A uuid for each client instance.

51.14. MESSAGING PING

Check if Zaqr server is alive or not

Usage:

```
openstack messaging ping [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent] [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty]
```


Table 51.56. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.57. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.58. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.59. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.60. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.15. MESSAGING POOL CREATE

Create a pool

Usage:

```

openstack messaging pool create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--flavor <flavor>]
                                [--pool_options <pool_options>]
                                <pool_name> <pool_uri> <pool_weight>

```

Table 51.61. Positional arguments

Value	Summary
<pool_name>	Name of the pool
<pool_uri>	Storage engine uri
<pool_weight>	Weight of the pool

Table 51.62. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--flavor <flavor>	Flavor of the pool
--pool_options <pool_options>	An optional request component related to storage-specific options

Table 51.63. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.64. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.65. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 51.66. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.16. MESSAGING POOL DELETE

Delete a pool

Usage:

```
openstack messaging pool delete [-h] <pool_name>
```

Table 51.67. Positional arguments

Value	Summary
<code><pool_name></code>	Name of the pool

Table 51.68. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

51.17. MESSAGING POOL LIST

List available Pools

Usage:

```
openstack messaging pool list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
```

```

[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--marker <pool_name>] [--limit <limit>]
[--detailed]

```

Table 51.69. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker <pool_name>	Pool's paging marker
--limit <limit>	Page size limit
--detailed	Detailed output

Table 51.70. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 51.71. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.72. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.73. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.18. MESSAGING POOL SHOW

Display pool details

Usage:

```
openstack messaging pool show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             <pool_name>
```

Table 51.74. Positional arguments

Value	Summary
<code><pool_name></code>	Pool to display (name)

Table 51.75. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 51.76. Output formatter options

Value	Summary
<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 to show multiple columns

Table 51.77. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.78. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.79. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.19. MESSAGING POOL UPDATE

Update a pool attribute

Usage:

```
openstack messaging pool update [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--pool_uri <pool_uri>]
                               [--pool_weight <pool_weight>]
                               [--flavor <flavor>]
                               [--pool_options <pool_options>]
                               <pool_name>
```

Table 51.80. Positional arguments

Value	Summary
<pool_name>	Name of the pool

Table 51.81. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--pool_uri <pool_uri>	Storage engine uri
--pool_weight <pool_weight>	Weight of the pool
--flavor <flavor>	Flavor of the pool
--pool_options <pool_options>	An optional request component related to storage-specific options

Table 51.82. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.83. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.84. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.85. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.20. MESSAGING QUEUE CREATE

Create a queue

Usage:

```

openstack messaging queue create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <queue_name>

```

Table 51.86. Positional arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.87. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.88. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.89. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.90. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.91. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.21. MESSAGING QUEUE DELETE

Delete a queue

Usage:

```
openstack messaging queue delete [-h] <queue_name>
```

Table 51.92. Positional arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.93. Command arguments

Value	Summary
-h, --help	Show this help message and exit

51.22. MESSAGING QUEUE GET METADATA

Get queue metadata

Usage:

```
openstack messaging queue get metadata [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <queue_name>
```

Table 51.94. Positional arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.95. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.96. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.97. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.98. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.99. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.23. MESSAGING QUEUE LIST

List available queues

Usage:

```
openstack messaging queue list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--marker <queue_id>] [--limit <limit>]
                               [--detailed] [--with_count]
```

Table 51.100. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--marker <queue_id></code>	Queue's paging marker
<code>--limit <limit></code>	Page size limit
<code>--detailed</code>	If show detailed information of queue
<code>--with_count</code>	If show amount information of queue

Table 51.101. Output formatter options

Value	Summary
<code>-f {csv,json,table,value,yaml}, --format {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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 51.102. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.103. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.104. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.24. MESSAGING QUEUE PURGE

Purge a queue

Usage:

```
openstack messaging queue purge [-h]
                                [--resource_types <resource_types>]
                                <queue_name>
```

Table 51.105. Positional arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.106. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--resource_types <resource_types>	Resource types want to be purged.

51.25. MESSAGING QUEUE SET METADATA

Set queue metadata

Usage:

```
openstack messaging queue set metadata [-h]
                                        <queue_name> <queue_metadata>
```

Table 51.107. 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 51.108. Command arguments

Value	Summary
-h, --help	Show this help message and exit

51.26. MESSAGING QUEUE SIGNED URL

Create a pre-signed url

Usage:

-

```

openstack messaging queue signed url [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--paths <paths>]
    [--ttl-seconds <ttl_seconds>]
    [--methods <methods>]
    <queue_name>

```

Table 51.109. Positional arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.110. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--paths <paths>	Allowed paths in a comma-separated list. options: messages, subscriptions, claims
--ttl-seconds <ttl_seconds>	Length of time (in seconds) until the signature expires
--methods <methods>	Http methods to allow as a comma-separated list. Options: GET, HEAD, OPTIONS, POST, PUT, DELETE

Table 51.111. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.112. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.113. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.114. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.27. MESSAGING QUEUE STATS

Get queue stats

Usage:

```
openstack messaging queue stats [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <queue_name>
```

Table 51.115. Positional arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.116. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.117. Output formatter options

Value	Summary
<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 to show multiple columns

Table 51.118. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.119. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 51.120. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.28. MESSAGING SUBSCRIPTION CREATE

Create a subscription for queue

Usage:

```
openstack messaging subscription create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--options <options>]
                                     <queue_name> <subscriber> <ttl>
```


Table 51.121. Positional arguments

Value	Summary
<queue_name>	Name of the queue to subscribe to
<subscriber>	Subscriber which will be notified
<ttl>	Time to live of the subscription in seconds

Table 51.122. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--options <options>	Metadata of the subscription in json format

Table 51.123. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.124. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.125. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.126. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.29. MESSAGING SUBSCRIPTION DELETE

Delete a subscription

Usage:

```
openstack messaging subscription delete [-h]
                                     <queue_name> <subscription_id>
```

Table 51.127. Positional arguments

Value	Summary
<code><queue_name></code>	Name of the queue for the subscription
<code><subscription_id></code>	Id of the subscription

Table 51.128. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

51.30. MESSAGING SUBSCRIPTION LIST

List available subscriptions

Usage:

```
openstack messaging subscription list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
```

```

[--sort-ascending | --sort-descending]
[--marker <subscription_id>]
[--limit <limit>]
<queue_name>

```

Table 51.129. Positional arguments

Value	Summary
<queue_name>	Name of the queue to subscribe to

Table 51.130. Command arguments

Value	Summary
-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
--limit <limit>	Page size limit, default value is 20

Table 51.131. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 51.132. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.133. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.134. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.31. MESSAGING SUBSCRIPTION SHOW

Display subscription details

Usage:

```

openstack messaging subscription show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <queue_name> <subscription_id>

```

Table 51.135. Positional arguments

Value	Summary
<queue_name>	Name of the queue to subscribe to
<subscription_id>	Id of the subscription

Table 51.136. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.137. Output formatter options

Value	Summary
<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 to show multiple columns

Table 51.138. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.139. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 51.140. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

51.32. MESSAGING SUBSCRIPTION UPDATE

Update a subscription

Usage:

```
openstack messaging subscription update [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--subscriber <subscriber>]
```

```

[--ttl <ttl>]
[--options <options>]
<queue_name> <subscription_id>

```

Table 51.141. Positional arguments

Value	Summary
<queue_name>	Name of the queue to subscribe to
<subscription_id>	Id of the subscription

Table 51.142. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--subscriber <subscriber>	Subscriber which will be notified
--ttl <ttl>	Time to live of the subscription in seconds
--options <options>	Metadata of the subscription in json format

Table 51.143. Output formatter options

Value	Summary
-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 to show multiple columns

Table 51.144. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.145. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 51.146. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 52. METRIC

This chapter describes the commands under the **metric** command.

52.1. METRIC AGGREGATES

Get measurements of aggregated metrics.

Usage:

```
openstack metric aggregates [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--resource-type RESOURCE_TYPE]
                             [--start START] [--stop STOP]
                             [--granularity GRANULARITY]
                             [--needed-overlap NEEDED_OVERLAP]
                             [--groupby GROUPBY] [--fill FILL]
                             operations [search]
```

Table 52.1. 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-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, \neq , \geq , \leq , like, in.

Table 52.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-type RESOURCE_TYPE	Resource type to query
--start START	Beginning of the period
--stop STOP	End of the period

Value	Summary
--granularity GRANULARITY	Granularity to retrieve
--needed-overlap NEEDED_OVERLAP	Percentage of overlap across datapoints
--groupby GROUPBY	Attribute to use to group resources
--fill FILL	Value to use when backfilling timestamps with missing values in a subset of series. Value should be a float or <i>null</i> .

Table 52.3. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 52.4. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 52.5. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.2. METRIC ARCHIVE-POLICY CREATE

Create an archive policy.

Usage:

```

openstack metric archive-policy create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty] -d
                                     <DEFINITION> [-b BACK_WINDOW]
                                     [-m AGGREGATION_METHODS]
                                     name

```

Table 52.7. Positional arguments

Value	Summary
name	Name of the archive policy

Table 52.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-d <DEFINITION>, --definition <DEFINITION></code>	Two attributes (separated by ,) of an archive policy definition with its name and value separated with a :
<code>-b BACK_WINDOW, --back-window BACK_WINDOW</code>	Back window of the archive policy
<code>-m AGGREGATION_METHODS, --aggregation-method AGGREGATION_METHODS</code>	Aggregation method of the archive policy

Table 52.9. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.10. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.11. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.12. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.3. METRIC ARCHIVE-POLICY DELETE

Delete an archive policy.

Usage:

```
openstack metric archive-policy delete [-h] name
```

Table 52.13. Positional arguments

Value	Summary
name	Name of the archive policy

Table 52.14. Command arguments

Value	Summary
-h, --help	Show this help message and exit

52.4. METRIC ARCHIVE-POLICY LIST

List archive policies.

Usage:

```

openstack metric archive-policy list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]

```

Table 52.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.16. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 52.17. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.18. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.19. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.5. 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] [--noindent]
                                           [--prefix PREFIX]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty] -a
                                           ARCHIVE_POLICY_NAME -m
                                           METRIC_PATTERN
                                           name
```

Table 52.20. Positional arguments

Value	Summary
name	Rule name

Table 52.21. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-a ARCHIVE_POLICY_NAME, --archive-policy-name ARCHIVE_POLICY_NAME	Archive policy name
-m METRIC_PATTERN, --metric-pattern METRIC_PATTERN	Wildcard of metric name to match

Table 52.22. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.23. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.24. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.25. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.6. METRIC ARCHIVE-POLICY-RULE DELETE

Delete an archive policy rule.

Usage:

```
openstack metric archive-policy-rule delete [-h] name
```

Table 52.26. Positional arguments

Value	Summary
name	Name of the archive policy rule

Table 52.27. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

52.7. 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]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--sort-ascending | --sort-descending]
```

Table 52.28. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.29. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 52.30. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 52.31. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.32. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

52.8. 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] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         name
```

Table 52.33. Positional arguments

Value	Summary
name	Name of the archive policy rule

Table 52.34. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 52.35. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.36. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.37. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.38. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.9. METRIC ARCHIVE-POLICY SHOW

Show an archive policy.

Usage:

```

openstack metric archive-policy show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     name

```

Table 52.39. Positional arguments

Value	Summary
name	Name of the archive policy

Table 52.40. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 52.41. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.42. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.43. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.44. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.10. METRIC ARCHIVE-POLICY UPDATE

Update an archive policy.

Usage:

```
openstack metric archive-policy update [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty] -d
    <DEFINITION>
    name
```

-

Table 52.45. Positional arguments

Value	Summary
name	Name of the archive policy

Table 52.46. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-d <DEFINITION>, --definition <DEFINITION>	Two attributes (separated by ,) of an archive policy definition with its name and value separated with a :

Table 52.47. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.48. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.49. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.50. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.11. 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] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--workers WORKERS] --count
                                     COUNT [--batch BATCH]
                                     [--timestamp-start TIMESTAMP_START]
                                     [--timestamp-end TIMESTAMP_END]
                                     [--wait]
                                     metric

```

Table 52.51. Positional arguments

Value	Summary
<code>metric</code>	Id or name of the metric

Table 52.52. Command 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>--workers WORKERS, -w WORKERS</code>	Number of workers to use
<code>--count COUNT, -n COUNT</code>	Number of total measures to send

Value	Summary
<code>--batch BATCH, -b BATCH</code>	Number of measures to send in each batch
<code>--timestamp-start TIMESTAMP_START, -s TIMESTAMP_START</code>	First timestamp to use
<code>--timestamp-end TIMESTAMP_END, -e TIMESTAMP_END</code>	Last timestamp to use
<code>--wait</code>	Wait for all measures to be processed

Table 52.53. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.54. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.55. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.56. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

52.12. 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] [--noindent]
      [--prefix PREFIX]
      [--max-width <integer>]
      [--fit-width] [--print-empty]
      [--sort-column SORT_COLUMN]
      [--sort-ascending | --sort-descending]
      [--utc]
      [--resource-id RESOURCE_ID]
      [--aggregation AGGREGATION]
      [--start START] [--stop STOP]
      [--granularity GRANULARITY]
      [--refresh]
      [--resample RESAMPLE]
      [--workers WORKERS] --count
COUNT
metric

```

Table 52.57. Positional arguments

Value	Summary
<code>metric</code>	Id or name of the metric

Table 52.58. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--utc</code>	Return timestamps as utc
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>--aggregation AGGREGATION</code>	Aggregation to retrieve
<code>--start START</code>	Beginning of the period

Value	Summary
--stop STOP	End of the period
--granularity GRANULARITY	Granularity to retrieve
--refresh	Force aggregation of all known measures
--resample RESAMPLE	Granularity to resample time-series to (in seconds)
--workers WORKERS, -w WORKERS	Number of workers to use
--count COUNT, -n COUNT	Number of total measures to send

Table 52.59. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 52.60. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.61. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.62. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.13. 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] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--archive-policy-name ARCHIVE_POLICY_NAME]
                                     [--workers WORKERS] --count
                                     COUNT [--keep]

```

Table 52.63. Command 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>--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME</code>	Name of the archive policy
<code>--workers WORKERS, -w WORKERS</code>	Number of workers to use
<code>--count COUNT, -n COUNT</code>	Number of metrics to create
<code>--keep, -k</code>	Keep created metrics

Table 52.64. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.65. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.66. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.67. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.14. 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] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
```

```
[--workers WORKERS] --count
COUNT
metric [metric ...]
```

Table 52.68. Positional arguments

Value	Summary
metric	Id or name of the metrics

Table 52.69. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
--workers WORKERS, -w WORKERS	Number of workers to use
--count COUNT, -n COUNT	Number of metrics to get

Table 52.70. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.71. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.72. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.73. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.15. METRIC CAPABILITIES LIST

List capabilities.

Usage:

```

openstack metric capabilities list [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>]
                                [--fit-width] [--print-empty]

```

Table 52.74. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 52.75. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.76. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.77. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.78. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.16. METRIC CREATE

Create a metric.

Usage:

```
openstack metric create [-h] [--resource-id RESOURCE_ID]
                        [-f {json,shell,table,value,yaml}] [-c COLUMN]
                        [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        [--archive-policy-name ARCHIVE_POLICY_NAME]
                        [--unit UNIT]
                        [METRIC_NAME]
```

Table 52.79. Positional arguments

Value	Summary
METRIC_NAME	Name of the metric

Table 52.80. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource

Value	Summary
<code>--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME</code>	Name of the archive policy
<code>--unit UNIT, -u UNIT</code>	Unit of the metric

Table 52.81. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.82. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.83. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.84. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.17. METRIC DELETE

Delete a metric.

Usage:

```
openstack metric delete [-h] [--resource-id RESOURCE_ID]
                        metric [metric ...]
```

Table 52.85. Positional arguments

Value	Summary
metric	Ids or names of the metric

Table 52.86. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource

52.18. METRIC LIST

List metrics.

Usage:

```
openstack metric list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--limit <LIMIT>] [--marker <MARKER>]
                    [--sort <SORT>]
```

Table 52.87. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <LIMIT>	Number of metrics to return (default is server default)
--marker <MARKER>	Last item of the previous listing. return the next results after this value
--sort <SORT>	Sort of metric attribute (example: user_id:desc-nullslast)

Table 52.88. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 52.89. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.90. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.91. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.19. METRIC MEASURES ADD

Add measurements to a metric.

Usage:

```
openstack metric measures add [-h] [--resource-id RESOURCE_ID] -m
    MEASURE
    metric
```

Table 52.92. Positional arguments

Value	Summary
metric	Id or name of the metric

Table 52.93. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
-m MEASURE, --measure MEASURE	Timestamp and value of a measure separated with a @

52.20. METRIC MEASURES AGGREGATION

Get measurements of aggregated metrics.

Usage:

```
openstack metric measures aggregation [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    [--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 52.94. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--utc	Return timestamps as utc
-m METRIC [METRIC ...], --metric METRIC [METRIC ...]	Metrics ids or metric name
--aggregation AGGREGATION	Granularity aggregation function to retrieve
--reaggregation REAGGREGATION	Groupby aggregation function to retrieve
--start START	Beginning of the period
--stop STOP	End of the period
--granularity GRANULARITY	Granularity to retrieve
--needed-overlap NEEDED_OVERLAP	Percent of datapoints in each metrics required
--query QUERY	A query to filter resource. the syntax is a combination of attribute, operator and value. For example: id=90d58eea-70d7-4294-a49a-170dcdf44c3c would filter resource with a certain id. More complex queries can be built, e.g.: not (flavor_id!="1" and memory>=24). Use "" to force data to be interpreted as string. Supported operators are: not, and, \wedge or, \vee , $>=$, $<=$, $!=$, $>$, $<$, $=$, $==$, eq, ne, lt, gt, ge, le, in, like, \neq , \geq , \leq , like, in.
--resource-type RESOURCE_TYPE	Resource type to query
--groupby GROUPBY	Attribute to use to group resources
--refresh	Force aggregation of all known measures
--resample RESAMPLE	Granularity to resample time-series to (in seconds)
--fill FILL	Value to use when backfilling timestamps with missing values in a subset of series. Value should be a float or <i>null</i> .

Table 52.95. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 52.96. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.97. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.98. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.21. METRIC MEASURES BATCH-METRICS

Usage:

```
openstack metric measures batch-metrics [-h] file
```

-

Table 52.99. Positional arguments

Value	Summary
file	File containing measurements to batch or - for stdin (see Gnocchi REST API docs for the format)

Table 52.100. Command arguments

Value	Summary
-h, --help	Show this help message and exit

52.22. METRIC MEASURES BATCH-RESOURCES-METRICS

Usage:

```
openstack metric measures batch-resources-metrics [-h]
                                                    [--create-metrics]
                                                    file
```

Table 52.101. Positional arguments

Value	Summary
file	File containing measurements to batch or - for stdin (see Gnocchi REST API docs for the format)

Table 52.102. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--create-metrics	Create unknown metrics

52.23. METRIC MEASURES SHOW

Get measurements of a metric.

Usage:

```
openstack metric measures show [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
```

```

[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--utc] [--resource-id RESOURCE_ID]
[--aggregation AGGREGATION]
[--start START] [--stop STOP]
[--granularity GRANULARITY] [--refresh]
[--resample RESAMPLE]
metric

```

Table 52.103. Positional arguments

Value	Summary
metric	Id or name of the metric

Table 52.104. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--utc	Return timestamps as utc
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
--aggregation AGGREGATION	Aggregation to retrieve
--start START	Beginning of the period
--stop STOP	End of the period
--granularity GRANULARITY	Granularity to retrieve
--refresh	Force aggregation of all known measures
--resample RESAMPLE	Granularity to resample time-series to (in seconds)

Table 52.105. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 52.106. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.107. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.108. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.24. 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] [--noindent]
```

```

[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--type RESOURCE_TYPE]
query

```

Table 52.109. 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 52.110. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Table 52.111. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.112. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.113. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.114. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.25. METRIC RESOURCE CREATE

Create a resource.

Usage:

```

openstack metric resource create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--type RESOURCE_TYPE]
                                [-a ATTRIBUTE] [-m ADD_METRIC]
                                [-n CREATE_METRIC]
                                resource_id

```

Table 52.115. Positional arguments

Value	Summary
<code>resource_id</code>	Id of the resource

Table 52.116. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--type RESOURCE_TYPE, -t RESOURCE_TYPE</code>	Type of resource

Value	Summary
-a ATTRIBUTE, --attribute ATTRIBUTE	Name and value of an attribute separated with a :
-m ADD_METRIC, --add-metric ADD_METRIC	Name:id of a metric to add
-n CREATE_METRIC, --create-metric CREATE_METRIC	Name:archive_policy_name of a metric to create

Table 52.117. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.118. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.119. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.120. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.26. METRIC RESOURCE DELETE

Delete a resource.

Usage:

```
openstack metric resource delete [-h] resource_id
```

Table 52.121. Positional arguments

Value	Summary
resource_id	Id of the resource

Table 52.122. Command arguments

Value	Summary
-h, --help	Show this help message and exit

52.27. METRIC RESOURCE HISTORY

Show the history of a resource.

Usage:

```
openstack metric resource history [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    [--details] [--limit <LIMIT>]
    [--marker <MARKER>] [--sort <SORT>]
    [--type RESOURCE_TYPE]
    resource_id
```

Table 52.123. Positional arguments

Value	Summary
resource_id	Id of a resource

Table 52.124. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--details	Show all attributes of generic resources

Value	Summary
<code>--limit <LIMIT></code>	Number of resources to return (default is server default)
<code>--marker <MARKER></code>	Last item of the previous listing. return the next results after this value
<code>--sort <SORT></code>	Sort of resource attribute (example: user_id:desc-nullslast)
<code>--type RESOURCE_TYPE, -t RESOURCE_TYPE</code>	Type of resource

Table 52.125. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 52.126. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.127. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.128. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.28. METRIC RESOURCE LIST

List resources.

Usage:

```
openstack metric resource list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--details] [--history]
                               [--limit <LIMIT>] [--marker <MARKER>]
                               [--sort <SORT>] [--type RESOURCE_TYPE]
```

Table 52.129. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--details</code>	Show all attributes of generic resources
<code>--history</code>	Show history of the resources
<code>--limit <LIMIT></code>	Number of resources to return (default is server default)
<code>--marker <MARKER></code>	Last item of the previous listing. return the next results after this value
<code>--sort <SORT></code>	Sort of resource attribute (example: <code>user_id:desc-nullslast</code>)
<code>--type RESOURCE_TYPE, -t RESOURCE_TYPE</code>	Type of resource

Table 52.130. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 52.131. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.132. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.133. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.29. METRIC RESOURCE SEARCH

Search resources with specified query rules.

Usage:

```

openstack metric resource search [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--details] [--history]
                                [--limit <LIMIT>] [--marker <MARKER>]
                                [--sort <SORT>] [--type RESOURCE_TYPE]
                                query

```

Table 52.134. 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 52.135. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--details	Show all attributes of generic resources
--history	Show history of the resources
--limit <LIMIT>	Number of resources to return (default is server default)
--marker <MARKER>	Last item of the previous listing. return the next results after this value
--sort <SORT>	Sort of resource attribute (example: user_id:desc-nullslast)
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Table 52.136. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 52.137. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.138. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.139. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.30. METRIC RESOURCE SHOW

Show a resource.

Usage:

```

openstack metric resource show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--type RESOURCE_TYPE]
                               resource_id

```

Table 52.140. Positional arguments

Value	Summary
resource_id	Id of a resource

Table 52.141. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Table 52.142. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.143. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.144. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.145. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.31. METRIC RESOURCE-TYPE CREATE

Create a resource type.

Usage:

```
openstack metric resource-type create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [-a ATTRIBUTE]
                                     name
```

Table 52.146. Positional arguments

Value	Summary
name	Name of the resource type

Table 52.147. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-a ATTRIBUTE, --attribute ATTRIBUTE</code>	Attribute definition, <code>attribute_name:attribute_type:attribute_is_required:attribute_type_option_name=attribute_type_option_value:...</code> For example: <code>display_name:string:true:max_length=255</code>

Table 52.148. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.149. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.150. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.151. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.32. METRIC RESOURCE-TYPE DELETE

Delete a resource type.

Usage:

```
openstack metric resource-type delete [-h] name
```

Table 52.152. Positional arguments

Value	Summary
name	Name of the resource type

Table 52.153. Command arguments

Value	Summary
-h, --help	Show this help message and exit

52.33. METRIC RESOURCE-TYPE LIST

List resource types.

Usage:

```

openstack metric resource-type list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--noindent]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--sort-column SORT_COLUMN]
                                   [--sort-ascending | --sort-descending]

```

Table 52.154. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.155. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 52.156. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.157. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.158. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.34. METRIC RESOURCE-TYPE SHOW

Show a resource type.

Usage:

```

openstack metric resource-type show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     name

```

Table 52.159. Positional arguments

Value	Summary
name	Name of the resource type

Table 52.160. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.161. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.162. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.163. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.164. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.35. METRIC RESOURCE-TYPE UPDATE

Create a resource type.

Usage:

```
openstack metric resource-type update [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [-a ATTRIBUTE]
                                     [-r REMOVE_ATTRIBUTE]
                                     name
```

Table 52.165. Positional arguments

Value	Summary
name	Name of the resource type

Table 52.166. Command 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
-r REMOVE_ATTRIBUTE, --remove-attribute REMOVE_ATTRIBUTE	Attribute name

Table 52.167. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.168. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.169. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.170. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.36. METRIC RESOURCE UPDATE

Update a resource.

Usage:

```
openstack metric resource update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--type RESOURCE_TYPE]
                                [-a ATTRIBUTE] [-m ADD_METRIC]
                                [-n CREATE_METRIC] [-d DELETE_METRIC]
                                resource_id
```

Table 52.171. Positional arguments

Value	Summary
resource_id	Id of the resource

Table 52.172. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource
-a ATTRIBUTE, --attribute ATTRIBUTE	Name and value of an attribute separated with a :
-m ADD_METRIC, --add-metric ADD_METRIC	Name:id of a metric to add
-n CREATE_METRIC, --create-metric CREATE_METRIC	Name:archive_policy_name of a metric to create
-d DELETE_METRIC, --delete-metric DELETE_METRIC	Name of a metric to delete

Table 52.173. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.174. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.175. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.176. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.37. METRIC SERVER VERSION

Show the version of Gnocchi server.

Usage:

```
openstack metric server version [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
```

Table 52.177. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 52.178. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.179. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.180. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.181. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.38. METRIC SHOW

Show a metric.

Usage:

```

openstack metric show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--resource-id RESOURCE_ID]
                    metric

```

Table 52.182. Positional arguments

Value	Summary
<code>metric</code>	Id or name of the metric

Table 52.183. Command 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 52.184. Output formatter options

Value	Summary
<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 to show multiple columns

Table 52.185. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.186. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.187. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

52.39. METRIC STATUS

Show the status of measurements processing.

Usage:

```
openstack metric status [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
```

Table 52.188. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.189. Output formatter options

Value	Summary
-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 to show multiple columns

Table 52.190. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.191. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 52.192. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 53. MODULE

This chapter describes the commands under the **module** command.

53.1. MODULE LIST

List module versions

Usage:

```
openstack module list [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--all]
```

Table 53.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Show all modules that have version information

Table 53.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 53.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 53.4. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 53.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 54. NETWORK

This chapter describes the commands under the **network** command.

54.1. NETWORK AGENT ADD NETWORK

Add network to an agent

Usage:

```
openstack network agent add network [-h] [--dhcp] <agent-id> <network>
```

Table 54.1. 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 54.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--dhcp	Add network to a dhcp agent

54.2. NETWORK AGENT ADD ROUTER

Add router to an agent

Usage:

```
openstack network agent add router [-h] [--l3] <agent-id> <router>
```

Table 54.3. 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 54.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--l3	Add router to an l3 agent

54.3. NETWORK AGENT DELETE

Delete network agent(s)

Usage:

```
openstack network agent delete [-h]
                               <network-agent> [<network-agent> ...]
```

Table 54.5. Positional arguments

Value	Summary
<network-agent>	Network agent(s) to delete (id only)

Table 54.6. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.4. NETWORK AGENT LIST

List network agents

Usage:

```
openstack network agent list [-h] [-f {csv,json,table,value,yaml}]
                              [-c COLUMN]
                              [--quote {all,minimal,none,nonnumeric}]
                              [--noindent] [--max-width <integer>]
                              [--fit-width] [--print-empty]
                              [--sort-column SORT_COLUMN]
                              [--sort-ascending | --sort-descending]
                              [--agent-type <agent-type>]
                              [--host <host>]
                              [--network <network> | --router <router>]
                              [--long]
```

Table 54.7. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--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.
--host <host>	List only agents running on the specified host
--network <network>	List agents hosting a network (name or id)
--router <router>	List agents hosting this router (name or id)
--long	List additional fields in output

Table 54.8. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.9. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.10. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.11. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.5. NETWORK AGENT REMOVE NETWORK

Remove network from an agent.

Usage:

```
openstack network agent remove network [-h] [--dhcp]
    <agent-id> <network>
```

Table 54.12. Positional arguments

Value	Summary
<code><agent-id></code>	Agent to which a network is removed (id only)
<code><network></code>	Network to be removed from an agent (name or id)

Table 54.13. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--dhcp</code>	Remove network from dhcp agent

54.6. NETWORK AGENT REMOVE ROUTER

Remove router from an agent

Usage:

```
openstack network agent remove router [-h] [--l3] <agent-id> <router>
```

Table 54.14. 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 54.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--l3	Remove router from an l3 agent

54.7. NETWORK AGENT SET

Set network agent properties

Usage:

```
openstack network agent set [-h] [--description <description>]
                             [--enable | --disable]
                             <network-agent>
```

Table 54.16. Positional arguments

Value	Summary
<network-agent>	Network agent to modify (id only)

Table 54.17. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Set network agent description
--enable	Enable network agent
--disable	Disable network agent

54.8. NETWORK AGENT SHOW

Display network agent details

Usage:

```

openstack network agent show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <network-agent>

```

Table 54.18. Positional arguments

Value	Summary
<network-agent>	Network agent to display (id only)

Table 54.19. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.20. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.21. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.22. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.23. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.9. 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]
                                                [--noindent]
                                                [--prefix PREFIX]
                                                [--max-width <integer>]
                                                [--fit-width]
                                                [--print-empty]
                                                [--project <project>]
                                                [--project-domain <project-domain>]
                                                [--check-resources]
                                                [--or-show]

```

Table 54.24. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project <project></code>	Return the auto allocated topology for a given project. Default is current project
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--check-resources</code>	Validate the requirements for auto allocated topology. Does not return a topology.
<code>--or-show</code>	If topology exists returns the topology's information (Default)

Table 54.25. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.26. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.27. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.28. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.10. 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 54.29. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Delete auto allocated topology for a given project. Default is the current project
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

54.11. NETWORK CREATE

Create new network

Usage:

```

openstack network create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--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>]
                        [--dns-domain <dns-domain>]
                        [--tag <tag> | --no-tag]
                        <name>

```

Table 54.30. Positional arguments

Value	Summary
<name>	New network name

Table 54.31. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--share	Share the network between projects

Value	Summary
--no-share	Do not share the network between projects
--enable	Enable network (default)
--disable	Disable network
--project <project>	Owner's project (name or id)
--description <description>	Set network description
--mtu <mtu>	Set network mtu
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--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-port-security	Enable port security by default for ports created on this network (default)
--disable-port-security	Disable port security by default for ports created on this network
--external	Set this network as an external network (external-net extension required)
--internal	Set this network as an internal network (default)
--default	Specify if this network should be used as the default external network
--no-default	Do not use the network as the default external network (default)
--qos-policy <qos-policy>	Qos policy to attach to this network (name or id)
--transparent-vlan	Make the network vlan transparent
--no-transparent-vlan	Do not make the network vlan transparent

Value	Summary
<code>--provider-network-type <provider-network-type></code>	The physical mechanism by which the virtual network is implemented. For example: flat, geneve, gre, local, vlan, vxlan.
<code>--provider-physical-network <provider-physical-network></code>	Name of the physical network over which the virtual network is implemented
<code>--provider-segment <provider-segment></code>	Vlan id for vlan networks or tunnel id for GENEVE/GRE/VXLAN networks
<code>--dns-domain <dns-domain></code>	Set dns domain for this network (requires dns integration extension)
<code>--tag <tag></code>	Tag to be added to the network (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the network

Table 54.32. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.33. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.34. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.35. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.12. NETWORK DELETE

Delete network(s)

Usage:

```
openstack network delete [-h] <network> [<network> ...]
```

Table 54.36. Positional arguments

Value	Summary
<code><network></code>	Network(s) to delete (name or id)

Table 54.37. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.13. NETWORK FLAVOR ADD PROFILE

Add a service profile to a network flavor

Usage:

```
openstack network flavor add profile [-h] <flavor> <service-profile>
```

Table 54.38. Positional arguments

Value	Summary
<code><flavor></code>	Network flavor (name or id)

Value	Summary
<service-profile>	Service profile (id only)

Table 54.39. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.14. NETWORK FLAVOR CREATE

Create new network flavor

Usage:

```

openstack network flavor create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] --service-type
                               <service-type>
                               [--description DESCRIPTION]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               [--enable | --disable]
                               <name>

```

Table 54.40. Positional arguments

Value	Summary
<name>	Name for the flavor

Table 54.41. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--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
--project <project>	Owner's project (name or id)

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--enable</code>	Enable the flavor (default)
<code>--disable</code>	Disable the flavor

Table 54.42. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.43. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.44. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.45. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.15. NETWORK FLAVOR DELETE

Delete network flavors

Usage:

```
openstack network flavor delete [-h] <flavor> [<flavor> ...]
```

Table 54.46. Positional arguments

Value	Summary
<flavor>	Flavor(s) to delete (name or id)

Table 54.47. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.16. NETWORK FLAVOR LIST

List network flavors

Usage:

```
openstack network flavor list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
```

Table 54.48. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.49. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.50. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.51. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.52. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.17. NETWORK FLAVOR PROFILE CREATE

Create new network flavor profile

Usage:

```
openstack network flavor profile create [-h]
                                         [-f {json,shell,table,value,yaml}]
```

```

[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--project <project>]
[--project-domain <project-domain>]
[--description <description>]
[--enable | --disable]
[--driver DRIVER]
[--metainfo METAINFO]

```

Table 54.53. Command 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.
--description <description>	Description for the flavor profile
--enable	Enable the flavor profile
--disable	Disable the flavor profile
--driver DRIVER	Python module path to driver. this becomes required if --metainfo is missing and vice versa
--metainfo METAINFO	Metainfo for the flavor profile. this becomes required if --driver is missing and vice versa

Table 54.54. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.55. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.56. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.57. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.18. NETWORK FLAVOR PROFILE DELETE

Delete network flavor profile

Usage:

```
openstack network flavor profile delete [-h]
                                     <flavor-profile>
                                     [<flavor-profile> ...]
```

Table 54.58. Positional arguments

Value	Summary
<code><flavor-profile></code>	Flavor profile(s) to delete (id only)

Table 54.59. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.19. NETWORK FLAVOR PROFILE LIST

List network flavor profile(s)

Usage:

```
openstack network flavor profile list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]
```

Table 54.60. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.61. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.62. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.63. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.64. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.20. 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 54.65. Positional arguments

Value	Summary
<flavor-profile>	Flavor profile to update (id only)

Table 54.66. Command 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.

Value	Summary
<code>--description <description></code>	Description for the flavor profile
<code>--enable</code>	Enable the flavor profile
<code>--disable</code>	Disable the flavor profile
<code>--driver DRIVER</code>	Python module path to driver. this becomes required if <code>--metainfo</code> is missing and vice versa
<code>--metainfo METAINFO</code>	Metainfo for the flavor profile. this becomes required if <code>--driver</code> is missing and vice versa

54.21. NETWORK FLAVOR PROFILE SHOW

Display network flavor profile details

Usage:

```

openstack network flavor profile show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <flavor-profile>

```

Table 54.67. Positional arguments

Value	Summary
<code><flavor-profile></code>	Flavor profile to display (id only)

Table 54.68. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 54.69. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.70. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.71. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.72. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.22. NETWORK FLAVOR REMOVE PROFILE

Remove service profile from network flavor

Usage:

```
openstack network flavor remove profile [-h] <flavor> <service-profile>
```

Table 54.73. Positional arguments

Value	Summary
<flavor>	Network flavor (name or id)

Value	Summary
<service-profile>	Service profile (id only)

Table 54.74. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.23. NETWORK FLAVOR SET

Set network flavor properties

Usage:

```
openstack network flavor set [-h] [--description DESCRIPTION]
                             [--disable | --enable] [--name <name>]
                             <flavor>
```

Table 54.75. Positional arguments

Value	Summary
<flavor>	Flavor to update (name or id)

Table 54.76. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description DESCRIPTION	Set network flavor description
--disable	Disable network flavor
--enable	Enable network flavor
--name <name>	Set flavor name

54.24. NETWORK FLAVOR SHOW

Display network flavor details

Usage:

```
openstack network flavor show [-h] [-f {json,shell,table,value,yaml}]
```

```

[-c COLUMN] [--noindent]
[--prefix PREFIX] [--max-width <integer>]
[--fit-width] [--print-empty]
<flavor>

```

Table 54.77. Positional arguments

Value	Summary
<flavor>	Flavor to display (name or id)

Table 54.78. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.79. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.80. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.81. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.82. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.25. NETWORK LIST

List networks

Usage:

```
openstack network list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--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 54.83. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--external	List external networks
--internal	List internal networks
--long	List additional fields in output
--name <name>	List networks according to their name
--enable	List enabled networks

Value	Summary
<code>--disable</code>	List disabled networks
<code>--project <project></code>	List networks according to their project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--share</code>	List networks shared between projects
<code>--no-share</code>	List networks not shared between projects
<code>--status <status></code>	List networks according to their status (<i>active</i> , <i>BUILD</i> , <i>DOWN</i> , <i>ERROR</i>)
<code>--provider-network-type <provider-network-type></code>	List networks according to their physical mechanisms. The supported options are: flat, geneve, gre, local, vlan, vxlan.
<code>--provider-physical-network <provider-physical-network></code>	List networks according to name of the physical network
<code>--provider-segment <provider-segment></code>	List networks according to vlan id for vlan networks or Tunnel ID for GENEVE/GRE/VXLAN networks
<code>--agent <agent-id></code>	List networks hosted by agent (id only)
<code>--tags <tag>[,<tag>,...]</code>	List networks which have all given tag(s) (comma-separated list of tags)
<code>--any-tags <tag>[,<tag>,...]</code>	List networks which have any given tag(s) (comma-separated list of tags)
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude networks which have all given tag(s) (comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude networks which have any given tag(s) (comma-separated list of tags)

Table 54.84. Output formatter options

Value	Summary
<code>-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 54.85. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.86. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.87. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.26. NETWORK LOG CREATE

Create a new network log

Usage:

```
openstack network log create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty]
[--description <description>]
[--enable | --disable]
[--project <project>]
[--project-domain <project-domain>]
[--event {ALL,ACCEPT,DROP}]
--resource-type <resource-type>
[--resource <resource>]
[--target <target>]
<name>

```

Table 54.88. Positional arguments

Value	Summary
<name>	Name for the network log

Table 54.89. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the network log
--enable	Enable this log (default is disabled)
--disable	Disable this log
--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.
--event {ALL,ACCEPT,DROP}	An event to store with log
--resource-type <resource-type>	Network log type(s). you can see supported type(s) with following command: \$ openstack network loggable resources list
--resource <resource>	Name or id of resource (security group or firewall group) that used for logging. You can control for logging target combination with --target option.
--target <target>	Port (name or id) for logging. you can control for logging target combination with --resource option.

Table 54.90. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.91. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.92. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.93. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.27. NETWORK LOG DELETE

Delete network log(s)

Usage:

```
openstack network log delete [-h] <network-log> [<network-log> ...]
```

Table 54.94. Positional arguments

Value	Summary
<code><network-log></code>	Network log(s) to delete (name or id)

Value	Summary
-------	---------

Table 54.95. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.28. NETWORK LOG LIST

List network logs

Usage:

```

openstack network log list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--long]

```

Table 54.96. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 54.97. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 54.98. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.99. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.100. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.29. NETWORK LOG SET

Set network log properties

Usage:

```
openstack network log set [-h] [--description <description>]
                          [--enable | --disable] [--name <name>]
                          <network-log>
```

Table 54.101. Positional arguments

Value	Summary
<code><network-log></code>	Network log to set (name or id)

Table 54.102. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the network log
--enable	Enable this log (default is disabled)
--disable	Disable this log
--name <name>	Name of the network log

54.30. NETWORK LOG SHOW

Display network log details

Usage:

```
openstack network log show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <network-log>
```

Table 54.103. Positional arguments

Value	Summary
<network-log>	Network log to show (name or id)

Table 54.104. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.105. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.106. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.107. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.108. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.31. NETWORK LOGGABLE RESOURCES LIST

List supported loggable resources

Usage:

```
openstack network loggable resources list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--sort-ascending | --sort-descending]
                                         [--long]
```

Table 54.109. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 54.110. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 54.111. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.112. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.113. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.32. NETWORK METER CREATE

Create network meter

Usage:

```

openstack network meter create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description <description>]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               [--share | --no-share]
                               <name>

```

Table 54.114. Positional arguments

Value	Summary
<name>	Name of meter

Table 54.115. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Create description for meter
--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.
--share	Share meter between projects
--no-share	Do not share meter between projects

Table 54.116. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.117. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.118. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.119. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.33. NETWORK METER DELETE

Delete network meter

Usage:

```
openstack network meter delete [-h] <meter> [<meter> ...]
```

Table 54.120. Positional arguments

Value	Summary
<meter>	Meter to delete (name or id)

Table 54.121. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.34. NETWORK METER LIST

List network meters

Usage:

```
openstack network meter list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
```

Table 54.122. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.123. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.124. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.125. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.126. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.35. NETWORK METER RULE CREATE

Create a new meter rule

Usage:

```

openstack network meter rule create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--project <project>]
                                     [--project-domain <project-domain>]
                                     [--exclude | --include]
                                     [--ingress | --egress]
                                     [--remote-ip-prefix <remote-ip-prefix>]
                                     [--source-ip-prefix <remote-ip-prefix>]
                                     [--destination-ip-prefix <remote-ip-prefix>]
                                     <meter>

```

Table 54.127. Positional arguments

Value	Summary
<code><meter></code>	Label to associate with this metering rule (name or ID)

Table 54.128. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project <project></code>	Owner's project (name or id)

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--exclude</code>	Exclude remote ip prefix from traffic count
<code>--include</code>	Include remote ip prefix from traffic count (default)
<code>--ingress</code>	Apply rule to incoming network traffic (default)
<code>--egress</code>	Apply rule to outgoing network traffic
<code>--remote-ip-prefix <remote-ip-prefix></code>	The remote ip prefix to associate with this rule
<code>--source-ip-prefix <remote-ip-prefix></code>	The source ip prefix to associate with this rule
<code>--destination-ip-prefix <remote-ip-prefix></code>	The destination ip prefix to associate with this rule

Table 54.129. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.130. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.131. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.132. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.36. NETWORK METER RULE DELETE

Delete meter rule(s)

Usage:

```
openstack network meter rule delete [-h]
                                   <meter-rule-id>
                                   [<meter-rule-id> ...]
```

Table 54.133. Positional arguments

Value	Summary
<code><meter-rule-id></code>	Meter rule to delete (id only)

Table 54.134. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.37. NETWORK METER RULE LIST

List meter rules

Usage:

```
openstack network meter rule list [-h] [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--noindent] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--sort-column SORT_COLUMN]
                                   [--sort-ascending | --sort-descending]
```

Table 54.135. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.136. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.137. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.138. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.139. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

54.38. NETWORK METER RULE SHOW

Display meter rules details

Usage:

```

openstack network meter rule show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]
                                  [--max-width <integer>] [--fit-width]
                                  [--print-empty]
                                  <meter-rule-id>

```

Table 54.140. Positional arguments

Value	Summary
<code><meter-rule-id></code>	Meter rule (id only)

Table 54.141. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 54.142. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.143. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.144. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.145. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.39. NETWORK METER SHOW

Show network meter

Usage:

```
openstack network meter show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <meter>
```

Table 54.146. Positional arguments

Value	Summary
<meter>	Meter to display (name or id)

Table 54.147. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.148. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.149. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.150. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.151. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.40. NETWORK ONBOARD SUBNETS

Onboard network subnets into a subnet pool

Usage:

```
openstack network onboard subnets [-h] <network> <subnetpool>
```

Table 54.152. Positional arguments

Value	Summary
<code><network></code>	Onboard all subnets associated with this network

Value	Summary
<subnetpool>	Target subnet pool for onboarding subnets

Table 54.153. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.41. NETWORK QoS POLICY CREATE

Create a QoS policy

Usage:

```

openstack network qos policy create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--description <description>]
                                     [--share | --no-share]
                                     [--project <project>]
                                     [--project-domain <project-domain>]
                                     [--default | --no-default]
                                     <name>

```

Table 54.154. Positional arguments

Value	Summary
<name>	Name of qos policy to create

Table 54.155. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the qos policy
--share	Make the qos policy accessible by other projects

Value	Summary
<code>--no-share</code>	Make the qos policy not accessible by other projects (default)
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--default</code>	Set this as a default network qos policy
<code>--no-default</code>	Set this as a non-default network qos policy

Table 54.156. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.157. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.158. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.159. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.42. NETWORK QOS POLICY DELETE

Delete Qos Policy(s)

Usage:

```
openstack network qos policy delete [-h]
    <qos-policy> [<qos-policy> ...]
```

Table 54.160. Positional arguments

Value	Summary
<qos-policy>	Qos policy(s) to delete (name or id)

Table 54.161. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.43. NETWORK QOS POLICY LIST

List QoS policies

Usage:

```
openstack network qos policy list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    [--project <project>]
    [--project-domain <project-domain>]
    [--share | --no-share]
```

Table 54.162. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	List qos policies according to their project (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--share	List qos policies shared between projects
--no-share	List qos policies not shared between projects

Table 54.163. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.164. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.165. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.166. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.44. 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 54.167. Positional arguments

Value	Summary
<code><qos-policy></code>	Qos policy to modify (name or id)

Table 54.168. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Set qos policy name
<code>--description <description></code>	Description of the qos policy
<code>--share</code>	Make the qos policy accessible by other projects
<code>--no-share</code>	Make the qos policy not accessible by other projects
<code>--default</code>	Set this as a default network qos policy

Value	Summary
--no-default	Set this as a non-default network qos policy

54.45. NETWORK QOS POLICY SHOW

Display QoS policy details

Usage:

```

openstack network qos policy show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <qos-policy>

```

Table 54.169. Positional arguments

Value	Summary
<qos-policy>	Qos policy to display (name or id)

Table 54.170. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.171. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.172. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.173. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.174. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.46. NETWORK QOS RULE CREATE

Create new Network QoS rule

Usage:

```

openstack network qos rule create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] --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 54.175. Positional arguments

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)

Table 54.176. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
--type <type>	Qos rule type (minimum-bandwidth, dscp-marking, bandwidth-limit)
--max-kbps <max-kbps>	Maximum bandwidth in kbps
--max-burst-kbits <max-burst-kbits>	Maximum burst in kilobits, 0 or not specified means automatic, which is 80% of the bandwidth limit, which works for typical TCP traffic. For details check the QoS user workflow.
--dscp-mark <dscp-mark>	Dscp mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54
--min-kbps <min-kbps>	Minimum guaranteed bandwidth in kbps
--ingress	Ingress traffic direction from the project point of view
--egress	Egress traffic direction from the project point of view

Table 54.177. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.178. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.179. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.180. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.47. NETWORK QOS RULE DELETE

Delete Network QoS rule

Usage:

```
openstack network qos rule delete [-h] <qos-policy> <rule-id>
```

Table 54.181. Positional arguments

Value	Summary
<code><qos-policy></code>	Qos policy that contains the rule (name or id)
<code><rule-id></code>	Network qos rule to delete (id)

Table 54.182. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.48. NETWORK QOS RULE LIST

List Network QoS rules

Usage:

```
openstack network qos rule list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                <qos-policy>
```

Table 54.183. Positional arguments

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)

Table 54.184. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.185. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.186. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.187. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.188. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.49. 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 54.189. Positional arguments

Value	Summary
<code><qos-policy></code>	Qos policy that contains the rule (name or id)
<code><rule-id></code>	Network qos rule to delete (id)

Table 54.190. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--max-kbps <max-kbps></code>	Maximum bandwidth in kbps
<code>--max-burst-kbits <max-burst-kbits></code>	Maximum burst in kilobits, 0 or not specified means automatic, which is 80% of the bandwidth limit, which works for typical TCP traffic. For details check the QoS user workflow.

Value	Summary
--dscp-mark <dscp-mark>	Dscp mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54
--min-kbps <min-kbps>	Minimum guaranteed bandwidth in kbps
--ingress	Ingress traffic direction from the project point of view
--egress	Egress traffic direction from the project point of view

54.50. NETWORK QOS RULE SHOW

Display Network QoS rule details

Usage:

```
openstack network qos rule show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <qos-policy> <rule-id>
```

Table 54.191. Positional arguments

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)
<rule-id>	Network qos rule to delete (id)

Table 54.192. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.193. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.194. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.195. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.196. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.51. 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]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]

```

Table 54.197. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.198. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.199. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.200. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.201. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

54.52. 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] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <qos-rule-type-name>
```

Table 54.202. Positional arguments

Value	Summary
<code><qos-rule-type-name></code>	Name of qos rule type

Table 54.203. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 54.204. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.205. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.206. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.207. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.53. NETWORK RBAC CREATE

Create network RBAC policy

Usage:

```

openstack network rbac create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty] --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 54.208. Positional arguments

Value	Summary
<rbac-object>	The object to which this rbac policy affects (name or ID)

Table 54.209. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--type <type></code>	Type of the object that rbac policy affects ("address_group", "address_scope", "security_group", "subnetpool", "qos_policy" or "network")
<code>--action <action></code>	Action for the rbac policy ("access_as_external" or "access_as_shared")
<code>--target-project <target-project></code>	The project to which the rbac policy will be enforced (name or ID)
<code>--target-all-projects</code>	Allow creating rbac policy for all projects.
<code>--target-project-domain <target-project-domain></code>	Domain the target project belongs to (name or id). This can be used in case collisions between project names exist.
<code>--project <project></code>	The owner project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 54.210. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.211. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.212. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.213. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.54. NETWORK RBAC DELETE

Delete network RBAC policy(s)

Usage:

```
openstack network rbac delete [-h] <rbac-policy> [<rbac-policy> ...]
```

Table 54.214. Positional arguments

Value	Summary
<code><rbac-policy></code>	Rbac policy(s) to delete (id only)

Table 54.215. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.55. NETWORK RBAC LIST

List network RBAC policies

Usage:

```
openstack network rbac list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--type <type>] [--action <action>]
                             [--long]
```

Table 54.216. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--type <type>	List network rbac policies according to given object type ("address_group", "address_scope", "security_group", "subnetpool", "qos_policy" or "network")
--action <action>	List network rbac policies according to given action ("access_as_external" or "access_as_shared")
--long	List additional fields in output

Table 54.217. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.218. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.219. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.220. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.56. 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 54.221. Positional arguments

Value	Summary
<code><rbac-policy></code>	Rbac policy to be modified (id only)

Table 54.222. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--target-project <target-project></code>	The project to which the rbac policy will be enforced (name or ID)
<code>--target-project-domain <target-project-domain></code>	Domain the target project belongs to (name or id). This can be used in case collisions between project names exist.

54.57. NETWORK RBAC SHOW

Display network RBAC policy details

Usage:

```
openstack network rbac show [-h] [-f {json,shell,table,value,yaml}]
```

```
[-c COLUMN] [--noindent] [--prefix PREFIX]
[--max-width <integer>] [--fit-width]
[--print-empty]
<rbac-policy>
```

Table 54.223. Positional arguments

Value	Summary
<rbac-policy>	Rbac policy (id only)

Table 54.224. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.225. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.226. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.227. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.228. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.58. NETWORK SEGMENT CREATE

Create new network segment

Usage:

```

openstack network segment create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty]
    [--description <description>]
    [--physical-network <physical-network>]
    [--segment <segment>] --network
    <network> --network-type
    <network-type>
    <name>

```

Table 54.229. Positional arguments

Value	Summary
<name>	New network segment name

Table 54.230. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Network segment description
--physical-network <physical-network>	Physical network name of this network segment
--segment <segment>	Segment identifier for this network segment which is based on the network type, VLAN ID for vlan network type and tunnel ID for geneve, gre and vxlan network types

Value	Summary
<code>--network <network></code>	Network this network segment belongs to (name or id)
<code>--network-type <network-type></code>	Network type of this network segment (flat, geneve, gre, local, vlan or vxlan)

Table 54.231. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.232. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.233. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.234. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.59. NETWORK SEGMENT DELETE

Delete network segment(s)

Usage:

```
openstack network segment delete [-h]
                                <network-segment>
                                [<network-segment> ...]
```

Table 54.235. Positional arguments

Value	Summary
<network-segment>	Network segment(s) to delete (name or id)

Table 54.236. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.60. NETWORK SEGMENT LIST

List network segments

Usage:

```
openstack network segment list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--long] [--network <network>]
```

Table 54.237. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--network <network>	List network segments that belong to this network (name or ID)

Table 54.238. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 54.239. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.240. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.241. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.61. NETWORK SEGMENT RANGE CREATE

Create new network segment range

Usage:

```

openstack network segment range create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--private | --shared]
    [--project <project>]
    [--project-domain <project-domain>]
    --network-type <network-type>
    [--physical-network <physical-network-name>]
    --minimum
    <minimum-segmentation-id>
    --maximum
    <maximum-segmentation-id>
    <name>

```

Table 54.242. Positional arguments

Value	Summary
<name>	Name of new network segment range

Table 54.243. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--private	Network segment range is assigned specifically to the project
--shared	Network segment range is shared with other projects
--project <project>	Network segment range owner (name or id). optional when the segment range is shared
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--network-type <network-type>	Network type of this network segment range (geneve, gre, vlan or vxlan)
--physical-network <physical-network-name>	Physical network name of this network segment range

Value	Summary
<code>--minimum <minimum-segmentation-id></code>	Minimum segment identifier for this network segment range which is based on the network type, VLAN ID for vlan network type and tunnel ID for geneve, gre and vxlan network types
<code>--maximum <maximum-segmentation-id></code>	Maximum segment identifier for this network segment range which is based on the network type, VLAN ID for vlan network type and tunnel ID for geneve, gre and vxlan network types

Table 54.244. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.245. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.246. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.247. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.62. NETWORK SEGMENT RANGE DELETE

Delete network segment range(s)

Usage:

```
openstack network segment range delete [-h]
                                     <network-segment-range>
                                     [<network-segment-range> ...]
```

Table 54.248. Positional arguments

Value	Summary
<network-segment-range>	Network segment range(s) to delete (name or id)

Table 54.249. Command arguments

Value	Summary
-h, --help	Show this help message and exit

54.63. NETWORK SEGMENT RANGE LIST

List network segment ranges

Usage:

```
openstack network segment range list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]
                                     [--long] [--used | --unused]
                                     [--available | --unavailable]
```

Table 54.250. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--used	List network segment ranges that have segments in use

Value	Summary
--unused	List network segment ranges that have segments not in use
--available	List network segment ranges that have available segments
--unavailable	List network segment ranges without available segments

Table 54.251. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.252. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.253. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.254. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.64. NETWORK SEGMENT RANGE SET

Set network segment range properties

Usage:

```
openstack network segment range set [-h] [--name <name>]
                                     [--minimum <minimum-segmentation-id>]
                                     [--maximum <maximum-segmentation-id>]
                                     <network-segment-range>
```

Table 54.255. Positional arguments

Value	Summary
<code><network-segment-range></code>	Network segment range to modify (name or id)

Table 54.256. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Set network segment name
<code>--minimum <minimum-segmentation-id></code>	Set network segment range minimum segment identifier
<code>--maximum <maximum-segmentation-id></code>	Set network segment range maximum segment identifier

54.65. NETWORK SEGMENT RANGE SHOW

Display network segment range details

Usage:

```

openstack network segment range show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <network-segment-range>

```

Table 54.257. Positional arguments

Value	Summary
<network-segment-range>	Network segment range to display (name or id)

Table 54.258. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.259. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.260. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.261. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.262. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.66. NETWORK SEGMENT SET

Set network segment properties

Usage:

```
openstack network segment set [-h] [--description <description>]
                               [--name <name>]
                               <network-segment>
```

Table 54.263. Positional arguments

Value	Summary
<code><network-segment></code>	Network segment to modify (name or id)

Table 54.264. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description <description></code>	Set network segment description
<code>--name <name></code>	Set network segment name

54.67. NETWORK SEGMENT SHOW

Display network segment details

Usage:

```
openstack network segment show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty]
<network-segment>

```

Table 54.265. Positional arguments

Value	Summary
<network-segment>	Network segment to display (name or id)

Table 54.266. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.267. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.268. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.269. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.270. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.68. NETWORK SERVICE PROVIDER LIST

List Service Providers

Usage:

```
openstack network service provider list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--sort-ascending | --sort-descending]
```

Table 54.271. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 54.272. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 54.273. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.274. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.275. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.69. 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>]
                        [--dns-domain <dns-domain>]
                        <network>

```

Table 54.276. Positional arguments

Value	Summary
<network>	Network to modify (name or id)

Table 54.277. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set network name
--enable	Enable network
--disable	Disable network
--share	Share the network between projects
--no-share	Do not share the network between projects
--description <description>	Set network description
--mtu <mtu>	Set network mtu
--enable-port-security	Enable port security by default for ports created on this network
--disable-port-security	Disable port security by default for ports created on this network
--external	Set this network as an external network (external-net extension required)
--internal	Set this network as an internal network
--default	Set the network as the default external network
--no-default	Do not use the network as the default external network
--qos-policy <qos-policy>	Qos policy to attach to this network (name or id)
--no-qos-policy	Remove the qos policy attached to this network
--tag <tag>	Tag to be added to the network (repeat option to set multiple tags)

Value	Summary
<code>--no-tag</code>	Clear tags associated with the network. specify both <code>--tag</code> and <code>--no-tag</code> to overwrite current tags
<code>--provider-network-type <provider-network-type></code>	The physical mechanism by which the virtual network is implemented. For example: flat, geneve, gre, local, vlan, vxlan.
<code>--provider-physical-network <provider-physical-network></code>	Name of the physical network over which the virtual network is implemented
<code>--provider-segment <provider-segment></code>	Vlan id for vlan networks or tunnel id for GENEVE/GRE/VXLAN networks
<code>--dns-domain <dns-domain></code>	Set dns domain for this network (requires dns integration extension)

54.70. NETWORK SHOW

Show network details

Usage:

```
openstack network show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <network>
```

Table 54.278. Positional arguments

Value	Summary
<code><network></code>	Network to display (name or id)

Table 54.279. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 54.280. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.281. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.282. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.283. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.71. NETWORK SUPPORT LIST

List all subports for a given network trunk

Usage:

```
openstack network subport list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               --trunk <trunk>
```


Table 54.284. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--trunk <trunk>	List subports belonging to this trunk (name or id)

Table 54.285. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 54.286. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.287. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.288. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.72. 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] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description <description>]
                               --parent-port <parent-port>
                               [--subport <port=,segmentation-type=,segmentation-id=>]
                               [--enable | --disable]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               <name>

```

Table 54.289. Positional arguments

Value	Summary
<name>	Name of the trunk to create

Table 54.290. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	A description of the trunk
--parent-port <parent-port>	Parent port belonging to this trunk (name or id)
--subport <port=,segmentation-type=,segmentation-id=>	Subport to add. subport is of form <i>port=<name or ID>,segmentation-type=,segmentation-ID=</i> (--subport) option can be repeated

Value	Summary
<code>--enable</code>	Enable trunk (default)
<code>--disable</code>	Disable trunk
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 54.291. Output formatter options

Value	Summary
<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 to show multiple columns

Table 54.292. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.293. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.294. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

54.73. NETWORK TRUNK DELETE

Delete a given network trunk

Usage:

```
openstack network trunk delete [-h] <trunk> [<trunk> ...]
```

Table 54.295. Positional arguments

Value	Summary
<code><trunk></code>	Trunk(s) to delete (name or id)

Table 54.296. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.74. NETWORK TRUNK LIST

List all network trunks

Usage:

```
openstack network trunk list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--long]
```

Table 54.297. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

Table 54.298. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 54.299. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.300. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.301. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

54.75. 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 54.302. Positional arguments

Value	Summary
<trunk>	Trunk to modify (name or id)

Table 54.303. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set trunk name
--description <description>	A description of the trunk
--subport <port=,segmentation-type=,segmentation-id=>	Subport to add. subport is of form <i>port=<name or ID>,segmentation-type=,segmentation-ID=(--subport)</i> option can be repeated
--enable	Enable trunk
--disable	Disable trunk

54.76. NETWORK TRUNK SHOW

Show information of a given network trunk

Usage:

```

openstack network trunk show [-h] [-f {json,shell,table,value,yaml}]
                              [-c COLUMN] [--noindent] [--prefix PREFIX]
                              [--max-width <integer>] [--fit-width]
                              [--print-empty]
                              <trunk>

```

Table 54.304. Positional arguments

Value	Summary
<trunk>	Trunk to display (name or id)

Table 54.305. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.306. Output formatter options

Value	Summary
-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 to show multiple columns

Table 54.307. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.308. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 54.309. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.77. NETWORK TRUNK UNSET

Unset subports from a given network trunk

Usage:

```
openstack network trunk unset [-h] --subport <subport> <trunk>
```

Table 54.310. Positional arguments

Value	Summary
<trunk>	Unset subports from this trunk (name or id)

Table 54.311. Command 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

54.78. NETWORK UNSET

Unset network properties

Usage:

```
openstack network unset [-h] [--tag <tag> | --all-tag] <network>
```

Table 54.312. Positional arguments

Value	Summary
<network>	Network to modify (name or id)

Table 54.313. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--tag <tag>	Tag to be removed from the network (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the network

CHAPTER 55. OBJECT

This chapter describes the commands under the **object** command.

55.1. OBJECT CREATE

Upload object to container

Usage:

```
openstack object create [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--name <name>]
                        <container> <filename> [<filename> ...]
```

Table 55.1. Positional arguments

Value	Summary
<container>	Container for new object
<filename>	Local filename(s) to upload

Table 55.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Upload a file and rename it. can only be used when uploading a single object

Table 55.3. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 55.4. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 55.5. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 55.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

55.2. OBJECT DELETE

Delete object from container

Usage:

```
openstack object delete [-h] <container> <object> [<object> ...]
```

Table 55.7. Positional arguments

Value	Summary
<container>	Delete object(s) from <container>
<object>	Object(s) to delete

Table 55.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

55.3. OBJECT LIST

List objects

Usage:

```

openstack object list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--prefix <prefix>] [--delimiter <delimiter>]
                        [--marker <marker>] [--end-marker <end-marker>]
                        [--limit <num-objects>] [--long] [--all]
                        <container>

```

Table 55.9. Positional arguments

Value	Summary
<container>	Container to list

Table 55.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--prefix <prefix>	Filter list using <prefix>
--delimiter <delimiter>	Roll up items with <delimiter>
--marker <marker>	Anchor for paging

Value	Summary
--end-marker <end-marker>	End anchor for paging
--limit <num-objects>	Limit the number of objects returned
--long	List additional fields in output
--all	List all objects in container (default is 10000)

Table 55.11. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 55.12. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 55.13. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 55.14. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

55.4. OBJECT SAVE

Save object locally

Usage:

```
openstack object save [-h] [--file <filename>] <container> <object>
```

Table 55.15. Positional arguments

Value	Summary
<code><container></code>	Download <code><object></code> from <code><container></code>
<code><object></code>	Object to save

Table 55.16. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--file <filename></code>	Destination filename (defaults to object name); using <code>-</code> as the filename will print the file to stdout

55.5. OBJECT SET

Set object properties

Usage:

```
openstack object set [-h] --property <key=value> <container> <object>
```

Table 55.17. Positional arguments

Value	Summary
<container>	Modify <object> from <container>
<object>	Object to modify

Table 55.18. Command 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)

55.6. OBJECT SHOW

Display object details

Usage:

```

openstack object show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <container> <object>

```

Table 55.19. Positional arguments

Value	Summary
<container>	Display <object> from <container>
<object>	Object to display

Table 55.20. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 55.21. Output formatter options

Value	Summary
-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 to show multiple columns

Table 55.22. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 55.23. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 55.24. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

55.7. OBJECT STORE ACCOUNT SET

Set account properties

Usage:

```
openstack object store account set [-h] --property <key=value>
```

Table 55.25. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--property <key=value></code>	Set a property on this account (repeat option to set multiple properties)

55.8. OBJECT STORE ACCOUNT SHOW

Display account details

Usage:

```
openstack object store account show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
```

Table 55.26. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 55.27. Output formatter options

Value	Summary
<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 to show multiple columns

Table 55.28. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 55.29. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 55.30. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

55.9. OBJECT STORE ACCOUNT UNSET

Unset account properties

Usage:

```
openstack object store account unset [-h] --property <key>
```

Table 55.31. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--property <key></code>	Property to remove from account (repeat option to remove multiple properties)

55.10. OBJECT UNSET

Unset object properties

Usage:

```
openstack object unset [-h] --property <key> <container> <object>
```

Table 55.32. Positional arguments

Value	Summary
<code><container></code>	Modify <code><object></code> from <code><container></code>
<code><object></code>	Object to modify

Table 55.33. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from object (repeat option to remove multiple properties)

CHAPTER 56. ORCHESTRATION

This chapter describes the commands under the **orchestration** command.

56.1. ORCHESTRATION BUILD INFO

Retrieve build information.

Usage:

```
openstack orchestration build info [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>]
                                [--fit-width] [--print-empty]
```

Table 56.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 56.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 56.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.4. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 56.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

56.2. ORCHESTRATION RESOURCE TYPE LIST

List resource types.

Usage:

```

openstack orchestration resource type list [-h]
      [-f {csv,json,table,value,yaml}]
      [-c COLUMN]
      [--quote {all,minimal,none,nonnumeric}]
      [--noindent]
      [--max-width <integer>]
      [--fit-width]
      [--print-empty]
      [--sort-column SORT_COLUMN]
      [--sort-ascending | --sort-descending]
      [--filter <key=value>]
      [--long]

```

Table 56.6. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--filter <key=value></code>	Filter parameters to apply on returned resource types. This can be specified multiple times. It can be any of name, version or support_status
<code>--long</code>	Show resource types with corresponding description of each resource type.

Table 56.7. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 56.8. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 56.9. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 56.10. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

56.3. 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] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--template-type <template-type>]
                                         [--long]
                                         <resource-type>

```

Table 56.11. Positional arguments

Value	Summary
<resource-type>	Resource type to show details for

Table 56.12. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--template-type <template-type>	Optional template type to generate, hot or cfn
--long	Show resource type with corresponding description.

Table 56.13. Output formatter options

Value	Summary
-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 to show multiple columns

Table 56.14. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.15. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 56.16. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

56.4. ORCHESTRATION SERVICE LIST

List the Heat engines.

Usage:

```

openstack orchestration service list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]

```

Table 56.17. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 56.18. Output formatter options

Value	Summary
<code>-f {csv,json,table,value,yaml}, --format {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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 56.19. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 56.20. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.21. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

56.5. ORCHESTRATION TEMPLATE FUNCTION LIST

List the available functions.

Usage:

```
openstack orchestration template function list [-h]
        [-f {csv,json,table,value,yaml}]
```



```

[-c COLUMN]
[--quote {all,minimal,none,nonnumeric}]
[--noindent]
[--max-width <integer>]
[--fit-width]
[--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--with_conditions]
<template-version>

```

Table 56.22. Positional arguments

Value	Summary
<template-version>	Template version to get the functions for

Table 56.23. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--with_conditions	Show condition functions for template.

Table 56.24. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 56.25. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 56.26. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.27. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

56.6. ORCHESTRATION TEMPLATE VALIDATE

Validate a template

Usage:

```

openstack orchestration template validate [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [-e <environment>]
    [--show-nested]
    [--parameter <key=value>]
    [-s <files-container>]
    [--ignore-errors <error1,error2,...>]
    -t <template>

```

Table 56.28. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-e <environment>, --environment <environment>	Path to the environment. can be specified multiple times
--show-nested	Resolve parameters from nested templates as well

Value	Summary
<code>--parameter <key=value></code>	Parameter values used to create the stack. this can be specified multiple times
<code>-s <files-container>, --files-container <files-container></code>	Swift files container name. local files other than root template would be ignored. If other files are not found in swift, heat engine would raise an error.
<code>--ignore-errors <error1,error2,...></code>	List of heat errors to ignore
<code>-t <template>, --template <template></code>	Path to the template

Table 56.29. Output formatter options

Value	Summary
<code>-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to yaml
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated to show multiple columns

Table 56.30. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 56.31. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 56.32. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

56.7. ORCHESTRATION TEMPLATE VERSION LIST

List the available template versions.

Usage:

```

openstack orchestration template version list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--sort-ascending | --sort-descending]

```

Table 56.33. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 56.34. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 56.35. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 56.36. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 56.37. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 57. OVERCLOUD

This chapter describes the commands under the **overcloud** command.

57.1. OVERCLOUD ADMIN AUTHORIZE

Deploy the ssh keys needed by Mistral.

Usage:

```
openstack overcloud admin authorize [-h] [--stack STACK]
                                   [--overcloud-ssh-user OVERCLOUD_SSH_USER]
                                   [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
                                   [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
                                   [--overcloud-ssh-enable-timeout
OVERCLOUD_SSH_ENABLE_TIMEOUT]
                                   [--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT]
                                   [--static-inventory STATIC_INVENTORY]
                                   [--limit LIMIT_HOSTS]
```

Table 57.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to overcloud nodes
--overcloud-ssh-key OVERCLOUD_SSH_KEY	Key path for ssh access to overcloud nodes. When undefined the key will be autodetected.
--overcloud-ssh-network OVERCLOUD_SSH_NETWORK	Network name to use for ssh access to overcloud nodes.
--overcloud-ssh-enable-timeout OVERCLOUD_SSH_ENABLE_TIMEOUT	This option no longer has any effect.
--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT	Timeout for the ssh port to become active.
--static-inventory STATIC_INVENTORY	Path to an existing ansible inventory to use. if not specified, one will be generated in ~/tripleo-ansible-inventory.yaml
--limit LIMIT_HOSTS	Define which hosts or group of hosts to run the admin Authorize tasks against.

57.2. OVERCLOUD BACKUP

Backup the Overcloud

Usage:

```
openstack overcloud backup [--init [INIT]] [--setup-nfs] [--setup-rear]
                          [--setup-ironic] [--cron]
                          [--inventory INVENTORY]
                          [--storage-ip STORAGE_IP]
                          [--extra-vars EXTRA_VARS]
```

Table 57.2. Command arguments

Value	Summary
--init [INIT]	Initialize environment for backup, using <i>rear</i> , <i>nfs</i> or <i>ironic</i> as args which will check for package install and configured ReaR or NFS server. Defaults to: <i>rear</i> . i.e. --init <i>rear</i> . WARNING: This flag will be deprecated and replaced by <i>--setup-rear</i> , <i>--setup-nfs</i> and <i>--setup-ironic</i> .
--setup-nfs	Setup the nfs server on the backup node which will install required packages and configuration on the host <i>BackupNode</i> in the ansible inventory.
--setup-rear	Setup rear on the overcloud <i>controller</i> hosts which will install and configure ReaR.
--setup-ironic	Setup rear on the overcloud <i>controller</i> hosts which will install and configure ReaR with ironic
--cron	Sets up a new cron job that by default will execute a weekly backup at Sundays midnight, but that can be customized by using the <i>tripleo_backup_and_restore_cron</i> extra-var.
--inventory INVENTORY	Tripleo inventory file generated with <i>tripleo-ansible-inventory</i> command. Defaults to: <i>/root/config-download/overcloud/tripleo-ansible-inventory.yaml</i>
--storage-ip STORAGE_IP	Storage ip is an optional parameter which allows for an ip of a storage server to be specified, overriding the default undercloud. WARNING: This flag will be deprecated in favor of <i>--extra-vars</i> which will allow to pass this and other variables.

Value	Summary
<code>--extra-vars EXTRA_VARS</code>	Set additional variables as dict or as an absolute path of a JSON or YAML file type. i.e. <code>--extra-vars {"key": "val", "key2": "val2"}</code> i.e. <code>--extra-vars /path/to/my_vars.yaml</code> i.e. <code>--extra-vars /path/to/my_vars.json</code> . For more information about the variables that can be passed, visit: https://opendev.org/openstack/tripleo-ansible/src/branch/master/tripleo_ansible/roles/backup_and_restore/defaults/main.yml .

57.3. OVERCLOUD CELL EXPORT

Export cell information used as import of another cell

Usage:

```
openstack overcloud cell export [-h]
                                [--control-plane-stack <control plane stack>]
                                [--cell-stack <cell stack>]
                                [--output-file <output file>]
                                [--working-dir WORKING_DIR]
                                [--config-download-dir CONFIG_DOWNLOAD_DIR]
                                [--force-overwrite]
```

Table 57.3. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--control-plane-stack <control plane stack></code>	Name of the environment main heat stack to export information from. (default=Env: OVERCLOUD_STACK_NAME)
<code>--cell-stack <cell stack>, -e <cell stack></code>	Name of the controller cell heat stack to export information from. Used in case of: control plane stack → cell controller stack → multiple compute stacks
<code>--output-file <output file>, -o <output file></code>	Name of the output file for the cell data export. it will default to "<name>.yaml"
<code>--working-dir WORKING_DIR</code>	The working directory for the deployment where all input, output, and generated files are stored. Defaults to "\$HOME/overcloud-deploy/<stack>"

Value	Summary
<code>--config-download-dir CONFIG_DOWNLOAD_DIR</code>	Directory to search for config-download export data. Defaults to <code>\$HOME/overcloud-deploy/<stack>/config-download</code>
<code>--force-overwrite, -f</code>	Overwrite output file if it exists.

57.4. OVERCLOUD CEPH DEPLOY

Usage:

```

openstack overcloud ceph deploy [-h] -o <deployed_ceph.yaml> [-y]
    [--skip-user-create]
    [--skip-hosts-config]
    [--skip-container-registry-config]
    [--skip-ntp]
    [--cephadm-ssh-user CEPHADM_SSH_USER]
    [--stack STACK]
    [--working-dir WORKING_DIR]
    [--roles-data ROLES_DATA]
    [--network-data NETWORK_DATA]
    [--public-network-name PUBLIC_NETWORK_NAME]
    [--cluster-network-name CLUSTER_NETWORK_NAME]
    [--cluster CLUSTER] [--mon-ip MON_IP]
    [--config CONFIG]
    [--cephadm-extra-args CEPHADM_EXTRA_ARGS]
    [--force]
    [--ansible-extra-vars ANSIBLE_EXTRA_VARS]
    [--ceph-client-username CEPH_CLIENT_USERNAME]
    [--ceph-client-key CEPH_CLIENT_KEY]
    [--skip-cephx-keys]
    [--single-host-defaults]
    [--ntp-server NTP_SERVER]
    [--ntp-heat-env-file NTP_HEAT_ENV_FILE]
    [--ceph-spec CEPH_SPEC | --osd-spec OSD_SPEC]
    [--crush-hierarchy CRUSH_HIERARCHY]
    [--standalone]
    [--container-image-prepare CONTAINER_IMAGE_PREPARE]
    [--cephadm-default-container]
    [--container-namespace CONTAINER_NAMESPACE]
    [--container-image CONTAINER_IMAGE]
    [--container-tag CONTAINER_TAG]
    [--registry-url REGISTRY_URL]
    [--registry-username REGISTRY_USERNAME]
    [--registry-password REGISTRY_PASSWORD]
    [<deployed_baremetal.yaml>]

```

Table 57.4. Positional arguments

Value	Summary
<deployed_baremetal.yaml>	Path to the environment file output from "openstack overcloud node provision". This argument may be excluded only if --ceph-spec is used.

Table 57.5. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-o <deployed_ceph.yaml>, --output <deployed_ceph.yaml>	The path to the output environment file describing the Ceph deployment to pass to the overcloud deployment.
-y, --yes	Skip yes/no prompt before overwriting an existing <deployed_ceph.yaml> output file (assume yes).
--skip-user-create	Do not create the cephadm ssh user. this user is necessary to deploy but may be created in a separate step via <i>openstack overcloud ceph user enable</i> .
--skip-hosts-config	Do not update /etc/hosts on deployed servers. by default this is configured so overcloud nodes can reach each other and the undercloud by name.
--skip-container-registry-config	Do not update /etc/containers/registries.conf on deployed servers. By default this is configured so overcloud nodes can pull containers from the undercloud registry.
--skip-ntp	Do not install/enable ntp chronyd service. By default time synchronization service chronyd is installed and enabled later by tripleo.
--cephadm-ssh-user CEPHADM_SSH_USER	Name of the ssh user used by cephadm. warning: if this option is used, it must be used consistently for every <i>openstack overcloud ceph</i> call. Defaults to <i>ceph-admin</i> . (default=Env: CEPHADM_SSH_USER)
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
--working-dir WORKING_DIR	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy/<stack>"

Value	Summary
--roles-data ROLES_DATA	Path to an alternative roles_data.yaml. used to decide which node gets which Ceph mon, mgr, or osd service based on the node's role in <deployed_baremetal.yaml>.
--network-data NETWORK_DATA	Path to an alternative network_data.yaml. used to define Ceph public_network and cluster_network. This file is searched for networks with name_lower values of storage and storage_mgmt. If none found, then search repeats but with service_net_map_replace in place of name_lower. Use --public-network-name or --cluster-network-name options to override name of the searched for network from storage or storage_mgmt to a customized name. If network_data has no storage networks, both default to ctlplane. If found network has >1 subnet, they are all combined (for routed traffic). If a network has ipv6 true, then the ipv6_subnet is retrieved instead of the ip_subnet, and the Ceph global ms_bind_ipv4 is set false and the ms_bind_ipv6 is set true. Use --config to override these defaults if desired.
--public-network-name PUBLIC_NETWORK_NAME	Name of the network defined in network_data.yaml which should be used for the Ceph public_network. Defaults to <i>storage</i> .
--cluster-network-name CLUSTER_NETWORK_NAME	Name of the network defined in network_data.yaml which should be used for the Ceph cluster_network. Defaults to <i>storage_mgmt</i> .
--cluster CLUSTER	Name of the ceph cluster. if set to <i>foo</i> , then the files /etc/ceph/<FSID>/foo.conf and /etc/ceph/<FSID>/foo.client.admin.keyring will be created. Otherwise these files will use the name <i>ceph</i> . Changing this means changing command line calls too, e.g. <i>ceph health</i> will become <i>ceph --cluster foo health</i> unless export CEPH_ARGS="-- cluster foo" is used.
--mon-ip MON_IP	Ip address of the first ceph monitor. if not set, an IP from the Ceph public_network of a server with the mon label from the Ceph spec is used. IP must already be active on server.
--config CONFIG	Path to an existing ceph.conf with settings to be assimilated by the new cluster via <i>cephadm bootstrap --config</i>

Value	Summary
<code>--cephadm-extra-args CEPHADM_EXTRA_ARGS</code>	String of extra parameters to pass cephadm. e.g. if <code>--cephadm-extra-args --log-to-file --skip-prepare-host</code> , then cephadm bootstrap will use those options. Warning: requires <code>--force</code> as not all possible options ensure a functional deployment.
<code>--force</code>	Run command regardless of consequences.
<code>--ansible-extra-vars ANSIBLE_EXTRA_VARS</code>	Path to an existing ansible vars file which can override any variable in tripleo-ansible. If <code>--ansible-extra-vars vars.yaml</code> is passed, then <code>ansible-playbook -e @vars.yaml ...</code> is used to call tripleo-ansible Ceph roles. Warning: requires <code>--force</code> as not all options ensure a functional deployment.
<code>--ceph-client-username CEPH_CLIENT_USERNAME</code>	Name of the cephx user. e.g. if <code>openstack</code> is used, then <code>ceph auth get client.openstack</code> will return a working user with key and capabilities on the deployed Ceph cluster. Ignored unless <code>tripleo_cephadm_pools</code> is set via <code>--ansible-extra-vars</code> . If this parameter is not set and <code>tripleo_cephadm_keys</code> is set via <code>--ansible-extra-vars</code> , then <code>openstack</code> will be used. Used to set <code>CephClientUserName</code> in <code>--output</code> .
<code>--ceph-client-key CEPH_CLIENT_KEY</code>	Value of the cephx key. e.g. <code>AQC+vYNXgDAgAhAAc8UoYt+OTz5uhV7ltLdwUw==</code> . Ignored unless <code>tripleo_cephadm_pools</code> is set via <code>--ansible-extra-vars</code> . If this parameter is not set and <code>tripleo_cephadm_keys</code> is set via <code>--ansible-extra-vars</code> , then a random key will be generated. Used to set <code>CephClientKey</code> in <code>--output</code> .
<code>--skip-cephx-keys</code>	Do not create cephx keys even if <code>tripleo_cephadm_pools</code> is set via <code>--ansible-extra-vars</code> . If this option is used, then even the defaults of <code>--ceph-client-key</code> and <code>--ceph-client-username</code> are ignored, but the pools defined via <code>--ansible-extra-vars</code> are still created.
<code>--single-host-defaults</code>	Adjust configuration defaults to suit a single-host Ceph cluster.
<code>--ntp-server NTP_SERVER</code>	NTP Servers to be used while configuring chronyd service. e.g. <code>--ntp-server 0.pool.ntp.org, 1.pool.ntp.org, 2.pool.ntp.org</code>

Value	Summary
<code>--ntp-heat-env-file NTP_HEAT_ENV_FILE</code>	Path to existing heat environment file with NTP servers to be used while configuring chronyd service. NTP servers are extracted from <i>NtpServer</i> key.
<code>--ceph-spec CEPH_SPEC</code>	Path to an existing ceph spec file. if not provided a spec will be generated automatically based on <code>--roles-</code> data and <code><deployed_baremetal.yaml></code> . The <code><deployed_baremetal.yaml></code> parameter is optional only if <code>--ceph-spec</code> is used.
<code>--osd-spec OSD_SPEC</code>	Path to an existing osd spec file. mutually exclusive with <code>--ceph-spec</code> . If the Ceph spec file is generated automatically, then the OSD spec in the Ceph spec file defaults to <code>{data_devices: {all: true}}</code> for all <code>service_type</code> <code>osd</code> . Use <code>--osd-spec</code> to override the <code>data_devices</code> value inside the Ceph spec file.
<code>--crush-hierarchy CRUSH_HIERARCHY</code>	Path to an existing crush hierarchy spec file.
<code>--standalone</code>	Use single host ansible inventory. used only for development or testing environments.
<code>--container-image-prepare CONTAINER_IMAGE_PREPARE</code>	Path to an alternative <code>container_image_prepare_defaults.yaml</code> . Used to control which Ceph container is pulled by cephadm via the <code>ceph_namespace</code> , <code>ceph_image</code> , and <code>ceph_tag</code> variables in addition to registry authentication via <code>ContainerImageRegistryCredentials</code> .
<code>--cephadm-default-container</code>	Use the default container defined in cephadm instead of <code>container_image_prepare_defaults.yaml</code> . If this is used, <i>cephadm bootstrap</i> is not passed the <code>--image</code> parameter.

Table 57.6. container-image-prepare overrides

Value	Summary
The following options may be used to override individual values set via <code>--container-image-prepare</code> . If the example variables below were set the image would be concatenated into <code>quay.io/ceph/ceph:latest</code> and a custom registry login would be used. <code>--container-namespace CONTAINER_NAMESPACE</code>	E.g. <code>quay.io/ceph</code>

Value	Summary
<code>--container-image CONTAINER_IMAGE</code>	E.g. ceph
<code>--container-tag CONTAINER_TAG</code>	E.g. latest
<code>--registry-url REGISTRY_URL --registry-username REGISTRY_USERNAME --registry-password REGISTRY_PASSWORD</code>	None

57.5. OVERCLOUD CEPH SPEC

Usage:

```
openstack overcloud ceph spec [-h] -o <ceph_spec.yaml> [-y]
                               [--stack STACK]
                               [--working-dir WORKING_DIR]
                               [--roles-data ROLES_DATA]
                               [--mon-ip MON_IP] [--standalone]
                               [--osd-spec OSD_SPEC | --crush-hierarchy CRUSH_HIERARCHY]
                               [<deployed_baremetal.yaml>]
```

Table 57.7. Positional arguments

Value	Summary
<code><deployed_baremetal.yaml></code>	Path to the environment file output from "openstack overcloud node provision". This argument may be excluded only if <code>--standalone</code> is used.

Table 57.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-o <ceph_spec.yaml>, --output <ceph_spec.yaml></code>	The path to the output cephadm spec file to pass to the "openstack overcloud ceph deploy --ceph-spec <ceph_spec.yaml>" command.
<code>-y, --yes</code>	Skip yes/no prompt before overwriting an existing <ceph_spec.yaml> output file (assume yes).
<code>--stack STACK</code>	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)

Value	Summary
<code>--working-dir WORKING_DIR</code>	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy/<stack>"
<code>--roles-data ROLES_DATA</code>	Path to an alternative roles_data.yaml. used to decide which node gets which Ceph mon, mgr, or osd service based on the node's role in <deployed_baremetal.yaml>.
<code>--mon-ip MON_IP</code>	Ip address of the first ceph monitor. only available with <code>--standalone</code> .
<code>--standalone</code>	Create a spec file for a standalone deployment. used for single server development or testing environments.
<code>--osd-spec OSD_SPEC</code>	Path to an existing osd spec file. when the ceph spec file is generated its OSD spec defaults to {data_devices: {all: true}} for all service_type osd. Use <code>--osd-spec</code> to override the data_devices value inside the Ceph spec file.
<code>--crush-hierarchy CRUSH_HIERARCHY</code>	Path to an existing crush hierarchy spec file.

57.6. OVERCLOUD CEPH USER DISABLE

Usage:

```

openstack overcloud ceph user disable [-h] [-y]
                                     [--cephadm-ssh-user CEPHADM_SSH_USER]
                                     [--stack STACK]
                                     [--working-dir WORKING_DIR]
                                     --fsid <FSID> [--standalone]
                                     <ceph_spec.yaml>

```

Table 57.9. Positional arguments

Value	Summary
<ceph_spec.yaml>	Path to an existing ceph spec file which describes the Ceph cluster where the cephadm SSH user will have their public and private keys removed and cephadm will be disabled. Spec file is necessary to determine which nodes to modify. WARNING: Ceph cluster administration or modification will no longer function.

Table 57.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-y, --yes	Skip yes/no prompt before disabling cephadm and its SSH user. (assume yes).
--cephadm-ssh-user CEPHADM_SSH_USER	Name of the ssh user used by cephadm. warning: if this option is used, it must be used consistently for every <i>openstack overcloud ceph</i> call. Defaults to <i>ceph-admin</i> . (default=Env: CEPHADM_SSH_USER)
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
--working-dir WORKING_DIR	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy/<stack>"
--standalone	Use single host ansible inventory. used only for development or testing environments.

Table 57.11. required named arguments

Value	Summary
--fsid <FSID>	The fsid of the ceph cluster to be disabled. required for disable option.

57.7. OVERCLOUD CEPH USER ENABLE

Usage:

```
openstack overcloud ceph user enable [-h] [--fsid <FSID>]
                                     [--standalone]
                                     [--cephadm-ssh-user CEPHADM_SSH_USER]
                                     [--stack STACK]
                                     [--working-dir WORKING_DIR]
                                     <ceph_spec.yaml>
```

Table 57.12. Positional arguments

Value	Summary
-------	---------

Value	Summary
<ceph_spec.yaml>	Path to an existing ceph spec file which describes the Ceph cluster where the cephadm SSH user will be created (if necessary) and have their public and private keys installed. Spec file is necessary to determine which nodes to modify and if a public or private key is required.

Table 57.13. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--fsid <FSID>	The fsid of the ceph cluster to be (re-)enabled. if the user disable option has been used, the FSID may be passed to the user enable option so that cephadm will be re-enabled for the Ceph cluster identified by the FSID.
--standalone	Use single host ansible inventory. used only for development or testing environments.
--cephadm-ssh-user CEPHADM_SSH_USER	Name of the ssh user used by cephadm. warning: if this option is used, it must be used consistently for every <i>openstack overcloud ceph</i> call. Defaults to <i>ceph-admin</i> . (default=Env: CEPHADM_SSH_USER)
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
--working-dir WORKING_DIR	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy/<stack>"

57.8. 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]
                                           [--exclude <container-name>]
```

```

[--use-buildah]
[--work-dir <container builds directory>]
[--build-timeout <build timeout in seconds>]

```

Table 57.14. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--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. If not specified, the default set of containers will be built.
--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.
--list-dependencies	Show the image build dependencies instead of building them.
--exclude <container-name>	Name of a container to match against the list of containers to be built to skip. Can be specified multiple times.
--use-buildah	Use buildah instead of docker to build the images with Kolla.
--work-dir <container builds directory>	Tripleo container builds directory, storing configs and logs for each image and its dependencies.
--build-timeout <build timeout in seconds>	Build timeout in seconds.

57.9. OVERCLOUD CONTAINER IMAGE PREPARE

Generate files defining the images, tags and registry.

Usage:

```

openstack overcloud container image prepare [-h]
      [--template-file <yaml template file>]
      [--push-destination <location>]
      [--tag <tag>]
      [--tag-from-label <image label>]

```

```

[--namespace <namespace>]
[--prefix <prefix>]
[--suffix <suffix>]
[--set <variable=value>]
[--exclude <regex>]
[--include <regex>]
[--output-images-file <file path>]
[--environment-file <file path>]
[--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
[--output-env-file <file path>]
[--roles-file ROLES_FILE]
[--modify-role MODIFY_ROLE]
[--modify-vars MODIFY_VARS]

```

Table 57.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--template-file <yaml template file>	Yaml template file which the images config file will be built from. Default: /usr/share/tripleo-common/container-images/tripleo_containers.yaml.j2
--push-destination <location>	Location of image registry to push images to. if specified, a push_destination will be set for every image entry.
--tag <tag>	Override the default tag substitution. if --tag-from-label is specified, start discovery with this tag. Default: 17.0
--tag-from-label <image label>	Use the value of the specified label(s) to discover the tag. Labels can be combined in a template format, for example: {version}-{release}
--namespace <namespace>	Override the default namespace substitution. Default: registry.redhat.io/rhosp-rhel9
--prefix <prefix>	Override the default name prefix substitution. Default: openstack-
--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".
--exclude <regex>	Pattern to match against resulting imagename entries to exclude from the final output. Can be specified multiple times.

Value	Summary
<code>--include <regex></code>	Pattern to match against resulting imagename entries to include in final output. Can be specified multiple times, entries not matching any <code>--include</code> will be excluded. <code>--exclude</code> is ignored if <code>--include</code> is used.
<code>--output-images-file <file path></code>	File to write resulting image entries to, as well as stdout. Any existing file will be overwritten.
<code>--environment-file <file path>, -e <file path></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>--environment-directory <HEAT ENVIRONMENT DIRECTORY></code>	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.
<code>--output-env-file <file path></code>	File to write heat environment file which specifies all image parameters. Any existing file will be overwritten.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default roles_data.yaml in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--modify-role MODIFY_ROLE</code>	Name of ansible role to run between every image upload pull and push.
<code>--modify-vars MODIFY_VARS</code>	Ansible variable file containing variables to use when invoking the role <code>--modify-role</code> .

57.10. 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 57.16. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--image <container image>	Fully qualified name of the image to discover the tag for (Including registry and stable tag).
--tag-from-label <image label>	Use the value of the specified label(s) to discover the tag. Labels can be combined in a template format, for example: {version}--{release}

57.11. OVERCLOUD CONTAINER IMAGE UPLOAD

Push overcloud container images to registries.

Usage:

```
openstack overcloud container image upload [-h] --config-file <yaml
config file>
[--cleanup <full, partial, none>]
```

Table 57.17. Command arguments

Value	Summary
-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.
--cleanup <full, partial, none>	Cleanup behavior for local images left after upload. The default <i>full</i> will attempt to delete all local images. <i>partial</i> will leave images required for deployment on this host. <i>none</i> will do no cleanup.

57.12. OVERCLOUD CREDENTIALS

Create the overcloudrc files

Usage:

```
openstack overcloud credentials [-h] [--directory [DIRECTORY]]
[--working-dir WORKING_DIR]
stack
```

Table 57.18. Positional arguments

Value	Summary
stack	The name of the stack you want to create rc files for.

Table 57.19. Command 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.
--working-dir WORKING_DIR	The working directory that contains the input, output, and generated files for the deployment. Defaults to "\$HOME/overcloud-deploy/<stack>"

57.13. OVERCLOUD DELETE

Delete overcloud stack and plan

Usage:

```

openstack overcloud delete [-h] [-y] [-s]
                           [-b <baremetal_deployment.yaml>]
                           [--networks-file <network_data.yaml>]
                           [--network-ports]
                           [--heat-type {installed,pod,container,native}]
                           [stack]

```

Table 57.20. Positional arguments

Value	Summary
stack	Name or id of heat stack to delete(default=env: OVERCLOUD_STACK_NAME)

Table 57.21. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-y, --yes	Skip yes/no prompt (assume yes).

Value	Summary
<code>-s, --skip-ipa-cleanup</code>	Skip removing overcloud hosts, services, and dns records from FreeIPA. This is particularly relevant for deployments using certificates from FreeIPA for TLS. By default, overcloud hosts, services, and DNS records will be removed from FreeIPA before deleting the overcloud. Using this option might require you to manually cleanup FreeIPA later.
<code>-b <baremetal_deployment.yaml>, --baremetal-deployment <baremetal_deployment.yaml></code>	Configuration file describing the baremetal deployment
<code>--networks-file <network_data.yaml></code>	Configuration file describing the network deployment to enable unprovisioning of networks.
<code>--network-ports</code>	Enable unprovisioning of network ports
<code>--heat-type {installed,pod,container,native}</code>	The type of heat process that was used to executethe deployment. pod (Default): Use an ephemeral Heat pod. installed: Use the system installed Heat. container: Use an ephemeral Heat container. native: Use an ephemeral Heat process.

57.14. OVERCLOUD DEPLOY

Deploy Overcloud

Usage:

```

openstack overcloud deploy [--templates [TEMPLATES]] [--stack STACK]
    [--timeout <TIMEOUT>]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
    [--overcloud-ssh-enable-timeout OVERCLOUD_SSH_ENABLE_TIMEOUT]
    [--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--vip-file VIP_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup] [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]
    [--inflight-validations] [--dry-run]
    [--run-validations] [--skip-postconfig]

```

```

[--force-postconfig]
[--skip-deploy-identifier]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server] [--config-download]
[--no-config-download]
[--config-download-only] [--setup-only]
[--config-dir CONFIG_DIR]
[--config-type CONFIG_TYPE]
[--no-preserve-config]
[--output-dir OUTPUT_DIR]
[--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
[--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
[--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER]
[-b [<baremetal_deployment.yaml>]]
[--network-config] [--limit LIMIT]
[--tags TAGS] [--skip-tags SKIP_TAGS]
[--ansible-forks ANSIBLE_FORKS]
[--disable-container-prepare]
[--working-dir WORKING_DIR]
[--heat-type {pod,container,native}]
[--heat-container-api-image <HEAT_CONTAINER_API_IMAGE>]
[--heat-container-engine-image <HEAT_CONTAINER_ENGINE_IMAGE>]
[--rm-heat] [--skip-heat-pull]
[--disable-protected-resource-types] [-y]
[--allow-deprecated-network-data]

```

Table 57.22. Command arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--libvirt-type {kvm,qemu}	Libvirt domain type.
--ntp-server NTP_SERVER	The ntp for overcloud nodes.
--no-proxy NO_PROXY	A comma separated list of hosts that should not be proxied.
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to overcloud nodes
--overcloud-ssh-key OVERCLOUD_SSH_KEY	Key path for ssh access to overcloud nodes. When undefined the key will be autodetected.
--overcloud-ssh-network OVERCLOUD_SSH_NETWORK	Network name to use for ssh access to overcloud nodes.

Value	Summary
<code>--overcloud-ssh-enable-timeout</code> <code>OVERCLOUD_SSH_ENABLE_TIMEOUT</code>	This option no longer has any effect.
<code>--overcloud-ssh-port-timeout</code> <code>OVERCLOUD_SSH_PORT_TIMEOUT</code>	Timeout for the ssh port to become active.
<code>--environment-file <HEAT ENVIRONMENT FILE>, -e</code> <code><HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--environment-directory <HEAT ENVIRONMENT</code> <code>DIRECTORY></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>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default roles_data.yaml in the --templates directory. May be an absolute path or the path relative to --templates
<code>--networks-file NETWORKS_FILE, -n</code> <code>NETWORKS_FILE</code>	Networks file, overrides the default network_data_default.yaml in the --templates directory
<code>--vip-file VIP_FILE</code>	Configuration file describing the network virtual ips.
<code>--plan-environment-file</code> <code>PLAN_ENVIRONMENT_FILE, -p</code> <code>PLAN_ENVIRONMENT_FILE</code>	Plan environment file for derived parameters.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Deprecated: only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release. Not supported anymore.
<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>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.

Value	Summary
<code>--disable-validations</code>	Deprecated. 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. These validations are now run via the external validations in tripleo-validations.
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<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>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<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>--config-download</code>	Deprecated: run deployment via config-download mechanism. This is now the default, and this CLI options has no effect.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and download the config. No software configuration, setup, or any changes will be applied to overcloud nodes.

Value	Summary
<code>--config-download-only</code>	Disable the stack create and setup, and only run the config-download workflow to apply the software configuration. Requires that config-download setup was previously completed, either with <code>--stack-only</code> and <code>--setup-only</code> or a full deployment
<code>--setup-only</code>	Disable the stack and config-download workflow to apply the software configuration and only run the setup to enable ssh connectivity.
<code>--config-dir CONFIG_DIR</code>	The directory where the configuration files will be pushed
<code>--config-type CONFIG_TYPE</code>	Only used when " <code>--setup-only</code> " is invoked. type of object config to be extract from the deployment, defaults to all keys available
<code>--no-preserve-config</code>	Only used when " <code>--setup-only</code> " is invoked. if specified, will delete and recreate the <code>--config-dir</code> if it already exists. Default is to use the existing dir location and overwrite files. Files in <code>--config-dir</code> not from the stack will be preserved by default.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . When not specified, <code><working-dir>/config-download</code> will be used.
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by <code>config-download</code> by default.
<code>--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for config-download steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.
<code>--deployment-python-interpretor DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
<code>-b [<baremetal_deployment.yaml>], --baremetal-deployment [<baremetal_deployment.yaml>]</code>	Deploy baremetal nodes, network and virtual ip addresses as defined in <code>baremetal_deployment.yaml</code> along with overcloud. If no <code>baremetal_deployment</code> YAML file is given, the <code>tripleo-<stack_name>-baremetal-deployment.yaml</code> file in the working-dir will be used.

Value	Summary
<code>--network-config</code>	Apply network config to provisioned nodes. (implies " <code>--network-ports</code> ")
<code>--limit LIMIT</code>	A string that identifies a single node or comma-separated list of nodes the config-download Ansible playbook execution will be limited to. For example: <code>--limit "compute-0,compute-1,compute-5"</code> .
<code>--tags TAGS</code>	A list of tags to use when running the the config-download <code>ansible-playbook</code> command.
<code>--skip-tags SKIP_TAGS</code>	A list of tags to skip when running the the config-download <code>ansible-playbook</code> command.
<code>--ansible-forks ANSIBLE_FORKS</code>	The number of ansible forks to use for the config-download <code>ansible-playbook</code> command.
<code>--disable-container-prepare</code>	Disable the container preparation actions to prevent container tags from being updated and new containers from being fetched. If you skip this but do not have the container parameters configured, the deployment action may fail.
<code>--working-dir WORKING_DIR</code>	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to " <code>HOME/overcloud-deploy/<stack></code> "
<code>--heat-type {pod,container,native}</code>	The type of heat process to use to execute the deployment. <code>pod</code> (Default): Use an ephemeral Heat pod. <code>container</code> (Experimental): Use an ephemeral Heat container. <code>native</code> (Experimental): Use an ephemeral Heat process.
<code>--heat-container-api-image <HEAT_CONTAINER_API_IMAGE></code>	The container image to use when launching the heat-api process. Only used when <code>--heat-type=pod</code> . Defaults to: <code>localhost/tripleo/openstack-heat-api:ephemeral</code>
<code>--heat-container-engine-image <HEAT_CONTAINER_ENGINE_IMAGE></code>	The container image to use when launching the heat-engine process. Only used when <code>--heat-type=pod</code> . Defaults to: <code>localhost/tripleo/openstack-heat-engine:ephemeral</code>
<code>--rm-heat</code>	If specified and <code>--heat-type</code> is <code>container</code> or <code>pod</code> any existing container or pod of a previous ephemeral Heat process will be deleted first. Ignored if <code>--heat-type</code> is <code>native</code> .

Value	Summary
<code>--skip-heat-pull</code>	When <code>--heat-type</code> is <code>pod</code> or <code>container</code> , assume the container image has already been pulled
<code>--disable-protected-resource-types</code>	Disable protected resource type overrides. resources types that are used internally are protected, and cannot be overridden in the user environment. Setting this argument disables the protection, allowing the protected resource types to be override in the user environment.
<code>-y, --yes</code>	Use <code>-y</code> or <code>--yes</code> to skip any confirmation required before the deploy operation. Use this with caution!
<code>--allow-deprecated-network-data</code>	Set this to allow using deprecated network data yaml definition schema.

57.15. OVERCLOUD EXPORT CEPH

Export Ceph information used as import of another stack Export Ceph information from one or more stacks to be used as input of another stack. Creates a valid YAML file with the `CephExternalMultiConfig` parameter populated.

Usage:

```
openstack overcloud export ceph [-h] [--stack <stack>]
                               [--cephx-key-client-name <cephx>]
                               [--output-file <output file>]
                               [--force-overwrite]
                               [--config-download-dir CONFIG_DOWNLOAD_DIR]
```

Table 57.23. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--stack <stack></code>	Name of the overcloud stack(s) to export ceph information from. If a comma delimited list of stacks is passed, Ceph information for all stacks will be exported into a single file. (default=Env: <code>OVERCLOUD_STACK_NAME</code>)
<code>--cephx-key-client-name <cephx>, -k <cephx></code>	Name of the cephx client key to export. (default=openstack)

Value	Summary
<code>--output-file <output file>, -o <output file></code>	Name of the output file for the ceph data export. Defaults to "ceph-export-<STACK>.yaml" if one stack is provided. Defaults to "ceph-export-<N>-stacks.yaml" if N stacks are provided.
<code>--force-overwrite, -f</code>	Overwrite output file if it exists.
<code>--config-download-dir CONFIG_DOWNLOAD_DIR</code>	Directory to search for config-download export data. Defaults to <code>\$HOME/overcloud-deploy/<stack>/config-download</code>

57.16. OVERCLOUD EXPORT

Export stack information used as import of another stack

Usage:

```

openstack overcloud export [-h] [--stack <stack>]
                          [--output-file <output file>]
                          [--force-overwrite]
                          [--working-dir WORKING_DIR]
                          [--config-download-dir CONFIG_DOWNLOAD_DIR]
                          [--no-password-excludes]

```

Table 57.24. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--stack <stack></code>	Name of the environment main heat stack to export information from. (default=overcloud)
<code>--output-file <output file>, -o <output file></code>	Name of the output file for the stack data export. it will default to "<name>.yaml"
<code>--force-overwrite, -f</code>	Overwrite output file if it exists.
<code>--working-dir WORKING_DIR</code>	The working directory for the deployment where all input, output, and generated files are stored. Defaults to <code>"\$HOME/overcloud-deploy/<stack>"</code>
<code>--config-download-dir CONFIG_DOWNLOAD_DIR</code>	Directory to search for config-download export data. Defaults to <code>\$HOME/overcloud-deploy/<stack>/config-download</code>

Value	Summary
<code>--no-password-excludes</code>	Dont exclude certain passwords from the password export. Defaults to False in that some passwords will be excluded that are not typically necessary.

57.17. OVERCLOUD EXTERNAL-UPDATE RUN

Run external minor update Ansible playbook This will run the external minor update Ansible playbook, executing tasks from the undercloud. The update playbooks are made available after completion of the *overcloud update prepare* command.

Usage:

```
openstack overcloud external-update run [-h]
                                         [--static-inventory STATIC_INVENTORY]
                                         [--ssh-user SSH_USER]
                                         [--tags TAGS]
                                         [--skip-tags SKIP_TAGS]
                                         [--stack STACK] [-e EXTRA_VARS]
                                         [-y] [--limit LIMIT]
                                         [--ansible-forks ANSIBLE_FORKS]
                                         [--refresh]
```

Table 57.25. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--static-inventory STATIC_INVENTORY</code>	Deprecated: tripleo-ansible-inventory.yaml in working dir will be used.
<code>--ssh-user SSH_USER</code>	Deprecated: only tripleo-admin should be used as ssh user.
<code>--tags TAGS</code>	A string specifying the tag or comma separated list of tags to be passed as <code>--tags</code> to ansible-playbook.
<code>--skip-tags SKIP_TAGS</code>	A string specifying the tag or comma separated list of tags to be passed as <code>--skip-tags</code> to ansible-playbook.
<code>--stack STACK</code>	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
<code>-e EXTRA_VARS, --extra-vars EXTRA_VARS</code>	Set additional variables as key=value or yaml/json

Value	Summary
-y, --yes	Use -y or --yes to skip the confirmation required before any upgrade operation. Use this with caution!
--limit LIMIT	A string that identifies a single node or comma-separated list of nodes the config-download Ansible playbook execution will be limited to. For example: --limit "compute-0,compute-1,compute-5".
--ansible-forks ANSIBLE_FORKS	The number of ansible forks to use for the config-download ansible-playbook command.
--refresh	Deprecated: refresh the config-download playbooks. use overcloud update prepare instead to refresh playbooks.

57.18. OVERCLOUD EXTERNAL-UPGRADE RUN

Run external major upgrade Ansible playbook This will run the external major upgrade Ansible playbook, executing tasks from the undercloud. The upgrade playbooks are made available after completion of the *overcloud upgrade prepare* command.

Usage:

```

openstack overcloud external-upgrade run [-h]
                                     [--static-inventory STATIC_INVENTORY]
                                     [--ssh-user SSH_USER]
                                     [--tags TAGS]
                                     [--skip-tags SKIP_TAGS]
                                     [--stack STACK]
                                     [-e EXTRA_VARS] [-y]
                                     [--limit LIMIT]
                                     [--ansible-forks ANSIBLE_FORKS]

```

Table 57.26. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--static-inventory STATIC_INVENTORY	Deprecated: tripleo-ansible-inventory.yaml in working dir will be used.
--ssh-user SSH_USER	Deprecated: only tripleo-admin should be used as ssh user.
--tags TAGS	A string specifying the tag or comma separated list of tags to be passed as --tags to ansible-playbook.

Value	Summary
<code>--skip-tags SKIP_TAGS</code>	A string specifying the tag or comma separated list of tags to be passed as <code>--skip-tags</code> to <code>ansible-playbook</code> .
<code>--stack STACK</code>	Name or id of heat stack (default= <code>env: OVERCLOUD_STACK_NAME</code>)
<code>-e EXTRA_VARS, --extra-vars EXTRA_VARS</code>	Set additional variables as <code>key=value</code> or <code>yaml/json</code>
<code>-y, --yes</code>	Use <code>-y</code> or <code>--yes</code> to skip the confirmation required before any upgrade operation. Use this with caution!
<code>--limit LIMIT</code>	A string that identifies a single node or comma-separated list of nodes the <code>config-download Ansible</code> playbook execution will be limited to. For example: <code>--limit "compute-0,compute-1,compute-5"</code> .
<code>--ansible-forks ANSIBLE_FORKS</code>	The number of ansible forks to use for the <code>config-download ansible-playbook</code> command.

57.19. 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 57.27. Positional arguments

Value	Summary
<code>instackenv</code>	None

Table 57.28. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
-a FENCE_ACTION, --action FENCE_ACTION	Deprecated: this option is ignored.
--delay DELAY	Wait delay seconds before fencing is started
--ipmi-lanplus	Deprecated: this is the default.
--ipmi-no-lanplus	Do not use lanplus. defaults to: false
--ipmi-cipher IPMI_CIPHER	Ciphersuite to use (same as ipmitool -c parameter.
--ipmi-level IPMI_LEVEL	Privileged level on ipmi device. valid levels: callback, user, operator, administrator.
--output OUTPUT	Write parameters to a file

57.20. 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]
                                [--temp-dir TEMP_DIR]
```

Table 57.29. Command arguments

Value	Summary
-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.
--no-skip	Skip build if cached image exists.
--output-directory OUTPUT_DIRECTORY	Output directory for images. defaults to \$TRIPLEO_ROOT, or current directory if unset.

Value	Summary
<code>--temp-dir TEMP_DIR</code>	Temporary directory to use when building the images. Defaults to \$TMPDIR or current directory if unset.

57.21. OVERCLOUD IMAGE UPLOAD

Make existing image files available for overcloud deployment.

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]
                                [--image-type {os,ironic-python-agent}]
                                [--progress] [--local] [--no-local]
                                [--local-path LOCAL_PATH]
```

Table 57.30. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--image-path IMAGE_PATH</code>	Path to directory containing image files
<code>--os-image-name OS_IMAGE_NAME</code>	Openstack disk image filename
<code>--ironic-python-agent-name IPA_NAME</code>	Openstack ironic-python-agent (agent) image filename
<code>--http-boot HTTP_BOOT</code>	Root directory for the ironic-python-agent image. if uploading images for multiple architectures/platforms, vary this argument such that a distinct folder is created for each architecture/platform.
<code>--update-existing</code>	Update images if already exist
<code>--whole-disk</code>	When set, the overcloud-full image to be uploaded will be considered as a whole disk one

Value	Summary
<code>--architecture ARCHITECTURE</code>	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>
<code>--platform PLATFORM</code>	Platform type for these images. platform is a sub-category of architecture. For example you may have generic images for <i>x86_64</i> but offer images specific to SandyBridge (SNB).
<code>--image-type {os,ironic-python-agent}</code>	If specified, allows to restrict the image type to upload (os for the overcloud image or <i>ironic-python-agent</i> for the <i>ironic-python-agent</i> one)
<code>--progress</code>	Show progress bar for upload files action
<code>--local</code>	Deprecated: copy files locally, even if there is an image service endpoint. The default has been changed to copy files locally.
<code>--no-local</code>	Upload files to image service.
<code>--local-path LOCAL_PATH</code>	Root directory for image file copy destination when there is no image endpoint, or when <code>--local</code> is specified

57.22. OVERCLOUD NETENV VALIDATE

Validate the network environment file.

Usage:

```
openstack overcloud netenv validate [-h] [-f NETENV]
```

Table 57.31. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-f NETENV, --file NETENV</code>	Path to the network environment file

57.23. OVERCLOUD NETWORK EXTRACT

Usage:

```
openstack overcloud network extract [-h] --stack STACK -o
<network_deployment.yaml> [-y]
```

Table 57.32. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
-o <network_deployment.yaml>, --output <network_deployment.yaml>	The output file path describing the network deployment
-y, --yes	Skip yes/no prompt for existing files (assume yes).

57.24. OVERCLOUD NETWORK PROVISION

Usage:

```
openstack overcloud network provision [-h] -o
<network_environment.yaml> [-y]
[--templates TEMPLATES]
[--stack STACK]
[--working-dir WORKING_DIR]
<network_data.yaml>
```

Table 57.33. Positional arguments

Value	Summary
<network_data.yaml>	Configuration file describing the network deployment.

Table 57.34. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-o <network_environment.yaml>, --output <network_environment.yaml>	The output network environment file path.
-y, --yes	Skip yes/no prompt for existing files (assume yes).
--templates TEMPLATES	The directory containing the heat templates to deploy

Value	Summary
<code>--stack STACK</code>	Name or id of heat stack, when set the networks file will be copied to the working dir.
<code>--working-dir WORKING_DIR</code>	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy-<stack>"

57.25. OVERCLOUD NETWORK UNPROVISION

Usage:

```
openstack overcloud network unprovision [-h] [-y] <network_data.yaml>
```

Table 57.35. Positional arguments

Value	Summary
<code><network_data.yaml></code>	Configuration file describing the network deployment.

Table 57.36. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-y, --yes</code>	Skip yes/no prompt (assume yes).

57.26. OVERCLOUD NETWORK VIP EXTRACT

Usage:

```
openstack overcloud network vip extract [-h] --stack STACK -o
<vip_data.yaml> [-y]
```

Table 57.37. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--stack STACK</code>	Name of heat stack (default=env: overcloud_stack_name)

Value	Summary
-o <vip_data.yaml>, --output <vip_data.yaml>	The output file path describing the virtual ip deployment
-y, --yes	Skip yes/no prompt for existing files (assume yes).

57.27. OVERCLOUD NETWORK VIP PROVISION

Usage:

```
openstack overcloud network vip provision [-h] --stack STACK -o
    <vip_environment.yaml> [-y]
    [--templates TEMPLATES]
    [--working-dir WORKING_DIR]
    <vip_data.yaml>
```

Table 57.38. Positional arguments

Value	Summary
<vip_data.yaml>	Configuration file describing the network virtual ips.

Table 57.39. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--stack STACK	Name of heat stack (default=env: overcloud_stack_name)
-o <vip_environment.yaml>, --output <vip_environment.yaml>	The output virtual ip environment file path.
-y, --yes	Skip yes/no prompt for existing files (assume yes).
--templates TEMPLATES	The directory containing the heat templates to deploy
--working-dir WORKING_DIR	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy-<stack>"

57.28. OVERCLOUD NODE BIOS CONFIGURE

Apply BIOS configuration on given nodes

Usage:

```
openstack overcloud node bios configure [-h] [--all-manageable]
                                         [--configuration <configuration>]
                                         [<node_uuid> ...]
```

Table 57.40. Positional arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to configure bios

Table 57.41. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-manageable	Configure bios for all nodes currently in <i>manageable</i> state
--configuration <configuration>	Bios configuration (yaml/json string or file name).

57.29. OVERCLOUD NODE BIOS RESET

Reset BIOS configuration to factory default

Usage:

```
openstack overcloud node bios reset [-h] [--all-manageable]
                                       [<node_uuid> ...]
```

Table 57.42. Positional arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to reset bios

Table 57.43. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-manageable	Reset bios on all nodes currently in <i>manageable</i> state

57.30. OVERCLOUD NODE CLEAN

Run node(s) through cleaning.

Usage:

```
openstack overcloud node clean [-h] [--all-manageable] [--provide]
                               [<node_uuid> ...]
```

Table 57.44. Positional arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be cleaned

Table 57.45. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-manageable	Clean all nodes currently in <i>manageable</i> state
--provide	Provide (make available) the nodes once cleaned

57.31. 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}]
                                   [--boot-mode {uefi,bios}]
                                   [--root-device ROOT_DEVICE]
                                   [--root-device-minimum-size ROOT_DEVICE_MINIMUM_SIZE]
                                   [--overwrite-root-device-hints]
                                   [<node_uuid> ...]
```

Table 57.46. Positional arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be configured

Table 57.47. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-manageable</code>	Configure all nodes currently in <i>manageable</i> state
<code>--deploy-kernel DEPLOY_KERNEL</code>	Image with deploy kernel.
<code>--deploy-ramdisk DEPLOY_RAMDISK</code>	Image with deploy ramdisk.
<code>--instance-boot-option {local,netboot}</code>	Whether to set instances for booting from local hard drive (local) or network (netboot).
<code>--boot-mode {uefi,bios}</code>	Whether to set the boot mode to uefi (uefi) or legacy BIOS (bios)
<code>--root-device ROOT_DEVICE</code>	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.
<code>--root-device-minimum-size ROOT_DEVICE_MINIMUM_SIZE</code>	Minimum size (in gib) of the detected root device. Used with <code>--root-device</code> .
<code>--overwrite-root-device-hints</code>	Whether to overwrite existing root device hints when <code>--root-device</code> is used.

57.32. OVERCLOUD NODE DELETE

Delete overcloud nodes.

Usage:

```

openstack overcloud node delete [-h] [-b <BAREMETAL DEPLOYMENT FILE>]
                                [--stack STACK] [--timeout <TIMEOUT>]
                                [--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT]
                                [-y]
                                [<node> ...]

```

Table 57.48. Positional arguments

Value	Summary
<code><node></code>	Node id(s) to delete (otherwise specified in the <code>--baremetal-deployment</code> file)

Table 57.49. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-b <BAREMETAL DEPLOYMENT FILE>, --baremetal-deployment <BAREMETAL DEPLOYMENT FILE>	Configuration file describing the baremetal deployment
--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
--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT	Timeout for the ssh port to become active.
-y, --yes	Skip yes/no prompt (assume yes).

57.33. 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}]
                                [--concurrency CONCURRENCY]
                                [--node-timeout NODE_TIMEOUT]
                                [--max-retries MAX_RETRIES]
                                [--retry-timeout RETRY_TIMEOUT]
```

Table 57.50. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--ip <ips>	Ip address(es) to probe
--range <range>	Ip range to probe
--credentials <key:value>	Key/value pairs of possible credentials

Value	Summary
<code>--port <ports></code>	Bmc port(s) to probe
<code>--introspect</code>	Introspect the imported nodes
<code>--run-validations</code>	Run the pre-deployment validations. these external validations are from the TripleO Validations project.
<code>--provide</code>	Provide (make available) the nodes
<code>--no-deploy-image</code>	Skip setting the deploy kernel and ramdisk.
<code>--instance-boot-option {local,netboot}</code>	Whether to set instances for booting from local hard drive (local) or network (netboot).
<code>--concurrency CONCURRENCY</code>	Maximum number of nodes to introspect at once.
<code>--node-timeout NODE_TIMEOUT</code>	Maximum timeout for node introspection.
<code>--max-retries MAX_RETRIES</code>	Maximum introspection retries.
<code>--retry-timeout RETRY_TIMEOUT</code>	Maximum timeout between introspectionretries

57.34. OVERCLOUD NODE EXTRACT PROVISIONED

Usage:

```

openstack overcloud node extract provisioned [-h] [--stack STACK]
                                           [-o <baremetal_deployment.yaml>]
                                           [-y]
                                           [--roles-file ROLES_FILE]

```

Table 57.51. Command 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>-o <baremetal_deployment.yaml>, --output <baremetal_deployment.yaml></code>	The output file path describing the baremetal deployment
<code>-y, --yes</code>	Skip yes/no prompt for existing files (assume yes).

Value	Summary
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Role data definition file

57.35. 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}]
                                [--boot-mode {uefi,bios}]
                                [--http-boot HTTP_BOOT]
                                [--concurrency CONCURRENCY]
                                env_file
```

Table 57.52. Positional arguments

Value	Summary
<code>env_file</code>	None

Table 57.53. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--introspect</code>	Introspect the imported nodes
<code>--run-validations</code>	Run the pre-deployment validations. these external validations are from the TripleO Validations project.
<code>--validate-only</code>	Validate the <code>env_file</code> and then exit without actually importing the nodes.
<code>--provide</code>	Provide (make available) the nodes
<code>--no-deploy-image</code>	Skip setting the deploy kernel and ramdisk.
<code>--instance-boot-option {local,netboot}</code>	Whether to set instances for booting from local hard drive (local) or network (netboot)

Value	Summary
--boot-mode {uefi,bios}	Whether to set the boot mode to uefi (uefi) or legacy BIOS (bios)
--http-boot HTTP_BOOT	Root directory for the ironic-python-agent image
--concurrency CONCURRENCY	Maximum number of nodes to introspect at once.

57.36. OVERCLOUD NODE INTROSPECT

Introspect specified nodes or all nodes in *manageable* state.

Usage:

```
openstack overcloud node introspect [-h] [--all-manageable] [--provide]
    [--run-validations]
    [--concurrency CONCURRENCY]
    [--node-timeout NODE_TIMEOUT]
    [--max-retries MAX_RETRIES]
    [--retry-timeout RETRY_TIMEOUT]
    [<node_uuid> ...]
```

Table 57.54. Positional arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be introspected

Table 57.55. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-manageable	Introspect all nodes currently in <i>manageable</i> state
--provide	Provide (make available) the nodes once introspected
--run-validations	Run the pre-deployment validations. these external validations are from the TripleO Validations project.
--concurrency CONCURRENCY	Maximum number of nodes to introspect at once.
--node-timeout NODE_TIMEOUT	Maximum timeout for node introspection.

Value	Summary
<code>--max-retries MAX_RETRIES</code>	Maximum introspection retries.
<code>--retry-timeout RETRY_TIMEOUT</code>	Maximum timeout between introspectionretries

57.37. OVERCLOUD NODE PROVIDE

Mark nodes as available based on UUIDs or current *manageable* state.

Usage:

```
openstack overcloud node provide [-h] [--all-manageable]
    [<node_uuid> ...]
```

Table 57.56. Positional arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be provided

Table 57.57. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-manageable</code>	Provide all nodes currently in <i>manageable</i> state

57.38. OVERCLOUD NODE PROVISION

Provision new nodes using Ironic.

Usage:

```
openstack overcloud node provision [-h] [-o OUTPUT] [-y]
    [--stack STACK]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--concurrency CONCURRENCY]
    [--timeout TIMEOUT]
    [--network-ports] [--network-config]
    [--templates TEMPLATES]
    [--working-dir WORKING_DIR]
    <baremetal_deployment.yaml>
```

Table 57.58. Positional arguments

Value	Summary
<baremetal_deployment.yaml>	Configuration file describing the baremetal deployment

Table 57.59. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-o OUTPUT, --output OUTPUT	The output environment file path
-y, --yes	Skip yes/no prompt for existing files (assume yes).
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to newly deployed nodes
--overcloud-ssh-key OVERCLOUD_SSH_KEY	Key path for ssh access to overcloud nodes. when undefined the key will be autodetected.
--concurrency CONCURRENCY	Maximum number of nodes to provision at once. (default=20)
--timeout TIMEOUT	Number of seconds to wait for the node provision to complete. (default=3600)
--network-ports	Deprecated! network ports will always be provisioned. Enable provisioning of network ports
--network-config	Apply network config to provisioned nodes. (implies "--network-ports")
--templates TEMPLATES	The directory containing the heat templates to deploy
--working-dir WORKING_DIR	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy-<stack>"

57.39. OVERCLOUD NODE UNPROVISION

Unprovisions nodes using Ironic.

Usage:


```
openstack overcloud node unprovision [-h] [--stack STACK] [--all] [-y]
    [--network-ports]
    <baremetal_deployment.yaml>
```

Table 57.60. Positional arguments

Value	Summary
<baremetal_deployment.yaml>	Configuration file describing the baremetal deployment

Table 57.61. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
--all	Unprovision every instance in the deployment
-y, --yes	Skip yes/no prompt (assume yes)
--network-ports	Deprecated! network ports will always be unprovisioned. Enable unprovisioning of network ports

57.40. OVERCLOUD PROFILES LIST

List overcloud node profiles

Usage:

```
openstack overcloud profiles list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    [--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 57.62. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all	List all nodes, even those not available to nova.
--control-scale CONTROL_SCALE	New number of control nodes.
--compute-scale COMPUTE_SCALE	New number of compute 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.
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes.
--control-flavor CONTROL_FLAVOR	Nova flavor to use for control nodes.
--compute-flavor COMPUTE_FLAVOR	Nova flavor to use for compute 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
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes

Table 57.63. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
--sort-descending	Sort the column(s) in descending order

Table 57.64. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 57.65. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 57.66. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

57.41. 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 57.67. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--dry-run	Only run validations, but do not apply any changes.
--control-scale CONTROL_SCALE	New number of control nodes.
--compute-scale COMPUTE_SCALE	New number of compute 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.
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes.
--control-flavor CONTROL_FLAVOR	Nova flavor to use for control nodes.
--compute-flavor COMPUTE_FLAVOR	Nova flavor to use for compute 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
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes

57.42. OVERCLOUD RAID CREATE

Create RAID on given nodes

Usage:

```
openstack overcloud raid create [-h] --node NODE configuration
```

Table 57.68. Positional arguments

Value	Summary
configuration	Raid configuration (yaml/json string or file name).

Table 57.69. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--node NODE</code>	Nodes to create raid on (expected to be in manageable state). Can be specified multiple times.

57.43. OVERCLOUD RESTORE

Restore the Overcloud

Usage:

```
openstack overcloud restore [--inventory INVENTORY] [--stack [STACK]]
                             --node-name NODE_NAME
                             [--extra-vars EXTRA_VARS]
```

Table 57.70. Command arguments

Value	Summary
<code>--inventory INVENTORY</code>	Tripleo inventory file generated with tripleo-ansible-inventory command. Defaults to: /root/config-download/overcloud/tripleo-ansible-inventory.yaml
<code>--stack [STACK]</code>	Name or id of the stack to be used(default=env: OVERCLOUD_STACK_NAME)
<code>--node-name NODE_NAME</code>	Controller name is a required parameter which defines the controller node to be restored.
<code>--extra-vars EXTRA_VARS</code>	Set additional variables as dict or as an absolute path of a JSON or YAML file type. i.e. <code>--extra-vars {"key": "val", "key2": "val2"}</code> i.e. <code>--extra-vars /path/to/my_vars.yaml</code> i.e. <code>--extra-vars /path/to/my_vars.json</code> . For more information about the variables that can be passed, visit: https://opendev.org/openstack/tripleo-ansible/src/branch/master/tripleo_ansible/roles/backup_and_restore/defaults/main.yml .

57.44. OVERCLOUD ROLE LIST

List available roles.

Usage:

```
openstack overcloud role list [-h] [--roles-path <roles directory>]
```

Table 57.71. Command 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

57.45. OVERCLOUD ROLE SHOW

Show information about a given role.

Usage:

```
openstack overcloud role show [-h] [--roles-path <roles directory>]
                               <role>
```

Table 57.72. Positional arguments

Value	Summary
<role>	Role to display more information about.

Table 57.73. Command 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

57.46. 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 57.74. 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 57.75. Command 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
-o <output file>, --output-file <output file>	File to capture all output to. for example, roles_data.yaml
--skip-validate	Skip role metadata type validation whengenerating the roles_data.yaml

57.47. OVERCLOUD STATUS

Get deployment status

Usage:

```
openstack overcloud status [-h] [--plan PLAN]
                          [--working-dir WORKING_DIR]
```

Table 57.76. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--plan PLAN, --stack PLAN	Name of the stack/plan. (default: overcloud)
--working-dir WORKING_DIR	The working directory for the deployment where all input, output, and generated files are stored. Defaults to "\$HOME/overcloud-deploy/<stack>"

57.48. OVERCLOUD SUPPORT REPORT COLLECT

Run `sosreport` on selected servers.

Usage:

```
openstack overcloud support report collect [-h] [--stack STACK]
                                           [-c CONTAINER]
                                           [-o DESTINATION]
                                           [--skip-container-delete]
                                           [-t TIMEOUT]
                                           [-n CONCURRENCY]
                                           [--collect-only]
                                           [--download-only]
                                           server_name
```

Table 57.77. Positional arguments

Value	Summary
server_name	Server name, group name, or partial name to match. for example "Controller" will match all controllers for an environment.

Table 57.78. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--stack STACK	Stack name to use for log collection.
-c CONTAINER, --container CONTAINER	This option no-longer has any effect.
-o DESTINATION, --output DESTINATION	Output directory for the report
--skip-container-delete	This option no-longer has any effect.
-t TIMEOUT, --timeout TIMEOUT	This option no-longer has any effect.
-n CONCURRENCY, --concurrency CONCURRENCY	This option no-longer has any effect.
--collect-only	This option no-longer has any effect.
--download-only	This option no-longer has any effect.

57.49. OVERCLOUD UPDATE PREPARE

Use Heat to update and render the new Ansible playbooks based on the updated templates. These playbooks will be rendered and used during the update run step to perform the minor update of the overcloud nodes.

Usage:

```

openstack overcloud update prepare [--templates [TEMPLATES]]
    [--stack STACK]
    [--timeout <TIMEOUT>]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
    [--overcloud-ssh-enable-timeout OVERCLOUD_SSH_ENABLE_TIMEOUT]
    [--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--vip-file VIP_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup] [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]
    [--inflight-validations] [--dry-run]
    [--run-validations]
    [--skip-postconfig]
    [--force-postconfig]
    [--skip-deploy-identifier]
    [--answers-file ANSWERS_FILE]
    [--disable-password-generation]
    [--deployed-server]
    [--config-download]
    [--no-config-download]
    [--config-download-only]
    [--setup-only]
    [--config-dir CONFIG_DIR]
    [--config-type CONFIG_TYPE]
    [--no-preserve-config]
    [--output-dir OUTPUT_DIR]
    [--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
    [--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
    [--deployment-python-interpreter
DEPLOYMENT_PYTHON_INTERPRETER]
    [-b [<baremetal_deployment.yaml>]]
    [--network-config] [--limit LIMIT]
    [--tags TAGS]
    [--skip-tags SKIP_TAGS]
    [--ansible-forks ANSIBLE_FORKS]
    [--disable-container-prepare]
    [--working-dir WORKING_DIR]
    [--heat-type {pod,container,native}]
    [--heat-container-api-image <HEAT_CONTAINER_API_IMAGE>]

```

```

[--heat-container-engine-image <HEAT_CONTAINER_ENGINE_IMAGE>]
[--rm-heat] [--skip-heat-pull]
[--disable-protected-resource-types]
[-y]
[--allow-deprecated-network-data]

```

Table 57.79. Command arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--libvirt-type {kvm,qemu}	Libvirt domain type.
--ntp-server NTP_SERVER	The ntp for overcloud nodes.
--no-proxy NO_PROXY	A comma separated list of hosts that should not be proxied.
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to overcloud nodes
--overcloud-ssh-key OVERCLOUD_SSH_KEY	Key path for ssh access to overcloud nodes. When undefined the key will be autodetected.
--overcloud-ssh-network OVERCLOUD_SSH_NETWORK	Network name to use for ssh access to overcloud nodes.
--overcloud-ssh-enable-timeout OVERCLOUD_SSH_ENABLE_TIMEOUT	This option no longer has any effect.
--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT	Timeout for the ssh port to become active.
--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.)
--environment-directory <HEAT ENVIRONMENT DIRECTORY>	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.
--roles-file ROLES_FILE, -r ROLES_FILE	Roles file, overrides the default roles_data.yaml in the --templates directory. May be an absolute path or the path relative to --templates

Value	Summary
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data_default.yaml</code> in the <code>--templates</code> directory
<code>--vip-file VIP_FILE</code>	Configuration file describing the network virtual ips.
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file for derived parameters.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Deprecated: only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release. Not supported anymore.
<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>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.
<code>--disable-validations</code>	Deprecated. 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. These validations are now run via the external validations in <code>tripleo-validations</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--run-validations</code>	Run external validations from the <code>tripleo-validations</code> project.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.

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>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<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>--config-download</code>	Deprecated: run deployment via config-download mechanism. This is now the default, and this CLI options has no effect.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and download the config. No software configuration, setup, or any changes will be applied to overcloud nodes.
<code>--config-download-only</code>	Disable the stack create and setup, and only run the config-download workflow to apply the software configuration. Requires that config-download setup was previously completed, either with <code>--stack-only</code> and <code>--setup-only</code> or a full deployment
<code>--setup-only</code>	Disable the stack and config-download workflow to apply the software configuration and only run the setup to enable ssh connectivity.
<code>--config-dir CONFIG_DIR</code>	The directory where the configuration files will be pushed
<code>--config-type CONFIG_TYPE</code>	Only used when " <code>--setup-only</code> " is invoked. type of object config to be extract from the deployment, defaults to all keys available
<code>--no-preserve-config</code>	Only used when " <code>--setup-only</code> " is invoked. if specified, will delete and recreate the <code>--config-dir</code> if it already exists. Default is to use the existing dir location and overwrite files. Files in <code>--config-dir</code> not from the stack will be preserved by default.

Value	Summary
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . When not specified, <code><working-dir>/config-download</code> will be used.
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by <code>config-download</code> by default.
<code>--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for <code>config-download</code> steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.
<code>--deployment-python-interpretor DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
<code>-b [<baremetal_deployment.yaml>], --baremetal-deployment [<baremetal_deployment.yaml>]</code>	Deploy baremetal nodes, network and virtual ip addresses as defined in <code>baremetal_deployment.yaml</code> along with overcloud. If no <code>baremetal_deployment</code> YAML file is given, the <code>tripleo-<stack_name>-baremetal-deployment.yaml</code> file in the <code>working-dir</code> will be used.
<code>--network-config</code>	Apply network config to provisioned nodes. (implies " <code>--network-ports</code> ")
<code>--limit LIMIT</code>	A string that identifies a single node or comma-separated list of nodes the <code>config-download</code> Ansible playbook execution will be limited to. For example: <code>--limit "compute-0,compute-1,compute-5"</code> .
<code>--tags TAGS</code>	A list of tags to use when running the the <code>config-download ansible-playbook</code> command.
<code>--skip-tags SKIP_TAGS</code>	A list of tags to skip when running the the <code>config-download ansible-playbook</code> command.
<code>--ansible-forks ANSIBLE_FORKS</code>	The number of ansible forks to use for the <code>config-download ansible-playbook</code> command.
<code>--disable-container-prepare</code>	Disable the container preparation actions to prevent container tags from being updated and new containers from being fetched. If you skip this but do not have the container parameters configured, the deployment action may fail.

Value	Summary
<code>--working-dir WORKING_DIR</code>	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy/<stack>"
<code>--heat-type {pod,container,native}</code>	The type of heat process to use to execute the deployment. pod (Default): Use an ephemeral Heat pod. container (Experimental): Use an ephemeral Heat container. native (Experimental): Use an ephemeral Heat process.
<code>--heat-container-api-image <HEAT_CONTAINER_API_IMAGE></code>	The container image to use when launching the heat-api process. Only used when <code>--heat-type=pod</code> . Defaults to: localhost/tripleo/openstack-heat-api:ephemeral
<code>--heat-container-engine-image <HEAT_CONTAINER_ENGINE_IMAGE></code>	The container image to use when launching the heat-engine process. Only used when <code>--heat-type=pod</code> . Defaults to: localhost/tripleo/openstack-heat-engine:ephemeral
<code>--rm-heat</code>	If specified and <code>--heat-type</code> is container or pod any existing container or pod of a previous ephemeral Heat process will be deleted first. Ignored if <code>--heat-type</code> is native.
<code>--skip-heat-pull</code>	When <code>--heat-type</code> is pod or container, assume the container image has already been pulled
<code>--disable-protected-resource-types</code>	Disable protected resource type overrides. resources types that are used internally are protected, and cannot be overridden in the user environment. Setting this argument disables the protection, allowing the protected resource types to be override in the user environment.
<code>-y, --yes</code>	Use <code>-y</code> or <code>--yes</code> to skip any confirmation required before the deploy operation. Use this with caution!
<code>--allow-deprecated-network-data</code>	Set this to allow using deprecated network data yaml definition schema.

57.50. OVERCLOUD UPDATE RUN

Run minor update ansible playbooks on Overcloud nodes

Usage:

```
openstack overcloud update run [-h] --limit LIMIT
```

```

[--playbook [PLAYBOOK ...]]
[--ssh-user SSH_USER]
[--static-inventory STATIC_INVENTORY]
[--stack STACK] [--tags TAGS]
[--skip-tags SKIP_TAGS] [-y]
[--ansible-forks ANSIBLE_FORKS]

```

Table 57.80. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--limit LIMIT	A string that identifies a single node or comma-separated list of nodes the config-download Ansible playbook execution will be limited to. For example: --limit "compute-0,compute-1,compute-5".
--playbook [PLAYBOOK ...]	Ansible playbook to use for the minor update. can be used multiple times. 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 all playbooks so that all services are updated and running with the target version configuration.
--ssh-user SSH_USER	Deprecated: only tripleo-admin should be used as ssh user.
--static-inventory STATIC_INVENTORY	Deprecated: tripleo-ansible-inventory.yaml in working dir will be used.
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
--tags TAGS	A list of tags to use when running the the config-download ansible-playbook command.
--skip-tags SKIP_TAGS	A list of tags to skip when running the the config-download ansible-playbook command.
-y, --yes	Use -y or --yes to skip the confirmation required before any update operation. Use this with caution!
--ansible-forks ANSIBLE_FORKS	The number of ansible forks to use for the config-download ansible-playbook command.

57.51. 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>]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
    [--overcloud-ssh-enable-timeout
OVERCLOUD_SSH_ENABLE_TIMEOUT]
    [--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--vip-file VIP_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup]
    [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]
    [--inflight-validations]
    [--dry-run] [--run-validations]
    [--skip-postconfig]
    [--force-postconfig]
    [--skip-deploy-identifier]
    [--answers-file ANSWERS_FILE]
    [--disable-password-generation]
    [--deployed-server]
    [--config-download]
    [--no-config-download]
    [--config-download-only]
    [--setup-only]
    [--config-dir CONFIG_DIR]
    [--config-type CONFIG_TYPE]
    [--no-preserve-config]
    [--output-dir OUTPUT_DIR]
    [--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
    [--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
    [--deployment-python-interpreter
DEPLOYMENT_PYTHON_INTERPRETER]
    [-b [<baremetal_deployment.yaml>]]
    [--network-config] [--limit LIMIT]
    [--tags TAGS]
    [--skip-tags SKIP_TAGS]
    [--ansible-forks ANSIBLE_FORKS]
    [--disable-container-prepare]
    [--working-dir WORKING_DIR]
    [--heat-type {pod,container,native}]

```



```

[--heat-container-api-image <HEAT_CONTAINER_API_IMAGE>]
[--heat-container-engine-image <HEAT_CONTAINER_ENGINE_IMAGE>]
[--rm-heat] [--skip-heat-pull]
[--disable-protected-resource-types]
[-y]
[--allow-deprecated-network-data]

```

Table 57.81. Command arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--libvirt-type {kvm,qemu}	Libvirt domain type.
--ntp-server NTP_SERVER	The ntp for overcloud nodes.
--no-proxy NO_PROXY	A comma separated list of hosts that should not be proxied.
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to overcloud nodes
--overcloud-ssh-key OVERCLOUD_SSH_KEY	Key path for ssh access to overcloud nodes. When undefined the key will be autodetected.
--overcloud-ssh-network OVERCLOUD_SSH_NETWORK	Network name to use for ssh access to overcloud nodes.
--overcloud-ssh-enable-timeout OVERCLOUD_SSH_ENABLE_TIMEOUT	This option no longer has any effect.
--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT	Timeout for the ssh port to become active.
--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.)
--environment-directory <HEAT ENVIRONMENT DIRECTORY>	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.

Value	Summary
<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. May be an absolute path or the path relative to <code>--templates</code>
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data_default.yaml</code> in the <code>--templates</code> directory
<code>--vip-file VIP_FILE</code>	Configuration file describing the network virtual ips.
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file for derived parameters.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Deprecated: only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release. Not supported anymore.
<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>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.
<code>--disable-validations</code>	Deprecated. 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. These validations are now run via the external validations in <code>tripleo-validations</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--run-validations</code>	Run external validations from the <code>tripleo-validations</code> project.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.

Value	Summary
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<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>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<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>--config-download</code>	Deprecated: run deployment via config-download mechanism. This is now the default, and this CLI options has no effect.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and download the config. No software configuration, setup, or any changes will be applied to overcloud nodes.
<code>--config-download-only</code>	Disable the stack create and setup, and only run the config-download workflow to apply the software configuration. Requires that config-download setup was previously completed, either with <code>--stack-only</code> and <code>--setup-only</code> or a full deployment
<code>--setup-only</code>	Disable the stack and config-download workflow to apply the software configuration and only run the setup to enable ssh connectivity.
<code>--config-dir CONFIG_DIR</code>	The directory where the configuration files will be pushed
<code>--config-type CONFIG_TYPE</code>	Only used when " <code>--setup-only</code> " is invoked. type of object config to be extract from the deployment, defaults to all keys available

Value	Summary
<code>--no-preserve-config</code>	Only used when " <code>--setup-only</code> " is invoked. If specified, will delete and recreate the <code>--config-dir</code> if it already exists. Default is to use the existing dir location and overwrite files. Files in <code>--config-</code> dir not from the stack will be preserved by default.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config- download</code> . When not specified, <code><working-dir>/config- download</code> will be used.
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. The configuration in the file will override any configuration used by <code>config-download</code> by default.
<code>--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for <code>config-download</code> steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.
<code>--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
<code>-b [<baremetal_deployment.yaml>], --baremetal-deployment [<baremetal_deployment.yaml>]</code>	Deploy baremetal nodes, network and virtual ip addresses as defined in <code>baremetal_deployment.yaml</code> along with overcloud. If no <code>baremetal_deployment</code> YAML file is given, the <code>tripleo-<stack_name>-baremetal- deployment.yaml</code> file in the <code>working-dir</code> will be used.
<code>--network-config</code>	Apply network config to provisioned nodes. (implies " <code>--network-ports</code> ")
<code>--limit LIMIT</code>	A string that identifies a single node or comma-separated list of nodes the <code>config-download</code> Ansible playbook execution will be limited to. For example: <code>--limit "compute-0,compute-1,compute-5"</code> .
<code>--tags TAGS</code>	A list of tags to use when running the the <code>config-download ansible-playbook</code> command.
<code>--skip-tags SKIP_TAGS</code>	A list of tags to skip when running the the <code>config-download ansible-playbook</code> command.
<code>--ansible-forks ANSIBLE_FORKS</code>	The number of ansible forks to use for the <code>config-download ansible-playbook</code> command.

Value	Summary
<code>--disable-container-prepare</code>	Disable the container preparation actions to prevent container tags from being updated and new containers from being fetched. If you skip this but do not have the container parameters configured, the deployment action may fail.
<code>--working-dir WORKING_DIR</code>	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy/<stack>"
<code>--heat-type {pod,container,native}</code>	The type of heat process to use to execute the deployment. pod (Default): Use an ephemeral Heat pod. container (Experimental): Use an ephemeral Heat container. native (Experimental): Use an ephemeral Heat process.
<code>--heat-container-api-image <HEAT_CONTAINER_API_IMAGE></code>	The container image to use when launching the heat-api process. Only used when <code>--heat-type=pod</code> . Defaults to: localhost/tripleo/openstack-heat-api:ephemeral
<code>--heat-container-engine-image <HEAT_CONTAINER_ENGINE_IMAGE></code>	The container image to use when launching the heat-engine process. Only used when <code>--heat-type=pod</code> . Defaults to: localhost/tripleo/openstack-heat-engine:ephemeral
<code>--rm-heat</code>	If specified and <code>--heat-type</code> is container or pod any existing container or pod of a previous ephemeral Heat process will be deleted first. Ignored if <code>--heat-type</code> is native.
<code>--skip-heat-pull</code>	When <code>--heat-type</code> is pod or container, assume the container image has already been pulled
<code>--disable-protected-resource-types</code>	Disable protected resource type overrides. resources types that are used internally are protected, and cannot be overridden in the user environment. Setting this argument disables the protection, allowing the protected resource types to be override in the user environment.
<code>-y, --yes</code>	Use <code>-y</code> or <code>--yes</code> to skip any confirmation required before the deploy operation. Use this with caution!
<code>--allow-deprecated-network-data</code>	Set this to allow using deprecated network data yaml definition schema.

57.52. 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>]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
    [--overcloud-ssh-enable-timeout
OVERCLOUD_SSH_ENABLE_TIMEOUT]
    [--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--vip-file VIP_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup] [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]
    [--inflight-validations]
    [--dry-run] [--run-validations]
    [--skip-postconfig]
    [--force-postconfig]
    [--skip-deploy-identifier]
    [--answers-file ANSWERS_FILE]
    [--disable-password-generation]
    [--deployed-server]
    [--config-download]
    [--no-config-download]
    [--config-download-only]
    [--setup-only]
    [--config-dir CONFIG_DIR]
    [--config-type CONFIG_TYPE]
    [--no-preserve-config]
    [--output-dir OUTPUT_DIR]
    [--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
    [--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
    [--deployment-python-interpreter
DEPLOYMENT_PYTHON_INTERPRETER]
    [-b [<baremetal_deployment.yaml>]]
    [--network-config] [--limit LIMIT]
    [--tags TAGS]
    [--skip-tags SKIP_TAGS]
    [--ansible-forks ANSIBLE_FORKS]
    [--disable-container-prepare]
    [--working-dir WORKING_DIR]
    [--heat-type {pod,container,native}]

```

```

[--heat-container-api-image <HEAT_CONTAINER_API_IMAGE>]
[--heat-container-engine-image <HEAT_CONTAINER_ENGINE_IMAGE>]
[--rm-heat] [--skip-heat-pull]
[--disable-protected-resource-types]
[-y]
[--allow-deprecated-network-data]

```

Table 57.82. Command arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--libvirt-type {kvm,qemu}	Libvirt domain type.
--ntp-server NTP_SERVER	The ntp for overcloud nodes.
--no-proxy NO_PROXY	A comma separated list of hosts that should not be proxied.
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to overcloud nodes
--overcloud-ssh-key OVERCLOUD_SSH_KEY	Key path for ssh access to overcloud nodes. When undefined the key will be autodetected.
--overcloud-ssh-network OVERCLOUD_SSH_NETWORK	Network name to use for ssh access to overcloud nodes.
--overcloud-ssh-enable-timeout OVERCLOUD_SSH_ENABLE_TIMEOUT	This option no longer has any effect.
--overcloud-ssh-port-timeout OVERCLOUD_SSH_PORT_TIMEOUT	Timeout for the ssh port to become active.
--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.)
--environment-directory <HEAT ENVIRONMENT DIRECTORY>	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.

Value	Summary
<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. May be an absolute path or the path relative to <code>--templates</code>
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data_default.yaml</code> in the <code>--templates</code> directory
<code>--vip-file VIP_FILE</code>	Configuration file describing the network virtual ips.
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file for derived parameters.
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Deprecated: only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release. Not supported anymore.
<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>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.
<code>--disable-validations</code>	Deprecated. 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. These validations are now run via the external validations in <code>tripleo-validations</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--run-validations</code>	Run external validations from the <code>tripleo-validations</code> project.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.

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>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<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>--config-download</code>	Deprecated: run deployment via config-download mechanism. This is now the default, and this CLI options has no effect.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and download the config. No software configuration, setup, or any changes will be applied to overcloud nodes.
<code>--config-download-only</code>	Disable the stack create and setup, and only run the config-download workflow to apply the software configuration. Requires that config-download setup was previously completed, either with <code>--stack-only</code> and <code>--setup-only</code> or a full deployment
<code>--setup-only</code>	Disable the stack and config-download workflow to apply the software configuration and only run the setup to enable ssh connectivity.
<code>--config-dir CONFIG_DIR</code>	The directory where the configuration files will be pushed
<code>--config-type CONFIG_TYPE</code>	Only used when " <code>--setup-only</code> " is invoked. type of object config to be extract from the deployment, defaults to all keys available

Value	Summary
<code>--no-preserve-config</code>	Only used when " <code>--setup-only</code> " is invoked. if specified, will delete and recreate the <code>--config-dir</code> if it already exists. Default is to use the existing dir location and overwrite files. Files in <code>--config-dir</code> not from the stack will be preserved by default.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . When not specified, <code><working-dir>/config-download</code> will be used.
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by <code>config-download</code> by default.
<code>--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for <code>config-download</code> steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.
<code>--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
<code>-b [<baremetal_deployment.yaml>], --baremetal-deployment [<baremetal_deployment.yaml>]</code>	Deploy baremetal nodes, network and virtual ip addresses as defined in <code>baremetal_deployment.yaml</code> along with overcloud. If no <code>baremetal_deployment</code> YAML file is given, the <code>tripleo-<stack_name>-baremetal-deployment.yaml</code> file in the <code>working-dir</code> will be used.
<code>--network-config</code>	Apply network config to provisioned nodes. (implies " <code>--network-ports</code> ")
<code>--limit LIMIT</code>	A string that identifies a single node or comma-separated list of nodes the <code>config-download</code> Ansible playbook execution will be limited to. For example: <code>--limit "compute-0,compute-1,compute-5"</code> .
<code>--tags TAGS</code>	A list of tags to use when running the the <code>config-download ansible-playbook</code> command.
<code>--skip-tags SKIP_TAGS</code>	A list of tags to skip when running the the <code>config-download ansible-playbook</code> command.
<code>--ansible-forks ANSIBLE_FORKS</code>	The number of ansible forks to use for the <code>config-download ansible-playbook</code> command.

Value	Summary
<code>--disable-container-prepare</code>	Disable the container preparation actions to prevent container tags from being updated and new containers from being fetched. If you skip this but do not have the container parameters configured, the deployment action may fail.
<code>--working-dir WORKING_DIR</code>	The working directory for the deployment where all input, output, and generated files will be stored. Defaults to "\$HOME/overcloud-deploy/<stack>"
<code>--heat-type {pod,container,native}</code>	The type of heat process to use to execute the deployment. pod (Default): Use an ephemeral Heat pod. container (Experimental): Use an ephemeral Heat container. native (Experimental): Use an ephemeral Heat process.
<code>--heat-container-api-image</code> <HEAT_CONTAINER_API_IMAGE>	The container image to use when launching the heat-api process. Only used when <code>--heat-type=pod</code> . Defaults to: localhost/tripleo/openstack-heat-api:ephemeral
<code>--heat-container-engine-image</code> <HEAT_CONTAINER_ENGINE_IMAGE>	The container image to use when launching the heat-engine process. Only used when <code>--heat-type=pod</code> . Defaults to: localhost/tripleo/openstack-heat-engine:ephemeral
<code>--rm-heat</code>	If specified and <code>--heat-type</code> is container or pod any existing container or pod of a previous ephemeral Heat process will be deleted first. Ignored if <code>--heat-type</code> is native.
<code>--skip-heat-pull</code>	When <code>--heat-type</code> is pod or container, assume the container image has already been pulled
<code>--disable-protected-resource-types</code>	Disable protected resource type overrides. resources types that are used internally are protected, and cannot be overridden in the user environment. Setting this argument disables the protection, allowing the protected resource types to be override in the user environment.
<code>-y, --yes</code>	Use <code>-y</code> or <code>--yes</code> to skip any confirmation required before the deploy operation. Use this with caution!
<code>--allow-deprecated-network-data</code>	Set this to allow using deprecated network data yaml definition schema.

57.53. 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] --limit LIMIT
                               [--playbook [PLAYBOOK ...]]
                               [--static-inventory STATIC_INVENTORY]
                               [--ssh-user SSH_USER] [--tags TAGS]
                               [--skip-tags SKIP_TAGS] [--stack STACK]
                               [-y] [--ansible-forks ANSIBLE_FORKS]
```

Table 57.83. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--limit LIMIT</code>	A string that identifies a single node or comma-separated list of nodes the config-download Ansible playbook execution will be limited to. For example: <code>--limit "compute-0,compute-1,compute-5"</code> .
<code>--playbook [PLAYBOOK ...]</code>	Ansible playbook to use for the minor update. can be used multiple times. 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 all playbooks so that all services are updated and running with the target version configuration.
<code>--static-inventory STATIC_INVENTORY</code>	Deprecated: <code>tripleo-ansible-inventory.yaml</code> in working dir will be used.
<code>--ssh-user SSH_USER</code>	Deprecated: only <code>tripleo-admin</code> should be used as ssh user.
<code>--tags TAGS</code>	A string specifying the tag or comma separated list of tags to be passed as <code>--tags</code> to <code>ansible-playbook</code> .
<code>--skip-tags SKIP_TAGS</code>	A string specifying the tag or comma separated list of tags to be passed as <code>--skip-tags</code> to <code>ansible-playbook</code> . 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.

Value	Summary
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
-y, --yes	Use -y or --yes to skip the confirmation required before any upgrade operation. Use this with caution!
--ansible-forks ANSIBLE_FORKS	The number of ansible forks to use for the config-download ansible-playbook command.

CHAPTER 58. POLICY

This chapter describes the commands under the **policy** command.

58.1. POLICY CREATE

Create new policy

Usage:

```
openstack policy create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--type <type>]
                        <filename>
```

Table 58.1. Positional arguments

Value	Summary
<filename>	New serialized policy rules file

Table 58.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--type <type>	New mime type of the policy rules file (defaults to application/json)

Table 58.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 58.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 58.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 58.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

58.2. POLICY DELETE

Delete policy(s)

Usage:

```
openstack policy delete [-h] <policy> [<policy> ...]
```

Table 58.7. Positional arguments

Value	Summary
<code><policy></code>	Policy(s) to delete

Table 58.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

58.3. POLICY LIST

List policies

Usage:

```
openstack policy list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending] [--long]

```

Table 58.9. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

Table 58.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 58.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 58.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 58.13. Table formatter options

Value	Summary
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Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

58.4. POLICY SET

Set policy properties

Usage:

```
openstack policy set [-h] [--type <type>] [--rules <filename>] <policy>
```

Table 58.14. Positional arguments

Value	Summary
<code><policy></code>	Policy to modify

Table 58.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--type <type></code>	New mime type of the policy rules file
<code>--rules <filename></code>	New serialized policy rules file

58.5. POLICY SHOW

Display policy details

Usage:

```
openstack policy show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
```

```

[--print-empty]
<policy>

```

Table 58.16. Positional arguments

Value	Summary
<policy>	Policy to display

Table 58.17. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 58.18. Output formatter options

Value	Summary
-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 to show multiple columns

Table 58.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 58.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 58.21. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 59. PORT

This chapter describes the commands under the **port** command.

59.1. PORT CREATE

Create a new port

Usage:

```
openstack port create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] --network <network>
                    [--description <description>]
                    [--device <device-id>]
                    [--mac-address <mac-address>]
                    [--device-owner <device-owner>]
                    [--vnic-type <vnic-type>] [--host <host-id>]
                    [--dns-domain dns-domain] [--dns-name <dns-name>]
                    [--numa-policy-required | --numa-policy-preferred | --numa-policy-legacy]
                    [--fixed-ip subnet=<subnet>,ip-address=<ip-address> | --no-fixed-ip]
                    [--binding-profile <binding-profile>]
                    [--enable | --disable]
                    [--enable-uplink-status-propagation | --disable-uplink-status-propagation]
                    [--project <project>]
                    [--project-domain <project-domain>]
                    [--extra-dhcp-option name=<name>[,value=<value>,ip-version={4,6}]]
                    [--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>]]
                    [--device-profile <device-profile>]
                    [--tag <tag> | --no-tag]
                    <name>
```

Table 59.1. Positional arguments

Value	Summary
<name>	Name of this port

Table 59.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--network <network>	Network this port belongs to (name or id)
--description <description>	Description of this port

Value	Summary
<code>--device <device-id></code>	Port device id
<code>--mac-address <mac-address></code>	Mac address of this port (admin only)
<code>--device-owner <device-owner></code>	Device owner of this port. this is the entity that uses the port (for example, network:dhcp).
<code>--vnic-type <vnic-type></code>	Vnic type for this port (direct direct-physical macvtap normal baremetal virtio-forwarder, default: normal)
<code>--host <host-id></code>	Allocate port on host <host-id> (id only)
<code>--dns-domain dns-domain</code>	Set dns domain to this port (requires dns_domain extension for ports)
<code>--dns-name <dns-name></code>	Set dns name for this port (requires dns integration extension)
<code>--numa-policy-required</code>	Numa affinity policy required to schedule this port
<code>--numa-policy-preferred</code>	Numa affinity policy preferred to schedule this port
<code>--numa-policy-legacy</code>	Numa affinity policy using legacy mode to schedule this port
<code>--fixed-ip subnet=<subnet>,ip-address=<ip-address></code>	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)
<code>--no-fixed-ip</code>	No ip or subnet for this port.
<code>--binding-profile <binding-profile></code>	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)
<code>--enable</code>	Enable port (default)
<code>--disable</code>	Disable port
<code>--enable-uplink-status-propagation</code>	Enable uplink status propagate
<code>--disable-uplink-status-propagation</code>	Disable uplink status propagate (default)
<code>--project <project></code>	Owner's project (name or id)

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--extra-dhcp-option name=<name>[,value=<value>,ip-version={4,6}]</code>	Extra dhcp options to be assigned to this port: name=<name>[,value=<value>,ip-version={4,6}] (repeat option to set multiple extra DHCP options)
<code>--security-group <security-group></code>	Security group to associate with this port (name or ID) (repeat option to set multiple security groups)
<code>--no-security-group</code>	Associate no security groups with this port
<code>--qos-policy <qos-policy></code>	Attach qos policy to this port (name or id)
<code>--enable-port-security</code>	Enable port security for this port (default)
<code>--disable-port-security</code>	Disable port security for this port
<code>--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]</code>	Add allowed-address pair associated with this port: ip-address=<ip-address>[,mac-address=<mac-address>] (repeat option to set multiple allowed-address pairs)
<code>--device-profile <device-profile></code>	Cyborg port device profile
<code>--tag <tag></code>	Tag to be added to the port (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the port

Table 59.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 59.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 59.6. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

59.2. PORT DELETE

Delete port(s)

Usage:

```
openstack port delete [-h] <port> [<port> ...]
```

Table 59.7. Positional arguments

Value	Summary
<port>	Port(s) to delete (name or id)

Table 59.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

59.3. PORT LIST

List ports

Usage:

```
openstack port list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--device-owner <device-owner>] [--host <host-id>]
                    [--network <network>]
                    [--router <router> | --server <server> | --device-id <device-id>]
                    [--mac-address <mac-address>] [--long]
                    [--project <project>] [--name <name>]
                    [--project-domain <project-domain>]
                    [--fixed-ip subnet=<subnet>,ip-address=<ip-address>,ip-substring=<ip-substring>]
                    [--tags <tag>[,<tag>,...]]
                    [--any-tags <tag>[,<tag>,...]]
                    [--not-tags <tag>[,<tag>,...]]
                    [--not-any-tags <tag>[,<tag>,...]]
```

Table 59.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--device-owner <device-owner>	List only ports with the specified device owner. this is the entity that uses the port (for example, network:dhcp).
--host <host-id>	List only ports bound to this host id
--network <network>	List only ports connected to this network (name or id)
--router <router>	List only ports attached to this router (name or id)
--server <server>	List only ports attached to this server (name or id)
--device-id <device-id>	List only ports with the specified device id
--mac-address <mac-address>	List only ports with this mac address
--long	List additional fields in output
--project <project>	List ports according to their project (name or id)
--name <name>	List ports according to their name

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--fixed-ip subnet=<subnet>,ip-address=<ip-address>,ip-substring=<ip-substring></code>	Desired ip and/or subnet for filtering ports (name or ID): <code>subnet=<subnet>,ip-address=<ip-address>,ip-substring=<ip-substring></code> (repeat option to set multiple fixed IP addresses)
<code>--tags <tag>[,<tag>,...]</code>	List ports which have all given tag(s) (comma-separated list of tags)
<code>--any-tags <tag>[,<tag>,...]</code>	List ports which have any given tag(s) (comma-separated list of tags)
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude ports which have all given tag(s) (comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude ports which have any given tag(s) (comma-separated list of tags)

Table 59.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 59.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 59.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.13. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

59.4. 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-domain dns-domain] [--dns-name <dns-name>]
                  [--numa-policy-required | --numa-policy-preferred | --numa-policy-legacy]
                  [--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 59.14. Positional arguments

Value	Summary
<port>	Port to modify (name or id)

Table 59.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of this port
--device <device-id>	Port device id
--mac-address <mac-address>	Mac address of this port (admin only)
--device-owner <device-owner>	Device owner of this port. this is the entity that uses the port (for example, network:dhcp).
--vnic-type <vnic-type>	Vnic type for this port (direct direct-physical macvtap normal baremetal virtio-forwarder, default: normal)
--host <host-id>	Allocate port on host <host-id> (id only)
--dns-domain dns-domain	Set dns domain to this port (requires dns_domain extension for ports)
--dns-name <dns-name>	Set dns name for this port (requires dns integration extension)
--numa-policy-required	Numa affinity policy required to schedule this port
--numa-policy-preferred	Numa affinity policy preferred to schedule this port
--numa-policy-legacy	Numa affinity policy using legacy mode to schedule this port
--enable	Enable port
--disable	Disable port
--name <name>	Set port name
--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)

Value	Summary
<code>--no-fixed-ip</code>	Clear existing information of fixed ip addresses. Specify both <code>--fixed-ip</code> and <code>--no-fixed-ip</code> to overwrite the current fixed IP addresses.
<code>--binding-profile <binding-profile></code>	Custom data to be passed as binding:profile. data may be passed as <code><key>=<value></code> or JSON. (repeat option to set multiple binding:profile data)
<code>--no-binding-profile</code>	Clear existing information of binding:profile. specify both <code>--binding-profile</code> and <code>--no-binding-profile</code> to overwrite the current binding:profile information.
<code>--qos-policy <qos-policy></code>	Attach qos policy to this port (name or id)
<code>--security-group <security-group></code>	Security group to associate with this port (name or ID) (repeat option to set multiple security groups)
<code>--no-security-group</code>	Clear existing security groups associated with this port
<code>--enable-port-security</code>	Enable port security for this port
<code>--disable-port-security</code>	Disable port security for this port
<code>--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]</code>	Add allowed-address pair associated with this port: <code>ip-address=<ip-address>[,mac-address=<mac-address>]</code> (repeat option to set multiple allowed-address pairs)
<code>--no-allowed-address</code>	Clear existing allowed-address pairs associated with this port. (Specify both <code>--allowed-address</code> and <code>--no-allowed-address</code> to overwrite the current allowed-address pairs)
<code>--data-plane-status <status></code>	Set data plane status of this port (active down). Unset it to None with the <code>port unset</code> command (requires data plane status extension)
<code>--tag <tag></code>	Tag to be added to the port (repeat option to set multiple tags)
<code>--no-tag</code>	Clear tags associated with the port. specify both <code>--tag</code> and <code>--no-tag</code> to overwrite current tags

59.5. PORT SHOW

Display port details

Usage:

```
openstack port show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <port>
```

Table 59.16. Positional arguments

Value	Summary
<port>	Port to display (name or id)

Table 59.17. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 59.18. Output formatter options

Value	Summary
-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 to show multiple columns

Table 59.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 59.21. Table formatter options

Value	Summary
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Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

59.6. 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]
                    [--numa-policy] [--tag <tag> | --all-tag]
                    <port>

```

Table 59.22. Positional arguments

Value	Summary
<code><port></code>	Port to modify (name or id)

Table 59.23. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--fixed-ip subnet=<subnet>,ip-address=<ip-address></code>	Desired ip and/or subnet which should be removed from this port (name or ID): <code>subnet=<subnet>,ip-address=<ip-address></code> (repeat option to unset multiple fixed IP addresses)
<code>--binding-profile <binding-profile-key></code>	Desired key which should be removed from <code>binding:profile</code> (repeat option to unset multiple <code>binding:profile</code> data)

Value	Summary
--security-group <security-group>	Security group which should be removed this port (name or ID) (repeat option to unset multiple security groups)
--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]	Desired allowed-address pair which should be removed from this port: ip-address=<ip-address> [,mac-address=<mac-address>] (repeat option to unset multiple allowed-address pairs)
--qos-policy	Remove the qos policy attached to the port
--data-plane-status	Clear existing information of data plane status
--numa-policy	Clear existing numa affinity policy
--tag <tag>	Tag to be removed from the port (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the port

CHAPTER 60. PROJECT

This chapter describes the commands under the **project** command.

60.1. PROJECT CLEANUP

Clean resources associated with a project

Usage:

```
openstack project cleanup [-h] [--dry-run]
                          (--auth-project | --project <project>)
                          [--created-before <YYYY-MM-DDTHH24:MI:SS>]
                          [--updated-before <YYYY-MM-DDTHH24:MI:SS>]
                          [--project-domain <project-domain>]
```

Table 60.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--dry-run	List a project's resources
--auth-project	Delete resources of the project used to authenticate
--project <project>	Project to clean (name or id)
--created-before <YYYY-MM-DDTHH24:MI:SS>	Drop resources created before the given time
--updated-before <YYYY-MM-DDTHH24:MI:SS>	Drop resources updated before the given time
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

60.2. PROJECT CREATE

Create new project

Usage:

```
openstack project create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--domain <domain>]
                        [--parent <project>]
                        [--description <description>]
                        [--enable | --disable]
```



```

[--property <key=value>] [--or-show]
[--immutable | --no-immutable] [--tag <tag>]
<project-name>

```

Table 60.2. Positional arguments

Value	Summary
<project-name>	New project name

Table 60.3. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain owning the project (name or id)
--parent <project>	Parent of the project (name or id)
--description <description>	Project description
--enable	Enable project
--disable	Disable project
--property <key=value>	Add a property to <name> (repeat option to set multiple properties)
--or-show	Return existing project
--immutable	Make resource immutable. an immutable project may not be deleted or modified except to remove the immutable flag
--no-immutable	Make resource mutable (default)
--tag <tag>	Tag to be added to the project (repeat option to set multiple tags)

Table 60.4. Output formatter options

Value	Summary
-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 to show multiple columns

Table 60.5. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 60.6. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 60.7. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

60.3. PROJECT DELETE

Delete project(s)

Usage:

```
openstack project delete [-h] [--domain <domain>]
                        <project> [<project> ...]
```

Table 60.8. Positional arguments

Value	Summary
<code><project></code>	Project(s) to delete (name or id)

Table 60.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain owning <project> (name or id)

60.4. PROJECT LIST

List projects

Usage:

```

openstack project list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--domain <domain>] [--parent <parent>]
                        [--user <user>] [--my-projects] [--long]
                        [--sort <key>[:<direction>]]
                        [--tags <tag>[,<tag>,...]]
                        [--tags-any <tag>[,<tag>,...]]
                        [--not-tags <tag>[,<tag>,...]]
                        [--not-tags-any <tag>[,<tag>,...]]

```

Table 60.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Filter projects by <domain> (name or id)
--parent <parent>	Filter projects whose parent is <parent> (name or id)
--user <user>	Filter projects by <user> (name or id)
--my-projects	List projects for the authenticated user. supersedes other filters.
--long	List additional fields in output
--sort <key>[:<direction>]	Sort output by selected keys and directions (asc or desc) (default: asc), repeat this option to specify multiple keys and directions.

Value	Summary
<code>--tags <tag>[,<tag>,...]</code>	List projects which have all given tag(s) (comma-separated list of tags)
<code>--tags-any <tag>[,<tag>,...]</code>	List projects which have any given tag(s) (comma-separated list of tags)
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude projects which have all given tag(s) (comma-separated list of tags)
<code>--not-tags-any <tag>[,<tag>,...]</code>	Exclude projects which have any given tag(s) (comma-separated list of tags)

Table 60.11. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 60.12. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 60.13. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 60.14. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

60.5. 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 60.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--dry-run</code>	List a project's resources
<code>--keep-project</code>	Clean project resources, but don't delete the project
<code>--auth-project</code>	Delete resources of the project used to authenticate
<code>--project <project></code>	Project to clean (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

60.6. PROJECT SET

Set project properties

Usage:

```
openstack project set [-h] [--name <name>] [--domain <domain>]
                      [--description <description>]
                      [--enable | --disable] [--property <key=value>]
```

```

[--immutable | --no-immutable] [--tag <tag>]
[--clear-tags] [--remove-tag <tag>]
<project>

```

Table 60.16. Positional arguments

Value	Summary
<project>	Project to modify (name or id)

Table 60.17. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set project name
--domain <domain>	Domain owning <project> (name or id)
--description <description>	Set project description
--enable	Enable project
--disable	Disable project
--property <key=value>	Set a property on <project> (repeat option to set multiple properties)
--immutable	Make resource immutable. an immutable project may not be deleted or modified except to remove the immutable flag
--no-immutable	Make resource mutable (default)
--tag <tag>	Tag to be added to the project (repeat option to set multiple tags)
--clear-tags	Clear tags associated with the project. specify both -tag and --clear-tags to overwrite current tags
--remove-tag <tag>	Tag to be deleted from the project (repeat option to delete multiple tags)

60.7. PROJECT SHOW

Display project details

Usage:

```

openstack project show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--domain <domain>] [--parents]
                        [--children]
                        <project>

```

Table 60.18. Positional arguments

Value	Summary
<project>	Project to display (name or id)

Table 60.19. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain owning <project> (name or id)
--parents	Show the project's parents as a list
--children	Show project's subtree (children) as a list

Table 60.20. Output formatter options

Value	Summary
-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 to show multiple columns

Table 60.21. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 60.22. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 60.23. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 61. PTR

This chapter describes the commands under the **ptr** command.

61.1. PTR RECORD LIST

List floatingip ptr records

Usage:

```
openstack ptr record list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--all-projects]
                          [--sudo-project-id SUDO_PROJECT_ID]
```

Table 61.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 61.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 61.3. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 61.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 61.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

61.2. PTR RECORD SET

Set floatingip ptr record

Usage:

```

openstack ptr record set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        [--description DESCRIPTION | --no-description]
                        [--ttl TTL | --no-ttl] [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
floatingip_id ptrdname

```

Table 61.6. Positional arguments

Value	Summary
<code>floatingip_id</code>	Floating ip id in format region:floatingip_id
<code>ptrdname</code>	Ptrd name

Table 61.7. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description DESCRIPTION	Description
--no-description--ttl TTL	Ttl
--no-ttl--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 61.8. Output formatter options

Value	Summary
-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 to show multiple columns

Table 61.9. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 61.10. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 61.11. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

61.3. PTR RECORD SHOW

Show floatingip ptr record details

Usage:

```
openstack ptr record show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        floatingip_id
```

Table 61.12. Positional arguments

Value	Summary
<code>floatingip_id</code>	Floating ip id in format <code>region:floatingip_id</code>

Table 61.13. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 61.14. Output formatter options

Value	Summary
<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 to show multiple columns

Table 61.15. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 61.16. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 61.17. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

61.4. PTR RECORD UNSET

Unset floatingip ptr record

Usage:

```
openstack ptr record unset [-h] [--all-projects]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          floatingip_id
```

Table 61.18. Positional arguments

Value	Summary
floatingip_id	Floating ip id in format region:floatingip_id

Table 61.19. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

CHAPTER 62. QUOTA

This chapter describes the commands under the **quota** command.

62.1. 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]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--project <project>] [--detail]
                    (--compute | --volume | --network)
```

Table 62.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	List quotas for this project <project> (name or id)
--detail	Show details about quotas usage
--compute	List compute quota
--volume	List volume quota
--network	List network quota

Table 62.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 62.3. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 62.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

62.2. QUOTA SET

Set quotas for project or class

Usage:

```
openstack quota set [-h] [--class] [--cores <cores>]
                    [--fixed-ips <fixed-ips>]
                    [--injected-file-size <injected-file-size>]
                    [--injected-path-size <injected-path-size>]
                    [--injected-files <injected-files>]
                    [--instances <instances>] [--key-pairs <key-pairs>]
                    [--properties <properties>] [--ram <ram>]
                    [--server-groups <server-groups>]
                    [--server-group-members <server-group-members>]
                    [--backups <backups>]
```



```

[--backup-gigabytes <backup-gigabytes>]
[--gigabytes <gigabytes>]
[--per-volume-gigabytes <per-volume-gigabytes>]
[--snapshots <snapshots>] [--volumes <volumes>]
[--floating-ips <floating-ips>]
[--secgroup-rules <secgroup-rules>]
[--secgroups <secgroups>] [--networks <networks>]
[--subnets <subnets>] [--ports <ports>]
[--routers <routers>]
[--rbac-policies <rbac-policies>]
[--subnetpools <subnetpools>]
[--volume-type <volume-type>] [--force]
<project/class>

```

Table 62.6. Positional arguments

Value	Summary
<project/class>	Set quotas for this project or class (name/id)

Table 62.7. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--class	Set quotas for <class>
--cores <cores>	New value for the cores quota
--fixed-ips <fixed-ips>	New value for the fixed-ips quota
--injected-file-size <injected-file-size>	New value for the injected-file-size quota
--injected-path-size <injected-path-size>	New value for the injected-path-size quota
--injected-files <injected-files>	New value for the injected-files quota
--instances <instances>	New value for the instances quota
--key-pairs <key-pairs>	New value for the key-pairs quota
--properties <properties>	New value for the properties quota
--ram <ram>	New value for the ram quota
--server-groups <server-groups>	New value for the server-groups quota
--server-group-members <server-group-members>	New value for the server-group-members quota

Value	Summary
--backups <backups>	New value for the backups quota
--backup-gigabytes <backup-gigabytes>	New value for the backup-gigabytes quota
--gigabytes <gigabytes>	New value for the gigabytes quota
--per-volume-gigabytes <per-volume-gigabytes>	New value for the per-volume-gigabytes quota
--snapshots <snapshots>	New value for the snapshots quota
--volumes <volumes>	New value for the volumes quota
--floating-ips <floating-ips>	New value for the floating-ips quota
--secgroup-rules <secgroup-rules>	New value for the secgroup-rules quota
--secgroups <secgroups>	New value for the secgroups quota
--networks <networks>	New value for the networks quota
--subnets <subnets>	New value for the subnets quota
--ports <ports>	New value for the ports quota
--routers <routers>	New value for the routers quota
--rbac-policies <rbac-policies>	New value for the rbac-policies quota
--subnetpools <subnetpools>	New value for the subnetpools quota
--volume-type <volume-type>	Set quotas for a specific <volume-type>
--force	Force quota update (only supported by compute)

62.3. QUOTA SHOW

Show quotas for project or class. Specify ``--os-compute-api-version 2.50`` or higher to see ``server-groups`` and ``server-group-members`` output for a given quota class.

Usage:

```
openstack quota show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--class | --default]
                    [<project/class>]
```

Table 62.8. Positional arguments

Value	Summary
<project/class>	Show quotas for this project or class (name or id)

Table 62.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--class	Show quotas for <class>
--default	Show default quotas for <project>

Table 62.10. Output formatter options

Value	Summary
-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 to show multiple columns

Table 62.11. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.12. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 62.13. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 63. RECORDSET

This chapter describes the commands under the **recordset** command.

63.1. RECORDSET CREATE

Create new recordset

Usage:

```
openstack recordset create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] --record RECORD --type TYPE
                          [--ttl TTL] [--description DESCRIPTION]
                          [--all-projects]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          zone_id name
```

Table 63.1. Positional arguments

Value	Summary
zone_id	Zone id
name	Recordset name

Table 63.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--record RECORD	Recordset record, repeat if necessary
--type TYPE	Recordset type
--ttl TTL	Time to live (seconds)
--description DESCRIPTION	Description
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 63.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 63.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 63.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 63.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

63.2. RECORDSET DELETE

Delete recordset

Usage:

```
openstack recordset delete [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--all-projects]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          [--edit-managed]
                          zone_id id
```

Table 63.7. Positional arguments

Value	Summary
zone_id	Zone id
id	Recordset id

Table 63.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--edit-managed	Edit resources marked as managed. default: false

Table 63.9. Output formatter options

Value	Summary
-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 to show multiple columns

Table 63.10. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 63.11. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 63.12. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

63.3. RECORDSET LIST

List recordsets

Usage:

```

openstack recordset list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--name NAME] [--type TYPE] [--data DATA]
                        [--ttl TTL] [--description DESCRIPTION]
                        [--status STATUS] [--action ACTION]
                        [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
zone_id

```

Table 63.13. Positional arguments

Value	Summary
<code>zone_id</code>	Zone id. to list all recordsets specify <i>all</i>

Table 63.14. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name NAME</code>	Recordset name
<code>--type TYPE</code>	Recordset type
<code>--data DATA</code>	Recordset record data

Value	Summary
--ttl TTL	Time to live (seconds)
--description DESCRIPTION	Description
--status STATUS	Recordset status
--action ACTION	Recordset action
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 63.15. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 63.16. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 63.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 63.18. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

63.4. RECORDSET SET

Set recordset properties

Usage:

```
openstack recordset set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--record RECORD]
                        [--description DESCRIPTION | --no-description]
                        [--ttl TTL | --no-ttl] [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        [--edit-managed]
                        zone_id id
```

Table 63.19. Positional arguments

Value	Summary
<code>zone_id</code>	Zone id
<code>id</code>	Recordset id

Table 63.20. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--record RECORD</code>	Recordset record, repeat if necessary
<code>--description DESCRIPTION</code>	Description
<code>--no-description--ttl TTL</code>	Ttl

Value	Summary
<code>--no-ttl--all-projects</code>	Show results from all projects. default: false
<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

Table 63.21. Output formatter options

Value	Summary
<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 to show multiple columns

Table 63.22. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 63.23. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 63.24. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

63.5. RECORDSET SHOW

Show recordset details

Usage:

```
openstack recordset show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        zone_id id
```

Table 63.25. Positional arguments

Value	Summary
zone_id	Zone id
id	Recordset id

Table 63.26. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 63.27. Output formatter options

Value	Summary
-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 to show multiple columns

Table 63.28. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 63.29. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 63.30. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 64. REGION

This chapter describes the commands under the **region** command.

64.1. REGION CREATE

Create new region

Usage:

```
openstack region create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--parent-region <region-id>]
                        [--description <description>]
                        <region-id>
```

Table 64.1. Positional arguments

Value	Summary
<region-id>	New region id

Table 64.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--parent-region <region-id>	Parent region id
--description <description>	New region description

Table 64.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 64.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 64.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 64.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

64.2. REGION DELETE

Delete region(s)

Usage:

```
openstack region delete [-h] <region-id> [<region-id> ...]
```

Table 64.7. Positional arguments

Value	Summary
<code><region-id></code>	Region id(s) to delete

Table 64.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

64.3. REGION LIST

List regions

Usage:

```
openstack region list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
  [--quote {all,minimal,none,nonnumeric}]
```

```

[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--parent-region <region-id>]

```

Table 64.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--parent-region <region-id>	Filter by parent region id

Table 64.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 64.11. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 64.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 64.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

64.4. REGION SET

Set region properties

Usage:

```
openstack region set [-h] [--parent-region <region-id>]
                    [--description <description>]
                    <region-id>
```

Table 64.14. Positional arguments

Value	Summary
<code><region-id></code>	Region to modify

Table 64.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--parent-region <region-id></code>	New parent region id
<code>--description <description></code>	New region description

64.5. REGION SHOW

Display region details

Usage:

```
openstack region show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
```

```

[--print-empty]
<region-id>

```

Table 64.16. Positional arguments

Value	Summary
<region-id>	Region to display

Table 64.17. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 64.18. Output formatter options

Value	Summary
-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 to show multiple columns

Table 64.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 64.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 64.21. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 65. REGISTERED

This chapter describes the commands under the **registered** command.

65.1. REGISTERED LIMIT CREATE

Create a registered limit

Usage:

```
openstack registered limit create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--description <description>]
                                [--region <region>] --service
                                <service> --default-limit
                                <default-limit>
                                <resource-name>
```

Table 65.1. Positional arguments

Value	Summary
<resource-name>	The name of the resource to limit

Table 65.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the registered limit
--region <region>	Region for the registered limit to affect
--service <service>	Service responsible for the resource to limit (required)
--default-limit <default-limit>	The default limit for the resources to assume (required)

Table 65.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 65.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 65.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 65.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

65.2. REGISTERED LIMIT DELETE

Delete a registered limit

Usage:

```
openstack registered limit delete [-h]
                                <registered-limit-id>
                                [<registered-limit-id> ...]
```

Table 65.7. Positional arguments

Value	Summary
<registered-limit-id>	Registered limit to delete (id)

Table 65.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

65.3. REGISTERED LIMIT LIST

List registered limits

Usage:

```

openstack registered limit list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--service <service>]
                               [--resource-name <resource-name>]
                               [--region <region>]

```

Table 65.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--service <service>	Service responsible for the resource to limit
--resource-name <resource-name>	The name of the resource to limit
--region <region>	Region for the limit to affect.

Table 65.10. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 65.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 65.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 65.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

65.4. REGISTERED LIMIT SET

Update information about a registered limit

Usage:

```
openstack registered limit set [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--service <service>]
                               [--resource-name <resource-name>]
```

```

[--default-limit <default-limit>]
[--description <description>]
[--region <region>]
<registered-limit-id>

```

Table 65.14. Positional arguments

Value	Summary
<registered-limit-id>	Registered limit to update (id)

Table 65.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--service <service>	Service to be updated responsible for the resource to limit. Either --service, --resource-name or --region must be different than existing value otherwise it will be duplicate entry
--resource-name <resource-name>	Resource to be updated responsible for the resource to limit. Either --service, --resource-name or --region must be different than existing value otherwise it will be duplicate entry
--default-limit <default-limit>	The default limit for the resources to assume
--description <description>	Description to update of the registered limit
--region <region>	Region for the registered limit to affect. either --service, --resource-name or --region must be different than existing value otherwise it will be duplicate entry

Table 65.16. Output formatter options

Value	Summary
-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 to show multiple columns

Table 65.17. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 65.18. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 65.19. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

65.5. REGISTERED LIMIT SHOW

Display registered limit details

Usage:

```
openstack registered limit show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <registered-limit-id>
```

Table 65.20. Positional arguments

Value	Summary
<code><registered-limit-id></code>	Registered limit to display (id)

Table 65.21. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 65.22. Output formatter options

Value	Summary
-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 to show multiple columns

Table 65.23. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 65.24. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 65.25. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 66. REQUEST

This chapter describes the commands under the **request** command.

66.1. REQUEST TOKEN AUTHORIZE

Authorize a request token

Usage:

```
openstack request token authorize [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] --request-key
                                <request-key> --role <role>
```

Table 66.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--request-key <request-key>	Request token to authorize (id only) (required)
--role <role>	Roles to authorize (name or id) (repeat option to set multiple values) (required)

Table 66.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 66.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 66.4. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 66.5. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

66.2. REQUEST TOKEN CREATE

Create a request token

Usage:

```
openstack request token create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] --consumer-key
                               <consumer-key> --consumer-secret
                               <consumer-secret> --project <project>
                               [--domain <domain>]
```

Table 66.6. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--consumer-key <consumer-key>	Consumer key (required)
--consumer-secret <consumer-secret>	Consumer secret (required)
--project <project>	Project that consumer wants to access (name or id) (required)
--domain <domain>	Domain owning <project> (name or id)

Table 66.7. Output formatter options

Value	Summary
<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 to show multiple columns

Table 66.8. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 66.9. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 66.10. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 67. RESOURCE

This chapter describes the commands under the **resource** command.

67.1. RESOURCE MEMBER CREATE

Shares a resource to another tenant.

Usage:

```
openstack resource member create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                resource_id resource_type member_id
```

Table 67.1. Positional arguments

Value	Summary
resource_id	Resource id to be shared.
resource_type	Resource type.
member_id	Project id to whom the resource is shared to.

Table 67.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 67.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 67.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 67.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 67.6. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

67.2. RESOURCE MEMBER DELETE

Delete a resource sharing relationship.

Usage:

```
openstack resource member delete [-h] resource resource_type member_id
```

Table 67.7. 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 67.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

67.3. RESOURCE MEMBER LIST

List all members.

Usage:

```

openstack resource member list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--marker [MARKER]] [--limit [LIMIT]]
                               [--sort_keys [SORT_KEYS]]
                               [--sort_dirs [SORT_DIRS]]
                               [--filter FILTERS]
                               resource_id resource_type

```

Table 67.9. Positional arguments

Value	Summary
resource_id	Resource id to be shared.
resource_type	Resource type.

Table 67.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description

Value	Summary
<code>--sort_dirs [SORT_DIRS]</code>	Comma-separated list of sort directions. default: asc. Example: <code>mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc</code>
<code>--filter FILTERS</code>	Filters. can be repeated.

Table 67.11. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 67.12. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 67.13. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 67.14. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

67.4. RESOURCE MEMBER SHOW

Show specific member information.

Usage:

```
openstack resource member show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [-m MEMBER_ID]
                               resource resource_type
```

Table 67.15. Positional arguments

Value	Summary
<code>resource</code>	Resource id to be shared.
<code>resource_type</code>	Resource type.

Table 67.16. Command 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 67.17. Output formatter options

Value	Summary
<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 to show multiple columns

Table 67.18. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 67.19. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 67.20. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

67.5. RESOURCE MEMBER UPDATE

Update resource sharing status.

Usage:

```
openstack resource member update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [-m MEMBER_ID]
                                [-s {pending,accepted,rejected}]
                                resource_id resource_type
```

Table 67.21. Positional arguments

Value	Summary
resource_id	Resource id to be shared.
resource_type	Resource type.

Table 67.22. Command 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 67.23. Output formatter options

Value	Summary
-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 to show multiple columns

Table 67.24. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 67.25. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 67.26. Table formatter options

Value	Summary
-------	---------

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 68. ROLE

This chapter describes the commands under the **role** command.

68.1. ROLE ADD

Adds a role assignment to a user or group on the system, a domain, or a project

Usage:

```
openstack role add [-h]
                   [--system <system> | --domain <domain> | --project <project>]
                   [--user <user> | --group <group>]
                   [--group-domain <group-domain>]
                   [--project-domain <project-domain>]
                   [--user-domain <user-domain>] [--inherited]
                   [--role-domain <role-domain>]
                   <role>
```

Table 68.1. Positional arguments

Value	Summary
<role>	Role to add to <user> (name or id)

Table 68.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--system <system>	Include <system> (all)
--domain <domain>	Include <domain> (name or id)
--project <project>	Include <project> (name or id)
--user <user>	Include <user> (name or id)
--group <group>	Include <group> (name or id)
--group-domain <group-domain>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Value	Summary
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
<code>--inherited</code>	Specifies if the role grant is inheritable to the sub projects
<code>--role-domain <role-domain></code>	Domain the role belongs to (name or id). this must be specified when the name of a domain specific role is used.

68.2. ROLE ASSIGNMENT LIST

List role assignments

Usage:

```

openstack role assignment list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--effective] [--role <role>]
                               [--role-domain <role-domain>] [--names]
                               [--user <user>]
                               [--user-domain <user-domain>]
                               [--group <group>]
                               [--group-domain <group-domain>]
                               [--domain <domain> | --project <project> | --system <system>]
                               [--project-domain <project-domain>]
                               [--inherited] [--auth-user]
                               [--auth-project]

```

Table 68.3. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--effective</code>	Returns only effective role assignments
<code>--role <role></code>	Role to filter (name or id)
<code>--role-domain <role-domain></code>	Domain the role belongs to (name or id). this must be specified when the name of a domain specific role is used.

Value	Summary
--names	Display names instead of ids
--user <user>	User to filter (name or id)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--group <group>	Group to filter (name or id)
--group-domain <group-domain>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.
--domain <domain>	Domain to filter (name or id)
--project <project>	Project to filter (name or id)
--system <system>	Filter based on system role assignments
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--inherited	Specifies if the role grant is inheritable to the sub projects
--auth-user	Only list assignments for the authenticated user
--auth-project	Only list assignments for the project to which the authenticated user's token is scoped

Table 68.4. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 68.5. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 68.6. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 68.7. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

68.3. ROLE CREATE

Create new role

Usage:

```
openstack role create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--description <description>]
                    [--domain <domain>] [--or-show]
                    [--immutable | --no-immutable]
                    <role-name>
```

Table 68.8. Positional arguments

Value	Summary
<role-name>	New role name

Table 68.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Add description about the role
--domain <domain>	Domain the role belongs to (name or id)
--or-show	Return existing role
--immutable	Make resource immutable. an immutable project may not be deleted or modified except to remove the immutable flag
--no-immutable	Make resource mutable (default)

Table 68.10. Output formatter options

Value	Summary
-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 to show multiple columns

Table 68.11. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 68.12. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 68.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

68.4. ROLE DELETE

Delete role(s)

Usage:

```
openstack role delete [-h] [--domain <domain>] <role> [<role> ...]
```

Table 68.14. Positional arguments

Value	Summary
<code><role></code>	Role(s) to delete (name or id)

Table 68.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--domain <domain></code>	Domain the role belongs to (name or id)

68.5. ROLE LIST

List roles

Usage:

```
openstack role list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--domain <domain>]
```

Table 68.16. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Include <domain> (name or id)

Table 68.17. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 68.18. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 68.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 68.20. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

68.6. ROLE REMOVE

Removes a role assignment from system/domain/project : user/group

Usage:

```

openstack role remove [-h]
                      [--system <system> | --domain <domain> | --project <project>]
                      [--user <user> | --group <group>]
                      [--group-domain <group-domain>]
                      [--project-domain <project-domain>]
                      [--user-domain <user-domain>] [--inherited]
                      [--role-domain <role-domain>]
                      <role>

```

Table 68.21. Positional arguments

Value	Summary
<role>	Role to remove (name or id)

Table 68.22. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--system <system>	Include <system> (all)
--domain <domain>	Include <domain> (name or id)
--project <project>	Include <project> (name or id)
--user <user>	Include <user> (name or id)
--group <group>	Include <group> (name or id)
--group-domain <group-domain>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
<code>--inherited</code>	Specifies if the role grant is inheritable to the sub projects
<code>--role-domain <role-domain></code>	Domain the role belongs to (name or id). this must be specified when the name of a domain specific role is used.

68.7. ROLE SET

Set role properties

Usage:

```
openstack role set [-h] [--description <description>]
                  [--domain <domain>] [--name <name>]
                  [--immutable | --no-immutable]
                  <role>
```

Table 68.23. Positional arguments

Value	Summary
<code><role></code>	Role to modify (name or id)

Table 68.24. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description <description></code>	Add description about the role
<code>--domain <domain></code>	Domain the role belongs to (name or id)
<code>--name <name></code>	Set role name

Value	Summary
--immutable	Make resource immutable. an immutable project may not be deleted or modified except to remove the immutable flag
--no-immutable	Make resource mutable (default)

68.8. ROLE SHOW

Display role details

Usage:

```
openstack role show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--domain <domain>]
                    <role>
```

Table 68.25. Positional arguments

Value	Summary
<role>	Role to display (name or id)

Table 68.26. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain the role belongs to (name or id)

Table 68.27. Output formatter options

Value	Summary
-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 to show multiple columns

Table 68.28. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 68.29. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 68.30. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 69. ROUTER

This chapter describes the commands under the **router** command.

69.1. ROUTER ADD PORT

Add a port to a router

Usage:

```
openstack router add port [-h] <router> <port>
```

Table 69.1. Positional arguments

Value	Summary
<router>	Router to which port will be added (name or id)
<port>	Port to be added (name or id)

Table 69.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit

69.2. ROUTER ADD ROUTE

Add extra static routes to a router's routing table.

Usage:

```
openstack router add route [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             [--route destination=<subnet>,gateway=<ip-address>]
                             <router>
```

Table 69.3. Positional arguments

Value	Summary
<router>	Router to which extra static routes will be added (name or ID).

Table 69.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--route destination=<subnet>,gateway=<ip-address>	Add extra static route to the router. destination: destination subnet (in CIDR notation), gateway: nexthop IP address. Repeat option to add multiple routes. Trying to add a route that's already present (exactly, including destination and nexthop) in the routing table is allowed and is considered a successful operation.

Table 69.5. Output formatter options

Value	Summary
-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 to show multiple columns

Table 69.6. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 69.7. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 69.8. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

69.3. ROUTER ADD SUBNET

Add a subnet to a router

Usage:

```
openstack router add subnet [-h] <router> <subnet>
```

Table 69.9. Positional arguments

Value	Summary
<router>	Router to which subnet will be added (name or id)
<subnet>	Subnet to be added (name or id)

Table 69.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit

69.4. ROUTER CREATE

Create a new router

Usage:

```
openstack router create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--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 69.11. Positional arguments

Value	Summary
<name>	New router name

Table 69.12. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--enable	Enable router (default)
--disable	Disable router
--distributed	Create a distributed router
--centralized	Create a centralized router
--ha	Create a highly available router
--no-ha	Create a legacy router
--description <description>	Set router description
--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.
--availability-zone-hint <availability-zone>	Availability zone in which to create this router (Router Availability Zone extension required, repeat option to set multiple availability zones)
--tag <tag>	Tag to be added to the router (repeat option to set multiple tags)
--no-tag	No tags associated with the router

Table 69.13. Output formatter options

Value	Summary
-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 to show multiple columns

Table 69.14. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 69.15. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 69.16. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

69.5. ROUTER DELETE

Delete router(s)

Usage:

```
openstack router delete [-h] <router> [<router> ...]
```

Table 69.17. Positional arguments

Value	Summary
<router>	Router(s) to delete (name or id)

Table 69.18. Command arguments

Value	Summary
-h, --help	Show this help message and exit

69.6. ROUTER LIST

List routers

Usage:

```

openstack router list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--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 69.19. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List routers according to their name
--enable	List enabled routers
--disable	List disabled routers
--long	List additional fields in output
--project <project>	List routers according to their project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--agent <agent-id>	List routers hosted by an agent (id only)
--tags <tag>[,<tag>,...]	List routers which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List routers which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude routers which have all given tag(s) (comma-separated list of tags)

Value	Summary
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude routers which have any given tag(s) (comma-separated list of tags)

Table 69.20. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 69.21. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 69.22. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 69.23. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

69.7. ROUTER REMOVE PORT

Remove a port from a router

Usage:

```
openstack router remove port [-h] <router> <port>
```

Table 69.24. Positional arguments

Value	Summary
<code><router></code>	Router from which port will be removed (name or id)
<code><port></code>	Port to be removed and deleted (name or id)

Table 69.25. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

69.8. ROUTER REMOVE ROUTE

Remove extra static routes from a router's routing table.

Usage:

```
openstack router remove route [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--route destination=<subnet>,gateway=<ip-address>]
                               <router>
```

Table 69.26. Positional arguments

Value	Summary
<code><router></code>	Router from which extra static routes will be removed (name or ID).

Table 69.27. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--route destination=<subnet>,gateway=<ip-address>	Remove extra static route from the router. destination: destination subnet (in CIDR notation), gateway: nexthop IP address. Repeat option to remove multiple routes. Trying to remove a route that's already missing (fully, including destination and nexthop) from the routing table is allowed and is considered a successful operation.

Table 69.28. Output formatter options

Value	Summary
-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 to show multiple columns

Table 69.29. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 69.30. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 69.31. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

69.9. ROUTER REMOVE SUBNET

Remove a subnet from a router

Usage:

```
openstack router remove subnet [-h] <router> <subnet>
```

Table 69.32. Positional arguments

Value	Summary
<router>	Router from which the subnet will be removed (name or id)
<subnet>	Subnet to be removed (name or id)

Table 69.33. Command arguments

Value	Summary
-h, --help	Show this help message and exit

69.10. 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]
                    [--qos-policy <qos-policy> | --no-qos-policy]
                    [--tag <tag>] [--no-tag]
                    <router>
```

Table 69.34. Positional arguments

Value	Summary
<router>	Router to modify (name or id)

Table 69.35. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set router name
--description <description>	Set router description
--enable	Enable router
--disable	Disable router
--distributed	Set router to distributed mode (disabled router only)
--centralized	Set router to centralized mode (disabled router only)
--route destination=<subnet>,gateway=<ip-address>	Add routes to the router destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to add multiple routes). This is deprecated in favor of <i>router add/remove route</i> since it is prone to race conditions between concurrent clients when not used together with --no-route to overwrite the current value of <i>routes</i> .
--no-route	Clear routes associated with the router. specify both --route and --no-route to overwrite current value of routes.
--ha	Set the router as highly available (disabled router only)
--no-ha	Clear high availability attribute of the router (disabled router only)
--external-gateway <network>	External network used as router's gateway (name or id)
--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)
--enable-snat	Enable source nat on external gateway
--disable-snat	Disable source nat on external gateway
--qos-policy <qos-policy>	Attach qos policy to router gateway ips
--no-qos-policy	Remove qos policy from router gateway ips

Value	Summary
<code>--tag <tag></code>	Tag to be added to the router (repeat option to set multiple tags)
<code>--no-tag</code>	Clear tags associated with the router. specify both <code>--tag</code> and <code>--no-tag</code> to overwrite current tags

69.11. ROUTER SHOW

Display router details

Usage:

```
openstack router show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <router>
```

Table 69.36. Positional arguments

Value	Summary
<code><router></code>	Router to display (name or id)

Table 69.37. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 69.38. Output formatter options

Value	Summary
<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 to show multiple columns

Table 69.39. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 69.40. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 69.41. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

69.12. ROUTER UNSET

Unset router properties

Usage:

```

openstack router unset [-h]
                        [--route destination=<subnet>,gateway=<ip-address>]
                        [--external-gateway] [--qos-policy]
                        [--tag <tag> | --all-tag]
                        <router>

```

Table 69.42. Positional arguments

Value	Summary
<router>	Router to modify (name or id)

Table 69.43. Command arguments

Value	Summary
-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)

Value	Summary
--external-gateway	Remove external gateway information from the router
--qos-policy	Remove qos policy from router gateway ips
--tag <tag>	Tag to be removed from the router (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the router

CHAPTER 70. SECRET

This chapter describes the commands under the **secret** command.

70.1. SECRET CONTAINER CREATE

Store a container in Barbican.

Usage:

```
openstack secret container create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--name NAME]
                                [--type TYPE] [--secret SECRET]
```

Table 70.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME, -n NAME	A human-friendly name.
--type TYPE	Type of container to create (default: generic).
--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"

Table 70.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 70.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.4. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 70.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

70.2. SECRET CONTAINER DELETE

Delete a container by providing its href.

Usage:

```
openstack secret container delete [-h] URI
```

Table 70.6. Positional arguments

Value	Summary
URI	The uri reference for the container

Table 70.7. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

70.3. SECRET CONTAINER GET

Retrieve a container by providing its URI.

Usage:

```
openstack secret container get [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
```



```

[--max-width <integer>] [--fit-width]
[--print-empty]
URI

```

Table 70.8. Positional arguments

Value	Summary
URI	The uri reference for the container.

Table 70.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 70.10. Output formatter options

Value	Summary
-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 to show multiple columns

Table 70.11. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.12. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 70.13. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

70.4. SECRET CONTAINER LIST

List containers.

Usage:

```
openstack secret container list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--limit LIMIT] [--offset OFFSET]
                               [--name NAME] [--type TYPE]
```

Table 70.14. Command 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>--offset OFFSET, -o OFFSET</code>	Specify the page offset (default: 0)
<code>--name NAME, -n NAME</code>	Specify the container name (default: none)
<code>--type TYPE, -t TYPE</code>	Specify the type filter for the list (default: none).

Table 70.15. Output formatter options

Value	Summary
<code>-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 70.16. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 70.17. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.18. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

70.5. SECRET DELETE

Delete a secret by providing its URI.

Usage:

```
openstack secret delete [-h] URI
```

Table 70.19. Positional arguments

Value	Summary
URI	The uri reference for the secret

Table 70.20. Command arguments

Value	Summary
-h, --help	Show this help message and exit

70.6. SECRET GET

Retrieve a secret by providing its URI.

Usage:

```
openstack secret get [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    [--decrypt | --payload | --file <filename>]
                    [--payload_content_type PAYLOAD_CONTENT_TYPE]
                    URI
```

Table 70.21. Positional arguments

Value	Summary
URI	The uri reference for the secret.

Table 70.22. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--decrypt, -d	If specified, retrieve the unencrypted secret data.
--payload, -p	If specified, retrieve the unencrypted secret data.
--file <filename>, -F <filename>	If specified, save the payload to a new file with the given filename.
--payload_content_type PAYLOAD_CONTENT_TYPE, -t PAYLOAD_CONTENT_TYPE	The content type of the decrypted secret (default: text/plain).

Table 70.23. Output formatter options

Value	Summary
<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 to show multiple columns

Table 70.24. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.25. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 70.26. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

70.7. SECRET LIST

List secrets.

Usage:

```
openstack secret list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
```

```

[--limit LIMIT] [--offset OFFSET] [--name NAME]
[--algorithm ALGORITHM] [--bit-length BIT_LENGTH]
[--mode MODE] [--secret-type SECRET_TYPE]

```

Table 70.27. Command 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)
--name NAME, -n NAME	Specify the secret name (default: none)
--algorithm ALGORITHM, -a ALGORITHM	The algorithm filter for the list(default: none).
--bit-length BIT_LENGTH, -b BIT_LENGTH	The bit length filter for the list (default: 0).
--mode MODE, -m MODE	The algorithm mode filter for the list (default: None).
--secret-type SECRET_TYPE, -s SECRET_TYPE	Specify the secret type (default: none).

Table 70.28. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 70.29. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 70.30. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.31. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

70.8. SECRET ORDER CREATE

Create a new order.

Usage:

```
openstack secret order create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--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 70.32. Positional arguments

Value	Summary
<code>type</code>	The type of the order (key, asymmetric, certificate) to create.

Table 70.33. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME, -n NAME	A human-friendly name.
--algorithm ALGORITHM, -a ALGORITHM	The algorithm to be used with the requested key (default: aes).
--bit-length BIT_LENGTH, -b BIT_LENGTH	The bit length of the requested secret key (default: 256).
--mode MODE, -m MODE	The algorithm mode to be used with the requested key (default: cbc).
--payload-content-type PAYLOAD_CONTENT_TYPE, -t PAYLOAD_CONTENT_TYPE	The type/format of the secret to be generated (default: application/octet-stream).
--expiration EXPIRATION, -x EXPIRATION	The expiration time for the secret in iso 8601 format.
--request-type REQUEST_TYPE	The type of the certificate request.
--subject-dn SUBJECT_DN	The subject of the certificate.
--source-container-ref SOURCE_CONTAINER_REF	The source of the certificate when using stored-key requests.
--ca-id CA_ID	The identifier of the ca to use for the certificate request.
--profile PROFILE	The profile of certificate to use.
--request-file REQUEST_FILE	The file containing the csr.

Table 70.34. Output formatter options

Value	Summary
-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 to show multiple columns

Table 70.35. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.36. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 70.37. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

70.9. SECRET ORDER DELETE

Delete an order by providing its href.

Usage:

```
openstack secret order delete [-h] URI
```

Table 70.38. Positional arguments

Value	Summary
URI	The uri reference for the order

Table 70.39. Command arguments

Value	Summary
-h, --help	Show this help message and exit

70.10. SECRET ORDER GET

Retrieve an order by providing its URI.

Usage:

```
openstack secret order get [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             URI
```

Table 70.40. Positional arguments

Value	Summary
URI	The uri reference order.

Table 70.41. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 70.42. Output formatter options

Value	Summary
-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 to show multiple columns

Table 70.43. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.44. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 70.45. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

70.11. SECRET ORDER LIST

List orders.

Usage:

```
openstack secret order list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--limit LIMIT] [--offset OFFSET]
```

Table 70.46. Command 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>--offset OFFSET, -o OFFSET</code>	Specify the page offset (default: 0)

Table 70.47. Output formatter options

Value	Summary
<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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 70.48. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 70.49. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.50. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

70.12. SECRET STORE

Store a secret in Barbican.

Usage:

```
openstack secret store [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [--name NAME]
```

```

[--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]
[--payload PAYLOAD | --file <filename>]

```

Table 70.51. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME, -n NAME	A human-friendly name.
--secret-type SECRET_TYPE, -s SECRET_TYPE	The secret type; must be one of symmetric, public, private, certificate, passphrase, opaque (default)
--payload-content-type PAYLOAD_CONTENT_TYPE, -t PAYLOAD_CONTENT_TYPE	The type/format of the provided secret data; "text/plain" is assumed to be UTF-8; required when -payload is supplied.
--payload-content-encoding PAYLOAD_CONTENT_ENCODING, -e PAYLOAD_CONTENT_ENCODING	Required if --payload-content-type is "application/octet-stream".
--algorithm ALGORITHM, -a ALGORITHM	The algorithm (default: aes).
--bit-length BIT_LENGTH, -b BIT_LENGTH	The bit length (default: 256).
--mode MODE, -m MODE	The algorithm mode; used only for reference (default: cbc)
--expiration EXPIRATION, -x EXPIRATION	The expiration time for the secret in iso 8601 format.
--payload PAYLOAD, -p PAYLOAD	The unencrypted secret data.
--file <filename>, -F <filename>	File containing the secret payload

Table 70.52. Output formatter options

Value	Summary
-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 to show multiple columns

Table 70.53. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.54. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 70.55. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

70.13. SECRET UPDATE

Update a secret with no payload in Barbican.

Usage:

```
openstack secret update [-h] URI payload
```

Table 70.56. Positional arguments

Value	Summary
URI	The uri reference for the secret.
payload	The unencrypted secret

Table 70.57. Command arguments

Value	Summary
-h, --help	Show this help message and exit

CHAPTER 71. SECURITY

This chapter describes the commands under the **security** command.

71.1. SECURITY GROUP CREATE

Create a new security group

Usage:

```
openstack security group create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description <description>]
                               [--project <project>]
                               [--stateful | --stateless]
                               [--project-domain <project-domain>]
                               [--tag <tag> | --no-tag]
                               <name>
```

Table 71.1. Positional arguments

Value	Summary
<name>	New security group name

Table 71.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Security group description
--project <project>	Owner's project (name or id)
--stateful	Security group is stateful (default)
--stateless	Security group is stateless
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--tag <tag>	Tag to be added to the security group (repeat option to set multiple tags)

Value	Summary
<code>--no-tag</code>	No tags associated with the security group

Table 71.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 71.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 71.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

71.2. SECURITY GROUP DELETE

Delete security group(s)

Usage:


```
openstack security group delete [-h] <group> [<group> ...]
```

Table 71.7. Positional arguments

Value	Summary
<group>	Security group(s) to delete (name or id)

Table 71.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

71.3. SECURITY GROUP LIST

List security groups

Usage:

```
openstack security group list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             [--tags <tag>[,<tag>,...]]
                             [--any-tags <tag>[,<tag>,...]]
                             [--not-tags <tag>[,<tag>,...]]
                             [--not-any-tags <tag>[,<tag>,...]]
```

Table 71.9. Command 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.
--tags <tag>[,<tag>,...]	List security group which have all given tag(s) (Comma-separated list of tags)

Value	Summary
<code>--any-tags <tag>[,<tag>,...]</code>	List security group which have any given tag(s) (Comma-separated list of tags)
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude security group which have all given tag(s) (Comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude security group which have any given tag(s) (Comma-separated list of tags)

Table 71.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 71.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 71.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.13. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

71.4. 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] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--remote-ip <ip-address> | --remote-group <group> | --remote-address-
group <group>]
    [--dst-port <port-range>]
    [--protocol <protocol>]
    [--description <description>]
    [--icmp-type <icmp-type>]
    [--icmp-code <icmp-code>]
    [--ingress | --egress]
    [--ethertype <ethertype>]
    [--project <project>]
    [--project-domain <project-domain>]
    <group>

```

Table 71.14. Positional arguments

Value	Summary
<code><group></code>	Create rule in this security group (name or id)

Table 71.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--remote-ip <ip-address></code>	Remote ip address block (may use cidr notation; default for IPv4 rule: 0.0.0.0/0, default for IPv6 rule: ::/0)
<code>--remote-group <group></code>	Remote security group (name or id)
<code>--remote-address-group <group></code>	Remote address group (name or id)
<code>--dst-port <port-range></code>	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.
<code>--protocol <protocol></code>	Ip protocol (ah, dccp, egp, 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: any (all protocols))
<code>--description <description></code>	Set security group rule description
<code>--icmp-type <icmp-type></code>	Icmp type for icmp ip protocols
<code>--icmp-code <icmp-code></code>	Icmp code for icmp ip protocols
<code>--ingress</code>	Rule applies to incoming network traffic (default)
<code>--egress</code>	Rule applies to outgoing network traffic
<code>--ethertype <ethertype></code>	Ethertype of network traffic (ipv4, ipv6; default: based on IP protocol)
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 71.16. Output formatter options

Value	Summary
<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 to show multiple columns

Table 71.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.18. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 71.19. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

71.5. SECURITY GROUP RULE DELETE

Delete security group rule(s)

Usage:

```
openstack security group rule delete [-h] <rule> [<rule> ...]
```

Table 71.20. Positional arguments

Value	Summary
<rule>	Security group rule(s) to delete (id only)

Table 71.21. Command arguments

Value	Summary
-h, --help	Show this help message and exit

71.6. SECURITY GROUP RULE LIST

List security group rules

Usage:

```

openstack security group rule list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--protocol <protocol>]
                                [--ethertype <ethertype>]
                                [--ingress | --egress] [--long]
                                [<group>]

```

Table 71.22. Positional arguments

Value	Summary
<group>	List all rules in this security group (name or id)

Table 71.23. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--protocol <protocol>	List rules by the ip protocol (ah, dhcp, egp, 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: any (all protocols))
--ethertype <ethertype>	List rules by the ethertype (ipv4 or ipv6)
--ingress	List rules applied to incoming network traffic
--egress	List rules applied to outgoing network traffic
--long	deprecated this argument is no longer needed

Table 71.24. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 71.25. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 71.26. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.27. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

71.7. SECURITY GROUP RULE SHOW

Display security group rule details

Usage:

```

openstack security group rule show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]
                                  [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  <rule>

```

Table 71.28. Positional arguments

Value	Summary
<rule>	Security group rule to display (id only)

Table 71.29. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 71.30. Output formatter options

Value	Summary
-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 to show multiple columns

Table 71.31. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.32. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 71.33. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

71.8. SECURITY GROUP SET

Set security group properties

Usage:

```
openstack security group set [-h] [--name <new-name>]
                             [--description <description>]
                             [--stateful | --stateless] [--tag <tag>]
                             [--no-tag]
                             <group>
```

Table 71.34. Positional arguments

Value	Summary
<code><group></code>	Security group to modify (name or id)

Table 71.35. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <new-name></code>	New security group name
<code>--description <description></code>	New security group description
<code>--stateful</code>	Security group is stateful (default)
<code>--stateless</code>	Security group is stateless
<code>--tag <tag></code>	Tag to be added to the security group (repeat option to set multiple tags)

Value	Summary
<code>--no-tag</code>	Clear tags associated with the security group. specify both <code>--tag</code> and <code>--no-tag</code> to overwrite current tags

71.9. SECURITY GROUP SHOW

Display security group details

Usage:

```
openstack security group show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             <group>
```

Table 71.36. Positional arguments

Value	Summary
<code><group></code>	Security group to display (name or id)

Table 71.37. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 71.38. Output formatter options

Value	Summary
<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 to show multiple columns

Table 71.39. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.40. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 71.41. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

71.10. SECURITY GROUP UNSET

Unset security group properties

Usage:

```
openstack security group unset [-h] [--tag <tag> | --all-tag] <group>
```

Table 71.42. Positional arguments

Value	Summary
<code><group></code>	Security group to modify (name or id)

Table 71.43. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--tag <tag></code>	Tag to be removed from the security group (repeat option to remove multiple tags)
<code>--all-tag</code>	Clear all tags associated with the security group

CHAPTER 72. SERVER

This chapter describes the commands under the **server** command.

72.1. SERVER ADD FIXED IP

Add fixed IP address to server

Usage:

```
openstack server add fixed ip [-h] [--fixed-ip-address <ip-address>]
                               [--tag <tag>]
                               <server> <network>
```

Table 72.1. 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 72.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--fixed-ip-address <ip-address>	Requested fixed ip address
--tag <tag>	Tag for the attached interface. (supported by --os-compute-api-version 2.52 or above)

72.2. 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 72.3. Positional arguments

Value	Summary
<server>	Server to receive the floating ip address (name or id)

Value	Summary
<ip-address>	Floating ip address to assign to the first available server port (IP only)

Table 72.4. Command 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

72.3. SERVER ADD NETWORK

Add network to server

Usage:

```
openstack server add network [-h] [--tag <tag>] <server> <network>
```

Table 72.5. 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 72.6. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--tag <tag>	Tag for the attached interface. (supported by --os-compute-api- version 2.49 or above)

72.4. SERVER ADD PORT

Add port to server

Usage:

```
openstack server add port [-h] [--tag <tag>] <server> <port>
```

■

Table 72.7. 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 72.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--tag <tag>	Tag for the attached interface. (supported by api versions <i>2.49</i> - <i>2.latest</i>)

72.5. SERVER ADD SECURITY GROUP

Add security group to server

Usage:

```
openstack server add security group [-h] <server> <group>
```

Table 72.9. Positional arguments

Value	Summary
<server>	Server (name or id)
<group>	Security group to add (name or id)

Table 72.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.6. SERVER ADD VOLUME

Add volume to server. Specify ``--os-compute-api-version 2.20`` or higher to add a volume to a server with status ``SHELVED`` or ``SHELVED_OFFLOADED``.

Usage:

```

openstack server add volume [-h] [--device <device>] [--tag <tag>]
                             [--enable-delete-on-termination | --disable-delete-on-termination]
                             <server> <volume>

```

Table 72.11. Positional arguments

Value	Summary
<server>	Server (name or id)
<volume>	Volume to add (name or id)

Table 72.12. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--device <device>	Server internal device name for volume
--tag <tag>	Tag for the attached volume (supported by --os-compute-api-version 2.49 or above)
--enable-delete-on-termination	Delete the volume when the server is destroyed (supported by --os-compute-api-version 2.79 or above)
--disable-delete-on-termination	Do not delete the volume when the server is destroyed (supported by --os-compute-api-version 2.79 or above)

72.7. SERVER BACKUP CREATE

Create a server backup image

Usage:

```

openstack server backup create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--name <image-name>]
                               [--type <backup-type>]
                               [--rotate <count>] [--wait]
                               <server>

```

Table 72.13. Positional arguments

Value	Summary
<server>	Server to back up (name or id)

Table 72.14. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <image-name>	Name of the backup image (default: server name)
--type <backup-type>	Used to populate the backup_type property of the backup image (default: empty)
--rotate <count>	Number of backups to keep (default: 1)
--wait	Wait for backup image create to complete

Table 72.15. Output formatter options

Value	Summary
-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 to show multiple columns

Table 72.16. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.17. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 72.18. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.8. SERVER CREATE

Create a new server

Usage:

```

openstack server create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] --flavor <flavor>
                        (--image <image> | --image-property <key=value> | --volume <volume> | --
snapshot <snapshot>)
                        [--boot-from-volume <volume-size>]
                        [--block-device-mapping <dev-name=mapping>]
                        [--block-device] [--swap <swap>]
                        [--ephemeral <size=size[,format=format]>]
                        [--network <network>] [--port <port>]
                        [--nic <net-id=net-uuid,port-id=port-uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-
addr,tag=tag,auto,none>]
                        [--password <password>]
                        [--security-group <security-group>]
                        [--key-name <key-name>]
                        [--property <key=value>]
                        [--file <dest-filename=source-filename>]
                        [--user-data <user-data>]
                        [--description <description>]
                        [--availability-zone <zone-name>]
                        [--host <host>]
                        [--hypervisor-hostname <hypervisor-hostname>]
                        [--hint <key=value>]
                        [--use-config-drive | --no-config-drive | --config-drive <config-drive-volume>|True]
                        [--min <count>] [--max <count>] [--tag <tag>]
                        [--wait]
                        <server-name>

```

Table 72.19. Positional arguments

Value	Summary
<server-name>	New server name

Table 72.20. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--flavor <flavor>	Create server with this flavor (name or id)
--image <image>	Create server boot disk from this image (name or id)
--image-property <key=value>	Create server using the image that matches the specified property. Property must match exactly one property.
--volume <volume>	Create server using this volume as the boot disk (name or ID) This option automatically creates a block device mapping with a boot index of 0. On many hypervisors (libvirt/kvm for example) this will be device vda. Do not create a duplicate mapping using --block-device- mapping for this volume.
--snapshot <snapshot>	Create server using this snapshot as the boot disk (name or ID) This option automatically creates a block device mapping with a boot index of 0. On many hypervisors (libvirt/kvm for example) this will be device vda. Do not create a duplicate mapping using --block-device- mapping for this volume.
--boot-from-volume <volume-size>	When used in conjunction with the ``--image`` or ``--image-property`` option, this option automatically creates a block device mapping with a boot index of 0 and tells the compute service to create a volume of the given size (in GB) from the specified image and use it as the root disk of the server. The root volume will not be deleted when the server is deleted. This option is mutually exclusive with the ``--volume`` and ``--snapshot`` options.

Value	Summary
--block-device-mapping <dev-name=mapping>	<p>deprecated create a block device on the server. Block device mapping in the format <dev-name>=<id>:<type>:<size(GB)>:<delete-on-terminate> <dev-name>: block device name, like: vdb, xvdc (required) <id>: Name or ID of the volume, volume snapshot or image (required) <type>: volume, snapshot or image; default: volume (optional) <size(GB)>: volume size if create from image or snapshot (optional) <delete-on-terminate>: true or false; default: false (optional) Replaced by --block-device</p>
--block-device	<p>Create a block device on the server. Either a path to a JSON file or a CSV-serialized string describing the block device mapping. The following keys are accepted for both: uuid=<uuid>: UUID of the volume, snapshot or ID (required if using source image, snapshot or volume), source_type=<source_type>: source type (one of: image, snapshot, volume, blank), destination_type=<destination_type>: destination type (one of: volume, local) (optional), disk_bus=<disk_bus>: device bus (one of: uml, lxc, virtio, ...) (optional), device_type=<device_type>: device type (one of: disk, cdrom, etc. (optional), device_name=<device_name>: name of the device (optional), volume_size=<volume_size>: size of the block device in MiB (for swap) or GiB (for everything else) (optional), guest_format=<guest_format>: format of device (optional), boot_index=<boot_index>: index of disk used to order boot disk (required for volume-backed instances), delete_on_termination=<true false>: whether to delete the volume upon deletion of server (optional), tag=<tag>: device metadata tag (optional), volume_type=<volume_type>: type of volume to create (name or ID) when source if blank, image or snapshot and dest is volume (optional)</p>
--swap <swap>	<p>Create and attach a local swap block device of <swap_size> MiB.</p>
--ephemeral <size=size[,format=format]>	<p>Create and attach a local ephemeral block device of <size> GiB and format it to <format>.</p>

Value	Summary
<code>--network <network></code>	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=<network></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>--port <port></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=<port></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 <net-id=net-uuid,port-id=port-uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-addr,tag=tag,auto,none></code>	Create a nic on the server. NIC in the format: net-id=<net-uuid>: attach NIC to network with this UUID, port-id=<port-uuid>: attach NIC to port with this UUID, v4-fixed-ip=<ip-addr>: IPv4 fixed address for NIC (optional), v6-fixed-ip=<ip-addr>: IPv6 fixed address for NIC (optional), tag: interface metadata tag (optional) (supported by <code>--os-compute-api-version 2.43</code> or above), none: (v2.37+) no network is attached, auto: (v2.37+) the compute service will automatically allocate a network. Specify option multiple times to create multiple NICs. Specifying a <code>--nic</code> of auto or none cannot be used with any other <code>--nic</code> value. Either net-id or port-id must be provided, but not both.
<code>--password <password></code>	Set the password to this server
<code>--security-group <security-group></code>	Security group to assign to this server (name or id) (repeat option to set multiple groups)
<code>--key-name <key-name></code>	Keypair to inject into this server
<code>--property <key=value></code>	Set a property on this server (repeat option to set multiple values)
<code>--file <dest-filename=source-filename></code>	File(s) to inject into image before boot (repeat option to set multiple files)(supported by <code>--os-compute-api-version 2.57</code> or below)
<code>--user-data <user-data></code>	User data file to serve from the metadata server

Value	Summary
<code>--description <description></code>	Set description for the server (supported by <code>--os-compute-api-version 2.19</code> or above)
<code>--availability-zone <zone-name></code>	Select an availability zone for the server. <code>host</code> and <code>node</code> are optional parameters. Availability zone in the format <code><zone-name>:<host-name>:<node-name></code> , <code><zone-name>::<node-name></code> , <code><zone-name>:<host-name></code> or <code><zone-name></code>
<code>--host <host></code>	Requested host to create servers. (admin only) (supported by <code>--os-compute-api-version 2.74</code> or above)
<code>--hypervisor-hostname <hypervisor-hostname></code>	Requested hypervisor hostname to create servers. (admin only) (supported by <code>--os-compute-api-version 2.74</code> or above)
<code>--hint <key=value></code>	Hints for the scheduler
<code>--use-config-drive</code>	Enable config drive.
<code>--no-config-drive</code>	Disable config drive.
<code>--config-drive <config-drive-volume> True</code>	deprecated use specified volume as the config drive, or <i>True</i> to use an ephemeral drive. Replaced by <code>--use-config-drive</code> .
<code>--min <count></code>	Minimum number of servers to launch (default=1)
<code>--max <count></code>	Maximum number of servers to launch (default=1)
<code>--tag <tag></code>	Tags for the server. specify multiple times to add multiple tags. (supported by <code>--os-compute-api-version 2.52</code> or above)
<code>--wait</code>	Wait for build to complete

Table 72.21. Output formatter options

Value	Summary
<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 to show multiple columns

Table 72.22. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.23. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 72.24. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.9. SERVER DELETE

Delete server(s)

Usage:

```
openstack server delete [-h] [--force] [--all-projects] [--wait]
    <server> [<server> ...]
```

Table 72.25. Positional arguments

Value	Summary
<server>	Server(s) to delete (name or id)

Table 72.26. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Force delete server(s)
--all-projects	Delete server(s) in another project by name (admin only)(can be specified using the ALL_PROJECTS envvar)
--wait	Wait for delete to complete

72.10. 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. This command requires ``--os-compute-api-version`` 2.17 or greater.

Usage:

```
openstack server dump create [-h] <server> [<server> ...]
```

Table 72.27. Positional arguments

Value	Summary
<server>	Server(s) to create dump file (name or id)

Table 72.28. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.11. SERVER EVACUATE

Evacuate a server to a different host. This command is used to recreate a server after the host it was on has failed. It can only be used if the compute service that manages the server is down. This command should only be used by an admin after they have confirmed that the instance is not running on the failed host. If the server instance was created with an ephemeral root disk on non-shared storage the server will be rebuilt using the original glance image preserving the ports and any attached data volumes. If the server uses boot for volume or has its root disk on shared storage the root disk will be preserved and reused for the evacuated instance on the new host.

Usage:

```

openstack server evacuate [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--wait] [--host <host>]
                          [--password <password> | --shared-storage]
                          <server>

```

Table 72.29. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.30. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for evacuation to complete
--host <host>	Set the preferred host on which to rebuild the evacuated server. The host will be validated by the scheduler. (supported by --os-compute-api-version 2.29 or above)
--password <password>	Set the password on the evacuated instance. this option is mutually exclusive with the --shared-storage option
--shared-storage	Indicate that the instance is on shared storage. this will be auto-calculated with --os-compute-api-version 2.14 and greater and should not be used with later microversions. This option is mutually exclusive with the --password option

Table 72.31. Output formatter options

Value	Summary
-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 to show multiple columns

Table 72.32. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 72.33. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 72.34. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.12. SERVER EVENT LIST

List recent events of a server. Specify `--os-compute-api-version 2.21` or higher to show events for a deleted server, specified by ID only.

Usage:

```
openstack server event list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--long] [--changes-since <changes-since>]
                             [--changes-before <changes-before>]
                             [--marker MARKER] [--limit LIMIT]
                             <server>
```

Table 72.35. Positional arguments

Value	Summary
<code><server></code>	Server to list events (name or id)

Table 72.36. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--changes-since <changes-since>	List only server events changed later or equal to a certain point of time. The provided time should be an ISO 8061 formatted time, e.g. ``2016-03-04T06:27:59Z``. (supported with --os-compute-api-version 2.58 or above)
--changes-before <changes-before>	List only server events changed earlier or equal to a certain point of time. The provided time should be an ISO 8061 formatted time, e.g. ``2016-03-04T06:27:59Z``. (supported with --os-compute-api-version 2.66 or above)
--marker MARKER	The last server event id of the previous page (supported by --os-compute-api-version 2.58 or above)
--limit LIMIT	Maximum number of server events to display (supported by --os-compute-api-version 2.58 or above)

Table 72.37. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 72.38. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 72.39. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 72.40. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.13. SERVER EVENT SHOW

Show server event details. Specify `--os-compute-api-version 2.21` or higher to show event details for a deleted server, specified by ID only. Specify `--os-compute-api-version 2.51` or higher to show event details for non-admin users.

Usage:

```
openstack server event show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <server> <request-id>
```

Table 72.41. Positional arguments

Value	Summary
<code><server></code>	Server to show event details (name or id)
<code><request-id></code>	Request id of the event to show (id only)

Table 72.42. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 72.43. Output formatter options

Value	Summary
-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 to show multiple columns

Table 72.44. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.45. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 72.46. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.14. SERVER GROUP CREATE

Create a new server group.

Usage:

```

openstack server group create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--policy <policy>] [--rule <key=value>]
                               <name>

```

Table 72.47. Positional arguments

Value	Summary
<name>	New server group name

Table 72.48. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--policy <policy>	Add a policy to <name> specify --os-compute-api-version 2.15 or higher for the <i>soft-affinity</i> or <i>soft-anti-affinity</i> policy.
--rule <key=value>	A rule for the policy. currently, only the <i>max_server_per_host</i> rule is supported for the <i>anti-affinity</i> policy.

Table 72.49. Output formatter options

Value	Summary
-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 to show multiple columns

Table 72.50. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.51. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 72.52. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.15. SERVER GROUP DELETE

Delete existing server group(s).

Usage:

```
openstack server group delete [-h] <server-group> [<server-group> ...]
```

Table 72.53. Positional arguments

Value	Summary
<code><server-group></code>	Server group(s) to delete (name or id)

Table 72.54. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

72.16. SERVER GROUP LIST

List all server groups.

Usage:

```
openstack server group list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
```

```

[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--all-projects] [--long]
[--offset <offset>] [--limit <limit>]

```

Table 72.55. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Display information from all projects (admin only)
--long	List additional fields in output
--offset <offset>	Index from which to start listing servers. this should typically be a factor of --limit. Display all servers groups if not specified.
--limit <limit>	Maximum number of server groups to display. if limit is greater than <i>osapi_max_limit</i> option of Nova API, <i>osapi_max_limit</i> will be used instead.

Table 72.56. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 72.57. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 72.58. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.59. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.17. SERVER GROUP SHOW

Display server group details.

Usage:

```
openstack server group show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <server-group>
```

Table 72.60. Positional arguments

Value	Summary
<server-group>	Server group to display (name or id)

Table 72.61. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 72.62. Output formatter options

Value	Summary
<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 to show multiple columns

Table 72.63. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 72.64. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 72.65. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.18. 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] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--name <image-name>]
                             [--property <key=value>] [--wait]
                             <server>
```

Table 72.66. Positional arguments

Value	Summary
<server>	Server to create image (name or id)

Table 72.67. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <image-name>	Name of new disk image (default: server name)
--property <key=value>	Set a new property to meta_data.json on the metadata server (repeat option to set multiple values)
--wait	Wait for operation to complete

Table 72.68. Output formatter options

Value	Summary
-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 to show multiple columns

Table 72.69. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.70. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 72.71. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.19. SERVER LIST

List servers

Usage:

```

openstack server list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    [--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>]
    [--deleted]
    [--availability-zone AVAILABILITY_ZONE]
    [--key-name KEY_NAME]
    [--config-drive | --no-config-drive]
    [--progress PROGRESS] [--vm-state <state>]
    [--task-state <state>] [--power-state <state>]
    [--long] [-n | --name-lookup-one-by-one]
    [--marker <server>] [--limit <num-servers>]
    [--changes-before <changes-before>]
    [--changes-since <changes-since>]
    [--locked | --unlocked] [--tags <tag>]
    [--not-tags <tag>]

```

Table 72.72. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--reservation-id <reservation-id>	Only return instances that match the reservation
--ip <ip-address-regex>	Regular expression to match ip addresses
--ip6 <ip-address-regex>	Regular expression to match ipv6 addresses. note that this option only applies for non-admin users when using ``--os-compute-api-version`` 2.5 or greater.
--name <name-regex>	Regular expression to match names
--instance-name <server-name>	Regular expression to match instance name (admin only)
--status <status>	Search by server status
--flavor <flavor>	Search by flavor (name or id)
--image <image>	Search by image (name or id)
--host <hostname>	Search by hostname
--all-projects	Include all projects (admin only) (can be specified using the ALL_PROJECTS envvar)
--project <project>	Search by project (admin only) (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.
--user <user>	Search by user (name or id) (admin only before microversion 2.83)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--deleted	Only display deleted servers (admin only)
--availability-zone AVAILABILITY_ZONE	Search by availability zone (admin only before microversion 2.83)
--key-name KEY_NAME	Search by keypair name (admin only before microversion 2.83)

Value	Summary
<code>--config-drive</code>	Only display servers with a config drive attached (admin only before microversion 2.83)
<code>--no-config-drive</code>	Only display servers without a config drive attached (admin only before microversion 2.83)
<code>--progress PROGRESS</code>	Search by progress value (%) (admin only before microversion 2.83)
<code>--vm-state <state></code>	Search by vm_state value (admin only before microversion 2.83)
<code>--task-state <state></code>	Search by task_state value (admin only before microversion 2.83)
<code>--power-state <state></code>	Search by power_state value (admin only before microversion 2.83)
<code>--long</code>	List additional fields in output
<code>-n, --no-name-lookup</code>	Skip flavor and image name lookup. mutually exclusive with " <code>--name-lookup-one-by-one</code> " option.
<code>--name-lookup-one-by-one</code>	When looking up flavor and image names, look them up one by one as needed instead of all together (default). Mutually exclusive with " <code>--no-name-lookup -n</code> " option.
<code>--marker <server></code>	The last server of the previous page. display list of servers after marker. Display all servers if not specified. When used with <code>--deleted`</code> , the marker must be an ID, otherwise a name or ID can be used.
<code>--limit <num-servers></code>	Maximum number of servers to display. if limit equals -1, all servers will be displayed. If limit is greater than <code>osapi_max_limit</code> option of Nova API, <code>osapi_max_limit</code> will be used instead.
<code>--changes-before <changes-before></code>	List only servers changed before a certain point of time. The provided time should be an ISO 8061 formatted time (e.g., 2016-03-05T06:27:59Z). (supported by <code>--os-compute-api-version 2.66</code> or above)
<code>--changes-since <changes-since></code>	List only servers changed after a certain point of time. The provided time should be an ISO 8061 formatted time (e.g., 2016-03-04T06:27:59Z).

Value	Summary
<code>--locked</code>	Only display locked servers (supported by <code>--os-compute-api-version 2.73</code> or above)
<code>--unlocked</code>	Only display unlocked servers (supported by <code>--os-compute-api-version 2.73</code> or above)
<code>--tags <tag></code>	Only list servers with the specified tag. specify multiple times to filter on multiple tags. (supported by <code>--os-compute-api-version 2.26</code> or above)
<code>--not-tags <tag></code>	Only list servers without the specified tag. specify multiple times to filter on multiple tags. (supported by <code>--os-compute-api-version 2.26</code> or above)

Table 72.73. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 72.74. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 72.75. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 72.76. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.20. SERVER LOCK

Lock server(s). A non-admin user will not be able to execute actions

Usage:

```
openstack server lock [-h] [--reason <reason>] <server> [<server> ...]
```

Table 72.77. Positional arguments

Value	Summary
<code><server></code>	Server(s) to lock (name or id)

Table 72.78. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--reason <reason></code>	Reason for locking the server(s). requires ``--os-compute-api-version`` 2.73 or greater.

72.21. SERVER MIGRATE CONFIRM

DEPRECATED: Confirm server migration. Use *server migration confirm* instead.

Usage:

```
openstack server migrate confirm [-h] <server>
```

Table 72.79. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.80. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.22. SERVER MIGRATE REVERT

Revert server migration. Use *server migration revert* instead.

Usage:

```
openstack server migrate revert [-h] <server>
```

Table 72.81. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.82. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.23. SERVER MIGRATE

Migrate server to different host. A migrate operation is implemented as a resize operation using the same flavor as the old server. This means that, like *resize*, *migrate* works by creating a new server using the same flavor and copying the contents of the original disk into a new one. As with *resize*, the *migrate* operation is a two-step process for the user: the first step is to perform the migrate, and the second step 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 migrate [-h] [--live-migration] [--host <hostname>]
                        [--shared-migration | --block-migration]
                        [--disk-overcommit | --no-disk-overcommit]
                        [--wait]
                        <server>
```

Table 72.83. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.84. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--live-migration	Live migrate the server; use the ``--host`` option to specify a target host for the migration which will be validated by the scheduler
--host <hostname>	Migrate the server to the specified host. (supported with --os-compute-api-version 2.30 or above when used with the --live-migration option) (supported with --os-compute-api-version 2.56 or above when used without the --live-migration option)
--shared-migration	Perform a shared live migration (default before --os-compute-api-version 2.25, auto after)
--block-migration	Perform a block live migration (auto-configured from --os-compute-api-version 2.25)
--disk-overcommit	Allow disk over-commit on the destination host(supported with --os-compute-api-version 2.24 or below)
--no-disk-overcommit	Do not over-commit disk on the destination host (default)(supported with --os-compute-api-version 2.24 or below)
--wait	Wait for migrate to complete

72.24. SERVER MIGRATION ABORT

Cancel an ongoing live migration. This command requires ``--os-compute-api-version`` 2.24 or greater.

Usage:

```
openstack server migration abort [-h] <server> <migration>
```

Table 72.85. Positional arguments

Value	Summary
<server>	Server (name or id)
<migration>	Migration (id)

Table 72.86. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.25. SERVER MIGRATION CONFIRM

Confirm server migration. Confirm (verify) success of the migration operation and release the old server.

Usage:

```
openstack server migration confirm [-h] <server>
```

Table 72.87. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.88. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.26. SERVER MIGRATION FORCE COMPLETE

Force an ongoing live migration to complete. This command requires ``--os-compute-api-version`` 2.22 or greater.

Usage:

```
openstack server migration force complete [-h] <server> <migration>
```

Table 72.89. Positional arguments

Value	Summary
<server>	Server (name or id)
<migration>	Migration (id)

Table 72.90. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.27. SERVER MIGRATION LIST

List server migrations

Usage:

```
openstack server migration list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--server <server>] [--host <host>]
                                [--status <status>] [--type <type>]
                                [--marker <marker>] [--limit <limit>]
                                [--changes-since <changes-since>]
                                [--changes-before <changes-before>]
                                [--project <project>]
                                [--project-domain <project-domain>]
                                [--user <user>]
                                [--user-domain <user-domain>]
```

Table 72.91. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--server <server>	Filter migrations by server (name or id)
--host <host>	Filter migrations by source or destination host
--status <status>	Filter migrations by status
--type <type>	Filter migrations by type

Value	Summary
<code>--marker <marker></code>	The last migration of the previous page; displays list of migrations after <i>marker</i> . Note that the marker is the migration UUID. (supported with <code>--os-compute-api-version 2.59</code> or above)
<code>--limit <limit></code>	Maximum number of migrations to display. note that there is a configurable max limit on the server, and the limit that is used will be the minimum of what is requested here and what is configured in the server. (supported with <code>--os-compute-api-version 2.59</code> or above)
<code>--changes-since <changes-since></code>	List only migrations changed later or equal to a certain point of time. The provided time should be an ISO 8061 formatted time, e.g. <code>`2016-03-04T06:27:59Z`</code> . (supported with <code>--os-compute-api-version 2.59</code> or above)
<code>--changes-before <changes-before></code>	List only migrations changed earlier or equal to a certain point of time. The provided time should be an ISO 8061 formatted time, e.g. <code>`2016-03-04T06:27:59Z`</code> . (supported with <code>--os-compute-api-version 2.66</code> or above)
<code>--project <project></code>	Filter migrations by project (name or id) (supported with <code>--os-compute-api-version 2.80</code> or above)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--user <user></code>	Filter migrations by user (name or id) (supported with <code>--os-compute-api-version 2.80</code> or above)
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Table 72.92. Output formatter options

Value	Summary
<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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 72.93. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 72.94. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 72.95. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.28. SERVER MIGRATION REVERT

Revert server migration. Revert the migration operation. Release the new server and restart the old one.

Usage:

```
openstack server migration revert [-h] <server>
```

Table 72.96. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.97. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.29. SERVER MIGRATION SHOW

Show a migration for a given server.

Usage:

```
openstack server migration show [-h] <server> <migration>
```

Table 72.98. Positional arguments

Value	Summary
<server>	Server (name or id)
<migration>	Migration (id)

Table 72.99. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.30. SERVER PAUSE

Pause server(s)

Usage:

```
openstack server pause [-h] <server> [<server> ...]
```

Table 72.100. Positional arguments

Value	Summary
<server>	Server(s) to pause (name or id)

Table 72.101. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.31. SERVER REBOOT

Perform a hard or soft server reboot

Usage:

```
openstack server reboot [-h] [--hard | --soft] [--wait] <server>
```

Table 72.102. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.103. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--hard	Perform a hard reboot
--soft	Perform a soft reboot
--wait	Wait for reboot to complete

72.32. SERVER REBUILD

Rebuild server

Usage:

```
openstack server rebuild [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--image <image>]
                        [--name <name>] [--password <password>]
                        [--property <key=value>]
                        [--description <description>]
                        [--preserve-ephemeral | --no-preserve-ephemeral]
                        [--key-name <key-name> | --no-key-name]
                        [--user-data <user-data> | --no-user-data]
```

```

[--trusted-image-cert <trusted-cert-id> | --no-trusted-image-certs]
[--wait]
<server>

```

Table 72.104. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.105. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--image <image>	Recreate server from the specified image (name or ID). Defaults to the currently used one.
--name <name>	Set the new name of the rebuilt server
--password <password>	Set the password on the rebuilt server
--property <key=value>	Set a new property on the rebuilt server (repeat option to set multiple values)
--description <description>	Set a new description on the rebuilt server (supported by --os-compute-api-version 2.19 or above)
--preserve-ephemeral	Preserve the default ephemeral storage partition on rebuild.
--no-preserve-ephemeral	Do not preserve the default ephemeral storage partition on rebuild.
--key-name <key-name>	Set the key name of key pair on the rebuilt server. Cannot be specified with the --key-unset option. (supported by --os-compute-api-version 2.54 or above)
--no-key-name	Unset the key name of key pair on the rebuilt server. Cannot be specified with the --key-name option. (supported by --os-compute-api-version 2.54 or above)
--user-data <user-data>	Add a new user data file to the rebuilt server. cannot be specified with the --no-user-data option. (supported by --os-compute-api-version 2.57 or above)

Value	Summary
<code>--no-user-data</code>	Remove existing user data when rebuilding server. Cannot be specified with the <code>--user-data</code> option. (supported by <code>--os-compute-api-version</code> 2.57 or above)
<code>--trusted-image-cert <trusted-cert-id></code>	Trusted image certificate ids used to validate certificates during the image signature verification process. Defaults to <code>env[OS_TRUSTED_IMAGE_CERTIFICATE_IDS]</code> . May be specified multiple times to pass multiple trusted image certificate IDs. Cannot be specified with the <code>--no-trusted-certs</code> option. (supported by <code>--os-compute-api-version</code> 2.63 or above)
<code>--no-trusted-image-certs</code>	Remove any existing trusted image certificates from the server. Cannot be specified with the <code>--trusted-certs</code> option. (supported by <code>--os-compute-api-version</code> 2.63 or above)
<code>--wait</code>	Wait for rebuild to complete

Table 72.106. Output formatter options

Value	Summary
<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 to show multiple columns

Table 72.107. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 72.108. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 72.109. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.33. SERVER REMOVE FIXED IP

Remove fixed IP address from server

Usage:

```
openstack server remove fixed ip [-h] <server> <ip-address>
```

Table 72.110. Positional arguments

Value	Summary
<code><server></code>	Server to remove the fixed ip address from (name or id)
<code><ip-address></code>	Fixed ip address to remove from the server (ip only)

Table 72.111. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

72.34. SERVER REMOVE FLOATING IP

Remove floating IP address from server

Usage:

```
openstack server remove floating ip [-h] <server> <ip-address>
```

Table 72.112. 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 72.113. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.35. SERVER REMOVE NETWORK

Remove all ports of a network from server

Usage:

```
openstack server remove network [-h] <server> <network>
```

Table 72.114. 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 72.115. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.36. SERVER REMOVE PORT

Remove port from server

Usage:

```
openstack server remove port [-h] <server> <port>
```

Table 72.116. 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 72.117. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.37. SERVER REMOVE SECURITY GROUP

Remove security group from server

Usage:

```
openstack server remove security group [-h] <server> <group>
```

Table 72.118. Positional arguments

Value	Summary
<server>	Name or id of server to use
<group>	Name or id of security group to remove from server

Table 72.119. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.38. SERVER REMOVE VOLUME

Remove volume from server. Specify ``--os-compute-api-version 2.20`` or higher to remove a volume from a server with status ``SHELVED`` or ``SHELVED_OFFLOADED``.

Usage:

```
openstack server remove volume [-h] <server> <volume>
```

Table 72.120. Positional arguments

Value	Summary
<server>	Server (name or id)
<volume>	Volume to remove (name or id)

Table 72.121. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.39. SERVER RESCUE

Put server in rescue mode

Usage:

```
openstack server rescue [-h] [--image <image>] [--password <password>]
                        <server>
```

Table 72.122. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.123. Command 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

72.40. SERVER RESIZE CONFIRM

Confirm server resize. Confirm (verify) success of resize operation and release the old server.

Usage:

```
openstack server resize confirm [-h] <server>
```

Table 72.124. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.125. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.41. SERVER RESIZE REVERT

Revert server resize. Revert the resize operation. Release the new server and restart the old one.

Usage:

```
openstack server resize revert [-h] <server>
```

Table 72.126. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.127. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.42. 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 a two-step process for the user: the first step is to perform the resize, and the second step 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 72.128. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.129. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--flavor <flavor>	Resize server to specified flavor
--confirm	Confirm server resize is complete
--revert	Restore server state before resize
--wait	Wait for resize to complete

72.43. SERVER RESTORE

Restore server(s)

Usage:

```
openstack server restore [-h] <server> [<server> ...]
```

Table 72.130. Positional arguments

Value	Summary
<server>	Server(s) to restore (name or id)

Table 72.131. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.44. SERVER RESUME

Resume server(s)

Usage:

```
openstack server resume [-h] <server> [<server> ...]
```

Table 72.132. Positional arguments

Value	Summary
<server>	Server(s) to resume (name or id)

Table 72.133. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.45. SERVER SET

Set server properties

Usage:

```
openstack server set [-h] [--name <new-name>]
                    [--password PASSWORD | --no-password]
                    [--property <key=value>] [--state <state>]
                    [--description <description>] [--tag <tag>]
                    <server>
```

Table 72.134. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.135. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <new-name>	New server name
--password PASSWORD	Set the server password
--no-password	Clear the admin password for the server from the metadata service; note that this action does not actually change the server password
--property <key=value>	Property to add/change for this server (repeat option to set multiple properties)
--state <state>	New server state (valid value: active, error)

Value	Summary
<code>--description <description></code>	New server description (supported by <code>--os-compute-api-</code> version 2.19 or above)
<code>--tag <tag></code>	Tag for the server. specify multiple times to add multiple tags. (supported by <code>--os-compute-api-</code> version 2.26 or above)

72.46. SERVER SHELVE

Shelve and optionally offload server(s). Shelving a server creates a snapshot of the server and stores this snapshot before shutting down the server. This shelved server can then be offloaded or deleted from the host, freeing up remaining resources on the host, such as network interfaces. Shelved servers can be unshelved, restoring the server from the snapshot. Shelving is therefore useful where users wish to retain the UUID and IP of a server, without utilizing other resources or disks. Most clouds are configured to automatically offload shelved servers immediately or after a small delay. For clouds where this is not configured, or where the delay is larger, offloading can be manually specified. This is an admin-only operation by default.

Usage:

```
openstack server shelve [-h] [--offload] [--wait]
    <server> [<server> ...]
```

Table 72.136. Positional arguments

Value	Summary
<code><server></code>	Server(s) to shelve (name or id)

Table 72.137. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--offload</code>	Remove the shelved server(s) from the host (admin only). Invoking this option on an unshelved server(s) will result in the server being shelved first
<code>--wait</code>	Wait for shelve and/or offload operation to complete

72.47. SERVER SHOW

Show server details. Specify `--os-compute-api-version 2.47` or higher to see the embedded flavor information for the server.

Usage:

```

openstack server show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--diagnostics | --topology]
                    <server>

```

Table 72.138. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.139. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--diagnostics	Display server diagnostics information
--topology	Include topology information in the output (supported by --os-compute-api-version 2.78 or above)

Table 72.140. Output formatter options

Value	Summary
-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 to show multiple columns

Table 72.141. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.142. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 72.143. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.48. 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 72.144. Positional arguments

Value	Summary
<code><server></code>	Server (name or id)

Table 72.145. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--login <login-name></code>	Login name (ssh -l option)
<code>--port <port></code>	Destination port (ssh -p option)
<code>--identity <keyfile></code>	Private key file (ssh -i option)
<code>--option <config-options></code>	Options in <code>ssh_config(5)</code> format (ssh -o option)
<code>-4</code>	Use only ipv4 addresses
<code>-6</code>	Use only ipv6 addresses

Value	Summary
--public	Use public ip address
--private	Use private ip address
--address-type <address-type>	Use other ip address (public, private, etc)

72.49. SERVER START

Start server(s).

Usage:

```
openstack server start [-h] [--all-projects] <server> [<server> ...]
```

Table 72.146. Positional arguments

Value	Summary
<server>	Server(s) to start (name or id)

Table 72.147. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Start server(s) in another project by name (admin only)(can be specified using the ALL_PROJECTS envvar)

72.50. SERVER STOP

Stop server(s).

Usage:

```
openstack server stop [-h] [--all-projects] <server> [<server> ...]
```

Table 72.148. Positional arguments

Value	Summary
<server>	Server(s) to stop (name or id)

Table 72.149. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Stop server(s) in another project by name (admin only)(can be specified using the ALL_PROJECTS envvar)

72.51. SERVER SUSPEND

Suspend server(s)

Usage:

```
openstack server suspend [-h] <server> [<server> ...]
```

Table 72.150. Positional arguments

Value	Summary
<server>	Server(s) to suspend (name or id)

Table 72.151. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.52. SERVER UNLOCK

Unlock server(s)

Usage:

```
openstack server unlock [-h] <server> [<server> ...]
```

Table 72.152. Positional arguments

Value	Summary
<server>	Server(s) to unlock (name or id)

Table 72.153. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.53. SERVER UNPAUSE

Unpause server(s)

Usage:

```
openstack server unpause [-h] <server> [<server> ...]
```

Table 72.154. Positional arguments

Value	Summary
<server>	Server(s) to unpause (name or id)

Table 72.155. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.54. SERVER UNRESCUE

Restore server from rescue mode

Usage:

```
openstack server unrescue [-h] <server>
```

Table 72.156. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.157. Command arguments

Value	Summary
-h, --help	Show this help message and exit

72.55. SERVER UNSET

Unset server properties and tags

Usage:

```
openstack server unset [-h] [--property <key>] [--description]
                        [--tag <tag>]
                        <server>
```

Table 72.158. Positional arguments

Value	Summary
<server>	Server (name or id)

Table 72.159. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property key to remove from server (repeat option to remove multiple values)
--description	Unset server description (supported by --os-compute-api- version 2.19 or above)
--tag <tag>	Tag to remove from the server. specify multiple times to remove multiple tags. (supported by --os-compute-api- version 2.26 or above)

72.56. SERVER UNSHELVE

Unshelve server(s)

Usage:

```
openstack server unshelve [-h] [--availability-zone AVAILABILITY_ZONE]
                           [--wait]
                           <server> [<server> ...]
```

Table 72.160. Positional arguments

Value	Summary
<server>	Server(s) to unshelve (name or id)

Table 72.161. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--availability-zone AVAILABILITY_ZONE	Name of the availability zone in which to unshelve a SHELVED_OFFLOADED server (supported by --os-compute-api-version 2.77 or above)
--wait	Wait for unshelve operation to complete

72.57. SERVER VOLUME LIST

List all the volumes attached to a server.

Usage:

```
openstack server volume list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
server
```

Table 72.162. Positional arguments

Value	Summary
server	Server to list volume attachments for (name or id)

Table 72.163. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 72.164. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 72.165. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 72.166. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 72.167. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

72.58. SERVER VOLUME UPDATE

Update a volume attachment on the server.

Usage:

```
openstack server volume update [-h]
                               [--delete-on-termination | --preserve-on-termination]
                               server volume
```

Table 72.168. Positional arguments

Value	Summary
server	Server to update volume for (name or id)
volume	Volume (id)

Table 72.169. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--delete-on-termination	Delete the volume when the server is destroyed (supported by --os-compute-api-version 2.85 or above)
--preserve-on-termination	Preserve the volume when the server is destroyed (supported by --os-compute-api-version 2.85 or above)

CHAPTER 73. SERVICE

This chapter describes the commands under the **service** command.

73.1. SERVICE CREATE

Create new service

Usage:

```
openstack service create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--name <name>]
                        [--description <description>]
                        [--enable | --disable]
                        <type>
```

Table 73.1. Positional arguments

Value	Summary
<type>	New service type (compute, image, identity, volume, etc)

Table 73.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New service name
--description <description>	New service description
--enable	Enable service (default)
--disable	Disable service

Table 73.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 73.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 73.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

73.2. SERVICE DELETE

Delete service(s)

Usage:

```
openstack service delete [-h] <service> [<service> ...]
```

Table 73.7. Positional arguments

Value	Summary
<code><service></code>	Service(s) to delete (type, name or id)

Table 73.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

73.3. SERVICE LIST

List services

Usage:

```
openstack service list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending] [--long]
```

Table 73.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 73.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 73.11. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 73.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

73.4. SERVICE PROVIDER CREATE

Create new service provider

Usage:

```

openstack service provider create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] --auth-url <auth-url>
                                [--description <description>]
                                --service-provider-url <sp-url>
                                [--enable | --disable]
                                <name>

```

Table 73.14. Positional arguments

Value	Summary
<code><name></code>	New service provider name (must be unique)

Table 73.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--auth-url <auth-url></code>	Authentication url of remote federated service provider (required)
<code>--description <description></code>	New service provider description
<code>--service-provider-url <sp-url></code>	A service url where saml assertions are being sent (required)
<code>--enable</code>	Enable the service provider (default)
<code>--disable</code>	Disable the service provider

Table 73.16. Output formatter options

Value	Summary
<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 to show multiple columns

Table 73.17. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.18. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 73.19. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

73.5. SERVICE PROVIDER DELETE

Delete service provider(s)

Usage:

```
openstack service provider delete [-h]
                                <service-provider>
                                [<service-provider> ...]
```

Table 73.20. Positional arguments

Value	Summary
<code><service-provider></code>	Service provider(s) to delete

Table 73.21. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

73.6. SERVICE PROVIDER LIST

List service providers

Usage:

```
openstack service provider list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
```

Table 73.22. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.23. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 73.24. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 73.25. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.26. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

73.7. SERVICE PROVIDER SET

Set service provider properties

Usage:

```
openstack service provider set [-h] [--auth-url <auth-url>]
                               [--description <description>]
                               [--service-provider-url <sp-url>]
                               [--enable | --disable]
                               <service-provider>
```

Table 73.27. Positional arguments

Value	Summary
<code><service-provider></code>	Service provider to modify

Table 73.28. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--auth-url <auth-url></code>	New authentication url of remote federated service provider
<code>--description <description></code>	New service provider description
<code>--service-provider-url <sp-url></code>	New service provider url, where saml assertions are sent
<code>--enable</code>	Enable the service provider
<code>--disable</code>	Disable the service provider

73.8. SERVICE PROVIDER SHOW

Display service provider details

Usage:

```
openstack service provider show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
```

```

[--prefix PREFIX]
[--max-width <integer>] [--fit-width]
[--print-empty]
<service-provider>

```

Table 73.29. Positional arguments

Value	Summary
<service-provider>	Service provider to display

Table 73.30. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.31. Output formatter options

Value	Summary
-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 to show multiple columns

Table 73.32. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.33. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 73.34. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

73.9. SERVICE SET

Set service properties

Usage:

```
openstack service set [-h] [--type <type>] [--name <service-name>]
                    [--description <description>]
                    [--enable | --disable]
                    <service>
```

Table 73.35. Positional arguments

Value	Summary
<code><service></code>	Service to modify (type, name or id)

Table 73.36. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--type <type></code>	New service type (compute, image, identity, volume, etc)
<code>--name <service-name></code>	New service name
<code>--description <description></code>	New service description
<code>--enable</code>	Enable service
<code>--disable</code>	Disable service

73.10. SERVICE SHOW

Display service details

Usage:

```
openstack service show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <service>
```

Table 73.37. Positional arguments

Value	Summary
<service>	Service to display (type, name or id)

Table 73.38. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.39. Output formatter options

Value	Summary
-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 to show multiple columns

Table 73.40. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.41. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 73.42. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 74. SFC

This chapter describes the commands under the **sfc** command.

74.1. SFC FLOW CLASSIFIER CREATE

Create a flow classifier

Usage:

```
openstack sfc flow classifier create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--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 74.1. Positional arguments

Value	Summary
<name>	Name of the flow classifier

Table 74.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description for the flow classifier
--protocol <protocol>	Ip protocol name. protocol name should be as per iana standard.
--ethertype {IPv4,IPv6}	L2 ethertype, default is ipv4
--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.

Value	Summary
<code>--destination-port <min-port>:<max-port></code>	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.
<code>--source-ip-prefix <source-ip-prefix></code>	Source ip address in cidr notation
<code>--destination-ip-prefix <destination-ip-prefix></code>	Destination ip address in cidr notation
<code>--logical-source-port <logical-source-port></code>	Neutron source port (name or id)
<code>--logical-destination-port <logical-destination-port></code>	Neutron destination port (name or id)
<code>--l7-parameters L7_PARAMETERS</code>	Dictionary of l7 parameters. currently, no value is supported for this option.

Table 74.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 74.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 74.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.2. SFC FLOW CLASSIFIER DELETE

Delete a given flow classifier

Usage:

```
openstack sfc flow classifier delete [-h] <flow-classifier>
```

Table 74.7. Positional arguments

Value	Summary
<flow-classifier>	Flow classifier to delete (name or id)

Table 74.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

74.3. SFC FLOW CLASSIFIER LIST

List flow classifiers

Usage:

```
openstack sfc flow classifier list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--long]
```

Table 74.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 74.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 74.11. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 74.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.13. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.4. SFC FLOW CLASSIFIER SET

Set flow classifier properties

Usage:

```
openstack sfc flow classifier set [-h] [--name <name>]
                                [--description <description>]
                                <flow-classifier>
```

Table 74.14. Positional arguments

Value	Summary
<flow-classifier>	Flow classifier to modify (name or id)

Table 74.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the flow classifier
--description <description>	Description for the flow classifier

74.5. SFC FLOW CLASSIFIER SHOW

Display flow classifier details

Usage:

```
openstack sfc flow classifier show [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   <flow-classifier>
```

Table 74.16. Positional arguments

Value	Summary
<flow-classifier>	Flow classifier to display (name or id)

Table 74.17. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 74.18. Output formatter options

Value	Summary
-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 to show multiple columns

Table 74.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 74.21. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

74.6. SFC PORT CHAIN CREATE

Create a port chain

Usage:

```
openstack sfc port chain create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description <description>]
                               [--flow-classifier <flow-classifier>]
                               [--chain-parameters correlation=<correlation-type>,symmetric=<boolean>]
                               --port-pair-group <port-pair-group>
                               <name>
```

Table 74.22. Positional arguments

Value	Summary
<code><name></code>	Name of the port chain

Table 74.23. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description <description></code>	Description for the port chain
<code>--flow-classifier <flow-classifier></code>	Add flow classifier (name or id). this option can be repeated.
<code>--chain-parameters correlation=<correlation-type>,symmetric=<boolean></code>	Dictionary of chain parameters. supports correlation=(mpls nsh) (default is mpls) and symmetric=(true false).
<code>--port-pair-group <port-pair-group></code>	Add port pair group (name or id). this option can be repeated.

Table 74.24. Output formatter options

Value	Summary
<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 to show multiple columns

Table 74.25. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.26. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 74.27. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

74.7. SFC PORT CHAIN DELETE

Delete a given port chain

Usage:

```
openstack sfc port chain delete [-h] <port-chain>
```

Table 74.28. Positional arguments

Value	Summary
<code><port-chain></code>	Port chain to delete (name or id)

Value	Summary
-------	---------

Table 74.29. Command arguments

Value	Summary
-h, --help	Show this help message and exit

74.8. SFC PORT CHAIN LIST

List port chains

Usage:

```
openstack sfc port chain list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--long]
```

Table 74.30. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 74.31. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 74.32. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 74.33. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.34. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

74.9. 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 74.35. Positional arguments

Value	Summary
<port-chain>	Port chain to modify (name or id)

Table 74.36. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the port chain
--description <description>	Description for the port chain
--flow-classifier <flow-classifier>	Add flow classifier (name or id). this option can be repeated.
--no-flow-classifier	Remove associated flow classifiers from the port chain
--port-pair-group <port-pair-group>	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.
--no-port-pair-group	Remove associated port pair groups from the port chain. At least one --port-pair-group must be specified together.

74.10. SFC PORT CHAIN SHOW

Display port chain details

Usage:

```
openstack sfc port chain show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             <port-chain>
```

Table 74.37. Positional arguments

Value	Summary
<port-chain>	Port chain to display (name or id)

Table 74.38. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 74.39. Output formatter options

Value	Summary
-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 to show multiple columns

Table 74.40. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.41. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 74.42. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.11. 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 74.43. Positional arguments

Value	Summary
<port-chain>	Port chain to unset (name or id)

Table 74.44. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--flow-classifier <flow-classifier>	Remove flow classifier(s) from the port chain (name or ID). This option can be repeated.
--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.

74.12. SFC PORT PAIR CREATE

Create a port pair

Usage:

```

openstack sfc port pair create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description <description>]
                               [--service-function-parameters correlation=<correlation-type>,weight=
<weight>]
                               --ingress <ingress> --egress <egress>
                               <name>

```

Table 74.45. Positional arguments

Value	Summary
<name>	Name of the port pair

Table 74.46. Command arguments

Value	Summary
-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 impls 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.
--ingress <ingress>	Ingress neutron port (name or id)
--egress <egress>	Egress neutron port (name or id)

Table 74.47. Output formatter options

Value	Summary
-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 to show multiple columns

Table 74.48. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.49. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 74.50. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.13. SFC PORT PAIR DELETE

Delete a given port pair

Usage:

```
openstack sfc port pair delete [-h] <port-pair>
```

Table 74.51. Positional arguments

Value	Summary
<port-pair>	Port pair to delete (name or id)

Table 74.52. Command arguments

Value	Summary
-h, --help	Show this help message and exit

74.14. 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] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--description <description>]
    [--port-pair <port-pair>]
    [--enable-tap | --disable-tap]
    [--port-pair-group-parameters lb-fields=<lb-fields>]
    <name>
```

Table 74.53. Positional arguments

Value	Summary
<name>	Name of the port pair group

Table 74.54. Command arguments

Value	Summary
-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.
--enable-tap	Port pairs of this port pair group are deployed as passive tap service function
--disable-tap	Port pairs of this port pair group are deployed as I3 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.

Table 74.55. Output formatter options

Value	Summary
-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 to show multiple columns

Table 74.56. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.57. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 74.58. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

74.15. SFC PORT PAIR GROUP DELETE

Delete a given port pair group

Usage:

```
openstack sfc port pair group delete [-h] <port-pair-group>
```

Table 74.59. Positional arguments

Value	Summary
<code><port-pair-group></code>	Port pair group to delete (name or id)

Table 74.60. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

74.16. 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]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    [--long]
```

Table 74.61. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 74.62. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 74.63. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 74.64. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.65. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.17. 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 74.66. Positional arguments

Value	Summary
<port-pair-group>	Port pair group to modify (name or id)

Table 74.67. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the port pair group
--description <description>	Description for the port pair group
--port-pair <port-pair>	Port pair (name or id). this option can be repeated.
--no-port-pair	Remove all port pair from port pair group

74.18. 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] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   <port-pair-group>

```

Table 74.68. Positional arguments

Value	Summary
<port-pair-group>	Port pair group to display (name or id)

Table 74.69. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 74.70. Output formatter options

Value	Summary
-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 to show multiple columns

Table 74.71. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.72. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 74.73. Table formatter options

Value	Summary
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Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

74.19. 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 74.74. Positional arguments

Value	Summary
<code><port-pair-group></code>	Port pair group to unset (name or id)

Table 74.75. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--port-pair <port-pair></code>	Remove port pair(s) from the port pair group (name or ID). This option can be repeated.
<code>--all-port-pair</code>	Remove all port pairs from the port pair group

74.20. SFC PORT PAIR LIST

List port pairs

Usage:

```
openstack sfc port pair list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--long]

```

Table 74.76. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

Table 74.77. Output formatter options

Value	Summary
<code>-f</code> {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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 74.78. CSV formatter options

Value	Summary
<code>--quote</code> {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 74.79. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.80. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

74.21. SFC PORT PAIR SET

Set port pair properties

Usage:

```
openstack sfc port pair set [-h] [--name <name>]
                             [--description <description>]
                             <port-pair>
```

Table 74.81. Positional arguments

Value	Summary
<code><port-pair></code>	Port pair to modify (name or id)

Table 74.82. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Name of the port pair
<code>--description <description></code>	Description for the port pair

74.22. SFC PORT PAIR SHOW

Display port pair details

Usage:

```
openstack sfc port pair show [-h] [-f {json,shell,table,value,yaml}]
                              [-c COLUMN] [--noindent] [--prefix PREFIX]
                              [--max-width <integer>] [--fit-width]
```

```

[--print-empty]
<port-pair>

```

Table 74.83. Positional arguments

Value	Summary
<port-pair>	Port pair to display (name or id)

Table 74.84. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 74.85. Output formatter options

Value	Summary
-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 to show multiple columns

Table 74.86. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.87. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 74.88. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.23. SFC SERVICE GRAPH CREATE

Create a service graph.

Usage:

```

openstack sfc service graph create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--description DESCRIPTION]
    --branching-point
    SRC_CHAIN:DST_CHAIN_1,DST_CHAIN_2,DST_CHAIN_N
    <name>

```

Table 74.89. Positional arguments

Value	Summary
<name>	Name of the service graph.

Table 74.90. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description DESCRIPTION	Description for the service graph.
--branching-point SRC_CHAIN:DST_CHAIN_1,DST_CHAIN_2,DST_CHAI N_N	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.

Table 74.91. Output formatter options

Value	Summary
<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 to show multiple columns

Table 74.92. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.93. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 74.94. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

74.24. SFC SERVICE GRAPH DELETE

Delete a given service graph.

Usage:

```
openstack sfc service graph delete [-h] <service-graph>
```

Table 74.95. Positional arguments

Value	Summary
<code><service-graph></code>	Id or name of the service graph to delete.

Value	Summary
-------	---------

Table 74.96. Command arguments

Value	Summary
-h, --help	Show this help message and exit

74.25. SFC SERVICE GRAPH LIST

List service graphs

Usage:

```
openstack sfc service graph list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--long]
```

Table 74.97. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 74.98. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order

Value	Summary
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 74.99. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 74.100. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.101. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

74.26. SFC SERVICE GRAPH SET

Set service graph properties

Usage:

```
openstack sfc service graph set [-h] [--name <name>]
                                [--description <description>]
                                <service-graph>
```

Table 74.102. Positional arguments

Value	Summary
<code><service-graph></code>	Service graph to modify (name or id)

Table 74.103. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the service graph
--description <description>	Description for the service graph

74.27. 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] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <service-graph>
```

Table 74.104. Positional arguments

Value	Summary
<service-graph>	Id or name of the service graph to display.

Table 74.105. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 74.106. Output formatter options

Value	Summary
-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 to show multiple columns

Table 74.107. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.108. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 74.109. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 75. SHARE

This chapter describes the commands under the **share** command.

75.1. SHARE ABANDON

Abandon a share

Usage:

```
openstack share abandon [-h] [--wait] <share> [<share> ...]
```

Table 75.1. Positional arguments

Value	Summary
<share>	Name or id of the share(s)

Table 75.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait until share is abandoned

75.2. SHARE ACCESS CREATE

Create new share access rule

Usage:

```
openstack share access create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--properties [<key=value> ...]]
                             [--access-level <access_level>]
                             <share> <access_type> <access_to>
```

Table 75.3. Positional arguments

Value	Summary
<share>	Name or id of the nas share to modify.
<access_type>	Access rule type (only "ip", "user" (user or group), "cert" or "cephx" are supported).

Value	Summary
<access_to>	Value that defines access.

Table 75.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--properties [<key=value> ...]	Space separated list of key=value pairs of properties. OPTIONAL: Default=None. Available only for API microversion >= 2.45.
--access-level <access_level>	Share access level ("rw" and "ro" access levels are supported). Defaults to rw.

Table 75.5. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.6. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.7. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.8. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.3. SHARE ACCESS DELETE

Delete a share access rule

Usage:

```
openstack share access delete [-h] <share> <id>
```

Table 75.9. Positional arguments

Value	Summary
<code><share></code>	Name or id of the nas share to modify.
<code><id></code>	Id of the access rule to be deleted.

Table 75.10. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

75.4. SHARE ACCESS LIST

List share access rule

Usage:

```
openstack share access list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--properties [<key=value> ...]]
                             <share>
```

■

Table 75.11. Positional arguments

Value	Summary
<share>	Name or id of the share.

Table 75.12. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--properties [<key=value> ...]	Filters results by properties (key=value). optional: Default=None. Available only for API microversion >= 2.45

Table 75.13. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 75.14. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 75.15. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.16. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.5. SHARE ACCESS SET

Set properties to share access rule. Available for API microversion 2.45 and higher

Usage:

```
openstack share access set [-h] [--property <key=value>] <access_id>
```

Table 75.17. Positional arguments

Value	Summary
<code><access_id></code>	Id of the nas share access rule.

Table 75.18. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--property <key=value></code>	Set a property to this share access rule. (repeat option to set multiple properties) Available only for API microversion \geq 2.45.

75.6. SHARE ACCESS SHOW

Display a share access rule. Available for API microversion 2.45 and higher

Usage:

```
openstack share access show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <access_id>
```

Table 75.19. Positional arguments

Value	Summary
<access_id>	Id of the nas share access rule.

Table 75.20. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.21. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.22. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.23. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.24. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

75.7. SHARE ACCESS UNSET

Unset properties of share access rule. Available for API microversion 2.45 and higher

Usage:

```
openstack share access unset [-h] [--property <key>] <access_id>
```

Table 75.25. Positional arguments

Value	Summary
<code><access_id></code>	Id of the nas share access rule.

Table 75.26. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--property <key></code>	Remove property from share access rule. (repeat option to remove multiple properties) Available only for API microversion \geq 2.45.

75.8. SHARE ADOPT

Adopt a share

Usage:

```
openstack share adopt [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent] [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty] [--name <name>]
    [--description <description>]
    [--share-type <share-type>]
    [--driver-options [<key=value> ...]] [--public]
    [--share-server-id <share-server-id>] [--wait]
    <service-host> <protocol> <export-path>
```

Table 75.27. Positional arguments

Value	Summary
<service-host>	Service host: some.host@driver#pool.
<protocol>	Protocol of the share to manage, such as nfs or cifs.
<export-path>	Share export path, nfs share such as: 10.0.0.1:/example_path, CIFS share such as: \\10.0.0.1\example_cifs_share.

Table 75.28. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Optional share name. (default=none)
--description <description>	Optional share description. (default=none)
--share-type <share-type>	Optional share type assigned to share. (default=none)
--driver-options [<key=value> ...]	Optional driver options as key=value pairs (Default=None).
--public	Level of visibility for share. defines whether other projects are able to see it or not. Available only for microversion >= 2.8. (Default=False)
--share-server-id <share-server-id>	Share server associated with share when using a share type with "driver_handles_share_servers" extra_spec set to True. Available only for microversion >= 2.49. (Default=None)
--wait	Wait until share is adopted

Table 75.29. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.30. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.31. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.32. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.9. SHARE CREATE

Create new share

Usage:

```
openstack share create [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [--name <name>]
                       [--snapshot-id <snapshot-id>]
                       [--property <key=value>]
                       [--share-network <network-info>]
                       [--description <description>]
                       [--public <public>] [--share-type <share-type>]
                       [--availability-zone <availability-zone>]
                       [--share-group <share-group>] [--wait]
                       <share_protocol> <size>
```

Table 75.33. Positional arguments

Value	Summary
<share_protocol>	Share protocol (nfs, cifs, cephfs, glusterfs or hdfs)

Value	Summary
<size>	Share size in gib.

Table 75.34. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Optional share name. (default=none)
--snapshot-id <snapshot-id>	Optional snapshot id to create the share from. (Default=None)
--property <key=value>	Set a property to this share (repeat option to set multiple properties)
--share-network <network-info>	Optional network info id or name.
--description <description>	Optional share description. (default=none)
--public <public>	Level of visibility for share. defines whether other tenants are able to see it or not. (Default = False)
--share-type <share-type>	Optional share type. use of optional shares type is deprecated. (Default=Default)
--availability-zone <availability-zone>	Availability zone in which share should be created.
--share-group <share-group>	Optional share group name or id in which to create the share. (Default=None).
--wait	Wait for share creation

Table 75.35. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.36. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.37. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.38. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.10. SHARE DELETE

Delete a share

Usage:

```
openstack share delete [-h] [--share-group <share-group>] [--force]
                        [--wait]
                        <share> [<share> ...]
```

Table 75.39. Positional arguments

Value	Summary
<share>	Share(s) to delete (name or id)

Table 75.40. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--share-group <share-group></code>	Optional share group (name or id) which contains the share
<code>--force</code>	Attempt forced removal of share(s), regardless of state (defaults to False)
<code>--wait</code>	Wait for share deletion

75.11. SHARE EXPORT LOCATION LIST

List export location of a share

Usage:

```
openstack share export location list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--noindent]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--sort-column SORT_COLUMN]
                                   [--sort-ascending | --sort-descending]
                                   <share>
```

Table 75.41. Positional arguments

Value	Summary
<code><share></code>	Name or id of share

Table 75.42. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 75.43. Output formatter options

Value	Summary
<code>-f {csv,json,table,value,yaml}, --format {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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 75.44. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 75.45. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.46. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.12. SHARE EXPORT LOCATION SHOW

Show export location of a share

Usage:

```
openstack share export location show [-h]
```

```

[-f {json,shell,table,value,yaml}]
[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
<share> <export-location>

```

Table 75.47. Positional arguments

Value	Summary
<share>	Name or id of share
<export-location>	Id of the share export location

Table 75.48. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.49. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.50. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.51. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.52. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.13. SHARE LIST

List shares

Usage:

```
openstack share list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--name <share-name>] [--status <share-status>]
                    [--snapshot <share-network-id>] [--public]
                    [--share-network <share-network-name-or-id>]
                    [--share-type <share-type-name-or-id>]
                    [--share-group <share-group-name-or-id>]
                    [--host <share-host>]
                    [--share-server <share-server-id>]
                    [--project <project>]
                    [--project-domain <project-domain>]
                    [--user <user>] [--user-domain <user-domain>]
                    [--all-projects] [--property <key=value>]
                    [--extra-spec <key=value>] [--long]
                    [--sort <key>[:<direction>]]
                    [--limit <num-shares>] [--marker <share>]
```

Table 75.53. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <share-name></code>	Filter shares by share name
<code>--status <share-status></code>	Filter shares by status
<code>--snapshot <share-network-id></code>	Filter shares by snapshot name or id.

Value	Summary
<code>--public</code>	Include public shares
<code>--share-network <share-network-name-or-id></code>	Filter shares exported on a given share network
<code>--share-type <share-type-name-or-id></code>	Filter shares of a given share type
<code>--share-group <share-group-name-or-id></code>	Filter shares belonging to a given share group
<code>--host <share-host></code>	Filter shares belonging to a given host (admin only)
<code>--share-server <share-server-id></code>	Filter shares exported via a given share server (admin only)
<code>--project <project></code>	Filter shares by project (name or id) (admin only)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--user <user></code>	Filter results by user (name or id) (admin only)
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
<code>--all-projects</code>	Include all projects (admin only)
<code>--property <key=value></code>	Filter shares having a given metadata key=value property (repeat option to filter by multiple properties)
<code>--extra-spec <key=value></code>	Filter shares with extra specs (key=value) of the share type that they belong to. (repeat option to filter by multiple extra specs)
<code>--long</code>	List additional fields in output
<code>--sort <key>[:<direction>]</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>--limit <num-shares></code>	Maximum number of shares to display
<code>--marker <share></code>	The last share id of the previous page

Table 75.54. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 75.55. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 75.56. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 75.57. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.14. SHARE MESSAGE DELETE

Remove one or more messages

Usage:

```
openstack share message delete [-h] <message> [<message> ...]
```

Table 75.58. Positional arguments

Value	Summary
<message>	Id of the message(s).

Table 75.59. Command arguments

Value	Summary
-h, --help	Show this help message and exit

75.15. SHARE MESSAGE LIST

Lists all messages

Usage:

```
openstack share message list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--resource-id <resource-id>]
                             [--resource-type <resource-type>]
                             [--action-id <action-id>]
                             [--detail-id <detail-id>]
                             [--request-id <request-id>]
                             [--message-level <message-level>]
                             [--limit <limit>] [--since <since>]
                             [--before <before>]
```

Table 75.60. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id <resource-id>	Filters results by a resource uuid. default=none.
--resource-type <resource-type>	Filters results by a resource type. default=none. Example: "openstack message list --resource-type share"
--action-id <action-id>	Filters results by action id. default=none.

Value	Summary
<code>--detail-id <detail-id></code>	Filters results by detail id. default=none.
<code>--request-id <request-id></code>	Filters results by request id. default=none.
<code>--message-level <message-level></code>	Filters results by the message level. default=none. Example: "openstack message list --message-level ERROR".
<code>--limit <limit></code>	Maximum number of messages to return. (default=none)
<code>--since <since></code>	Return only user messages created since given date. The date format must be conforming to ISO8601. Available only for microversion >= 2.52.
<code>--before <before></code>	Return only user messages created before given date. The date format must be conforming to ISO8601. Available only for microversion >= 2.52.

Table 75.61. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 75.62. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 75.63. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 75.64. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.16. SHARE MESSAGE SHOW

Show details about a message

Usage:

```

openstack share message show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <message>

```

Table 75.65. Positional arguments

Value	Summary
<code><message></code>	Id of the message.

Table 75.66. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 75.67. Output formatter options

Value	Summary
<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 to show multiple columns

Table 75.68. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 75.69. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 75.70. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.17. SHARE PROPERTIES SHOW

Show share properties

Usage:

```
openstack share properties show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <share>
```

Table 75.71. Positional arguments

Value	Summary
<share>	Name or id of share

Table 75.72. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.73. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.74. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.75. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.76. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.18. SHARE QUOTA DELETE

Delete Quota

Usage:

```
openstack share quota delete [-h] [--project <project>] [--user <user>]
                             [--share-type <share-type>]
```

Table 75.77. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Name or id of the project to delete quotas for.
--user <user>	Name or id of user to delete the quotas for. optional. Mutually exclusive with <i>--share-type</i> .
--share-type <share-type>	Name or id of a share type to delete the quotas for. Optional. Mutually exclusive with <i>--user</i> . Available only for microversion ≥ 2.39

75.19. SHARE QUOTA SET

Set Quota

Usage:

```
openstack share quota set [-h] [--project <project>] [--user <user>]
                          [--shares <shares>] [--snapshots <snapshots>]
                          [--gigabytes <gigabytes>]
                          [--snapshot-gigabytes <snapshot-gigabytes>]
                          [--share-networks <share-networks>]
                          [--share-groups <share-groups>]
                          [--share-group-snapshots <share-group-snapshots>]
                          [--share-replicas <share-replicas>]
                          [--replica-gigabytes <replica-gigabytes>]
                          [--share-type <share-type>] [--force]
```

Table 75.78. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Name or id of the project to set the quotas for.

Value	Summary
<code>--user <user></code>	Name or id of a user to set the quotas for. optional. Mutually exclusive with <code>--share-type</code> .
<code>--shares <shares></code>	New value for the "shares" quota.
<code>--snapshots <snapshots></code>	New value for the "snapshots" quota.
<code>--gigabytes <gigabytes></code>	New value for the "gigabytes" quota.
<code>--snapshot-gigabytes <snapshot-gigabytes></code>	New value for the "snapshot-gigabytes" quota.
<code>--share-networks <share-networks></code>	New value for the "share-networks" quota.
<code>--share-groups <share-groups></code>	New value for the "share-groups" quota. available only for microversion ≥ 2.40
<code>--share-group-snapshots <share-group-snapshots></code>	New value for the "share-group-snapshots" quota.
<code>--share-replicas <share-replicas></code>	Number of share replicas. available only for microversion ≥ 2.53
<code>--replica-gigabytes <replica-gigabytes></code>	Capacity of share replicas in total. available only for microversion ≥ 2.53
<code>--share-type <share-type></code>	Name or id of a share type to set the quotas for. Optional. Mutually exclusive with <code>--user</code> . Available only for microversion ≥ 2.39
<code>--force</code>	Force update the quota.

75.20. SHARE QUOTA SHOW

Show Quota

Usage:

```
openstack share quota show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--project <project>]
                          [--user <user>] [--share-type <share-type>]
                          [--detail] [--defaults]
```

Table 75.79. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Name or id of hte project to list quotas for.
--user <user>	Name or id of user to list the quotas for. optional. Mutually exclusive with <i>--share-type</i> .
--share-type <share-type>	Uuid or name of a share type to list the quotas for. Optional. Mutually exclusive with <i>--user</i> . Available only for microversion >= 2.39
--detail	Optional flag to indicate whether to show quota in detail. Default false, available only for microversion >= 2.25.
--defaults	Show the default quotas for the project.

Table 75.80. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.81. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.82. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.83. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.21. SHARE RESIZE

Resize a share

Usage:

```
openstack share resize [-h] [--wait] <share> <new-size>
```

Table 75.84. Positional arguments

Value	Summary
<code><share></code>	Name or id of share to resize
<code><new-size></code>	New size of share, in gibs

Table 75.85. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--wait</code>	Wait for share resize

75.22. SHARE REVERT

Revert a share to the specified snapshot.

Usage:

```
openstack share revert [-h] <snapshot>
```

Table 75.86. Positional arguments

Value	Summary
<snapshot>	Name or id of the snapshot to restore. the snapshot must be the most recent one known to manila.

Table 75.87. Command arguments

Value	Summary
-h, --help	Show this help message and exit

75.23. SHARE SET

Set share properties

Usage:

```
openstack share set [-h] [--property <key=value>] [--name <name>]
                    [--description <description>] [--public <public>]
                    [--status <status>]
                    <share>
```

Table 75.88. Positional arguments

Value	Summary
<share>	Share to modify (name or id)

Table 75.89. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Set a property to this share (repeat option to set multiple properties)
--name <name>	New share name. (default=none)
--description <description>	New share description. (default=none)
--public <public>	Level of visibility for share. defines whether other tenants are able to see it or not.
--status <status>	Explicitly update the status of a share (admin only). Examples include: available, error, creating, deleting, error_deleting.

75.24. SHARE SHOW

Display share details

Usage:

```
openstack share show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <share>
```

Table 75.90. Positional arguments

Value	Summary
<share>	Share to display (name or id)

Table 75.91. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.92. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.93. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.94. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.95. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.25. SHARE SNAPSHOT ABANDON

Abandon share snapshot(s)

Usage:

```
openstack share snapshot abandon [-h] <snapshot> [<snapshot> ...]
```

Table 75.96. Positional arguments

Value	Summary
<code><snapshot></code>	Name or id of the snapshot(s) to be abandoned.

Table 75.97. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

75.26. SHARE SNAPSHOT ACCESS CREATE

Allow access to a snapshot

Usage:

```
openstack share snapshot access create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <snapshot> <access_type>
                                     <access_to>
```

Table 75.98. Positional arguments

Value	Summary
<snapshot>	Name or id of the snapshot
<access_type>	Access rule type (only "ip", "user" (user or group), "cert" or "cephx" are supported).
<access_to>	Value that defines access.

Table 75.99. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.100. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.101. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.102. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.103. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.27. SHARE SNAPSHOT ACCESS DELETE

Delete access to a snapshot

Usage:

```
openstack share snapshot access delete [-h] <snapshot> <id> [<id> ...]
```

Table 75.104. Positional arguments

Value	Summary
<snapshot>	Name or id of the share snapshot to deny access to.
<id>	Id(s) of the access rule(s) to be deleted.

Table 75.105. Command arguments

Value	Summary
-h, --help	Show this help message and exit

75.28. SHARE SNAPSHOT ACCESS LIST

Show access list for a snapshot

Usage:

```
openstack share snapshot access list [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending | --sort-descending]
    <snapshot>
```

Table 75.106. Positional arguments

Value	Summary
<snapshot>	Name or id of the share snapshot to show access list for.

Table 75.107. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.108. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 75.109. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 75.110. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.111. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.29. SHARE SNAPSHOT ADOPT

Adopt a share snapshot

Usage:

```
openstack share snapshot adopt [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--name <name>]
                               [--description <description>]
                               [--driver-option <key=value>]
                               <share> <provider-location>
```

Table 75.112. Positional arguments

Value	Summary
<code><share></code>	Name or id of the share that owns the snapshot to be adopted.
<code><provider-location></code>	Provider location of the snapshot on the backend.

Table 75.113. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Optional snapshot name (default=none).
<code>--description <description></code>	Optional snapshot description (default=none).
<code>--driver-option <key=value></code>	Set driver options as key=value pairs.(repeat option to set multiple key=value pairs)

Table 75.114. Output formatter options

Value	Summary
<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 to show multiple columns

Table 75.115. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 75.116. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 75.117. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.30. SHARE SNAPSHOT CREATE

Create a snapshot of the given share

Usage:

```
openstack share snapshot create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--force]
```

```

[--name <name>]
[--description <description>]
<share>

```

Table 75.118. Positional arguments

Value	Summary
<share>	Name or id of the share to create snapshot of

Table 75.119. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Optional flag to indicate whether to snapshot a share even if it's busy. (Default=False)
--name <name>	Add a name to the snapshot (optional).
--description <description>	Add a description to the snapshot (optional).

Table 75.120. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.121. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.122. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.123. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.31. SHARE SNAPSHOT DELETE

Delete one or more share snapshots

Usage:

```
openstack share snapshot delete [-h] [--force]
                               <snapshot> [<snapshot> ...]
```

Table 75.124. Positional arguments

Value	Summary
<code><snapshot></code>	Name or id of the snapshot(s) to delete

Table 75.125. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--force</code>	Delete the snapshot(s) ignoring the current state.

75.32. SHARE SNAPSHOT EXPORT LOCATION LIST

List export locations of a given snapshot

Usage:

```
openstack share snapshot export location list [-h]
                                             [-f {csv,json,table,value,yaml}]
                                             [-c COLUMN]
                                             [--quote {all,minimal,none,nonnumeric}]
                                             [--noindent]
                                             [--max-width <integer>]
                                             [--fit-width]
                                             [--print-empty]
```



```

[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
<snapshot>

```

Table 75.126. Positional arguments

Value	Summary
<snapshot>	Name or id of the share snapshot.

Table 75.127. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.128. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 75.129. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 75.130. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.131. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.33. SHARE SNAPSHOT EXPORT LOCATION SHOW

Show export location of the share snapshot

Usage:

```
openstack share snapshot export location show [-h]
                                             [-f {json,shell,table,value,yaml}]
                                             [-c COLUMN] [--noindent]
                                             [--prefix PREFIX]
                                             [--max-width <integer>]
                                             [--fit-width]
                                             [--print-empty]
                                             <snapshot>
                                             <export-location>
```

Table 75.132. Positional arguments

Value	Summary
<code><snapshot></code>	Name or id of the share snapshot.
<code><export-location></code>	Id of the share snapshot export location.

Table 75.133. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 75.134. Output formatter options

Value	Summary
<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 to show multiple columns

Table 75.135. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.136. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.137. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.34. SHARE SNAPSHOT LIST

List snapshots

Usage:

```
openstack share snapshot list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--all-projects] [--name <name>]
                             [--description <description>]
                             [--status <status>] [--share <share>]
                             [--usage <usage>]
```

```

[--limit <num-snapshots>]
[--marker <snapshot>]
[--sort <key>[:<direction>]]
[--name~ <name~>]
[--description~ <description~>]
[--detail]

```

Table 75.138. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Display snapshots from all projects (admin only).
--name <name>	Filter results by name.
--description <description>	Filter results by description. available only for microversion >= 2.36.
--status <status>	Filter results by status
--share <share>	Name or id of a share to filter results by.
--usage <usage>	Option to filter snapshots by usage.
--limit <num-snapshots>	Limit the number of snapshots returned
--marker <snapshot>	The last share id of the previous page
--sort <key>[:<direction>]	Sort output by selected keys and directions(asc or desc) (default: name:asc), multiple keys and directions can be specified separated by comma
--name~ <name~>	Filter results matching a share snapshot name pattern. Available only for microversion >= 2.36.
--description~ <description~>	Filter results matching a share snapshot description pattern. Available only for microversion >= 2.36.
--detail	List share snapshots with details

Table 75.139. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 75.140. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 75.141. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.142. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.35. SHARE SNAPSHOT SET

Set share snapshot properties

Usage:

```
openstack share snapshot set [-h] [--name <name>]
```

```

[--description <description>]
[--status <status>]
<snapshot>

```

Table 75.143. Positional arguments

Value	Summary
<snapshot>	Name or id of the snapshot to set a property for

Table 75.144. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set a name to the snapshot.
--description <description>	Set a description to the snapshot.
--status <status>	Assign a status to the snapshot (admin only). options include : available, error, creating, deleting, manage_starting, manage_error, unmanage_starting, unmanage_error, error_deleting.

75.36. SHARE SNAPSHOT SHOW

Show details about a share snapshot

Usage:

```

openstack share snapshot show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             <snapshot>

```

Table 75.145. Positional arguments

Value	Summary
<snapshot>	Name or id of the snapshot to display

Table 75.146. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.147. Output formatter options

Value	Summary
<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 to show multiple columns

Table 75.148. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 75.149. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 75.150. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.37. SHARE SNAPSHOT UNSET

Unset a share snapshot property

Usage:

```
openstack share snapshot unset [-h] [--name] [--description] <snapshot>
```

Table 75.151. Positional arguments

Value	Summary
<snapshot>	Name or id of the snapshot to set a property for

Table 75.152. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name	Unset snapshot name.
--description	Unset snapshot description.

75.38. SHARE TYPE ACCESS CREATE

Add access for share type

Usage:

```
openstack share type access create [-h] <share_type> <project_id>
```

Table 75.153. Positional arguments

Value	Summary
<share_type>	Share type name or id to add access to
<project_id>	Project id to add share type access for

Table 75.154. Command arguments

Value	Summary
-h, --help	Show this help message and exit

75.39. SHARE TYPE ACCESS DELETE

Delete access from share type

Usage:

```
openstack share type access delete [-h] <share_type> <project_id>
```

Table 75.155. Positional arguments

Value	Summary
<share_type>	Share type name or id to delete access from
<project_id>	Project id to delete share type access for

Table 75.156. Command arguments

Value	Summary
-h, --help	Show this help message and exit

75.40. SHARE TYPE ACCESS LIST

Get access list for share type

Usage:

```
openstack share type access list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                <share_type>
```

Table 75.157. Positional arguments

Value	Summary
<share_type>	Share type name or id to get access list for

Table 75.158. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.159. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 75.160. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 75.161. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.162. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.41. SHARE TYPE CREATE

Create new share type

Usage:

```
openstack share type create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty]
[--description <description>]
[--snapshot-support <snapshot_support>]
[--create-share-from-snapshot-support
<create_share_from_snapshot_support>]
[--revert-to-snapshot-support <revert_to_snapshot_support>]
[--mount-snapshot-support <mount_snapshot_support>]
[--extra-specs [<key=value> ...]]
[--public <public>]
<name> <spec_driver_handles_share_servers>

```

Table 75.163. Positional arguments

Value	Summary
<name>	Share type name
<spec_driver_handles_share_servers>	Required extra specification. valid values are <i>true</i> and <i>false</i>

Table 75.164. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Share type description. available only for microversion >= 2.41.
--snapshot-support <snapshot_support>	Boolean extra spec used for filtering of back ends by their capability to create share snapshots.
--create-share-from-snapshot-support <create_share_from_snapshot_support>	Boolean extra spec used for filtering of back ends by their capability to create shares from snapshots.
--revert-to-snapshot-support <revert_to_snapshot_support>	Boolean extra spec used for filtering of back ends by their capability to revert shares to snapshots. (Default is False).
--mount-snapshot-support <mount_snapshot_support>	Boolean extra spec used for filtering of back ends by their capability to mount share snapshots. (Default is False).
--extra-specs [<key=value> ...]	Extra specs key and value of share type that will be used for share type creation. OPTIONAL: Default=None. example --extra-specs thin_provisioning=<is> True, replication_type=readable.

Value	Summary
<code>--public <public></code>	Make type accessible to the public (default true).

Table 75.165. Output formatter options

Value	Summary
<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 to show multiple columns

Table 75.166. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 75.167. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 75.168. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.42. SHARE TYPE DELETE

Delete a share type

Usage:

```
openstack share type delete [-h] <share_types> [<share_types> ...]
```

Table 75.169. Positional arguments

Value	Summary
<share_types>	Name or id of the share type(s) to delete

Table 75.170. Command arguments

Value	Summary
-h, --help	Show this help message and exit

75.43. SHARE TYPE LIST

List share types

Usage:

```
openstack share type list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--all] [--extra-specs [<key=value> ...]]
```

Table 75.171. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Display all share types whatever public or private. Default=False. (Admin only)
--extra-specs [<key=value> ...]	Filter share types with extra specs (key=value). Available only for API microversion >= 2.43. OPTIONAL: Default=None.

Table 75.172. Output formatter options

Value	Summary
-f {csv,json,table,value,yaml}, --format {csv,json,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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 75.173. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 75.174. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 75.175. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

75.44. SHARE TYPE SET

Set share type properties

Usage:

```
openstack share type set [-h] [--extra-specs [<key=value> ...]]
                        [--public <public>]
```

```

[--description <description>] [--name <name>]
<share_type>

```

Table 75.176. Positional arguments

Value	Summary
<share_type>	Name or id of the share type to modify

Table 75.177. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--extra-specs [<key=value> ...]	Extra specs key and value of share type that will be used for share type creation. OPTIONAL: Default=None. example --extra-specs thin_provisioning=<is> True, replication_type=readable.
--public <public>	New visibility of the share type. if set to true, share type will be available to all projects in the cloud. Available only for microversion >= 2.50
--description <description>	New description of share type. available only for microversion >= 2.50
--name <name>	New name of share type. available only for microversion >= 2.50

75.45. SHARE TYPE SHOW

Display share type details

Usage:

```

openstack share type show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <share_type>

```

Table 75.178. Positional arguments

Value	Summary
<share_type>	Share type to display (name or id)

Table 75.179. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 75.180. Output formatter options

Value	Summary
-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 to show multiple columns

Table 75.181. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.182. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 75.183. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.46. SHARE TYPE UNSET

Unset share type extra specs

Usage:


```
openstack share type unset [-h] <share_type> <key> [<key> ...]
```

Table 75.184. Positional arguments

Value	Summary
<share_type>	Name or id of the share type to modify
<key>	Remove extra_specs from this share type

Table 75.185. Command arguments

Value	Summary
-h, --help	Show this help message and exit

75.47. SHARE UNSET

Unset share properties

Usage:

```
openstack share unset [-h] [--property <key>] [--name] [--description]
                    <share>
```

Table 75.186. Positional arguments

Value	Summary
<share>	Share to modify (name or id)

Table 75.187. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Remove a property from share (repeat option to remove multiple properties)
--name	Unset share name.
--description	Unset share description.

CHAPTER 76. SOFTWARE

This chapter describes the commands under the **software** command.

76.1. SOFTWARE CONFIG CREATE

Create software config

Usage:

```
openstack software config create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--config-file <config-file>]
                                [--definition-file <destination-file>]
                                [--group <group>]
                                <config-name>
```

Table 76.1. Positional arguments

Value	Summary
<config-name>	Name of the software config to create

Table 76.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--config-file <config-file>	Path to json/yaml containing map defining <inputs>, <outputs>, and <options>
--definition-file <destination-file>	Path to software config script/data
--group <group>	Group name of tool expected by the software config

Table 76.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 76.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 76.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 76.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

76.2. SOFTWARE CONFIG DELETE

Delete software configs

Usage:

```
openstack software config delete [-h] <config> [<config> ...]
```

Table 76.7. Positional arguments

Value	Summary
<code><config></code>	Ids of the software configs to delete

Table 76.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

76.3. SOFTWARE CONFIG LIST

List software configs

Usage:

```
openstack software config list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--limit <limit>] [--marker <id>]
```

Table 76.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Limit the number of configs returned
--marker <id>	Return configs that appear after the given config id

Table 76.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 76.11. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 76.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 76.13. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

76.4. SOFTWARE CONFIG SHOW

Show software config details

Usage:

```
openstack software config show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--config-only]
                               <config>
```

Table 76.14. Positional arguments

Value	Summary
<config>	Id of the config

Table 76.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--config-only	Only display the value of the <config> property.

Table 76.16. Output formatter options

Value	Summary
<code>-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to yaml
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated to show multiple columns

Table 76.17. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 76.18. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 76.19. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

76.5. SOFTWARE DEPLOYMENT CREATE

Create a software deployment.

Usage:

```

openstack software deployment create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--input-value <key=value>]
                                     [--action <action>]

```

```

[--config <config>]
[--signal-transport <signal-transport>]
[--container <container>]
[--timeout <timeout>] --server
<server>
<deployment-name>

```

Table 76.20. 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 76.21. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--input-value <key=value>	Input value to set on the deployment. this can be specified multiple times.
--action <action>	Name of an action for this deployment. this can be a custom action, or one of CREATE, UPDATE, DELETE, SUSPEND, RESUME. Default is UPDATE
--config <config>	Id of the configuration to deploy
--signal-transport <signal-transport>	How the server should signal to heat with the deployment output values. TEMP_URL_SIGNAL will create a Swift TempURL to be signaled via HTTP PUT. 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
--container <container>	Optional name of container to store temp_url_signal objects in. If not specified a container will be created with a name derived from the DEPLOY_NAME
--timeout <timeout>	Deployment timeout in minutes
--server <server>	Id of the server being deployed to

Table 76.22. Output formatter options

Value	Summary
<code>-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to yaml
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated to show multiple columns

Table 76.23. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 76.24. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 76.25. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

76.6. SOFTWARE DEPLOYMENT DELETE

Delete software deployment(s) and correlative config(s).

Usage:

```
openstack software deployment delete [-h]
                                     <deployment> [<deployment> ...]
```

Table 76.26. Positional arguments

Value	Summary
<deployment>	Id of the deployment(s) to delete.

Table 76.27. Command arguments

Value	Summary
-h, --help	Show this help message and exit

76.7. SOFTWARE DEPLOYMENT LIST

List software deployments.

Usage:

```

openstack software deployment list [-h]
                                  [-f {csv,json,table,value,yaml}]
                                  [-c COLUMN]
                                  [--quote {all,minimal,none,nonnumeric}]
                                  [--noindent] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--sort-column SORT_COLUMN]
                                  [--sort-ascending | --sort-descending]
                                  [--server <server>] [--long]

```

Table 76.28. Command 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

Table 76.29. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 76.30. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 76.31. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 76.32. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

76.8. SOFTWARE DEPLOYMENT METADATA SHOW

Get deployment configuration metadata for the specified server.

Usage:

```
openstack software deployment metadata show [-h] <server>
```

Table 76.33. Positional arguments

Value	Summary
<server>	Id of the server to fetch deployments for

Table 76.34. Command arguments

Value	Summary
-h, --help	Show this help message and exit

76.9. SOFTWARE DEPLOYMENT OUTPUT SHOW

Show a specific deployment output.

Usage:

```
openstack software deployment output show [-h] [--all] [--long]
      <deployment> [<output-name>]
```

Table 76.35. Positional arguments

Value	Summary
<deployment>	Id of deployment to show the output for
<output-name>	Name of an output to display

Table 76.36. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Display all deployment outputs
--long	Show full deployment logs in output

76.10. SOFTWARE DEPLOYMENT SHOW

Show SoftwareDeployment Details.

Usage:

```
openstack software deployment show [-h]
      [-f {json,shell,table,value,yaml}]
      [-c COLUMN] [--noindent]
      [--prefix PREFIX]
```

```

[--max-width <integer>]
[--fit-width] [--print-empty]
[--long]
<deployment>

```

Table 76.37. Positional arguments

Value	Summary
<deployment>	Id of the deployment

Table 76.38. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	Show more fields in output

Table 76.39. Output formatter options

Value	Summary
-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 to show multiple columns

Table 76.40. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 76.41. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 76.42. Table formatter options

Value	Summary
-------	---------

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 77. STACK

This chapter describes the commands under the **stack** command.

77.1. STACK ABANDON

Abandon stack and output results.

Usage:

```
openstack stack abandon [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--output-file <output-file>]
                        <stack>
```

Table 77.1. Positional arguments

Value	Summary
<stack>	Name or id of stack to abandon

Table 77.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--output-file <output-file>	File to output abandon results

Table 77.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.6. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.2. STACK ADOPT

Adopt a stack.

Usage:

```
openstack stack adopt [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [-e <environment>]
                    [--timeout <timeout>] [--enable-rollback]
                    [--parameter <key=value>] [--wait] --adopt-file
                    <adopt-file>
                    <stack-name>
```

Table 77.7. Positional arguments

Value	Summary
<stack-name>	Name of the stack to adopt

Table 77.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-e <environment>, --environment <environment>	Path to the environment. can be specified multiple times

Value	Summary
<code>--timeout <timeout></code>	Stack creation timeout in minutes
<code>--enable-rollback</code>	Enable rollback on create/update failure
<code>--parameter <key=value></code>	Parameter values used to create the stack. can be specified multiple times
<code>--wait</code>	Wait until stack adopt completes
<code>--adopt-file <adopt-file></code>	Path to adopt stack data file

Table 77.9. Output formatter options

Value	Summary
<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 to show multiple columns

Table 77.10. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.11. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 77.12. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

77.3. 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]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending] [--wait]
                        [--no-rollback]
                        <stack> [<stack> ...]
```

Table 77.13. Positional arguments

Value	Summary
<code><stack></code>	Stack(s) to cancel (name or id)

Table 77.14. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--wait</code>	Wait for cancel to complete
<code>--no-rollback</code>	Cancel without rollback

Table 77.15. Output formatter options

Value	Summary
<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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 77.16. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.17. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.18. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.4. STACK CHECK

Check a stack.

Usage:

```
openstack stack check [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending] [--wait]
<stack> [<stack> ...]

```

Table 77.19. Positional arguments

Value	Summary
<stack>	Stack(s) to check update (name or id)

Table 77.20. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for check to complete

Table 77.21. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 77.22. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 77.23. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.24. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.5. STACK CREATE

Create a stack.

Usage:

```

openstack stack create [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [-e <environment>]
                       [-s <files-container>] [--timeout <timeout>]
                       [--pre-create <resource>] [--enable-rollback]
                       [--parameter <key=value>]
                       [--parameter-file <key=file>] [--wait]
                       [--poll SECONDS] [--tags <tag1,tag2...>]
                       [--dry-run] -t <template>
                       <stack-name>

```

Table 77.25. Positional arguments

Value	Summary
<stack-name>	Name of the stack to create

Table 77.26. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
-e <environment>, --environment <environment>	Path to the environment. can be specified multiple times
-s <files-container>, --files-container <files-container>	Swift files container name. local files other than root template would be ignored. If other files are not found in swift, heat engine would raise an error.
--timeout <timeout>	Stack creating timeout in minutes
--pre-create <resource>	Name of a resource to set a pre-create hook to. Resources in nested stacks can be set using slash as a separator: ``nested_stack/another/my_resource``. You can use wildcards to match multiple stacks or resources: ``nested_stack/an*/*_resource``. This can be specified multiple times
--enable-rollback	Enable rollback on create/update failure
--parameter <key=value>	Parameter values used to create the stack. this can be specified multiple times
--parameter-file <key=file>	Parameter values from file used to create the stack. This can be specified multiple times. Parameter values would be the content of the file
--wait	Wait until stack goes to create_complete or CREATE_FAILED
--poll SECONDS	Poll interval in seconds for use with --wait, defaults to 5.
--tags <tag1,tag2...>	A list of tags to associate with the stack
--dry-run	Do not actually perform the stack create, but show what would be created
-t <template>, --template <template>	Path to the template

Table 77.27. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.28. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.29. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.30. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.6. STACK DELETE

Delete stack(s).

Usage:

```
openstack stack delete [-h] [-y] [--wait] <stack> [<stack> ...]
```

Table 77.31. Positional arguments

Value	Summary
<stack>	Stack(s) to delete (name or id)

Table 77.32. Command 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

77.7. STACK ENVIRONMENT SHOW

Show a stack's environment.

Usage:

```
openstack stack environment show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <NAME or ID>
```

Table 77.33. Positional arguments

Value	Summary
<NAME or ID>	Name or id of stack to query

Table 77.34. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.35. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.36. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.37. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 77.38. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.8. STACK EVENT LIST

List events.

Usage:

```
openstack stack event list [-h] [-f {csv,json,log,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--resource <resource>]
                          [--filter <key=value>] [--limit <limit>]
                          [--marker <id>] [--nested-depth <depth>]
                          [--sort <key>[:<direction>]] [--follow]
                          <stack>
```

Table 77.39. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack to show events for

Table 77.40. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--resource <resource>	Name of resource to show events for. note: this cannot be specified with --nested-depth
--filter <key=value>	Filter parameters to apply on returned events
--limit <limit>	Limit the number of events returned
--marker <id>	Only return events that appear after the given id
--nested-depth <depth>	Depth of nested stacks from which to display events. Note: this cannot be specified with --resource
--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.
--follow	Print events until process is halted

Table 77.41. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 77.42. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.43. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.44. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.9. STACK EVENT SHOW

Show event details.

Usage:

```
openstack stack event show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <stack> <resource> <event>
```

Table 77.45. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack to show events for
<code><resource></code>	Name of the resource event belongs to
<code><event></code>	Id of event to display details for

Table 77.46. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.47. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.48. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.49. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.50. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.10. STACK EXPORT

Export stack data json.

Usage:

```

openstack stack export [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--output-file <output-file>]
                        <stack>

```

Table 77.51. Positional arguments

Value	Summary
<stack>	Name or id of stack to export

Table 77.52. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--output-file <output-file>	File to output export data

Table 77.53. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.54. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.55. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.56. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.11. STACK FAILURES LIST

Show information about failed stack resources.

Usage:

```
openstack stack failures list [-h] [--long] <stack>
```

Table 77.57. Positional arguments

Value	Summary
<code><stack></code>	Stack to display (name or id)

Table 77.58. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	Show full deployment logs in output

77.12. STACK FILE LIST

Show a stack's files map.

Usage:

```
openstack stack file list [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <NAME or ID>
```

Table 77.59. Positional arguments

Value	Summary
<NAME or ID>	Name or id of stack to query

Table 77.60. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.61. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.62. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.63. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.64. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.13. 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 77.65. Positional arguments

Value	Summary
<stack>	Stack to display (name or id)
<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``

Table 77.66. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--pre-create	Clear the pre-create hooks
--pre-update	Clear the pre-update hooks
--pre-delete	Clear the pre-delete hooks

77.14. 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]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--nested-depth <nested-depth>]
                          <stack>
```

Table 77.67. Positional arguments

Value	Summary
<stack>	Stack to display (name or id)

Table 77.68. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--nested-depth <nested-depth>	Depth of nested stacks from which to display hooks

Table 77.69. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 77.70. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 77.71. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.72. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.15. STACK LIST

List stacks.

Usage:

```
openstack stack list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending] [--deleted]
                    [--nested] [--hidden] [--property <key=value>]
                    [--tags <tag1,tag2...>] [--tag-mode <mode>]
                    [--limit <limit>] [--marker <id>]
                    [--sort <key>[:<direction>]] [--all-projects]
                    [--short] [--long]
```

Table 77.73. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--deleted</code>	Include soft-deleted stacks in the stack listing
<code>--nested</code>	Include nested stacks in the stack listing
<code>--hidden</code>	Include hidden stacks in the stack listing
<code>--property <key=value></code>	Filter properties to apply on returned stacks (repeat to filter on multiple properties)
<code>--tags <tag1,tag2...></code>	List of tags to filter by. can be combined with <code>--tag-mode</code> to specify how to filter tags

Value	Summary
<code>--tag-mode <mode></code>	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
<code>--limit <limit></code>	The number of stacks returned
<code>--marker <id></code>	Only return stacks that appear after the given id
<code>--sort <key>[:<direction>]</code>	Sort output by selected keys and directions (asc or desc) (default: asc). Specify multiple times to sort on multiple properties
<code>--all-projects</code>	Include all projects (admin only)
<code>--short</code>	List fewer fields in output
<code>--long</code>	List additional fields in output, this is implied by <code>--all-projects</code>

Table 77.74. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 77.75. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.76. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.77. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.16. STACK OUTPUT LIST

List stack outputs.

Usage:

```
openstack stack output list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             <stack>
```

Table 77.78. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack to query

Table 77.79. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 77.80. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 77.81. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.82. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.83. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.17. STACK OUTPUT SHOW

Show stack output.

Usage:

```

openstack stack output show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--all]
                             <stack> [<output>]

```

Table 77.84. Positional arguments

Value	Summary
<stack>	Name or id of stack to query
<output>	Name of an output to display

Table 77.85. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Display all stack outputs

Table 77.86. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.87. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.88. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.89. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.18. STACK RESOURCE LIST

List stack resources.

Usage:

```

openstack stack resource list [-h] [-f {csv,dot,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--long] [-n <nested-depth>]
                               [--filter <key=value>]
                               <stack>

```

Table 77.90. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack to query

Table 77.91. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	Enable detailed information presented for each resource in resource list
<code>-n <nested-depth>, --nested-depth <nested-depth></code>	Depth of nested stacks from which to display resources

Value	Summary
<code>--filter <key=value></code>	Filter parameters to apply on returned resources based on their name, status, type, action, id and <code>physical_resource_id</code>

Table 77.92. Output formatter options

Value	Summary
<code>-f {csv,dot,json,table,value,yaml}, --format {csv,dot,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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 77.93. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.94. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.95. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

77.19. STACK RESOURCE MARK UNHEALTHY

Set resource's health.

Usage:

```
openstack stack resource mark unhealthy [-h] [--reset]
    <stack> <resource> [reason]
```

Table 77.96. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack the resource belongs to
<code><resource></code>	Name of the resource
<code>reason</code>	Reason for state change

Table 77.97. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--reset</code>	Set the resource as healthy

77.20. STACK RESOURCE METADATA

Show resource metadata

Usage:

```
openstack stack resource metadata [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty]
    <stack> <resource>
```

Table 77.98. Positional arguments

Value	Summary
<stack>	Stack to display (name or id)
<resource>	Name of the resource to show the metadata for

Table 77.99. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.100. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.101. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.102. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.103. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

77.21. STACK RESOURCE SHOW

Display stack resource.

Usage:

```
openstack stack resource show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--with-attr <attribute>]
                             <stack> <resource>
```

Table 77.104. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack to query
<code><resource></code>	Name of resource

Table 77.105. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--with-attr <attribute></code>	Attribute to show, can be specified multiple times

Table 77.106. Output formatter options

Value	Summary
<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 to show multiple columns

Table 77.107. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.108. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 77.109. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.22. STACK RESOURCE SIGNAL

Signal a resource with optional data.

Usage:

```
openstack stack resource signal [-h] [--data <data>]
                               [--data-file <data-file>]
                               <stack> <resource>
```

Table 77.110. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack the resource belongs to
<code><resource></code>	Name of the resource to signal

Table 77.111. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--data <data>	Json data to send to the signal handler
--data-file <data-file>	File containing json data to send to the signal handler

77.23. STACK RESUME

Resume a stack.

Usage:

```

openstack stack resume [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending] [--wait]
                        <stack> [<stack> ...]

```

Table 77.112. Positional arguments

Value	Summary
<stack>	Stack(s) to resume (name or id)

Table 77.113. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for resume to complete

Table 77.114. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 77.115. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.116. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.117. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.24. STACK SHOW

Show stack details.

Usage:

```
openstack stack show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
```

```

[--print-empty] [--no-resolve-outputs]
<stack>

```

Table 77.118. Positional arguments

Value	Summary
<stack>	Stack to display (name or id)

Table 77.119. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--no-resolve-outputs	Do not resolve outputs of the stack.

Table 77.120. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.121. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.122. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.123. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.25. STACK SNAPSHOT CREATE

Create stack snapshot.

Usage:

```
openstack stack snapshot create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--name <name>]
                               <stack>
```

Table 77.124. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack

Table 77.125. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Name of snapshot

Table 77.126. Output formatter options

Value	Summary
<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 to show multiple columns

Table 77.127. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.128. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.129. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.26. STACK SNAPSHOT DELETE

Delete stack snapshot.

Usage:

```
openstack stack snapshot delete [-h] [-y] <stack> <snapshot>
```

Table 77.130. Positional arguments

Value	Summary
<stack>	Name or id of stack
<snapshot>	Id of stack snapshot

Table 77.131. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
-y, --yes	Skip yes/no prompt (assume yes)

77.27. STACK SNAPSHOT LIST

List stack snapshots.

Usage:

```
openstack stack snapshot list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             <stack>
```

Table 77.132. Positional arguments

Value	Summary
<stack>	Name or id of stack containing the snapshots

Table 77.133. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.134. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 77.135. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.136. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.137. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.28. STACK SNAPSHOT RESTORE

Restore stack snapshot

Usage:

```
openstack stack snapshot restore [-h] <stack> <snapshot>
```

Table 77.138. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack containing the snapshot
<code><snapshot></code>	Id of the snapshot to restore

Table 77.139. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

77.29. STACK SNAPSHOT SHOW

Show stack snapshot.

Usage:

```
openstack stack snapshot show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               <stack> <snapshot>
```

Table 77.140. Positional arguments

Value	Summary
<stack>	Name or id of stack containing the snapshot
<snapshot>	Id of the snapshot to show

Table 77.141. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.142. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.143. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.144. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.145. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.30. STACK SUSPEND

Suspend a stack.

Usage:

```
openstack stack suspend [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending] [--wait]
                        <stack> [<stack> ...]
```

Table 77.146. Positional arguments

Value	Summary
<code><stack></code>	Stack(s) to suspend (name or id)

Table 77.147. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--wait</code>	Wait for suspend to complete

Table 77.148. Output formatter options

Value	Summary
-------	---------

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 77.149. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.150. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.151. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.31. STACK TEMPLATE SHOW

Display stack template.

Usage:

```

openstack stack template show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             <stack>

```

Table 77.152. Positional arguments

Value	Summary
<stack>	Name or id of stack to query

Table 77.153. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.154. Output formatter options

Value	Summary
-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 to show multiple columns

Table 77.155. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.156. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 77.157. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

77.32. STACK UPDATE

Update a stack.

Usage:

```
openstack stack update [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [-t <template>]
                        [-s <files-container>] [-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 77.158. Positional arguments

Value	Summary
<code><stack></code>	Name or id of stack to update

Table 77.159. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-t <template>, --template <template></code>	Path to the template
<code>-s <files-container>, --files-container <files-container></code>	Swift files container name. local files other than root template would be ignored. If other files are not found in swift, heat engine would raise an error.

Value	Summary
<code>-e <environment>, --environment <environment></code>	Path to the environment. can be specified multiple times
<code>--pre-update <resource></code>	Name of a resource to set a pre-update hook to. Resources in nested stacks can be set using slash as a separator: ``nested_stack/another/my_resource``. You can use wildcards to match multiple stacks or resources: ``nested_stack/an*/*_resource``. This can be specified multiple times
<code>--timeout <timeout></code>	Stack update timeout in minutes
<code>--rollback <value></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>--dry-run</code>	Do not actually perform the stack update, but show what would be changed
<code>--show-nested</code>	Show nested stacks when performing --dry-run
<code>--parameter <key=value></code>	Parameter values used to create the stack. this can be specified multiple times
<code>--parameter-file <key=file></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>--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 --environment is specified then the existing environment is used. Parameters specified in --parameter will patch over the existing values in the current stack. Parameters omitted will keep the existing values
<code>--clear-parameter <parameter></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 <tag1,tag2...></code>	An updated list of tags to associate with the stack

Value	Summary
<code>--wait</code>	Wait until stack goes to <code>update_complete</code> or <code>UPDATE_FAILED</code>
<code>--converge</code>	Stack update with observe on reality.

Table 77.160. Output formatter options

Value	Summary
<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 to show multiple columns

Table 77.161. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.162. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 77.163. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 78. SUBNET

This chapter describes the commands under the **subnet** command.

78.1. SUBNET CREATE

Create a subnet

Usage:

```
openstack subnet create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--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]
                        [--dns-publish-fixed-ip | --no-dns-publish-fixed-ip]
                        [--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 78.1. Positional arguments

Value	Summary
<name>	New subnet name

Table 78.2. Command 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.

Value	Summary
<code>--subnet-pool <subnet-pool></code>	Subnet pool from which this subnet will obtain a cidr (Name or ID)
<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>--use-default-subnet-pool</code>	Use default subnet pool for <code>--ip-version</code>
<code>--prefix-length <prefix-length></code>	Prefix length for subnet allocation from subnet pool
<code>--subnet-range <subnet-range></code>	Subnet range in cidr notation (required if <code>--subnet-pool</code> is not specified, optional otherwise)
<code>--dhcp</code>	Enable dhcp (default)
<code>--no-dhcp</code>	Disable dhcp
<code>--dns-publish-fixed-ip</code>	Enable publishing fixed ips in dns
<code>--no-dns-publish-fixed-ip</code>	Disable publishing fixed ips in dns (default)
<code>--gateway <gateway></code>	Specify a gateway for the subnet. the three options are: <code><ip-address></code> : 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.: <code>--gateway 192.168.9.1</code> , <code>--gateway auto</code> , <code>--gateway none</code> (default is <i>auto</i>).
<code>--ip-version {4,6}</code>	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.
<code>--ipv6-ra-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}</code>	Ipv6 ra (router advertisement) mode, valid modes: [dhcpv6-stateful, dhcpv6-stateless, slaac]
<code>--ipv6-address-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}</code>	Ipv6 address mode, valid modes: [dhcpv6-stateful, dhcpv6-stateless, slaac]
<code>--network-segment <network-segment></code>	Network segment to associate with this subnet (name or ID)
<code>--network <network></code>	Network this subnet belongs to (name or id)
<code>--description <description></code>	Set subnet description

Value	Summary
<code>--allocation-pool start=<ip-address>,end=<ip-address></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>--dns-nameserver <dns-nameserver></code>	Dns server for this subnet (repeat option to set multiple DNS servers)
<code>--host-route destination=<subnet>,gateway=<ip-address></code>	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)
<code>--service-type <service-type></code>	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)
<code>--tag <tag></code>	Tag to be added to the subnet (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the subnet

Table 78.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 78.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 78.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 78.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

78.2. SUBNET DELETE

Delete subnet(s)

Usage:

```
openstack subnet delete [-h] <subnet> [<subnet> ...]
```

Table 78.7. Positional arguments

Value	Summary
<code><subnet></code>	Subnet(s) to delete (name or id)

Table 78.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

78.3. SUBNET LIST

List subnets

Usage:

```
openstack subnet list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending] [--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 78.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--ip-version <ip-version>	List only subnets of given ip version in output. Allowed values for IP version are 4 and 6.
--dhcp	List subnets which have dhcp enabled
--no-dhcp	List subnets which have dhcp disabled
--service-type <service-type>	List only subnets of a given service type in output e.g.: network:floatingip_agent_gateway. Must be a valid device owner value for a network port (repeat option to list multiple service types)
--project <project>	List only subnets which belong to a given project in output (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.
--network <network>	List only subnets which belong to a given network in output (name or ID)
--gateway <gateway>	List only subnets of given gateway ip in output
--name <name>	List only subnets of given name in output
--subnet-range <subnet-range>	List only subnets of given subnet range (in cidr notation) in output e.g.: --subnet-range 10.10.0.0/16
--tags <tag>[,<tag>,...]	List subnets which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List subnets which have any given tag(s) (comma-separated list of tags)

Value	Summary
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude subnets which have all given tag(s) (comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude subnets which have any given tag(s) (comma-separated list of tags)

Table 78.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 78.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 78.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 78.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

78.4. SUBNET POOL CREATE

Create subnet pool

Usage:

```

openstack subnet pool create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] --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 78.14. Positional arguments

Value	Summary
<name>	Name of the new subnet pool

Table 78.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--pool-prefix <pool-prefix>	Set subnet pool prefixes (in cidr notation) (repeat option to set multiple prefixes)
--default-prefix-length <default-prefix-length>	Set subnet pool default prefix length

Value	Summary
<code>--min-prefix-length <min-prefix-length></code>	Set subnet pool minimum prefix length
<code>--max-prefix-length <max-prefix-length></code>	Set subnet pool maximum prefix length
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--address-scope <address-scope></code>	Set address scope associated with the subnet pool (name or ID), prefixes must be unique across address scopes
<code>--default</code>	Set this as a default subnet pool
<code>--no-default</code>	Set this as a non-default subnet pool
<code>--share</code>	Set this subnet pool as shared
<code>--no-share</code>	Set this subnet pool as not shared
<code>--description <description></code>	Set subnet pool description
<code>--default-quota <num-ip-addresses></code>	Set default per-project quota for this subnet pool as the number of IP addresses that can be allocated from the subnet pool
<code>--tag <tag></code>	Tag to be added to the subnet pool (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the subnet pool

Table 78.16. Output formatter options

Value	Summary
<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 to show multiple columns

Table 78.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 78.18. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 78.19. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

78.5. SUBNET POOL DELETE

Delete subnet pool(s)

Usage:

```
openstack subnet pool delete [-h] <subnet-pool> [<subnet-pool> ...]
```

Table 78.20. Positional arguments

Value	Summary
<subnet-pool>	Subnet pool(s) to delete (name or id)

Table 78.21. Command arguments

Value	Summary
-h, --help	Show this help message and exit

78.6. SUBNET POOL LIST

List subnet pools

Usage:

```

openstack subnet pool list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--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 78.22. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--share	List subnet pools shared between projects
--no-share	List subnet pools not shared between projects
--default	List subnet pools used as the default external subnet pool
--no-default	List subnet pools not used as the default external subnet pool
--project <project>	List subnet pools 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.
--name <name>	List only subnet pools of given name in output
--address-scope <address-scope>	List only subnet pools of given address scope in output (name or ID)

Value	Summary
<code>--tags <tag>[,<tag>,...]</code>	List subnet pools which have all given tag(s) (comma-separated list of tags)
<code>--any-tags <tag>[,<tag>,...]</code>	List subnet pools which have any given tag(s) (comma-separated list of tags)
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude subnet pools which have all given tag(s) (Comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude subnet pools which have any given tag(s) (Comma-separated list of tags)

Table 78.23. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 78.24. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 78.25. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 78.26. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

78.7. 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 78.27. Positional arguments

Value	Summary
<code><subnet-pool></code>	Subnet pool to modify (name or id)

Table 78.28. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Set subnet pool name
<code>--pool-prefix <pool-prefix></code>	Set subnet pool prefixes (in cidr notation) (repeat option to set multiple prefixes)
<code>--default-prefix-length <default-prefix-length></code>	Set subnet pool default prefix length

Value	Summary
<code>--min-prefix-length <min-prefix-length></code>	Set subnet pool minimum prefix length
<code>--max-prefix-length <max-prefix-length></code>	Set subnet pool maximum prefix length
<code>--address-scope <address-scope></code>	Set address scope associated with the subnet pool (name or ID), prefixes must be unique across address scopes
<code>--no-address-scope</code>	Remove address scope associated with the subnet pool
<code>--default</code>	Set this as a default subnet pool
<code>--no-default</code>	Set this as a non-default subnet pool
<code>--description <description></code>	Set subnet pool description
<code>--default-quota <num-ip-addresses></code>	Set default per-project quota for this subnet pool as the number of IP addresses that can be allocated from the subnet pool
<code>--tag <tag></code>	Tag to be added to the subnet pool (repeat option to set multiple tags)
<code>--no-tag</code>	Clear tags associated with the subnet pool. specify both <code>--tag</code> and <code>--no-tag</code> to overwrite current tags

78.8. SUBNET POOL SHOW

Display subnet pool details

Usage:

```
openstack subnet pool show [-h] [-f {json,shell,table,value,yaml}]
                           [-c COLUMN] [--noindent] [--prefix PREFIX]
                           [--max-width <integer>] [--fit-width]
                           [--print-empty]
                           <subnet-pool>
```

Table 78.29. Positional arguments

Value	Summary
<code><subnet-pool></code>	Subnet pool to display (name or id)

Table 78.30. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 78.31. Output formatter options

Value	Summary
-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 to show multiple columns

Table 78.32. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 78.33. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 78.34. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

78.9. SUBNET POOL UNSET

Unset subnet pool properties

Usage:

```
openstack subnet pool unset [-h] [--tag <tag> | --all-tag]
                             <subnet-pool>
```

Table 78.35. Positional arguments

Value	Summary
<subnet-pool>	Subnet pool to modify (name or id)

Table 78.36. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--tag <tag>	Tag to be removed from the subnet pool (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the subnet pool

78.10. SUBNET SET

Set subnet properties

Usage:

```
openstack subnet set [-h] [--name <name>] [--dhcp | --no-dhcp]
                    [--dns-publish-fixed-ip | --no-dns-publish-fixed-ip]
                    [--gateway <gateway>]
                    [--network-segment <network-segment>]
                    [--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 78.37. Positional arguments

Value	Summary
<subnet>	Subnet to modify (name or id)

Table 78.38. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Updated name of the subnet
--dhcp	Enable dhcp
--no-dhcp	Disable dhcp
--dns-publish-fixed-ip	Enable publishing fixed ips in dns
--no-dns-publish-fixed-ip	Disable publishing fixed ips in dns
--gateway <gateway>	Specify a gateway for the subnet. the options are: <ip-address>: Specific IP address to use as the gateway, <i>none</i> : This subnet will not use a gateway, e.g.: --gateway 192.168.9.1, --gateway none.
--network-segment <network-segment>	Network segment to associate with this subnet (name or ID). It is only allowed to set the segment if the current value is None , the network must also have only one segment and only one subnet can exist on the network.
--description <description>	Set subnet description
--tag <tag>	Tag to be added to the subnet (repeat option to set multiple tags)
--no-tag	Clear tags associated with the subnet. specify both -tag and --no-tag to overwrite current tags
--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-allocation-pool	Clear associated allocation-pools from the subnet. Specify both --allocation-pool and --no-allocation-pool to overwrite the current allocation pool information.
--dns-nameserver <dns-nameserver>	Dns server for this subnet (repeat option to set multiple DNS servers)
--no-dns-nameservers	Clear existing information of dns nameservers. specify both --dns-nameserver and --no-dns-nameserver to overwrite the current DNS Nameserver information.

Value	Summary
<code>--host-route destination=<subnet>,gateway=<ip-address></code>	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)
<code>--no-host-route</code>	Clear associated host-routes from the subnet. specify both <code>--host-route</code> and <code>--no-host-route</code> to overwrite the current host route information.
<code>--service-type <service-type></code>	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)

78.11. SUBNET SHOW

Display subnet details

Usage:

```
openstack subnet show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <subnet>
```

Table 78.39. Positional arguments

Value	Summary
<code><subnet></code>	Subnet to display (name or id)

Table 78.40. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 78.41. Output formatter options

Value	Summary
<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 to show multiple columns

Table 78.42. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 78.43. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 78.44. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

78.12. SUBNET UNSET

Unset subnet properties

Usage:

```
openstack subnet unset [-h]
                        [--allocation-pool start=<ip-address>,end=<ip-address>]
                        [--gateway] [--dns-nameserver <dns-nameserver>]
                        [--host-route destination=<subnet>,gateway=<ip-address>]
```

```
[--service-type <service-type>]
[--tag <tag> | --all-tag]
<subnet>
```

Table 78.45. Positional arguments

Value	Summary
<subnet>	Subnet to modify (name or id)

Table 78.46. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--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)
--gateway	Remove gateway ip from this subnet
--dns-nameserver <dns-nameserver>	Dns server to be removed from this subnet (repeat option to unset multiple DNS servers)
--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)
--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)
--all-tag	Clear all tags associated with the subnet

CHAPTER 79. TASK

This chapter describes the commands under the **task** command.

79.1. TASK EXECUTION LIST

List all tasks.

Usage:

```
openstack task execution list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--marker [MARKER]] [--limit [LIMIT]]
                             [--sort_keys [SORT_KEYS]]
                             [--sort_dirs [SORT_DIRS]]
                             [--filter FILTERS] [--oldest]
                             [workflow_execution]
```

Table 79.1. Positional arguments

Value	Summary
workflow_execution	Workflow execution id associated with list of tasks.

Table 79.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Value	Summary
<code>--oldest</code>	Display the executions starting from the oldest entries instead of the newest

Table 79.3. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 79.4. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 79.5. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 79.6. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

79.2. TASK EXECUTION PUBLISHED SHOW

Show task published variables.

Usage:

```
openstack task execution published show [-h] id
```

Table 79.7. Positional arguments

Value	Summary
<code>id</code>	Task id

Table 79.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

79.3. TASK EXECUTION RERUN

Rerun an existing task.

Usage:

```
openstack task execution rerun [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--resume] [-e ENV]
                               id
```

Table 79.9. Positional arguments

Value	Summary
<code>id</code>	Task identifier

Table 79.10. Command 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 79.11. Output formatter options

Value	Summary
-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 to show multiple columns

Table 79.12. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 79.13. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 79.14. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

79.4. TASK EXECUTION RESULT SHOW

Show task output data.

Usage:

```
openstack task execution result show [-h] id
```

Table 79.15. Positional arguments

Value	Summary
id	Task id

Table 79.16. Command arguments

Value	Summary
-h, --help	Show this help message and exit

79.5. TASK EXECUTION SHOW

Show specific task.

Usage:

```
openstack task execution show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             task
```

Table 79.17. Positional arguments

Value	Summary
task	Task identifier

Table 79.18. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 79.19. Output formatter options

Value	Summary
<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 to show multiple columns

Table 79.20. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 79.21. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 79.22. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 80. TLD

This chapter describes the commands under the **tld** command.

80.1. TLD CREATE

Create new tld

Usage:

```
openstack tld create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] --name NAME
                    [--description DESCRIPTION] [--all-projects]
                    [--sudo-project-id SUDO_PROJECT_ID]
```

Table 80.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tld name
--description DESCRIPTION	Description
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 80.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 80.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 80.4. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 80.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

80.2. TLD DELETE

Delete tld

Usage:

```
openstack tld delete [-h] [--all-projects]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```

Table 80.6. Positional arguments

Value	Summary
<code>id</code>	Tld name or id

Table 80.7. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

80.3. TLD LIST

List tlds

Usage:

```
openstack tld list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                  [--quote {all,minimal,none,nonnumeric}] [--noindent]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--sort-column SORT_COLUMN]
                  [--sort-ascending | --sort-descending] [--name NAME]
                  [--description DESCRIPTION] [--all-projects]
                  [--sudo-project-id SUDO_PROJECT_ID]
```

Table 80.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tld name
--description DESCRIPTION	Tld description
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 80.9. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 80.10. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 80.11. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 80.12. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

80.4. TLD SET

Set tld properties

Usage:

```
openstack tld set [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                 [--noindent] [--prefix PREFIX]
                 [--max-width <integer>] [--fit-width] [--print-empty]
                 [--name NAME]
                 [--description DESCRIPTION | --no-description]
                 [--all-projects] [--sudo-project-id SUDO_PROJECT_ID]
                 id
```

Table 80.13. Positional arguments

Value	Summary
id	Tld name or id

Table 80.14. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name NAME</code>	Tld name
<code>--description DESCRIPTION</code>	Description
<code>--no-description--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 80.15. Output formatter options

Value	Summary
<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 to show multiple columns

Table 80.16. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 80.17. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 80.18. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

80.5. TLD SHOW

Show tld details

Usage:

```

openstack tld show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                  [--noindent] [--prefix PREFIX]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--all-projects]
                  [--sudo-project-id SUDO_PROJECT_ID]
                  id

```

Table 80.19. Positional arguments

Value	Summary
<code>id</code>	Tld name or id

Table 80.20. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 80.21. Output formatter options

Value	Summary
<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 to show multiple columns

Table 80.22. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 80.23. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 80.24. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 81. TOKEN

This chapter describes the commands under the **token** command.

81.1. TOKEN ISSUE

Issue new token

Usage:

```
openstack token issue [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
```

Table 81.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 81.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 81.3. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 81.4. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 81.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

81.2. TOKEN REVOKE

Revoke existing token

Usage:

```
openstack token revoke [-h] <token>
```

Table 81.6. Positional arguments

Value	Summary
<code><token></code>	Token to be deleted

Table 81.7. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

CHAPTER 82. TRIPLEO

This chapter describes the commands under the **tripleo** command.

82.1. TRIPLEO CONFIG GENERATE ANSIBLE

Generate the default ansible.cfg for deployments.

Usage:

```
openstack tripleo config generate ansible
                                [--deployment-user DEPLOYMENT_USER]
                                [--output-dir OUTPUT_DIR]
```

Table 82.1. Command arguments

Value	Summary
--deployment-user DEPLOYMENT_USER	User who executes the tripleo config generate command. Defaults to stack.
--output-dir OUTPUT_DIR	Directory to output ansible.cfg and ansible.log files.

82.2. TRIPLEO CONTAINER IMAGE BUILD

Build tripleo container images with tripleo-ansible.

Usage:

```
openstack tripleo container image build [-h] [--authfile <authfile>]
                                         [--base <base-image>]
                                         [--config-file <config-file>]
                                         [--config-path <config-path>]
                                         [--distro <distro>]
                                         [--tcib-extras <key=val>]
                                         [--exclude <container-name>]
                                         [--extra-config <extra-config>]
                                         [--namespace <registry-namespace>]
                                         [--registry <registry-url>]
                                         [--skip-build]
                                         [--tag <image-tag>]
                                         [--prefix <image-prefix>]
                                         [--push] [--label <label-data>]
                                         [--volume <volume-path>]
                                         [--repo-dir <repo-dir>]
                                         [--work-dir <work-directory>]
                                         [--rhel-modules <rhel-modules>]
                                         [--build-timeout <build timeout in seconds>]
```

Table 82.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--authfile <authfile>	Path of the authentication file. use REGISTRY_AUTH_FILE environment variable to override. (default: /root/containers/auth.json)
--base <base-image>	Base image name, with optional version. can be <i>centos:8</i> , base name image will be <i>centos</i> but <i>centos:8</i> will be pulled to build the base image. (default: ubi8)
--config-file <config-file>	Yaml config file specifying the images to build. (default: tripleo_containers.yaml)
--config-path <config-path>	Base configuration path. this is the base path for all container-image files. The defined containers must reside within a <i>tcib</i> folder that is in this path. If this option is set, the default path for <config-file> will be modified. (default: /usr/share/tripleo-common/container-images)
--distro <distro>	Distro name, if undefined the system will build using the host distro. (default: centos)
--tcib-extras <key=val>	Tcib extra variables you want to pass. they can be later used within TCIB files as conditionals. Can be passed multiple times (default: None)
--exclude <container-name>	Name of one container to match against the list of containers to be built to skip. Should be specified multiple times when skipping multiple containers. (default: [])
--extra-config <extra-config>	Apply additional options from a given configuration YAML file. This will apply to all containers built. (default: None)
--namespace <registry-namespace>	Container registry namespace (default: tripleomaster)
--registry <registry-url>	Container registry url (default: localhost)
--skip-build	Skip or not the build of the images (default: false)
--tag <image-tag>	Image tag (default: latest)
--prefix <image-prefix>	Image prefix. (default: openstack)

Value	Summary
<code>--push</code>	Enable image push to a given registry. (default: False)
<code>--label <label-data></code>	Add labels to the containers. this option can be specified multiple times. Each label is a key=value pair.
<code>--volume <volume-path></code>	Container bind mount used when building the image. Should be specified multiple times if multiple volumes.(default: <code>[/etc/pki/rpm-gpg/etc/pki/rpm-gpg:z]</code>)
<code>--repo-dir <repo-dir></code>	Define a custom directory containing the repo files. This is useful when building containers from a different OS release.
<code>--work-dir <work-directory></code>	Tripleo container builds directory, storing configs and logs for each image and its dependencies. (default: <code>/tmp/container-builds</code>)
<code>--rhel-modules <rhel-modules></code>	A comma separated list of rhel modules to enable with their version. Example: <code>mysql:5.7,python:2.7.5</code> .
<code>--build-timeout <build timeout in seconds></code>	Build timeout in seconds.

82.3. TRIPLEO CONTAINER IMAGE DELETE

Delete specified image from registry.

Usage:

```

openstack tripleo container image delete [-h]
                                     [--registry-url <registry url>]
                                     [--username <username>]
                                     [--password <password>] [-y]
                                     <image to delete>

```

Table 82.3. Positional arguments

Value	Summary
<code><image to delete></code>	Full url of image to be deleted in the form <code><fqdn>:<port>/path/to/image</code>

Table 82.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--registry-url <registry url>	Url of registry images are to be listed from in the form <fqdn>:<port>.
--username <username>	Username for image registry.
--password <password>	Password for image registry.
-y, --yes	Skip yes/no prompt (assume yes).

82.4. TRIPLEO CONTAINER IMAGE HOTFIX

Hotfix tripleo container images with tripleo-ansible.

Usage:

```
openstack tripleo container image hotfix [-h] --image <images>
                                         --rpms-path <rpms-path>
                                         [--tag <image-tag>]
```

Table 82.5. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--image <images>	Fully qualified reference to the source image to be modified. Can be specified multiple times (one per image) (default: []).
--rpms-path <rpms-path>	Path containing rpms to install (default: none).
--tag <image-tag>	Image hotfix tag (default: latest)

82.5. TRIPLEO CONTAINER IMAGE LIST

List images discovered in registry.

Usage:

```
openstack tripleo container image list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--registry-url <registry url>]
[--username <username>]
[--password <password>]

```

Table 82.6. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--registry-url <registry url>	Url of registry images are to be listed from in the form <fqdn>:<port>.
--username <username>	Username for image registry.
--password <password>	Password for image registry.

Table 82.7. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 82.8. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 82.9. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 82.10. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

82.6. TRIPLEO CONTAINER IMAGE PREPARE DEFAULT

Generate a default ContainerImagePrepare parameter.

Usage:

```
openstack tripleo container image prepare default [-h]
                                                    [--output-env-file <file path>]
                                                    [--local-push-destination]
                                                    [--enable-registry-login]
```

Table 82.11. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--output-env-file <file path>	File to write environment file containing default ContainerImagePrepare value.
--local-push-destination	Include a push_destination to trigger upload to a local registry.
--enable-registry-login	Use this flag to enable the flag to have systems attempt to login to a remote registry prior to pulling their containers. This flag should be used when --local-push-destination is NOT used and the target systems will have network connectivity to the remote registries. Do not use this for an overcloud that may not have network connectivity to a remote registry.

82.7. TRIPLEO CONTAINER IMAGE PREPARE

Prepare and upload containers from a single command.

Usage:

```
openstack tripleo container image prepare [-h]
                                         [--environment-file <file path>]
                                         [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
                                         [--roles-file ROLES_FILE]
                                         [--output-env-file <file path>]
                                         [--dry-run]
                                         [--cleanup <full, partial, none>]
                                         [--log-file LOG_FILE]
```

Table 82.12. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--environment-file <file path>, -e <file path>	Environment file containing the containerimageprepare parameter which specifies all prepare actions. Also, 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.)
--environment-directory <HEAT ENVIRONMENT DIRECTORY>	Environment file directories that are automatically added to the environment. Can be specified more than once. Files in directories are loaded in ascending sort order.
--roles-file ROLES_FILE, -r ROLES_FILE	Roles file, overrides the default roles_data.yaml in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
--output-env-file <file path>	File to write heat environment file which specifies all image parameters. Any existing file will be overwritten.
--dry-run	Do not perform any pull, modify, or push operations. The environment file will still be populated as if these operations were performed.
--cleanup <full, partial, none>	Cleanup behavior for local images left after upload. The default <i>full</i> will attempt to delete all local images. <i>partial</i> will leave images required for deployment on this host. <i>none</i> will do no cleanup.

Value	Summary
<code>--log-file LOG_FILE</code>	Log file to be used for python logging. by default it would be logged to <code>\$HOME/container_image_prepare.log</code> .

82.8. TRIPLEO CONTAINER IMAGE PUSH

Push specified image to registry.

Usage:

```

openstack tripleo container image push [-h] [--local]
                                     [--registry-url <registry url>]
                                     [--append-tag APPEND_TAG]
                                     [--username <username>]
                                     [--password <password>]
                                     [--source-username <source_username>]
                                     [--source-password <source_password>]
                                     [--dry-run] [--multi-arch]
                                     [--cleanup]
                                     <image to push>

```

Table 82.13. Positional arguments

Value	Summary
<code><image to push></code>	Container image to upload. should be in the form of <code><registry>/<namespace>/<name>:<tag></code> . If tag is not provided, then latest will be used.

Table 82.14. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--local</code>	Use this flag if the container image is already on the current system and does not need to be pulled from a remote registry.
<code>--registry-url <registry url></code>	Url of the destination registry in the form <code><fqdn>:<port></code> .
<code>--append-tag APPEND_TAG</code>	Tag to append to the existing tag when pushing the container.

Value	Summary
--username <username>	Username for the destination image registry.
--password <password>	Password for the destination image registry.
--source-username <source_username>	Username for the source image registry.
--source-password <source_password>	Password for the source image registry.
--dry-run	Perform a dry run upload. the upload action is not performed, but the authentication process is attempted.
--multi-arch	Enable multi arch support for the upload.
--cleanup	Remove local copy of the image after uploading

82.9. TRIPLEO CONTAINER IMAGE SHOW

Show image selected from the registry.

Usage:

```

openstack tripleo container image show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--username <username>]
                                     [--password <password>]
                                     <image to inspect>

```

Table 82.15. Positional arguments

Value	Summary
<image to inspect>	Image to be inspected, for example: docker.io/library/centos:7 or docker://docker.io/library/centos:7

Table 82.16. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--username <username></code>	Username for image registry.
<code>--password <password></code>	Password for image registry.

Table 82.17. Output formatter options

Value	Summary
<code>-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to json
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated to show multiple columns

Table 82.18. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 82.19. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 82.20. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

82.10. TRIPLEO DEPLOY

Deploy containerized Undercloud

Usage:

```

openstack tripleo deploy [--templates [TEMPLATES]] [--standalone]
                        [--upgrade] [-y] [--stack STACK]
                        [--output-dir OUTPUT_DIR] [--output-only]
                        [--standalone-role STANDALONE_ROLE]
                        [-t <TIMEOUT>] [-e <HEAT ENVIRONMENT FILE>]
                        [--roles-file ROLES_FILE]
                        [--networks-file NETWORKS_FILE]
                        [--plan-environment-file PLAN_ENVIRONMENT_FILE]
                        [--heat-api-port <HEAT_API_PORT>]
                        [--heat-user <HEAT_USER>]
                        [--deployment-user DEPLOYMENT_USER]
                        [--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER]
                        [--heat-container-image <HEAT_CONTAINER_IMAGE>]
                        [--heat-native [HEAT_NATIVE]]
                        [--local-ip <LOCAL_IP>]
                        [--control-virtual-ip <CONTROL_VIRTUAL_IP>]
                        [--public-virtual-ip <PUBLIC_VIRTUAL_IP>]
                        [--local-domain <LOCAL_DOMAIN>] [--cleanup]
                        [--hieradata-override [HIERADATA_OVERRIDE]]
                        [--keep-running] [--inflight-validations]
                        [--transport TRANSPORT]
                        [--ansible-forks ANSIBLE_FORKS]
                        [--disable-container-prepare]
                        [--reproduce-command]
                        [--force-stack-update | --force-stack-create]

```

Table 82.21. Command arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--standalone	Deprecated. the --standalone argument is now deprecated. Standalone deployments can now be run without passing --standalone.
--upgrade	Upgrade an existing deployment.
-y, --yes	Skip yes/no prompt (assume yes).
--stack STACK	Name for the ephemeral (one-time create and forget) heat stack.
--output-dir OUTPUT_DIR	Directory to output state, processed heat templates, ansible deployment files. Defaults to ~/tripleo-deploy/<stack>

Value	Summary
<code>--output-only</code>	Do not execute the ansible playbooks. by default the playbooks are saved to the output-dir and then executed.
<code>--standalone-role STANDALONE_ROLE</code>	The role to use for standalone configuration when populating the deployment actions.
<code>-t <TIMEOUT>, --timeout <TIMEOUT></code>	Deployment timeout in minutes.
<code>-e <HEAT ENVIRONMENT FILE>, --environment-file <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default roles_data_undercloud.yaml in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Roles file, overrides the default /dev/null in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Deprecated: plan environment file, not supported
<code>--heat-api-port <HEAT_API_PORT></code>	Heat api port to use for the installers private heat API instance. Optional. Default: 8006.)
<code>--heat-user <HEAT_USER></code>	User to execute the non-privileged heat-all process. Defaults to the value of <code>--deployment-user</code> .
<code>--deployment-user DEPLOYMENT_USER</code>	User who executes the tripleo deploy command. defaults to <code>\$SUDO_USER</code> . If <code>\$SUDO_USER</code> is unset it defaults to stack.
<code>--deployment-python-interpretor DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. If not specified the python version of the openstackclient will be used. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
<code>--heat-container-image <HEAT_CONTAINER_IMAGE></code>	The container image to use when launching the heat-all process. Defaults to: registry.redhat.io/rhosp-rhel9/openstack-heat-all:17.0

Value	Summary
<code>--heat-native [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>--local-ip <LOCAL_IP></code>	Local ip/cidr for undercloud traffic. required.
<code>--control-virtual-ip <CONTROL_VIRTUAL_IP></code>	Control plane vip. this allows the undercloud installer to configure a custom VIP on the control plane.
<code>--public-virtual-ip <PUBLIC_VIRTUAL_IP></code>	Public nw vip. this allows the undercloud installer to configure a custom VIP on the public (external) NW.
<code>--local-domain <LOCAL_DOMAIN></code>	Local domain for standalone cloud and its api endpoints
<code>--cleanup</code>	Cleanup temporary files. using this flag will remove the temporary files used during deployment in after the command is run.
<code>--hieradata-override [HIERADATA_OVERRIDE]</code>	Path to hieradata override file. when it points to a heat env file, it is passed in t-h-t via <code>--environment-file</code> . When the file contains legacy instack data, it is wrapped with <code><role>ExtraConfig</code> and also passed in for t-h-t as a temp file created in <code>--output-dir</code> . Note, instack hiera data may be not t-h-t compatible and will highly likely require a manual revision.
<code>--keep-running</code>	Keep the ephemeral heat running after the stack operation is complete. This is for debugging purposes only. The ephemeral Heat can be used by <code>openstackclient</code> with: <code>OS_AUTH_TYPE=none OS_ENDPOINT=http://127.0.0.1:8006/v1/admin openstack stack list</code> where 8006 is the port specified by <code>--heat-api-port</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--transport TRANSPORT</code>	Transport mechanism to use for ansible. use "ssh" for multinode deployments. Use "local" for standalone deployments. Defaults to "local".
<code>--ansible-forks ANSIBLE_FORKS</code>	The number of ansible forks to use for the config-download ansible-playbook command.

Value	Summary
<code>--disable-container-prepare</code>	Disable the container preparation actions to prevent container tags from being updated and new containers from being fetched. If you skip this but do not have the container parameters configured, the deployment action may fail.
<code>--reproduce-command</code>	Create a reproducer command with ansible commandline and all environments variables.
<code>--force-stack-update</code>	Do a virtual update of the ephemeral heat stack (it cannot take real updates). New or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=UPDATE</code> .
<code>--force-stack-create</code>	Do a virtual create of the ephemeral heat stack. new or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=CREATE</code> .

82.11. TRIPLEO LAUNCH HEAT

Launch ephemeral Heat process.

Usage:

```
openstack tripleo launch heat [--heat-api-port <HEAT_API_PORT>]
                               [--heat-user <HEAT_USER>]
                               [--heat-container-image <HEAT_CONTAINER_IMAGE>]
                               [--heat-container-api-image <HEAT_CONTAINER_API_IMAGE>]
                               [--heat-container-engine-image <HEAT_CONTAINER_ENGINE_IMAGE>]
                               [--kill] [--heat-dir HEAT_DIR]
                               [--rm-heat] [--skip-heat-pull]
                               [--restore-db]
                               [--heat-native | --heat-type {native,container,pod}]
```

Table 82.22. Command arguments

Value	Summary
<code>--heat-api-port <HEAT_API_PORT></code>	Heat api port to use for the installers private heat API instance. Optional. (default: 8006)
<code>--heat-user <HEAT_USER></code>	User to execute the non-privileged heat-all process. Defaults to current user. If the configuration files <code>/etc/heat/heat.conf</code> or <code>/usr/share/heat/heat-dist.conf</code> exist, the user must have read access to those files. This option is ignored when using <code>--heat-type=container</code> or <code>--heat-type=pod</code> (default: root)

Value	Summary
<code>--heat-container-image</code> <HEAT_CONTAINER_IMAGE>	The container image to use when launching the heat-all process. Defaults to: localhost/tripleo/openstack-heat-all:ephemeral (default: localhost/tripleo/openstack-heat-all:ephemeral)
<code>--heat-container-api-image</code> <HEAT_CONTAINER_API_IMAGE>	The container image to use when launching the heat-api process. Only used when <code>--heat-type=pod</code> . Defaults to: localhost/tripleo/openstack-heat-api:ephemeral (default: localhost/tripleo/openstack-heat-api:ephemeral)
<code>--heat-container-engine-image</code> <HEAT_CONTAINER_ENGINE_IMAGE>	The container image to use when launching the heat-engine process. Only used when <code>--heat-type=pod</code> . Defaults to: localhost/tripleo/openstack-heat-engine:ephemeral (default: localhost/tripleo/openstack-heat-engine:ephemeral)
<code>--kill, -k</code>	Kill the running heat process (if found). (default: False)
<code>--heat-dir HEAT_DIR</code>	Directory to use for file storage and logs of the running heat process, in the current directory. Can be set to an already existing directory to reuse the environment from a previous Heat process. (default: /root/overcloud-deploy/overcloud/heat-launcher)
<code>--rm-heat</code>	If specified and <code>--heat-type</code> is container or pod any existing container or pod of a previous ephemeral Heat process will be deleted first. Ignored if <code>--heat-type</code> is native or <code>--kill</code> . (default: False)
<code>--skip-heat-pull</code>	When <code>--heat-type</code> is pod or container, assume the container image has already been pulled (default: False)
<code>--restore-db</code>	Restore a database dump if it exists within the directory specified by <code>--heat-dir</code> (default: False)
<code>--heat-native</code>	(deprecated): 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. Conflicts with <code>--heat-type</code> , which deprecates <code>--heat-native</code> . (default: False)

Value	Summary
<code>--heat-type {native,container,pod}</code>	Type of ephemeral heat process to launch. one of: native: Execute heat-all directly on the host. container: Execute heat-all in a container. pod: Execute separate heat api and engine processes in a podman pod. (default: pod)

82.12. TRIPLEO UPGRADE

Upgrade TripleO

Usage:

```
openstack tripleo upgrade [--templates [TEMPLATES]] [--standalone]
    [--upgrade] [-y] [--stack STACK]
    [--output-dir OUTPUT_DIR] [--output-only]
    [--standalone-role STANDALONE_ROLE]
    [-t <TIMEOUT>] [-e <HEAT ENVIRONMENT FILE>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--heat-api-port <HEAT_API_PORT>]
    [--heat-user <HEAT_USER>]
    [--deployment-user DEPLOYMENT_USER]
    [--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER]
    [--heat-container-image <HEAT_CONTAINER_IMAGE>]
    [--heat-native [HEAT_NATIVE]]
    [--local-ip <LOCAL_IP>]
    [--control-virtual-ip <CONTROL_VIRTUAL_IP>]
    [--public-virtual-ip <PUBLIC_VIRTUAL_IP>]
    [--local-domain <LOCAL_DOMAIN>] [--cleanup]
    [--hieradata-override [HIERADATA_OVERRIDE]]
    [--keep-running] [--inflight-validations]
    [--transport TRANSPORT]
    [--ansible-forks ANSIBLE_FORKS]
    [--disable-container-prepare]
    [--reproduce-command]
    [--force-stack-update | --force-stack-create]
```

Table 82.23. Command arguments

Value	Summary
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy
<code>--standalone</code>	Deprecated. the <code>--standalone</code> argument is now deprecated. Standalone deployments can now be run without passing <code>--standalone</code> .

Value	Summary
<code>--upgrade</code>	Upgrade an existing deployment.
<code>-y, --yes</code>	Skip yes/no prompt (assume yes).
<code>--stack STACK</code>	Name for the ephemeral (one-time create and forget) heat stack.
<code>--output-dir OUTPUT_DIR</code>	Directory to output state, processed heat templates, ansible deployment files. Defaults to <code>~/tripleo-deploy/<stack></code>
<code>--output-only</code>	Do not execute the ansible playbooks. by default the playbooks are saved to the output-dir and then executed.
<code>--standalone-role STANDALONE_ROLE</code>	The role to use for standalone configuration when populating the deployment actions.
<code>-t <TIMEOUT>, --timeout <TIMEOUT></code>	Deployment timeout in minutes.
<code>-e <HEAT ENVIRONMENT FILE>, --environment-file <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data_undercloud.yaml</code> in the <code>t-h-t</code> templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Roles file, overrides the default <code>/dev/null</code> in the <code>t-h-t</code> templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Deprecated: plan environment file, not supported
<code>--heat-api-port <HEAT_API_PORT></code>	Heat api port to use for the installers private heat API instance. Optional. Default: 8006.)
<code>--heat-user <HEAT_USER></code>	User to execute the non-privileged heat-all process. Defaults to the value of <code>--deployment-user</code> .
<code>--deployment-user DEPLOYMENT_USER</code>	User who executes the tripleo deploy command. defaults to <code>\$SUDO_USER</code> . If <code>\$SUDO_USER</code> is unset it defaults to stack.

Value	Summary
--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER	The path to python interpreter to use for the deployment actions. If not specified the python version of the openstackclient will be used. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
--heat-container-image <HEAT_CONTAINER_IMAGE>	The container image to use when launching the heat-all process. Defaults to: registry.redhat.io/rhosp-rhel9/openstack-heat-all:17.0
--heat-native [HEAT_NATIVE]	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.
--local-ip <LOCAL_IP>	Local ip/cidr for undercloud traffic. required.
--control-virtual-ip <CONTROL_VIRTUAL_IP>	Control plane vip. this allows the undercloud installer to configure a custom VIP on the control plane.
--public-virtual-ip <PUBLIC_VIRTUAL_IP>	Public nw vip. this allows the undercloud installer to configure a custom VIP on the public (external) NW.
--local-domain <LOCAL_DOMAIN>	Local domain for standalone cloud and its api endpoints
--cleanup	Cleanup temporary files. using this flag will remove the temporary files used during deployment in after the command is run.
--hieradata-override [HIERADATA_OVERRIDE]	Path to hieradata override file. when it points to a heat env file, it is passed in t-h-t via --environment-file. When the file contains legacy instack data, it is wrapped with <role>ExtraConfig and also passed in for t-h-t as a temp file created in --output-dir. Note, instack hiera data may be not t-h-t compatible and will highly likely require a manual revision.
--keep-running	Keep the ephemeral heat running after the stack operation is complete. This is for debugging purposes only. The ephemeral Heat can be used by openstackclient with: OS_AUTH_TYPE=none OS_ENDPOINT=http://127.0.0.1:8006/v1/admin openstack stack list where 8006 is the port specified by --heat-api-port.

Value	Summary
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--transport TRANSPORT</code>	Transport mechanism to use for ansible. use "ssh" for multinode deployments. Use "local" for standalone deployments. Defaults to "local".
<code>--ansible-forks ANSIBLE_FORKS</code>	The number of ansible forks to use for the config-download ansible-playbook command.
<code>--disable-container-prepare</code>	Disable the container preparation actions to prevent container tags from being updated and new containers from being fetched. If you skip this but do not have the container parameters configured, the deployment action may fail.
<code>--reproduce-command</code>	Create a reproducer command with ansible commandline and all environments variables.
<code>--force-stack-update</code>	Do a virtual update of the ephemeral heat stack (it cannot take real updates). New or failed deployments always have the stack_action=CREATE. This option enforces stack_action=UPDATE.
<code>--force-stack-create</code>	Do a virtual create of the ephemeral heat stack. new or failed deployments always have the stack_action=CREATE. This option enforces stack_action=CREATE.

82.13. TRIPLEO VALIDATOR GROUP INFO

[DEPRECATED]: Display detailed information about a Group. Please use "validation show group --help" instead.

Usage:

```

openstack tripleo validator group info [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--sort-ascending]

```

```

[--sort-descending]
[--config CONFIG]
[--validation-dir VALIDATION_DIR]

```

Table 82.24. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table (default: table)
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated to show multiple columns
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric (default: nonnumeric)
--noindent	Whether to disable indenting the json
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order
--config CONFIG	Config file path for validation framework. (default: /etc/validation.cfg)
--validation-dir VALIDATION_DIR	Path where validation playbooks are located. (default: /usr/share/ansible/validation-playbooks)

82.14. TRIPLEO VALIDATOR INIT

Create the paths and infrastructure to create a community validation

Usage:

```

openstack tripleo validator init [-h] [--config CONFIG]
                                [--validation-dir VALIDATION_DIR]
                                [--ansible-base-dir ANSIBLE_BASE_DIR]
                                <validation_name>

```

Table 82.25. Positional arguments

Value	Summary
<validation_name>	The name of the community validation: Validation name is limited to contain only lowercase alphanumeric characters, plus _ or - and starts with an alpha character. Ex: my-val, my_val2. This will generate an Ansible role and a playbook in /root/community-validations. Note that the structure of this directory will be created at the first use.

Table 82.26. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--config CONFIG	Config file path for validation framework. (default: /etc/validation.cfg)
--validation-dir VALIDATION_DIR	Path where the validation playbooks is located. (default: /usr/share/ansible/validation-playbooks)
--ansible-base-dir ANSIBLE_BASE_DIR	Path where the ansible roles, library and plugins are located. (default: /usr/share/ansible)

82.15. TRIPLEO VALIDATOR LIST

[DEPRECATED]: List the available validations. Please use "validation list --help" instead.

Usage:

```

openstack tripleo validator list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending] [--sort-descending]
                                [--config CONFIG]
                                [--group <group_id>[,<group_id>,...]]
                                [--category <category_id>[,<category_id>,...]]
                                [--product <product_id>[,<product_id>,...]]
                                [--validation-dir VALIDATION_DIR]

```


Table 82.27. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table (default: table)
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated to show multiple columns
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric (default: nonnumeric)
--noindent	Whether to disable indenting the json
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order
--config CONFIG	Config file path for validation framework. (default: /etc/validation.cfg)
--group <group_id>[,<group_id>,...], -g <group_id>[,<group_id>,...]	List specific group of validations, if more than one group is required separate the group names with commas.
--category <category_id>[,<category_id>,...]	List specific category of validations, if more than one category is required separate the category names with commas.
--product <product_id>[,<product_id>,...]	List specific product of validations, if more than one product is required separate the product names with commas.

Value	Summary
<code>--validation-dir VALIDATION_DIR</code>	Path where validation playbooks are located. (default: <code>/usr/share/ansible/validation-playbooks</code>)

82.16. TRIPLEO VALIDATOR RUN

[DEPRECATED]: Run the available validations. Please use "validation run --help" instead.

Usage:

```

openstack tripleo validator run [-h] [--config CONFIG]
                                [--limit <host1>[,<host2>,<host3>,...]]
                                [--ssh-user SSH_USER]
                                [--validation-dir VALIDATION_DIR]
                                [--ansible-base-dir ANSIBLE_BASE_DIR]
                                [--validation-log-dir VALIDATION_LOG_DIR]
                                [--inventory INVENTORY]
                                [--output-log OUTPUT_LOG]
                                [--junitxml JUNITXML]
                                [--python-interpretter --python-interpretter
<PYTHON_INTERPRETER_PATH>]
                                [--extra-env-vars key1=<val1> [--extra-env-vars key2=<val2>]]
                                [--skiplist SKIP_LIST]
                                [--extra-vars key1=<val1> [--extra-vars key2=<val2>]
| --extra-vars-file
/tmp/my_vars_file.[json|yaml]]
                                (--validation <validation_id>[,<validation_id>,...] | --group <group_id>[,<group_id>,...] | --category <category_id>[,<category_id>,...] | --product <product_id>[,<product_id>,...])

```

Table 82.28. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--config CONFIG</code>	Config file path for validation framework. (default: <code>/etc/validation.cfg</code>)
<code>--limit <host1>[,<host2>,<host3>,...]</code>	A string that identifies a single node or comma-separated list of nodes to be validated in this run invocation.
<code>--ssh-user SSH_USER</code>	Ssh user name for the ansible ssh connection. (default: <code>root</code>)
<code>--validation-dir VALIDATION_DIR</code>	Path where validation playbooks are located. (default: <code>/usr/share/ansible/validation-playbooks</code>)

Value	Summary
<code>--ansible-base-dir ANSIBLE_BASE_DIR</code>	Path where the ansible roles, library and plugins are located. (default: /usr/share/ansible)
<code>--validation-log-dir VALIDATION_LOG_DIR</code>	Path where the log files and artifacts are located. (default: /var/log/validations)
<code>--inventory INVENTORY, -i INVENTORY</code>	Path of the ansible inventory. (default: localhost)
<code>--output-log OUTPUT_LOG</code>	Path where the run result will be stored.
<code>--junitxml JUNITXML</code>	Path where the run result in junitxml format will be stored.
<code>--python-interpreter --python-interpreter <PYTHON_INTERPRETER_PATH></code>	Python interpreter for ansible execution. (default: /usr/bin/python3)
<code>--extra-env-vars key1=<val1> [--extra-env-vars key2=<val2>]</code>	Add extra environment variables you may need to provide to your Ansible execution as KEY=VALUE pairs. Note that if you pass the same KEY multiple times, the last given VALUE for that same KEY will override the other(s).
<code>--skiplist SKIP_LIST</code>	Path where the skip list is stored. an example of the skiplist format could be found at the root of the validations-libs repository.
<code>--extra-vars key1=<val1> [--extra-vars key2=<val2>]</code>	Add ansible extra variables to the validation(s) execution as KEY=VALUE pair(s). Note that if you pass the same KEY multiple times, the last given VALUE for that same KEY will override the other(s).
<code>--extra-vars-file /tmp/my_vars_file.[json yaml]</code>	Absolute or relative path to a json/yaml file containing extra variable(s) to pass to one or multiple validation(s) execution.
<code>--validation <validation_id>[,<validation_id>,...]</code>	Run specific validations, if more than one validation is required separate the names with commas.
<code>--group <group_id>[,<group_id>,...], -g <group_id>[,<group_id>,...]</code>	Run specific validations by group, if more than one group is required separate the group names with commas.
<code>--category <category_id>[,<category_id>,...]</code>	Run specific validations by category, if more than one category is required separate the category names with commas.

Value	Summary
<code>--product <product_id>[,<product_id>,...]</code>	Run specific validations by product, if more than one product is required separate the product names with commas.

82.17. TRIPLEO VALIDATOR SHOW HISTORY

[DEPRECATED]: Display Validations execution history. Please use "validation history list --help" instead.

Usage:

```

openstack tripleo validator show history [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending]
                                     [--sort-descending]
                                     [--config CONFIG]
                                     [--validation <validation_id>]
                                     [--limit HISTORY_LIMIT]
                                     [--validation-log-dir VALIDATION_LOG_DIR]

```

Table 82.29. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table (default: table)
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated to show multiple columns
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric (default: nonnumeric)
<code>--noindent</code>	Whether to disable indenting the json
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order
--config CONFIG	Config file path for validation framework. (default: /etc/validation.cfg)
--validation <validation_id>	Display execution history for a validation
--limit HISTORY_LIMIT	Display <n> most recent runs of the selected <validation>. <n> must be > 0 The default display limit is set to 15.
--validation-log-dir VALIDATION_LOG_DIR	Path where the log files and artifacts are located. (default: /var/log/validations)

82.18. TRIPLEO VALIDATOR SHOW PARAMETER

[DEPRECATED]: Display Validations Parameters. Please use "validation show parameter --help" instead.

Usage:

```

openstack tripleo validator show parameter [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--config CONFIG]
                                         [--validation-dir VALIDATION_DIR]
                                         [--validation <validation_id>[,<validation_id>,...]]
                                         | --group
                                         <group_id>[,<group_id>,...]
                                         | --category
                                         <category_id>[,<category_id>,...]
                                         | --product

```

```
<product_id>[,<product_id>,...]]
[--download DOWNLOAD]
[--format-output <format_output>]
```

Table 82.30. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--config CONFIG	Config file path for validation framework.
--validation-dir VALIDATION_DIR	Path where validation playbooks are located.
--validation <validation_id>[,<validation_id>,...]	List specific validations, if more than one validation is required separate the names with commas.
--group <group_id>[,<group_id>,...], -g <group_id>[,<group_id>,...]	List specific group of validations, if more than one group is required separate the group names with commas.
--category <category_id>[,<category_id>,...]	List specific category of validations, if more than one category is required separate the category names with commas.
--product <product_id>[,<product_id>,...]	List specific product of validations, if more than one product is required separate the product names with commas.
--download DOWNLOAD	Create a json or a yaml file containing all the variables available for the validations: /tmp/myvars
--format-output <format_output>	Print representation of the validation. the choices of the output format is json,yaml.

Table 82.31. Output formatter options

Value	Summary
-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 to show multiple columns

Table 82.32. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 82.33. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 82.34. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

82.19. TRIPLEO VALIDATOR SHOW RUN

[DEPRECATED]: Display details about a Validation execution. Please use "validation history get --help" instead.

Usage:

```
openstack tripleo validator show run [-h] [--config CONFIG] [--full]
    [--validation-log-dir VALIDATION_LOG_DIR]
    <uuid>
```

Table 82.35. Positional arguments

Value	Summary
<uuid>	Validation uuid run

Table 82.36. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--config CONFIG</code>	Config file path for validation framework. (default: <code>/etc/validation.cfg</code>)
<code>--full</code>	Show full details of the validation run
<code>--validation-log-dir VALIDATION_LOG_DIR</code>	Path where the log files and artifacts are located. (default: <code>/var/log/validations</code>)

82.20. TRIPLEO VALIDATOR SHOW

[DEPRECATED]: Display detailed information about a Validation. Please use "validation show --help" instead.

Usage:

```

openstack tripleo validator show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--config CONFIG]
                                [--validation-dir VALIDATION_DIR]
                                <validation>

```

Table 82.37. Positional arguments

Value	Summary
<code><validation></code>	Show a specific validation.

Table 82.38. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--config CONFIG</code>	Config file path for validation framework.
<code>--validation-dir VALIDATION_DIR</code>	Path where validation playbooks are located.

Table 82.39. Output formatter options

Value	Summary
-------	---------

Value	Summary
<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 to show multiple columns

Table 82.40. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 82.41. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 82.42. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 83. TRUST

This chapter describes the commands under the **trust** command.

83.1. TRUST CREATE

Create new trust

Usage:

```
openstack trust create [-h] [-f {json,shell,table,value,yaml}]
                      [-c COLUMN] [--noindent] [--prefix PREFIX]
                      [--max-width <integer>] [--fit-width]
                      [--print-empty] --project <project> --role
                      <role> [--impersonate]
                      [--expiration <expiration>]
                      [--project-domain <project-domain>]
                      [--trustor-domain <trustor-domain>]
                      [--trustee-domain <trustee-domain>]
                      <trustor-user> <trustee-user>
```

Table 83.1. Positional arguments

Value	Summary
<trustor-user>	User that is delegating authorization (name or id)
<trustee-user>	User that is assuming authorization (name or id)

Table 83.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Project being delegated (name or id) (required)
--role <role>	Roles to authorize (name or id) (repeat option to set multiple values, required)
--impersonate	Tokens generated from the trust will represent <trustor> (defaults to False)
--expiration <expiration>	Sets an expiration date for the trust (format of yyyy-mm-ddTHH:MM:SS)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Value	Summary
<code>--trustor-domain <trustor-domain></code>	Domain that contains <trustor> (name or id)
<code>--trustee-domain <trustee-domain></code>	Domain that contains <trustee> (name or id)

Table 83.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 83.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 83.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 83.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

83.2. TRUST DELETE

Delete trust(s)

Usage:

```
openstack trust delete [-h] <trust> [<trust> ...]
```

Table 83.7. Positional arguments

Value	Summary
<trust>	Trust(s) to delete

Table 83.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

83.3. TRUST LIST

List trusts

Usage:

```
openstack trust list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
```

Table 83.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 83.10. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 83.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 83.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 83.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

83.4. TRUST SHOW

Display trust details

Usage:

```
openstack trust show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <trust>
```

Table 83.14. Positional arguments

Value	Summary
<trust>	Trust to display

Table 83.15. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 83.16. Output formatter options

Value	Summary
-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 to show multiple columns

Table 83.17. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 83.18. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 83.19. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 84. TSIGKEY

This chapter describes the commands under the **tsigkey** command.

84.1. TSIGKEY CREATE

Create new tsigkey

Usage:

```
openstack tsigkey create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] --name NAME --algorithm
                        ALGORITHM --secret SECRET --scope SCOPE
                        --resource-id RESOURCE_ID [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
```

Table 84.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tsigkey name
--algorithm ALGORITHM	Tsigkey algorithm
--secret SECRET	Tsigkey secret
--scope SCOPE	Tsigkey scope
--resource-id RESOURCE_ID	Tsigkey resource_id
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 84.2. Output formatter options

Value	Summary
-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 to show multiple columns

Table 84.3. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 84.4. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 84.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

84.2. TSIGKEY DELETE

Delete tsigkey

Usage:

```
openstack tsigkey delete [-h] [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        id
```

Table 84.6. Positional arguments

Value	Summary
<code>id</code>	Tsigkey id

Table 84.7. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

84.3. TSIGKEY LIST

List tsigkeys

Usage:

```
openstack tsigkey list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--name NAME] [--algorithm ALGORITHM]
                        [--scope SCOPE] [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
```

Table 84.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name NAME</code>	Tsigkey name
<code>--algorithm ALGORITHM</code>	Tsigkey algorithm
<code>--scope SCOPE</code>	Tsigkey scope
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 84.9. Output formatter options

Value	Summary
<code>-f {csv,json,table,value,yaml}, --format {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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 84.10. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 84.11. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 84.12. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

84.4. TSIKEY SET

Set tsigkey properties

Usage:

```
openstack tsigkey set [-h] [-f {json,shell,table,value,yaml}]
```

```

[-c COLUMN] [--noindent] [--prefix PREFIX]
[--max-width <integer>] [--fit-width]
[--print-empty] [--name NAME]
[--algorithm ALGORITHM] [--secret SECRET]
[--scope SCOPE] [--all-projects]
[--sudo-project-id SUDO_PROJECT_ID]
id

```

Table 84.13. Positional arguments

Value	Summary
id	Tsigkey id

Table 84.14. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tsigkey name
--algorithm ALGORITHM	Tsigkey algorithm
--secret SECRET	Tsigkey secret
--scope SCOPE	Tsigkey scope
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 84.15. Output formatter options

Value	Summary
-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 to show multiple columns

Table 84.16. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 84.17. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 84.18. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

84.5. TSIGKEY SHOW

Show tsigkey details

Usage:

```
openstack tsigkey show [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [--all-projects]
                       [--sudo-project-id SUDO_PROJECT_ID]
                       id
```

Table 84.19. Positional arguments

Value	Summary
id	Tsigkey id

Table 84.20. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 84.21. Output formatter options

Value	Summary
-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 to show multiple columns

Table 84.22. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 84.23. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 84.24. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 85. UNDERCLOUD

This chapter describes the commands under the **undercloud** command.

85.1. UNDERCLOUD BACKUP

Backup the undercloud

Usage:

```
openstack undercloud backup [--init [INIT]] [--setup-nfs]
                             [--setup-rear] [--cron] [--db-only]
                             [--inventory INVENTORY]
                             [--add-path ADD_PATH]
                             [--exclude-path EXCLUDE_PATH]
                             [--save-swift] [--extra-vars EXTRA_VARS]
```

Table 85.1. Command arguments

Value	Summary
--init [INIT]	Initialize environment for backup, using <i>rear</i> or <i>nfs</i> as args which will check for package install and configured ReaR or NFS server. Defaults to: rear. i.e. --init rear. WARNING: This flag will be deprecated and replaced by --setup-rear and --setup-nfs
--setup-nfs	Setup the nfs server on the backup node which will install required packages and configuration on the host <i>BackupNode</i> in the ansible inventory.
--setup-rear	Setup rear on the <i>undercloud</i> host which will install and configure ReaR.
--cron	Sets up a new cron job that by default will execute a weekly backup at Sundays midnight, but that can be customized by using the tripleo_backup_and_restore_cron extra-var.
--db-only	Perform a db backup of the <i>undercloud</i> host. the db backup file will be stored in /home/stack with the name openstack-backup-mysql-<timestamp>.sql.
--inventory INVENTORY	Tripleo inventory file generated with tripleo-ansible-inventory command. Defaults to: /root/config-download/overcloud/tripleo-ansible-inventory.yaml
--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.

Value	Summary
<code>--exclude-path EXCLUDE_PATH</code>	Exclude path when performing the undercloud backup, this option can be specified multiple times. Defaults to: none i.e. <code>--exclude-path /this/is/a/folder/ --exclude-path /this/is/a/textfile.txt</code> .
<code>--save-swift</code>	Save backup to swift. defaults to: false special attention should be taken that Swift itself is backed up if you call this multiple times the backup size will grow exponentially.
<code>--extra-vars EXTRA_VARS</code>	Set additional variables as dict or as an absolute path of a JSON or YAML file type. i.e. <code>--extra-vars {"key": "val", "key2": "val2"}</code> i.e. <code>--extra-vars /path/to/my_vars.yaml</code> i.e. <code>--extra-vars /path/to/my_vars.json</code> . For more information about the variables that can be passed, visit: https://opendev.org/openstack/tripleo-ansible/src/branch/master/tripleo_ansible/roles/backup_and_restore/defaults/main.yml .

85.2. UNDERCLOUD INSTALL

Install and setup the undercloud

Usage:

```
openstack undercloud install [--force-stack-update] [--no-validations]
                             [--inflight-validations] [--dry-run] [-y]
                             [--disable-container-prepare]
                             [--reproduce-command]
```

Table 85.2. Command arguments

Value	Summary
<code>--force-stack-update</code>	Do a virtual update of the ephemeral heat stack. new or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=UPDATE</code> .
<code>--no-validations</code>	Do not perform undercloud configuration validations

Value	Summary
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Print the install command instead of running it
<code>-y, --yes</code>	Skip yes/no prompt (assume yes).
<code>--disable-container-prepare</code>	Disable the container preparation actions to prevent container tags from being updated and new containers from being fetched. If you skip this but do not have the container parameters configured, the deployment action may fail.
<code>--reproduce-command</code>	Create a reproducer command with ansible commandline and all environments variables.

85.3. UNDERCLOUD UPGRADE

Upgrade undercloud

Usage:

```
openstack undercloud upgrade [--force-stack-update] [--no-validations]
                             [--inflight-validations] [--dry-run] [-y]
                             [--disable-container-prepare]
                             [--reproduce-command]
                             [--skip-package-updates]
```

Table 85.3. Command arguments

Value	Summary
<code>--force-stack-update</code>	Do a virtual update of the ephemeral heat stack. new or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=UPDATE</code> .
<code>--no-validations</code>	Do not perform undercloud configuration validations
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Print the install command instead of running it

Value	Summary
-y, --yes	Skip yes/no prompt (assume yes).
--disable-container-prepare	Disable the container preparation actions to prevent container tags from being updated and new containers from being fetched. If you skip this but do not have the container parameters configured, the deployment action may fail.
--reproduce-command	Create a reproducer command with ansible commandline and all environments variables.
--skip-package-updates	Flag to skip the package update when performing upgrades and updates

CHAPTER 86. USAGE

This chapter describes the commands under the **usage** command.

86.1. USAGE LIST

List resource usage per project

Usage:

```
openstack usage list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--start <start>] [--end <end>]
```

Table 86.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--start <start>	Usage range start date, ex 2012-01-20 (default: 4 weeks ago)
--end <end>	Usage range end date, ex 2012-01-20 (default: tomorrow)

Table 86.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 86.3. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 86.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 86.5. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

86.2. USAGE SHOW

Show resource usage for a single project

Usage:

```
openstack usage show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--project <project>]
                    [--start <start>] [--end <end>]
```

Table 86.6. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project <project></code>	Name or id of project to show usage for
<code>--start <start></code>	Usage range start date, ex 2012-01-20 (default: 4 weeks ago)

Value	Summary
<code>--end <end></code>	Usage range end date, ex 2012-01-20 (default: tomorrow)

Table 86.7. Output formatter options

Value	Summary
<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 to show multiple columns

Table 86.8. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 86.9. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 86.10. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 87. USER

This chapter describes the commands under the **user** command.

87.1. USER CREATE

Create new user

Usage:

```
openstack user create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--domain <domain>]
                    [--project <project>]
                    [--project-domain <project-domain>]
                    [--password <password>] [--password-prompt]
                    [--email <email-address>]
                    [--description <description>]
                    [--ignore-lockout-failure-attempts]
                    [--no-ignore-lockout-failure-attempts]
                    [--ignore-password-expiry]
                    [--no-ignore-password-expiry]
                    [--ignore-change-password-upon-first-use]
                    [--no-ignore-change-password-upon-first-use]
                    [--enable-lock-password]
                    [--disable-lock-password]
                    [--enable-multi-factor-auth]
                    [--disable-multi-factor-auth]
                    [--multi-factor-auth-rule <rule>]
                    [--enable | --disable] [--or-show]
                    <name>
```

Table 87.1. Positional arguments

Value	Summary
<name>	New user name

Table 87.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Default domain (name or id)
--project <project>	Default project (name or id)

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--password <password></code>	Set user password
<code>--password-prompt</code>	Prompt interactively for password
<code>--email <email-address></code>	Set user email address
<code>--description <description></code>	User description
<code>--ignore-lockout-failure-attempts</code>	Opt into ignoring the number of times a user has authenticated and locking out the user as a result
<code>--no-ignore-lockout-failure-attempts</code>	Opt out of ignoring the number of times a user has authenticated and locking out the user as a result
<code>--ignore-password-expiry</code>	Opt into allowing user to continue using passwords that may be expired
<code>--no-ignore-password-expiry</code>	Opt out of allowing user to continue using passwords that may be expired
<code>--ignore-change-password-upon-first-use</code>	Control if a user should be forced to change their password immediately after they log into keystone for the first time. Opt into ignoring the user to change their password during first time login in keystone
<code>--no-ignore-change-password-upon-first-use</code>	Control if a user should be forced to change their password immediately after they log into keystone for the first time. Opt out of ignoring the user to change their password during first time login in keystone
<code>--enable-lock-password</code>	Disables the ability for a user to change its password through self-service APIs
<code>--disable-lock-password</code>	Enables the ability for a user to change its password through self-service APIs
<code>--enable-multi-factor-auth</code>	Enables the mfa (multi factor auth)
<code>--disable-multi-factor-auth</code>	Disables the mfa (multi factor auth)

Value	Summary
<code>--multi-factor-auth-rule <rule></code>	Set multi-factor auth rules. for example, to set a rule requiring the "password" and "totp" auth methods to be provided, use: " <code>--multi-factor-auth-rule password,totp</code> ". May be provided multiple times to set different rule combinations.
<code>--enable</code>	Enable user (default)
<code>--disable</code>	Disable user
<code>--or-show</code>	Return existing user

Table 87.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 87.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 87.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 87.6. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

87.2. USER DELETE

Delete user(s)

Usage:

```
openstack user delete [-h] [--domain <domain>] <user> [<user> ...]
```

Table 87.7. Positional arguments

Value	Summary
<code><user></code>	User(s) to delete (name or id)

Table 87.8. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--domain <domain></code>	Domain owning <user> (name or id)

87.3. USER LIST

List users

Usage:

```
openstack user list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--domain <domain>]
                    [--group <group> | --project <project>] [--long]
```

Table 87.9. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--domain <domain></code>	Filter users by <domain> (name or id)

Value	Summary
<code>--group <group></code>	Filter users by <group> membership (name or id)
<code>--project <project></code>	Filter users by <project> (name or id)
<code>--long</code>	List additional fields in output

Table 87.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 87.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 87.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 87.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

87.4. USER PASSWORD SET

Change current user password

Usage:

```
openstack user password set [-h] [--password <new-password>]
                             [--original-password <original-password>]
```

Table 87.14. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--password <new-password></code>	New user password
<code>--original-password <original-password></code>	Original user password

87.5. USER SET

Set user properties

Usage:

```
openstack user set [-h] [--name <name>] [--domain <domain>]
                  [--project <project>]
                  [--project-domain <project-domain>]
                  [--password <password>] [--password-prompt]
                  [--email <email-address>]
                  [--description <description>]
                  [--ignore-lockout-failure-attempts]
                  [--no-ignore-lockout-failure-attempts]
                  [--ignore-password-expiry]
                  [--no-ignore-password-expiry]
                  [--ignore-change-password-upon-first-use]
                  [--no-ignore-change-password-upon-first-use]
                  [--enable-lock-password] [--disable-lock-password]
                  [--enable-multi-factor-auth]
                  [--disable-multi-factor-auth]
```

```
[--multi-factor-auth-rule <rule>]
[--enable | --disable]
<user>
```

Table 87.15. Positional arguments

Value	Summary
<user>	User to modify (name or id)

Table 87.16. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set user name
--domain <domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--project <project>	Set default 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.
--password <password>	Set user password
--password-prompt	Prompt interactively for password
--email <email-address>	Set user email address
--description <description>	Set user description
--ignore-lockout-failure-attempts	Opt into ignoring the number of times a user has authenticated and locking out the user as a result
--no-ignore-lockout-failure-attempts	Opt out of ignoring the number of times a user has authenticated and locking out the user as a result
--ignore-password-expiry	Opt into allowing user to continue using passwords that may be expired
--no-ignore-password-expiry	Opt out of allowing user to continue using passwords that may be expired

Value	Summary
<code>--ignore-change-password-upon-first-use</code>	Control if a user should be forced to change their password immediately after they log into keystone for the first time. Opt into ignoring the user to change their password during first time login in keystone
<code>--no-ignore-change-password-upon-first-use</code>	Control if a user should be forced to change their password immediately after they log into keystone for the first time. Opt out of ignoring the user to change their password during first time login in keystone
<code>--enable-lock-password</code>	Disables the ability for a user to change its password through self-service APIs
<code>--disable-lock-password</code>	Enables the ability for a user to change its password through self-service APIs
<code>--enable-multi-factor-auth</code>	Enables the mfa (multi factor auth)
<code>--disable-multi-factor-auth</code>	Disables the mfa (multi factor auth)
<code>--multi-factor-auth-rule <rule></code>	Set multi-factor auth rules. for example, to set a rule requiring the "password" and "totp" auth methods to be provided, use: " <code>--multi-factor-auth-rule password,totp</code> ". May be provided multiple times to set different rule combinations.
<code>--enable</code>	Enable user (default)
<code>--disable</code>	Disable user

87.6. USER SHOW

Display user details

Usage:

```

openstack user show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--domain <domain>]
                    <user>

```

Table 87.17. Positional arguments

Value	Summary
<user>	User to display (name or id)

Table 87.18. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain owning <user> (name or id)

Table 87.19. Output formatter options

Value	Summary
-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 to show multiple columns

Table 87.20. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 87.21. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 87.22. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
--print-empty	Print empty table if there is no data to show.

CHAPTER 88. VERSIONS

This chapter describes the commands under the **versions** command.

88.1. VERSIONS SHOW

Show available versions of services

Usage:

```
openstack versions show [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--all-interfaces | --interface <interface>]
                        [--region-name <region_name>]
                        [--service <service>] [--status <status>]
```

Table 88.1. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-interfaces	Show values for all interfaces
--interface <interface>	Show versions for a specific interface.
--region-name <region_name>	Show versions for a specific region.
--service <service>	Show versions for a specific service. the argument should be either an exact match to what is in the catalog or a known official value or alias from service-types-authority (https://service-types.openstack.org/)
--status <status>	Show versions for a specific status. valid values are: - SUPPORTED - CURRENT - DEPRECATED - EXPERIMENTAL

Table 88.2. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 88.3. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 88.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 88.5. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 89. VOLUME

This chapter describes the commands under the **volume** command.

89.1. VOLUME BACKUP CREATE

Create new volume backup

Usage:

```
openstack volume backup create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--name <name>]
                               [--description <description>]
                               [--container <container>]
                               [--snapshot <snapshot>] [--force]
                               [--incremental]
                               <volume>
```

Table 89.1. Positional arguments

Value	Summary
<volume>	Volume to backup (name or id)

Table 89.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the backup
--description <description>	Description of the backup
--container <container>	Optional backup container name
--snapshot <snapshot>	Snapshot to backup (name or id)
--force	Allow to back up an in-use volume
--incremental	Perform an incremental backup

Table 89.3. Output formatter options

Value	Summary
<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 to show multiple columns

Table 89.4. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.5. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 89.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.2. VOLUME BACKUP DELETE

Delete volume backup(s)

Usage:

```
openstack volume backup delete [-h] [--force] <backup> [<backup> ...]
```

Table 89.7. Positional arguments

Value	Summary
<backup>	Backup(s) to delete (name or id)

Table 89.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Allow delete in state other than error or available

89.3. VOLUME BACKUP LIST

List volume backups

Usage:

```
openstack volume backup list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--long] [--name <name>]
                             [--status <status>] [--volume <volume>]
                             [--marker <volume-backup>]
                             [--limit <num-backups>] [--all-projects]
```

Table 89.9. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--name <name>	Filters results by the backup name
--status <status>	Filters results by the backup status (<i>creating, available, deleting, error, restoring or error_restoring</i>)
--volume <volume>	Filters results by the volume which they backup (name or ID)
--marker <volume-backup>	The last backup of the previous page (name or id)

Value	Summary
<code>--limit <num-backups></code>	Maximum number of backups to display
<code>--all-projects</code>	Include all projects (admin only)

Table 89.10. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 89.11. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 89.12. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.13. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.4. VOLUME BACKUP RECORD EXPORT

Export volume backup details. Backup information can be imported into a new service instance to be able to restore.

Usage:

```
openstack volume backup record export [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <backup>
```

Table 89.14. Positional arguments

Value	Summary
<code><backup></code>	Backup to export (name or id)

Table 89.15. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 89.16. Output formatter options

Value	Summary
<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 to show multiple columns

Table 89.17. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.18. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 89.19. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.5. VOLUME BACKUP RECORD IMPORT

Import volume backup details. Exported backup details contain the metadata necessary to restore to a new or rebuilt service instance

Usage:

```
openstack volume backup record import [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <backup_service>
                                     <backup_metadata>
```

Table 89.20. Positional arguments

Value	Summary
<code><backup_service></code>	Backup service containing the backup.
<code><backup_metadata></code>	Encoded backup metadata from export.

Table 89.21. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.22. Output formatter options

Value	Summary
-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 to show multiple columns

Table 89.23. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.24. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.25. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.6. VOLUME BACKUP RESTORE

Restore volume backup

Usage:

```

openstack volume backup restore [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <backup> <volume>

```

Table 89.26. Positional arguments

Value	Summary
<backup>	Backup to restore (name or id)
<volume>	Volume to restore to (name or id)

Table 89.27. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.28. Output formatter options

Value	Summary
-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 to show multiple columns

Table 89.29. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.30. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.31. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.7. VOLUME BACKUP SET

Set volume backup properties

Usage:

```
openstack volume backup set [-h] [--name <name>]
                             [--description <description>]
                             [--state <state>]
                             <backup>
```

Table 89.32. Positional arguments

Value	Summary
<code><backup></code>	Backup to modify (name or id)

Table 89.33. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	New backup name
<code>--description <description></code>	New backup description
<code>--state <state></code>	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)

89.8. VOLUME BACKUP SHOW

Display volume backup details

Usage:

```

openstack volume backup show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <backup>

```

Table 89.34. Positional arguments

Value	Summary
<backup>	Backup to display (name or id)

Table 89.35. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.36. Output formatter options

Value	Summary
-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 to show multiple columns

Table 89.37. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.38. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.39. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.9. VOLUME CREATE

Create new volume

Usage:

```
openstack volume create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--size <size>]
                        [--type <volume-type>]
                        [--image <image> | --snapshot <snapshot> | --source <volume>]
                        [--description <description>]
                        [--availability-zone <availability-zone>]
                        [--consistency-group consistency-group]
                        [--property <key=value>] [--hint <key=value>]
                        [--bootable | --non-bootable]
                        [--read-only | --read-write]
                        <name>
```

Table 89.40. Positional arguments

Value	Summary
<code><name></code>	Volume name

Table 89.41. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--size <size></code>	Volume size in gb (required unless <code>--snapshot</code> or <code>--source</code> is specified)
<code>--type <volume-type></code>	Set the type of volume

Value	Summary
<code>--image <image></code>	Use <image> as source of volume (name or id)
<code>--snapshot <snapshot></code>	Use <snapshot> as source of volume (name or id)
<code>--source <volume></code>	Volume to clone (name or id)
<code>--description <description></code>	Volume description
<code>--availability-zone <availability-zone></code>	Create volume in <availability-zone>
<code>--consistency-group consistency-group></code>	Consistency group where the new volume belongs to
<code>--property <key=value></code>	Set a property to this volume (repeat option to set multiple properties)
<code>--hint <key=value></code>	Arbitrary scheduler hint key-value pairs to help boot an instance (repeat option to set multiple hints)
<code>--bootable</code>	Mark volume as bootable
<code>--non-bootable</code>	Mark volume as non-bootable (default)
<code>--read-only</code>	Set volume to read-only access mode
<code>--read-write</code>	Set volume to read-write access mode (default)

Table 89.42. Output formatter options

Value	Summary
<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 to show multiple columns

Table 89.43. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.44. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.45. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.10. VOLUME DELETE

Delete volume(s)

Usage:

```
openstack volume delete [-h] [--force | --purge]
                        <volume> [<volume> ...]
```

Table 89.46. Positional arguments

Value	Summary
<volume>	Volume(s) to delete (name or id)

Table 89.47. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Attempt forced removal of volume(s), regardless of state (defaults to False)
--purge	Remove any snapshots along with volume(s) (defaults to false)

89.11. VOLUME HOST SET

Set volume host properties

Usage:

```
openstack volume host set [-h] [--disable | --enable] <host-name>
```

Table 89.48. Positional arguments

Value	Summary
<host-name>	Name of volume host

Table 89.49. Command 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

89.12. VOLUME LIST

List volumes

Usage:

```
openstack volume list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--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 89.50. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Filter results by project (name or id) (admin only)

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--user <user></code>	Filter results by user (name or id) (admin only)
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
<code>--name <name></code>	Filter results by volume name
<code>--status <status></code>	Filter results by status
<code>--all-projects</code>	Include all projects (admin only)
<code>--long</code>	List additional fields in output
<code>--marker <volume></code>	The last volume id of the previous page
<code>--limit <num-volumes></code>	Maximum number of volumes to display

Table 89.51. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 89.52. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 89.53. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.54. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.13. VOLUME MIGRATE

Migrate volume to a new host

Usage:

```
openstack volume migrate [-h] --host <host> [--force-host-copy]
                        [--lock-volume]
                        <volume>
```

Table 89.55. Positional arguments

Value	Summary
<code><volume></code>	Volume to migrate (name or id)

Table 89.56. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--host <host></code>	Destination host (takes the form: <code>host@backend-name#pool</code>)
<code>--force-host-copy</code>	Enable generic host-based force-migration, which bypasses driver optimizations

Value	Summary
<code>--lock-volume</code>	If specified, the volume state will be locked and will not allow a migration to be aborted (possibly by another operation)

89.14. VOLUME QOS ASSOCIATE

Associate a QoS specification to a volume type

Usage:

```
openstack volume qos associate [-h] <qos-spec> <volume-type>
```

Table 89.57. Positional arguments

Value	Summary
<code><qos-spec></code>	Qos specification to modify (name or id)
<code><volume-type></code>	Volume type to associate the qos (name or id)

Table 89.58. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

89.15. VOLUME QOS CREATE

Create new QoS specification

Usage:

```
openstack volume qos create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--consumer <consumer>]
                             [--property <key=value>]
                             <name>
```

Table 89.59. Positional arguments

Value	Summary
<code><name></code>	New qos specification name

Table 89.60. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--consumer <consumer>	Consumer of the qos. valid consumers: back-end, both, front-end (defaults to <i>both</i>)
--property <key=value>	Set a qos specification property (repeat option to set multiple properties)

Table 89.61. Output formatter options

Value	Summary
-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 to show multiple columns

Table 89.62. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.63. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.64. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.16. VOLUME QOS DELETE

Delete QoS specification

Usage:

```
openstack volume qos delete [-h] [--force] <qos-spec> [<qos-spec> ...]
```

Table 89.65. Positional arguments

Value	Summary
<qos-spec>	Qos specification(s) to delete (name or id)

Table 89.66. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Allow to delete in-use qos specification(s)

89.17. 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 89.67. Positional arguments

Value	Summary
<qos-spec>	Qos specification to modify (name or id)

Table 89.68. Command 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

89.18. VOLUME QOS LIST

List QoS specifications

Usage:

```
openstack volume qos list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
```

Table 89.69. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.70. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 89.71. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.72. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.73. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.19. VOLUME QOS SET

Set QoS specification properties

Usage:

```
openstack volume qos set [-h] [--property <key=value>] <qos-spec>
```

Table 89.74. Positional arguments

Value	Summary
<qos-spec>	Qos specification to modify (name or id)

Table 89.75. Command 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)

89.20. VOLUME QOS SHOW

Display QoS specification details

Usage:

```

openstack volume qos show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <qos-spec>

```

Table 89.76. Positional arguments

Value	Summary
<qos-spec>	Qos specification to display (name or id)

Table 89.77. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.78. Output formatter options

Value	Summary
-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 to show multiple columns

Table 89.79. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.80. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.81. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.21. VOLUME QOS UNSET

Unset QoS specification properties

Usage:

```
openstack volume qos unset [-h] [--property <key>] <qos-spec>
```

Table 89.82. Positional arguments

Value	Summary
<code><qos-spec></code>	Qos specification to modify (name or id)

Table 89.83. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--property <key></code>	Property to remove from the qos specification. (repeat option to unset multiple properties)

89.22. VOLUME SERVICE LIST

List service command

Usage:

```
openstack volume service list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
```

```

[--sort-ascending | --sort-descending]
[--host <host>] [--service <service>]
[--long]

```

Table 89.84. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--host <host>	List services on specified host (name only)
--service <service>	List only specified service (name only)
--long	List additional fields in output

Table 89.85. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 89.86. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.87. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.88. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.23. VOLUME SERVICE SET

Set volume service properties

Usage:

```
openstack volume service set [-h] [--enable | --disable]
                             [--disable-reason <reason>]
                             <host> <service>
```

Table 89.89. Positional arguments

Value	Summary
<code><host></code>	Name of host
<code><service></code>	Name of service (binary name)

Table 89.90. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--enable</code>	Enable volume service
<code>--disable</code>	Disable volume service
<code>--disable-reason <reason></code>	Reason for disabling the service (should be used with <code>--disable</code> option)

89.24. 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>]
                    [--attached | --detached] [--type <volume-type>]
                    [--retype-policy <retype-policy>]
                    [--bootable | --non-bootable]
                    [--read-only | --read-write]
                    <volume>

```

Table 89.91. Positional arguments

Value	Summary
<volume>	Volume to modify (name or id)

Table 89.92. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New volume name
--size <size>	Extend volume size in gb
--description <description>	New volume description
--no-property	Remove all properties from <volume> (specify both --no-property and --property to remove the current properties before setting new properties.)
--property <key=value>	Set a property on this volume (repeat option to set multiple properties)
--image-property <key=value>	Set an image property on this volume (repeat option to set multiple image properties)
--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)
--attached	Set volume attachment status to "attached" (admin only) (This option simply changes the state of the volume in the database with no regard to actual status, exercise caution when using)

Value	Summary
--detached	Set volume attachment status to "detached" (admin only) (This option simply changes the state of the volume in the database with no regard to actual status, exercise caution when using)
--type <volume-type>	New volume type (name or id)
--retype-policy <retype-policy>	Migration policy while re-typing volume ("never" or "on-demand", default is "never") (available only when --type option is specified)
--bootable	Mark volume as bootable
--non-bootable	Mark volume as non-bootable
--read-only	Set volume to read-only access mode
--read-write	Set volume to read-write access mode

89.25. VOLUME SHOW

Display volume details

Usage:

```
openstack volume show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <volume>
```

Table 89.93. Positional arguments

Value	Summary
<volume>	Volume to display (name or id)

Table 89.94. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.95. Output formatter options

Value	Summary
<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 to show multiple columns

Table 89.96. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.97. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 89.98. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.26. VOLUME SNAPSHOT CREATE

Create new volume snapshot

Usage:

```
openstack volume snapshot create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--volume <volume>]
                                [--description <description>]
```

```

[--force] [--property <key=value>]
[--remote-source <key=value>]
<snapshot-name>

```

Table 89.99. Positional arguments

Value	Summary
<snapshot-name>	Name of the new snapshot

Table 89.100. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--volume <volume>	Volume to snapshot (name or id) (default is <snapshot-name>)
--description <description>	Description of the snapshot
--force	Create a snapshot attached to an instance. default is False
--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>

Table 89.101. Output formatter options

Value	Summary
-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 to show multiple columns

Table 89.102. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.103. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.104. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.27. VOLUME SNAPSHOT DELETE

Delete volume snapshot(s)

Usage:

```
openstack volume snapshot delete [-h] [--force]
    <snapshot> [<snapshot> ...]
```

Table 89.105. Positional arguments

Value	Summary
<snapshot>	Snapshot(s) to delete (name or id)

Table 89.106. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Attempt forced removal of snapshot(s), regardless of state (defaults to False)

89.28. VOLUME SNAPSHOT LIST

List volume snapshots

Usage:

```

openstack volume snapshot list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--all-projects] [--project <project>]
                               [--project-domain <project-domain>]
                               [--long] [--marker <volume-snapshot>]
                               [--limit <num-snapshots>]
                               [--name <name>] [--status <status>]
                               [--volume <volume>]

```

Table 89.107. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Include all projects (admin only)
--project <project>	Filter results by 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.
--long	List additional fields in output
--marker <volume-snapshot>	The last snapshot id of the previous page
--limit <num-snapshots>	Maximum number of snapshots to display
--name <name>	Filters results by a name.
--status <status>	Filters results by a status. (<i>available, error, creating, deleting or error_deleting</i>)
--volume <volume>	Filters results by a volume (name or id).

Table 89.108. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 89.109. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.110. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.111. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.29. 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 89.112. Positional arguments

Value	Summary
<snapshot>	Snapshot to modify (name or id)

Table 89.113. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New snapshot name
--description <description>	New snapshot description
--no-property	Remove all properties from <snapshot> (specify both --no-property and --property to remove the current properties before setting new properties.)
--property <key=value>	Property to add/change for this snapshot (repeat option to set multiple properties)
--state <state>	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)

89.30. VOLUME SNAPSHOT SHOW

Display volume snapshot details

Usage:

```

openstack volume snapshot show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <snapshot>

```

Table 89.114. Positional arguments

Value	Summary
<snapshot>	Snapshot to display (name or id)

Table 89.115. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.116. Output formatter options

Value	Summary
-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 to show multiple columns

Table 89.117. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.118. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.119. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.31. VOLUME SNAPSHOT UNSET

Unset volume snapshot properties

Usage:

```
openstack volume snapshot unset [-h] [--property <key>] <snapshot>
```

Table 89.120. Positional arguments

Value	Summary
<snapshot>	Snapshot to modify (name or id)

Table 89.121. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from snapshot (repeat option to remove multiple properties)

89.32. VOLUME TRANSFER REQUEST ACCEPT

Accept volume transfer request.

Usage:

```
openstack volume transfer request accept [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         --auth-key <key>
                                         <transfer-request-id>
```

Table 89.122. Positional arguments

Value	Summary
<transfer-request-id>	Volume transfer request to accept (id only)

Table 89.123. Command arguments

Value	Summary
-------	---------

Value	Summary
-h, --help	Show this help message and exit
--auth-key <key>	Volume transfer request authentication key

Table 89.124. Output formatter options

Value	Summary
-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 to show multiple columns

Table 89.125. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.126. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.127. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.33. VOLUME TRANSFER REQUEST CREATE

Create volume transfer request.

Usage:

```

openstack volume transfer request create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--name <name>]
                                         <volume>

```

Table 89.128. Positional arguments

Value	Summary
<volume>	Volume to transfer (name or id)

Table 89.129. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New transfer request name (default to none)

Table 89.130. Output formatter options

Value	Summary
-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 to show multiple columns

Table 89.131. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.132. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.133. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.34. VOLUME TRANSFER REQUEST DELETE

Delete volume transfer request(s).

Usage:

```
openstack volume transfer request delete [-h]
                                     <transfer-request>
                                     [<transfer-request> ...]
```

Table 89.134. Positional arguments

Value	Summary
<code><transfer-request></code>	Volume transfer request(s) to delete (name or id)

Table 89.135. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

89.35. VOLUME TRANSFER REQUEST LIST

Lists all volume transfer requests.

Usage:

```
openstack volume transfer request list [-h]
                                       [-f {csv,json,table,value,yaml}]
                                       [-c COLUMN]
                                       [--quote {all,minimal,none,nonnumeric}]
                                       [--noindent]
                                       [--max-width <integer>]
                                       [--fit-width] [--print-empty]
```

```
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--all-projects]
```

Table 89.136. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Include all projects (admin only)

Table 89.137. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 89.138. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.139. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.140. Table formatter options

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.36. VOLUME TRANSFER REQUEST SHOW

Show volume transfer request details.

Usage:

```
openstack volume transfer request show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <transfer-request>
```

Table 89.141. Positional arguments

Value	Summary
<code><transfer-request></code>	Volume transfer request to display (name or id)

Table 89.142. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 89.143. Output formatter options

Value	Summary
<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 to show multiple columns

Table 89.144. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.145. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.146. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.37. VOLUME TYPE CREATE

Create new volume type

Usage:

```
openstack volume type create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             [--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 89.147. Positional arguments

Value	Summary
<name>	Volume type name

Table 89.148. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Volume type description
--public	Volume type is accessible to the public
--private	Volume type is not accessible to the public
--property <key=value>	Set a property on this volume type (repeat option to set multiple properties)
--project <project>	Allow <project> to access private type (name or id) (Must be used with --private option)
--encryption-provider <provider>	Set the encryption provider format for this volume type (e.g "luks" or "plain") (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")
--encryption-cipher <cipher>	Set the encryption algorithm or mode for this volume type (e.g "aes-xts-plain64") (admin only)
--encryption-key-size <key-size>	Set the size of the encryption key of this volume type (e.g "128" or "256") (admin only)
--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>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 89.149. Output formatter options

Value	Summary
<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 to show multiple columns

Table 89.150. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.151. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 89.152. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.38. VOLUME TYPE DELETE

Delete volume type(s)

Usage:

```
openstack volume type delete [-h] <volume-type> [<volume-type> ...]
```

Table 89.153. Positional arguments

Value	Summary
<volume-type>	Volume type(s) to delete (name or id)

Table 89.154. Command arguments

Value	Summary
-h, --help	Show this help message and exit

89.39. VOLUME TYPE LIST

List volume types

Usage:

```
openstack volume type list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--long] [--default | --public | --private]
                             [--encryption-type]
```

Table 89.155. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--default	List the default volume type
--public	List only public types
--private	List only private types (admin only)
--encryption-type	Display encryption information for each volume type (admin only)

Table 89.156. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 89.157. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 89.158. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.159. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

89.40. 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 89.160. Positional arguments

Value	Summary
<volume-type>	Volume type to modify (name or id)

Table 89.161. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set volume type name
--description <description>	Set volume type description
--property <key=value>	Set a property on this volume type (repeat option to set multiple properties)
--project <project>	Set 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.
--encryption-provider <provider>	Set the encryption provider format for this volume type (e.g "luks" or "plain") (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")
--encryption-cipher <cipher>	Set the encryption algorithm or mode for this volume type (e.g "aes-xts-plain64") (admin only)

Value	Summary
<code>--encryption-key-size <key-size></code>	Set the size of the encryption key of this volume type (e.g "128" or "256") (admin only)
<code>--encryption-control-location <control-location></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")

89.41. VOLUME TYPE SHOW

Display volume type details

Usage:

```
openstack volume type show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--encryption-type]
                          <volume-type>
```

Table 89.162. Positional arguments

Value	Summary
<code><volume-type></code>	Volume type to display (name or id)

Table 89.163. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--encryption-type</code>	Display encryption information of this volume type (admin only)

Table 89.164. Output formatter options

Value	Summary
<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 to show multiple columns

Table 89.165. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.166. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 89.167. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.42. 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 89.168. Positional arguments

Value	Summary
<volume-type>	Volume type to modify (name or id)

Table 89.169. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Remove a property from this volume type (repeat option to remove multiple properties)
--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.
--encryption-type	Remove the encryption type for this volume type (admin only)

89.43. VOLUME UNSET

Unset volume properties

Usage:

```
openstack volume unset [-h] [--property <key>] [--image-property <key>]
                        <volume>
```

Table 89.170. Positional arguments

Value	Summary
<volume>	Volume to modify (name or id)

Table 89.171. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Remove a property from volume (repeat option to remove multiple properties)

Value	Summary
--image-property <key>	Remove an image property from volume (repeat option to remove multiple image properties)

CHAPTER 90. WORKBOOK

This chapter describes the commands under the **workbook** command.

90.1. WORKBOOK CREATE

Create new workbook.

Usage:

```
openstack workbook create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--public]
                          [--namespace [NAMESPACE]]
                          definition
```

Table 90.1. Positional arguments

Value	Summary
definition	Workbook definition file

Table 90.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--public	With this flag workbook will be marked as "public".
--namespace [NAMESPACE]	Namespace to create the workbook within.

Table 90.3. Output formatter options

Value	Summary
-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 to show multiple columns

Table 90.4. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 90.5. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 90.6. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

90.2. WORKBOOK DEFINITION SHOW

Show workbook definition.

Usage:

```
openstack workbook definition show [-h] name
```

Table 90.7. Positional arguments

Value	Summary
name	Workbook name

Table 90.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit

90.3. WORKBOOK DELETE

Delete workbook.

Usage:

```
openstack workbook delete [-h] [--namespace [NAMESPACE]]
workbook [workbook ...]
```

Table 90.9. Positional arguments

Value	Summary
workbook	Name of workbook(s).

Table 90.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to delete the workbook(s) from.

90.4. WORKBOOK LIST

List all workbooks.

Usage:

```

openstack workbook list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--marker [MARKER]] [--limit [LIMIT]]
                        [--sort_keys [SORT_KEYS]]
                        [--sort_dirs [SORT_DIRS]] [--filter FILTERS]

```

Table 90.11. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description

Value	Summary
<code>--sort_dirs [SORT_DIRS]</code>	Comma-separated list of sort directions. default: asc. Example: <code>mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc</code>
<code>--filter FILTERS</code>	Filters. can be repeated.

Table 90.12. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 90.13. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 90.14. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 90.15. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

90.5. WORKBOOK SHOW

Show specific workbook.

Usage:

```
openstack workbook show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--namespace [NAMESPACE]]
                        workbook
```

Table 90.16. Positional arguments

Value	Summary
<code>workbook</code>	Workbook name

Table 90.17. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--namespace [NAMESPACE]</code>	Namespace to get the workbook from.

Table 90.18. Output formatter options

Value	Summary
<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 to show multiple columns

Table 90.19. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 90.20. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 90.21. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

90.6. WORKBOOK UPDATE

Update workbook.

Usage:

```

openstack workbook update [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--namespace [NAMESPACE]]
                          [--public]
                          definition

```

Table 90.22. Positional arguments

Value	Summary
definition	Workbook definition file

Table 90.23. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to update the workbook in.
--public	With this flag workbook will be marked as "public".

Table 90.24. Output formatter options

Value	Summary
-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 to show multiple columns

Table 90.25. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 90.26. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 90.27. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

90.7. WORKBOOK VALIDATE

Validate workbook.

Usage:

```
openstack workbook validate [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             definition
```

Table 90.28. Positional arguments

Value	Summary
definition	Workbook definition file

Table 90.29. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 90.30. Output formatter options

Value	Summary
-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 to show multiple columns

Table 90.31. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 90.32. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 90.33. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 91. WORKFLOW

This chapter describes the commands under the **workflow** command.

91.1. WORKFLOW CREATE

Create new workflow.

Usage:

```
openstack workflow create [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--marker [MARKER]] [--limit [LIMIT]]
                          [--sort_keys [SORT_KEYS]]
                          [--sort_dirs [SORT_DIRS]] [--filter FILTERS]
                          [--namespace [NAMESPACE]] [--public]
                          definition
```

Table 91.1. Positional arguments

Value	Summary
definition	Workflow definition file.

Table 91.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Value	Summary
<code>--namespace [NAMESPACE]</code>	Namespace to create the workflow within.
<code>--public</code>	With this flag workflow will be marked as "public".

Table 91.3. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 91.4. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 91.5. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.6. Table formatter options

Value	Summary
<code>--max-width <integer></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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.2. WORKFLOW DEFINITION SHOW

Show workflow definition.

Usage:

```
openstack workflow definition show [-h] [--namespace [NAMESPACE]]
                                identifier
```

Table 91.7. Positional arguments

Value	Summary
identifier	Workflow id or name.

Table 91.8. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to get the workflow from.

91.3. WORKFLOW DELETE

Delete workflow.

Usage:

```
openstack workflow delete [-h] [--namespace [NAMESPACE]]
                          workflow [workflow ...]
```

Table 91.9. Positional arguments

Value	Summary
workflow	Name or id of workflow(s).

Table 91.10. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to delete the workflow from.

91.4. WORKFLOW ENGINE SERVICE LIST

List all services.

Usage:

```

openstack workflow engine service list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--sort-ascending | --sort-descending]
                                     [--marker [MARKER]]
                                     [--limit [LIMIT]]
                                     [--sort_keys [SORT_KEYS]]
                                     [--sort_dirs [SORT_DIRS]]
                                     [--filter FILTERS]

```

Table 91.11. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Table 91.12. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 91.13. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 91.14. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.15. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

91.5. WORKFLOW ENV CREATE

Create new environment.

Usage:


```

openstack workflow env create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             file

```

Table 91.16. Positional arguments

Value	Summary
file	Environment configuration file in json or yaml

Table 91.17. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 91.18. Output formatter options

Value	Summary
-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 to show multiple columns

Table 91.19. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.20. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 91.21. Table formatter options

Value	Summary
--max-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
<code>--print-empty</code>	Print empty table if there is no data to show.

91.6. WORKFLOW ENV DELETE

Delete environment.

Usage:

```
openstack workflow env delete [-h] environment [environment ...]
```

Table 91.22. Positional arguments

Value	Summary
environment	Name of environment(s).

Table 91.23. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

91.7. WORKFLOW ENV LIST

List all environments.

Usage:

```
openstack workflow env list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--sort-ascending | --sort-descending]
                             [--marker [MARKER]] [--limit [LIMIT]]
                             [--sort_keys [SORT_KEYS]]
                             [--sort_dirs [SORT_DIRS]]
                             [--filter FILTERS]
```

Table 91.24. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Table 91.25. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 91.26. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 91.27. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.28. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.8. WORKFLOW ENV SHOW

Show specific environment.

Usage:

```
openstack workflow env show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--export]
                             environment
```

Table 91.29. Positional arguments

Value	Summary
environment	Environment name

Table 91.30. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--export	Export the environment suitable for import

Table 91.31. Output formatter options

Value	Summary
<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 to show multiple columns

Table 91.32. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.33. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 91.34. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

91.9. WORKFLOW ENV UPDATE

Update environment.

Usage:

```
openstack workflow env update [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             file
```

Table 91.35. Positional arguments

Value	Summary
file	Environment configuration file in json or yaml

Table 91.36. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 91.37. Output formatter options

Value	Summary
-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 to show multiple columns

Table 91.38. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.39. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 91.40. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.10. WORKFLOW EXECUTION CREATE

Create new execution.

Usage:

```
openstack workflow execution create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--namespace [NAMESPACE]]
                                   [-d DESCRIPTION]
                                   [-s [SOURCE_EXECUTION_ID]]
                                   [workflow_identifier]
                                   [workflow_input] [params]
```

Table 91.41. Positional arguments

Value	Summary
workflow_identifier	Workflow id or name
workflow_input	Workflow input
params	Workflow additional parameters

Table 91.42. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Workflow namespace.
-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: <code>mistral execution-create -s 123e4567-e89b-12d3-a456-426655440000</code>

Table 91.43. Output formatter options

Value	Summary
-------	---------

Value	Summary
<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 to show multiple columns

Table 91.44. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.45. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 91.46. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

91.11. WORKFLOW EXECUTION DELETE

Delete execution.

Usage:

```
openstack workflow execution delete [-h] [--force]
                                execution [execution ...]
```

Table 91.47. Positional arguments

Value	Summary
execution	Id of execution identifier(s).

Table 91.48. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Force the deletion of an execution. might cause a cascade of errors if used for running executions.

91.12. WORKFLOW EXECUTION INPUT SHOW

Show execution input data.

Usage:

```
openstack workflow execution input show [-h] id
```

Table 91.49. Positional arguments

Value	Summary
id	Execution id

Table 91.50. Command arguments

Value	Summary
-h, --help	Show this help message and exit

91.13. WORKFLOW EXECUTION LIST

List all executions.

Usage:

```
openstack workflow execution list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--sort-ascending | --sort-descending]
                                [--marker [MARKER]] [--limit [LIMIT]]
```

```

[--sort_keys [SORT_KEYS]]
[--sort_dirs [SORT_DIRS]]
[--filter FILTERS] [--oldest]
[--task [TASK]] [--rootsonly]

```

Table 91.51. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.
--oldest	Display the executions starting from the oldest entries instead of the newest
--task [TASK]	Parent task execution id associated with workflow execution list.
--rootsonly	Return only root executions

Table 91.52. Output formatter options

Value	Summary
-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 to show multiple columns
--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

Value	Summary
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 91.53. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 91.54. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.55. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

91.14. WORKFLOW EXECUTION OUTPUT SHOW

Show execution output data.

Usage:

```
openstack workflow execution output show [-h] id
```

Table 91.56. Positional arguments

Value	Summary
<code>id</code>	Execution id

Table 91.57. Command arguments

Value	Summary
-h, --help	Show this help message and exit

91.15. WORKFLOW EXECUTION PUBLISHED SHOW

Show workflow global published variables.

Usage:

```
openstack workflow execution published show [-h] id
```

Table 91.58. Positional arguments

Value	Summary
id	Workflow id

Table 91.59. Command arguments

Value	Summary
-h, --help	Show this help message and exit

91.16. WORKFLOW EXECUTION REPORT SHOW

Print execution report.

Usage:

```
openstack workflow execution report show [-h] [--errors-only]
                                         [--statistics-only]
                                         [--no-errors-only]
                                         [--max-depth [MAX_DEPTH]]
                                         id
```

Table 91.60. Positional arguments

Value	Summary
id	Execution id

Table 91.61. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--errors-only	Only error paths will be included.
--statistics-only	Only the statistics will be included.
--no-errors-only	Not only error paths will be included.
--max-depth [MAX_DEPTH]	Maximum depth of the workflow execution tree. if 0, only the root workflow execution and its tasks will be included

91.17. WORKFLOW EXECUTION SHOW

Show specific execution.

Usage:

```

openstack workflow execution show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                execution

```

Table 91.62. Positional arguments

Value	Summary
execution	Execution identifier

Table 91.63. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Table 91.64. Output formatter options

Value	Summary
-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 to show multiple columns

Table 91.65. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.66. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 91.67. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.18. WORKFLOW EXECUTION UPDATE

Update execution.

Usage:

```

openstack workflow execution update [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [-s {RUNNING,PAUSED,SUCCESS,ERROR,CANCELLED}]
    [-e ENV] [-d DESCRIPTION]
    id

```

Table 91.68. Positional arguments

Value	Summary
id	Execution identifier

Table 91.69. Command arguments

Value	Summary
-h, --help	Show this help message and exit
-s {RUNNING,PAUSED,SUCCESS,ERROR,CANCELLED} , --state {RUNNING,PAUSED,SUCCESS,ERROR,CANCELLED}	Execution state
-e ENV, --env ENV	Environment variables
-d DESCRIPTION, --description DESCRIPTION	Execution description

Table 91.70. Output formatter options

Value	Summary
-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 to show multiple columns

Table 91.71. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.72. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 91.73. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

91.19. WORKFLOW LIST

List all workflows.

Usage:

```

openstack workflow list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--marker [MARKER]] [--limit [LIMIT]]
                        [--sort_keys [SORT_KEYS]]
                        [--sort_dirs [SORT_DIRS]] [--filter FILTERS]

```

Table 91.74. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--marker [MARKER]</code>	The last execution uuid of the previous page, displays list of executions after "marker".
<code>--limit [LIMIT]</code>	Maximum number of entries to return in a single result.
<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>

Value	Summary
<code>--filter FILTERS</code>	Filters. can be repeated.

Table 91.75. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 91.76. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 91.77. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.78. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

91.20. WORKFLOW SHOW

Show specific workflow.

Usage:

```
openstack workflow show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--namespace [NAMESPACE]]
                        workflow
```

Table 91.79. Positional arguments

Value	Summary
<code>workflow</code>	Workflow id or name.

Table 91.80. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--namespace [NAMESPACE]</code>	Namespace to get the workflow from.

Table 91.81. Output formatter options

Value	Summary
<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 to show multiple columns

Table 91.82. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.83. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 91.84. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

91.21. WORKFLOW UPDATE

Update workflow.

Usage:

```

openstack workflow update [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--sort-ascending | --sort-descending]
                        [--marker [MARKER]] [--limit [LIMIT]]
                        [--sort_keys [SORT_KEYS]]
                        [--sort_dirs [SORT_DIRS]] [--filter FILTERS]
                        [--id ID] [--namespace [NAMESPACE]]
                        [--public]
definition

```

Table 91.85. Positional arguments

Value	Summary
definition	Workflow definition

Table 91.86. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.
--id ID	Workflow id.
--namespace [NAMESPACE]	Namespace of the workflow.
--public	With this flag workflow will be marked as "public".

Table 91.87. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 91.88. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 91.89. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.90. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

91.22. WORKFLOW VALIDATE

Validate workflow.

Usage:

```
openstack workflow validate [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             definition
```

Table 91.91. Positional arguments

Value	Summary
definition	Workflow definition file

Table 91.92. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 91.93. Output formatter options

Value	Summary
<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 to show multiple columns

Table 91.94. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.95. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 91.96. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 92. ZONE

This chapter describes the commands under the **zone** command.

92.1. ZONE ABANDON

Abandon a zone

Usage:

```
openstack zone abandon [-h] [--all-projects]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        id
```

Table 92.1. Positional arguments

Value	Summary
id	Zone id

Table 92.2. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

92.2. ZONE AXFR

AXFR a zone

Usage:

```
openstack zone axfr [-h] [--all-projects]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```

Table 92.3. Positional arguments

Value	Summary
id	Zone id

Table 92.4. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

92.3. ZONE BLACKLIST CREATE

Create new blacklist

Usage:

```

openstack zone blacklist create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] --pattern PATTERN
                                [--description DESCRIPTION]
                                [--all-projects]
                                [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.5. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--pattern PATTERN	Blacklist pattern
--description DESCRIPTION	Description
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.6. Output formatter options

Value	Summary
-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 to show multiple columns

Table 92.7. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.8. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 92.9. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.4. ZONE BLACKLIST DELETE

Delete blacklist

Usage:

```
openstack zone blacklist delete [-h] [--all-projects]
                                [--sudo-project-id SUDO_PROJECT_ID]
                                id
```

Table 92.10. Positional arguments

Value	Summary
<code>id</code>	Blacklist id

Table 92.11. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

92.5. ZONE BLACKLIST LIST

List blacklists

Usage:

```

openstack zone blacklist list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--sort-ascending | --sort-descending]
                               [--all-projects]
                               [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.12. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.13. Output formatter options

Value	Summary
<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 to show multiple columns
<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

Value	Summary
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 92.14. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 92.15. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.16. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.6. ZONE BLACKLIST SET

Set blacklist properties

Usage:

```
openstack zone blacklist set [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--pattern PATTERN]
                             [--description DESCRIPTION | --no-description]
                             [--all-projects]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             id
```

Table 92.17. Positional arguments

Value	Summary
id	Blacklist id

Table 92.18. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--pattern PATTERN	Blacklist pattern
--description DESCRIPTION	Description
--no-description--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.19. Output formatter options

Value	Summary
-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 to show multiple columns

Table 92.20. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.21. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 92.22. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.7. ZONE BLACKLIST SHOW

Show blacklist details

Usage:

```
openstack zone blacklist show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--all-projects]
                               [--sudo-project-id SUDO_PROJECT_ID]
                               id
```

Table 92.23. Positional arguments

Value	Summary
<code>id</code>	Blacklist id

Table 92.24. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.25. Output formatter options

Value	Summary
<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 to show multiple columns

Table 92.26. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.27. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 92.28. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.8. ZONE CREATE

Create new zone

Usage:

```
openstack zone create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--email EMAIL]
                    [--type {PRIMARY,SECONDARY}] [--ttl TTL]
                    [--description DESCRIPTION]
                    [--masters MASTERS [MASTERS ...]]
```

```

[--attributes ATTRIBUTES [ATTRIBUTES ...]]
[--all-projects]
[--sudo-project-id SUDO_PROJECT_ID]
name

```

Table 92.29. Positional arguments

Value	Summary
name	Zone name

Table 92.30. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--email EMAIL	Zone email
--type {PRIMARY,SECONDARY}	Zone type
--ttl TTL	Time to live (seconds)
--description DESCRIPTION	Description
--masters MASTERS [MASTERS ...]	Zone masters
--attributes ATTRIBUTES [ATTRIBUTES ...]	Zone attributes
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.31. Output formatter options

Value	Summary
-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 to show multiple columns

Table 92.32. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.33. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 92.34. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.9. ZONE DELETE

Delete zone

Usage:

```
openstack zone delete [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--all-projects]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```

Table 92.35. Positional arguments

Value	Summary
id	Zone id

Table 92.36. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.37. Output formatter options

Value	Summary
<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 to show multiple columns

Table 92.38. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.39. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 92.40. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.10. ZONE EXPORT CREATE

Export a Zone

Usage:

```

openstack zone export create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--all-projects]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_id

```

Table 92.41. Positional arguments

Value	Summary
zone_id	Zone id

Table 92.42. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.43. Output formatter options

Value	Summary
-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 to show multiple columns

Table 92.44. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.45. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 92.46. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.11. ZONE EXPORT DELETE

Delete a Zone Export

Usage:

```
openstack zone export delete [-h] [--all-projects]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_export_id
```

Table 92.47. Positional arguments

Value	Summary
zone_export_id	Zone export id

Table 92.48. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

92.12. ZONE EXPORT LIST

List Zone Exports

Usage:

```

openstack zone export list [-h] [-f {csv,json,table,value,yaml}]
                           [-c COLUMN]
                           [--quote {all,minimal,none,nonnumeric}]
                           [--noindent] [--max-width <integer>]
                           [--fit-width] [--print-empty]
                           [--sort-column SORT_COLUMN]
                           [--sort-ascending | --sort-descending]
                           [--all-projects]
                           [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.49. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.50. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 92.51. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 92.52. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.53. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.13. ZONE EXPORT SHOW

Show a Zone Export

Usage:

```
openstack zone export show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--all-projects]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          zone_export_id
```

Table 92.54. Positional arguments

Value	Summary
zone_export_id	Zone export id

Table 92.55. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false

Value	Summary
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.56. Output formatter options

Value	Summary
<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 to show multiple columns

Table 92.57. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.58. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 92.59. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.14. 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] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--all-projects]
                               [--sudo-project-id SUDO_PROJECT_ID]
                               zone_export_id

```

Table 92.60. Positional arguments

Value	Summary
zone_export_id	Zone export id

Table 92.61. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.62. Output formatter options

Value	Summary
-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 to show multiple columns

Table 92.63. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.64. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 92.65. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.15. 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] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--all-projects]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_file_path
```

Table 92.66. Positional arguments

Value	Summary
<code>zone_file_path</code>	Path to a zone file

Table 92.67. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.68. Output formatter options

Value	Summary
<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 to show multiple columns

Table 92.69. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.70. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 92.71. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.16. ZONE IMPORT DELETE

Delete a Zone Import

Usage:

```
openstack zone import delete [-h] [--all-projects]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_import_id
```

Table 92.72. Positional arguments

Value	Summary
zone_import_id	Zone import id

Table 92.73. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

92.17. ZONE IMPORT LIST

List Zone Imports

Usage:

```

openstack zone import list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--sort-ascending | --sort-descending]
                          [--all-projects]
                          [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.74. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.75. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 92.76. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 92.77. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.78. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.18. ZONE IMPORT SHOW

Show a Zone Import

Usage:

```
openstack zone import show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty] [--all-projects]
[--sudo-project-id SUDO_PROJECT_ID]
zone_import_id

```

Table 92.79. Positional arguments

Value	Summary
zone_import_id	Zone import id

Table 92.80. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.81. Output formatter options

Value	Summary
-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 to show multiple columns

Table 92.82. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.83. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 92.84. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.19. ZONE LIST

List zones

Usage:

```
openstack zone list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--sort-ascending | --sort-descending]
                    [--name NAME] [--email EMAIL]
                    [--type {PRIMARY,SECONDARY}] [--ttl TTL]
                    [--description DESCRIPTION] [--status STATUS]
                    [--all-projects]
                    [--sudo-project-id SUDO_PROJECT_ID]
```

Table 92.85. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name NAME</code>	Zone name
<code>--email EMAIL</code>	Zone email
<code>--type {PRIMARY,SECONDARY}</code>	Zone type
<code>--ttl TTL</code>	Time to live (seconds)
<code>--description DESCRIPTION</code>	Description
<code>--status STATUS</code>	Zone status
<code>--all-projects</code>	Show results from all projects. default: false

Value	Summary
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.86. Output formatter options

Value	Summary
<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 to show multiple columns
<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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 92.87. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 92.88. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.89. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
--print-empty	Print empty table if there is no data to show.

92.20. ZONE SET

Set zone properties

Usage:

```
openstack zone set [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                  [--noindent] [--prefix PREFIX]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--email EMAIL] [--ttl TTL]
                  [--description DESCRIPTION | --no-description]
                  [--masters MASTERS [MASTERS ...]] [--all-projects]
                  [--sudo-project-id SUDO_PROJECT_ID]
                  id
```

Table 92.90. Positional arguments

Value	Summary
id	Zone id

Table 92.91. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--email EMAIL	Zone email
--ttl TTL	Time to live (seconds)
--description DESCRIPTION	Description
--no-description--masters MASTERS [MASTERS ...]	Zone masters
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.92. Output formatter options

Value	Summary
<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 to show multiple columns

Table 92.93. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.94. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 92.95. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.21. ZONE SHOW

Show zone details

Usage:

```
openstack zone show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--all-projects]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```


Table 92.96. Positional arguments

Value	Summary
id	Zone id

Table 92.97. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.98. Output formatter options

Value	Summary
-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 to show multiple columns

Table 92.99. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.100. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 92.101. Table formatter options

Value	Summary
--max-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
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.22. ZONE TRANSFER ACCEPT LIST

List Zone Transfer Accepts

Usage:

```

openstack zone transfer accept list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--noindent]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--sort-column SORT_COLUMN]
                                   [--sort-ascending | --sort-descending]
                                   [--all-projects]
                                   [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.102. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.103. Output formatter options

Value	Summary
-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 to show multiple columns

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
<code>--sort-ascending</code>	Sort the column(s) in ascending order
<code>--sort-descending</code>	Sort the column(s) in descending order

Table 92.104. CSV formatter options

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 92.105. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.106. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.23. ZONE TRANSFER ACCEPT REQUEST

Accept a Zone Transfer Request

Usage:

```
openstack zone transfer accept request [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
```

```

[--max-width <integer>]
[--fit-width] [--print-empty]
--transfer-id TRANSFER_ID --key
KEY [--all-projects]
[--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.107. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--transfer-id TRANSFER_ID	Transfer id
--key KEY	Transfer key
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.108. Output formatter options

Value	Summary
-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 to show multiple columns

Table 92.109. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.110. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 92.111. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.24. ZONE TRANSFER ACCEPT SHOW

Show Zone Transfer Accept

Usage:

```

openstack zone transfer accept show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--all-projects]
                                     [--sudo-project-id SUDO_PROJECT_ID]
                                     id

```

Table 92.112. Positional arguments

Value	Summary
<code>id</code>	Zone tranfer accept id

Table 92.113. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.114. Output formatter options

Value	Summary
<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 to show multiple columns

Table 92.115. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.116. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 92.117. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.25. ZONE TRANSFER REQUEST CREATE

Create new zone transfer request

Usage:

```

openstack zone transfer request create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--target-project-id TARGET_PROJECT_ID]
                                     [--description DESCRIPTION]

```

```

[--all-projects]
[--sudo-project-id SUDO_PROJECT_ID]
zone_id

```

Table 92.118. Positional arguments

Value	Summary
zone_id	Zone id to transfer.

Table 92.119. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--target-project-id TARGET_PROJECT_ID	Target project id to transfer to.
--description DESCRIPTION	Description
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.120. Output formatter options

Value	Summary
-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 to show multiple columns

Table 92.121. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.122. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 92.123. Table formatter options

Value	Summary
<code>--max-width <integer></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
<code>--print-empty</code>	Print empty table if there is no data to show.

92.26. ZONE TRANSFER REQUEST DELETE

Delete a Zone Transfer Request

Usage:

```
openstack zone transfer request delete [-h] [--all-projects]
                                     [--sudo-project-id SUDO_PROJECT_ID]
                                     id
```

Table 92.124. Positional arguments

Value	Summary
<code>id</code>	Zone transfer request id

Table 92.125. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

92.27. ZONE TRANSFER REQUEST LIST

List Zone Transfer Requests

Usage:

```
openstack zone transfer request list [-h]
                                     [-f {csv,json,table,value,yaml}]
```



```

[-c COLUMN]
[--quote {all,minimal,none,nonnumeric}]
[--noindent]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--sort-ascending | --sort-descending]
[--all-projects]
[--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.126. Command arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.127. Output formatter options

Value	Summary
-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 to show multiple columns
--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
--sort-ascending	Sort the column(s) in ascending order
--sort-descending	Sort the column(s) in descending order

Table 92.128. CSV formatter options

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 92.129. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.130. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.28. ZONE TRANSFER REQUEST SET

Set a Zone Transfer Request

Usage:

```

openstack zone transfer request set [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--description DESCRIPTION | --no-description]
    [--target-project-id TARGET_PROJECT_ID]
    [--all-projects]
    [--sudo-project-id SUDO_PROJECT_ID]
    id
  
```

Table 92.131. Positional arguments

Value	Summary
id	Zone transfer request id

Table 92.132. Command arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--description DESCRIPTION</code>	Description
<code>--no-description--target-project-id TARGET_PROJECT_ID</code>	Target project id to transfer to.
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.133. Output formatter options

Value	Summary
<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 to show multiple columns

Table 92.134. JSON formatter options

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.135. Shell formatter options

Value	Summary
<code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 92.136. Table formatter options

Value	Summary
<code>--max-width <integer></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

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

92.29. ZONE TRANSFER REQUEST SHOW

Show Zone Transfer Request Details

Usage:

```

openstack zone transfer request show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--all-projects]
                                     [--sudo-project-id SUDO_PROJECT_ID]
                                     id

```

Table 92.137. Positional arguments

Value	Summary
<code>id</code>	Zone tranfer request id

Table 92.138. Command arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.139. Output formatter options

Value	Summary
<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 to show multiple columns

Table 92.140. JSON formatter options

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.141. Shell formatter options

Value	Summary
--prefix PREFIX	Add a prefix to all variable names

Table 92.142. Table formatter options

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.