



CLI

开发指南

文档版本 01

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目录

1 OpenStackClient CLI 停止支持通知	1
2 CLI 概述	2
3 CLI 使用样例	7
3.1 使用 Individual CLI 创建云服务器概述.....	7
3.2 使用 Individual CLI 创建云服务器示例.....	7
3.3 使用 Unified CLI 创建云服务器概述.....	9
3.4 使用 Unified CLI 创建云服务器示例.....	10
3.5 使用 Individual CLI 删除云服务器.....	11
3.6 使用 Unified CLI 删除云服务器.....	11
4 CLI 常见问题	12
4.1 安装类.....	12
4.1.1 升级软件到最新版本的方法.....	12
4.1.2 降级软件到指定版本的方法.....	12
4.1.3 debug 参数的使用方法.....	12
4.1.4 OpenStack 社区 CLI 参考.....	13
4.1.5 cryptography 安装问题.....	13
4.1.6 离线安装 setuptools 和 pip.....	13
4.2 使用类.....	13
4.2.1 在线帮助的使用方法.....	13
4.2.2 如何知道 CLI 调用了哪个 API.....	14
4.3 其他.....	14
4.3.1 如何获取 CLI 源代码.....	14
A OpenStack 客户端命令行	16

1 OpenStackClient CLI 停止支持通知

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尊敬的华为云客户:

为了给您带来更好的服务体验, 华为云计划于**2021/12/30 00:00 (北京时间)** 停止 OpenStackClient CLI 的支持工作, 不再提供咨询以及问题定位服务。

华为云全新设计的**华为云CLI**, 提供统一的CLI使用方式。华为云在此提醒您, 为避免影响您的业务, 建议您在**2021/12/30 00:00 (北京时间)** 之前替换使用华为云CLI。

如您有任何问题, 可随时通过**工单**或者服务热线 (4000-955-988或950808) 与我们联系。

感谢您对华为云的支持!

2 CLI 概述

命令行接口采用[OpenStackClient](#)工具。该工具提供命令行客户端，通过执行命令即可访问云服务的API获取云服务，操作方便。

命令行客户端概述

OpenStackClient项目设有统一命令行客户端（Unified CLI），通过执行命令即可访问OpenStack项目的API，操作非常简单。并且，大多数OpenStack项目会为每一项服务设置一个命令行客户端（Individual CLI）。例如，Compute服务提供的是Nova命令行客户端。具体信息请参见[详情](#)。

安装

工具安装说明

[OpenStackClient](#)可以通过安装运行python-openstackclient插件使用。因此，在使用该工具之前，需要确保python-openstackclient正常。

只要保证Python运行正常，该工具可以在所有操作系统上运行。但是由于各种操作系统之间存在差异，所以操作方法不尽相同。推荐使用Ubuntu16.04(64bit)操作系统。以下操作都以Ubuntu16.04(64bit)为例。

安装过程请在root权限下进行。

1. 更新系统

执行如下命令：

```
apt-get update
```

```
apt-get upgrade
```

2. 安装Python

根据OS类型安装 Python和pip。支持Python 2.7版本。

Ubuntu 16.04一般包含 Python 2.7。若尚未安装Python，请按照下面步骤安装。

执行以下命令安装python：

```
apt-get install python
```

执行以下命令安装setuptools：

```
apt-get install python-setuptools
```

执行以下命令安装pip：

apt-get install python-pip

（如果Ubuntu支持的setuptools和pip版本比较低，用户可以采用离线的方式安装。）

执行以下命令安装dev:

apt-get install python-dev3. **安装 python-openstackclient以及依赖的组件**

默认支持以下版本:

- python-openstackclient: 3.2.1
- python-novaclient: 6.0.2
- python-glanceclient: 2.5.0
- python-keystoneclient: 3.5.1
- python-neutronclient: 6.0.1
- python-cinderclient: 1.9.0
- python-heatclient: 1.5.1
- python-designateclient: 2.3.0
- openstacksdk: 0.9.5
- cliff: 2.2.0
- os-client-config: 1.21.1
- osc-lib: 1.1.0
- 通过执行以下命令，使用pip安装python-openstackclient:

pip install python-openstackclient==3.2.1

安装完成之后，请在命令行中输入如下命令，验证python-openstackclient能否正常运行。

openstack -h

查看是否显示帮助信息。如有帮助信息，表示安装成功。

其他部件安装方法相同。请使用相同的命令，按顺序进行安装。

配置

1. 配置OpenStack Client

既可以使用root用户，也可以以普通用户身份进行配置。

须知

只能通过安全网络（例如，通过VPN或租户弹性云服务器）调用API。如果网络不安全，则可能会受到攻击。

- a. 在OpenStack客户端安装路径下，创建一个环境变量文件，例如**novarc**。
- b. 使用文本编辑器创建环境变量文件，然后输入用户名、密码、区域、IAM IP地址和端口。

示例如下:

```
export OS_USERNAME="user_name" //登录控制台所用的用户名
export OS_USER_DOMAIN_NAME=user_domain_name //登录控制台所用的账号名
export OS_PASSWORD=password //登录控制台所用的密码
```

```
# Only change these for a different region
export OS_TENANT_NAME=tenant_name//项目名称
export OS_PROJECT_NAME=tenant_name//项目名称
export OS_AUTH_URL=https://iam.example.com:443/v3
export OS_INTERFACE=public
export NOVA_ENDPOINT_TYPE=publicURL
export OS_ENDPOINT_TYPE=publicURL
export CINDER_ENDPOINT_TYPE=publicURL
export OS_VOLUME_API_VERSION=2
export OS_IDENTITY_API_VERSION=3
export OS_IMAGE_API_VERSION=2
```

用户名、账号名、项目名称等在我的凭证中可获取，请参考图2-1获取。其他环境变量说明请参见表2-1。

图 2-1 账号相关参数

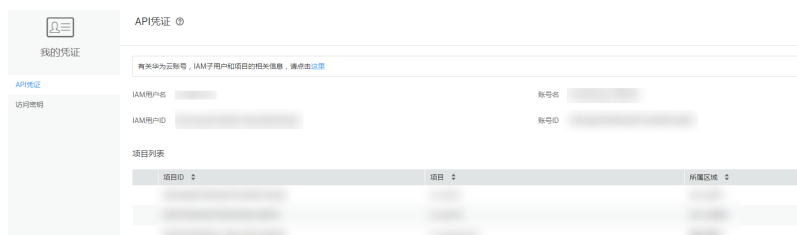


表 2-1 环境变量说明

参数	说明
OS_AUTH_URL	<p>参数值的格式为https://IAM URL:port number/API version。例如https://iam.example.com:443/v3</p> <ul style="list-style-type: none"> • IAM URL：请从地区和终端节点中获取。 • 端口号：443 • API版本：v3（当前） <p>取值样例如下： https://iam.cn-north-1.myhuaweicloud.com:443/v3</p>
OS_INTERFACE	指Endpoint可见类型。参数值为 public 。
NOVA_ENDPOINT_TYPE	指Nova的终端节点类型。当使用OpenStack命令时，需要配置该参数。参数值为 publicURL 。
OS_ENDPOINT_TYPE	指OS的终端节点类型。当使用OpenStack命令时，需要配置该参数。将参数值设置为 publicURL 。
CINDER_ENDPOINT_TYPE	指Cinder的终端节点类型。当使用OpenStack命令时，需要配置该参数。将参数值设置为 publicURL 。
OS_VOLUME_API_VERSION	指Cinder API的版本。参数值为 2 。

参数	说明
OS_IDENTITY_API_VERSION	指鉴权API版本。参数值为3。
OS_IMAGE_API_VERSION	指Glance API版本。参数值为2。

2. 执行以下命令设置环境变量：

```
source novarc
```

3. 注意：当调用OpenStackClient中的Keystone命令行时，需要配置环境变量OS_DOMAIN_NAME，并且将环境变量OS_TENANT_NAME和OS_PROJECT_NAME设置为空。命令如下：

```
export OS_DOMAIN_NAME=domain_name
```

```
unset OS_TENANT_NAME
```

```
unset OS_PROJECT_NAME
```

在调用其他服务的命令行时，需要把环境变量OS_DOMAIN_NAME设置为空，重新配置环境变量OS_TENANT_NAME和OS_PROJECT_NAME。命令如下：

```
unset OS_DOMAIN_NAME
```

```
export OS_TENANT_NAME=tenant_name
```

```
export OS_PROJECT_NAME=project_name
```

完成CLI安装和配置后，您就可以开始使用CLI了。

云平台支持的CLI列表，请参考附录。

如果您在安装、配置和使用过程中遇到问题，请到常见问题中寻找解决方法。

云平台除了支持OpenStack的Individual CLI和Unified CLI，还通过插件提供了Extended CLI。如果您需要使用Extended CLI，请参考下面的指导完成安装和配置，然后进行使用。

（可选）安装扩展客户端

扩展客户端可以通过运行python-openstackclient插件使用。因此，在使用扩展客户端之前，需要保证python-openstackclient处于正常状态。

当前共提供六个服务的插件。详情请参见[插件清单](#)。请根据实际需要选择安装所需的服务插件。

由于插件未被提交至pip库，因此插件不能使用pip安装。请从GitHub下载插件源代码（请单击[这里](#)下载插件），使用**python setup.py install**来安装插件。关于如何安装，请参见各插件随附的**Readme** 文档。

（可选）配置扩展客户端

在使用扩展客户端时，需要配置认证信息，认证成功后，扩展客户端才可以访问服务。您可以通过配置环境变量的方式来配置用户名和密码进行认证。

环境变量如下：

```
export OS_AUTH_URL=<url-to-openstack-identity>  
export OS_PROJECT_NAME=<project-name>
```



```
export OS_USERNAME=<username>
export OS_PASSWORD=<password>
export OS_REGION_NAME=<region>
# IP address of each service
export OS_ANTIDDOS_ENDPOINT_OVERRIDE=<url-to-endpoint-of-service>
export OS_AS_ENDPOINT_OVERRIDE=<url-to-endpoint-of-service>
export OS_CLOUDEYE_ENDPOINT_OVERRIDE=<url-to-endpoint-of-service>
export OS_VB_ENDPOINT_OVERRIDE=<url-to-endpoint-of-service>
export OS_WORKSPACE_ENDPOINT_OVERRIDE=<url-to-endpoint-of-service>
export OS_KM_ENDPOINT_OVERRIDE=<url-to-endpoint-of-service>
```

配置环境变量后，即可使用命令行。

说明

- 部分OpenStack版本，参数“OS_REGION_NAME”为选填，如OpenStack 5.2.1、OpenStack 3.8.1，建议填写。
- 如需访问IAM、OBS等全局服务，OS_REGION_NAME= “*”。

3 CLI 使用样例

3.1 使用 Individual CLI 创建云服务器概述

创建流程

1. 使用Neutron命令创建Port。
2. 使用Cinder命令，创建系统盘和数据盘。
3. 使用Nova命令，创建弹性云服务器。

约束和限制

1. 在创建云服务器之前，需要先申请port，并且需要创建一个主网卡资源（并且只能有一个），以便进行云服务器发放。
2. 创建云服务器时，请不要删除对应的镜像（Image）、网络（Network）、子网（subnet）、安全组（security_group）等信息。
3. 暂不支持批量创建云服务器。
4. 当云服务器创建失败或云服务器不可用时，请删除云服务器后重新参考上述流程创建。

3.2 使用 Individual CLI 创建云服务器示例

创建 Port

执行以下命令，创建Port。

```
neutron port-create d5d7e451-cc4a-4c26-a4cf-6e94d56cbabd --name port_test
```

回显如下所示。

Field	Value
admin_state_up	True
allowed_address_pairs	
binding:vif_details	{}
binding:vnic_type	normal
device_id	
device_owner	
extra_dhcp_opts	
fixed_ips	{"subnet_id": "14cae719-ab9c-401b-9097-4a6ff23c8407", "ip_address": "192.168.0.187"}
id	c2f6726d-99aa-4719-a63d-6dd72a627134
mac_address	fa:16:3e:47:61:39
name	port_test
network_id	d5d7e451-cc4a-4c26-a4cf-6e94d56cbabd
security_groups	c084f252-6ca1-425c-bf91-66ce2d5d1004
status	DOWN
tenant_id	9dbc88cd326b4c9db094f6612cfc8123

创建镜像磁盘

执行以下命令，创建镜像磁盘。

```
cinder create --image-id f6784132-2951-4d1c-82b1-68c540f9fdd6 --volume-type SATA --availability-zone aaa --name volume_test 10
```

📖 说明

命令中的“aaa”表示可用分区名称。

回显如下所示。

Property	Value
attachments	[]
availability_zone	aaa
bootable	false
consistencygroup_id	None
created_at	2017-07-17T06:26:51.559810
description	None
encrypted	False
id	09a0281f-9cc1-4735-8d61-bdba6abe82a7
metadata	{}
multiattach	False
name	volume_test
os-vol-host-attr:host	audi.eu-de-01#SATA
os-vol-mig-status-attr:migstat	None
os-vol-mig-status-attr:name_id	None
os-vol-tenant-attr:tenant_id	9dbc88cd326b4c9db094f6612cfc8123
os-volume-replication:driver_data	None
os-volume-replication:extended_status	None
replication_status	disabled
shareable	False
size	10
snapshot_id	None
source_volid	None
status	creating
updated_at	2017-07-17T06:26:51.851250
user_id	5d5eab4ed14f4ff98062b4d0a5710abc
volume_image_metadata	None
volume_type	SATA

创建云服务器

执行以下命令，创建云服务器。

```
nova boot --boot-volume 09a0281f-9cc1-4735-8d61-bdba6abe82a7 --  
availability-zone aaa --flavor normal1 --nic port-id=c2f6726d-99aa-4719-  
a63d-6dd72a627134 server_test
```

📖 说明

命令中的“aaa”表示可用分区名称。

回显如下所示。

Property	Value
OS-DCF:diskConfig	MANUAL
OS-EXT-AZ:availability_zone	aaa
OS-EXT-SRW-ATTR:host	-
OS-EXT-SRW-ATTR:hypervisor_hostname	-
OS-EXT-SRW-ATTR:instance_name	instance-008c249a
OS-EXT-STS:power_state	0
OS-EXT-STS:task_state	scheduling
OS-EXT-STS:vm_state	building
OS-SRW-USG:launched_at	-
OS-SRW-USG:terminated_at	-
accessIPv4	
accessIPv6	
adminPass	LSN8jNks8Zyd
config_drive	
created	2017-07-17T06:30:55Z
flavor	sl.medium (normal1)
hostId	
id	c8ca6f13-2be5-43f8-9fc9-cb19957564c4
image	OTC_openSUSE_42.1_JeOS.x86_64-1.1.1-20160925-0222 (f6784132-2951-4d1c-82b1-68c540f9fdd6)
key_name	-
metadata	{}
name	server_test
os-extended-volumes:volumes_attached	[{"id": "09a0281f-9cc1-4735-8d61-bdba6abe82a7"}]
progress	0
security_groups	default
status	BUILD
tenant_id	9dbc88cd326b4c9db094f6612cfc8123
updated	2017-07-17T06:30:56Z
user_id	5d5eab4ed14f4ff90062b4d0a5710abc

3.3 使用 Unified CLI 创建云服务器概述

Unified CLI不支持通过磁盘创建云服务器，要采用通过镜像创建云服务器的方式。

创建流程

1. 使用openstack port create命令创建Port。
2. 使用openstack server create命令创建云服务器。

约束和限制

1. 在创建云服务器之前，需要先申请port，并且需要创建一个主网卡资源（并且只能有一个），以便进行云服务器发放。
2. 创建云服务器时，请不要删除对应的镜像（Image）、网络（Network）、子网（subnet）、安全组（security_group）等信息。
3. 不支持批量创建云服务器。
4. 如未按以上原则创建云服务器，造成云服务器创建失败以及云服务器不可用，需要删除云服务器后重新按照上述流程创建。

3.4 使用 Unified CLI 创建云服务器示例

创建 Port

执行以下命令，创建Port。

```
openstack port create port_test --network d5d7e451-cc4a-4c26-a4cf-6e94d56cbabd
```

Field	Value
admin_state_up	UP
allowed_address_pairs	
binding_vif_details	
binding_vnic_type	normal
device_id	
device_owner	
extra_dhcp_opts	
fixed_ips	ip_address='192.168.0.102', subnet_id='14cae719-ab9c-401b-9097-4a6ff23c8407'
headers	
id	06137bc8-bf2a-47cf-8f0a-86ff43581cbf
mac_address	fa:16:3e:ef:6f:ab
name	port_test
network_id	d5d7e451-cc4a-4c26-a4cf-6e94d56cbabd
project_id	9dbc88cd326b4c9db094f6612cfc8123
security_groups	c084f252-6ca1-425c-bf91-66ce2d5d1004
status	DOWN

创建云服务器

执行以下命令，创建云服务器。

```
openstack server create --image f6784132-2951-4d1c-82b1-68c540f9fdd6 --flavor normal1 --availability-zone aaa --nic port-id=06137bc8-bf2a-47cf-8f0a-86ff43581cbf myserver
```

说明

命令中的“aaa”表示可用分区名称。

回显如下所示。

Field	Value
OS-DCF:diskConfig	MANUAL
OS-EXT-AZ:availability_zone	aaa
OS-EXT-SRV-ATTR:host	None
OS-EXT-SRV-ATTR:hypervisor_hostname	None
OS-EXT-SRV-ATTR:instance_name	instance-000c24a7
OS-EXT-STS:power_state	NOSTATE
OS-EXT-STS:task_state	scheduling
OS-EXT-STS:vm_state	building
OS-SRV-USG:launched_at	None
OS-SRV-USG:terminated_at	None
accessIPv4	
accessIPv6	
addresses	
adminPass	F8UdyjAgyd25
config_drive	
created	2017-07-17T06:48:02Z
flavor	s1.medium (normal1)
hostId	
id	abba26c2-e60b-4453-8c60-fb1f6aba457
image	OTC_openSUSE_42_1_jeOS.x86_64-1.1.1-20160925-0222 (f6784132-2951-4d1c-82b1-68c540f9fdd6)
key_name	None
name	myserver
os-extended-volumes:volumes_attached	[]
progress	0
project_id	9dbc88cd326b4c9db094f6612cfc8123
properties	
security_groups	[[{'name': 'u'default'}]]
status	BUILD
updated	2017-07-17T06:48:03Z
user_id	5d5eab4ed14f4ff98962b4d6a5710abc

3.5 使用 Individual CLI 删除云服务器

删除云服务器是一个单一的操作，执行以下命令，删除云服务器。

```
nova delete 3cc81618-4ff4-4e6a-b4df-2a437cd97422
```

3.6 使用 Unified CLI 删除云服务器

删除云服务器是一个单一的操作，执行以下命令，删除云服务器。

```
openstack server delete 428ac8a5-4fd2-4c22-a33b-f48b46231353
```

4 CLI 常见问题

4.1 安装类

4.1.1 升级软件到最新版本的方法

在安装python时，有时会需要软件升级到最新版本，以解决遇到的问题。

举例：执行以下命令升级setuptools和pip：

```
pip install -U setuptools
```

```
pip install -U pip
```

4.1.2 降级软件到指定版本的方法

在安装python-openstackclient 3.2.1时，openstackclient依赖的组件会自动升级到比较高的版本，导致openstack部分命令不可用。

如果遇到此类问题，请重新按推荐版本安装相关的组件。

举例：

```
pip install os-client-config==1.21.1
```

4.1.3 debug 参数的使用方法

在CLI的使用过程中，如果遇到问题，debug是一种非常方便的定位手段。

打开debug开关，有助于快速定位问题。

举例：在使用openstack help命令时，如果遇到问题，打开debug的方法如下：

```
openstack --debug --help
```

如下示例，debug信息提示，需要安装warlock：

```
Traceback (most recent call last):
  File "/usr/local/lib/python2.7/dist-packages/cliff/help.py", line 42, in __call__
    factory = ep.load()
  File "build/bdist.linux-x86_64/egg/pkg_resources/__init__.py", line 2369, in load
    self.require(*args, **kwargs)
  File "build/bdist.linux-x86_64/egg/pkg_resources/__init__.py", line 2386, in require
    items = working_set.resolve(reqs, env, installer)
  File "build/bdist.linux-x86_64/egg/pkg_resources/__init__.py", line 846, in resolve
    raise DistributionNotFound(req, requirers)
DistributionNotFound: The 'jsonschema<3,>=0.7' distribution was not found and is required by warlock
END return value: 1
```

4.1.4 OpenStack 社区 CLI 参考

点击[此处](#)，获取OpenStack社区CLI的最新指导。

4.1.5 cryptography 安装问题

在Client安装过程中，如果遇到cryptography安装不上，请用以下方法解决。

执行以下命令安装build-essential libssl-dev libffi-dev：

```
apt-get install build-essential libssl-dev libffi-dev
```

4.1.6 离线安装 setuptools 和 pip

setuptools官方下载地址：<https://pypi.python.org/pypi/setuptools>

pip官方下载地址：<https://pypi.python.org/pypi/pip>

请先安装setuptools，再安装pip

1. 进入setuptools或pip官方下载页。
2. 下载对应的压缩包。
3. 将压缩包上传到linux环境中。
4. 使用unzip或tar命令解压压缩包。
5. 进入到解压目录，执行python setup.py install即可完成安装。

4.2 使用类

4.2.1 在线帮助的使用方法

通过help命令可以方便的获得在线帮助。

举例：

1、获取相关的命令

```
root@n-version-client:/home/ubuntu# openstack help volume
Command "volume" matches:
volume backup create
volume backup delete
volume backup list
volume backup restore
volume backup show
volume create
volume delete
volume list
volume qos associate
volume qos create
volume qos delete
volume qos disassociate
volume qos list
volume qos set
volume qos show
volume qos unset
volume service list
volume set
volume show
volume transfer request list
volume type create
volume type delete
volume type list
volume type set
volume type show
volume type unset
volume unset
```

2、获取相关的参数，以及参数说明


```
root@n-version-client:/home/ubuntu# openstack help volume create
usage: openstack volume create [-h] [-f {html,json,shell,table,value,yaml}]
                               [-c COLUMN] [--max-width <integer>]
                               [--noindent] [--prefix PREFIX] --size <size>
                               [--type <volume-type>] [--image <image>]
                               [--snapshot <snapshot>] [--source <volume>]
                               [--description <description>] [--user <user>]
                               [--project <project>]
                               [--availability-zone <availability-zone>]
                               [--property <key=value>]
                               <name>

Create new volume

positional arguments:
  <name>                Volume name

optional arguments:
  -h, --help            show this help message and exit
  --size <size>         Volume size in GB
  --type <volume-type> Set the type of volume
  --image <image>       Use <image> as source of volume (name or ID)
  --snapshot <snapshot> Use <snapshot> as source of volume (name or ID)
  --source <volume>     Volume to clone (name or ID)
  --description <description>
                        Volume description
  --user <user>         Specify an alternate user (name or ID)
  --project <project>   Specify an alternate project (name or ID)
  --availability-zone <availability-zone>
                        Create volume in <availability-zone>
  --property <key=value>
                        Set a property to this volume (repeat option to set
                        multiple properties)

output formatters:
  output formatter options

  -f {html,json,shell,table,value,yaml}, --format {html,json,shell,table,value,yaml}
                        the output format, defaults to table
  -c COLUMN, --column COLUMN
                        specify the column(s) to include, can be repeated

table formatter:
  --max-width <integer>
                        Maximum display width, <1 to disable. You can also use
                        the CLIFF_MAX_TERM_WIDTH environment variable, but the
```

4.2.2 如何知道 CLI 调用了哪个 API

打开CLI的debug参数，即可知道当前执行的命令调用了哪个API。

举例：

```
nova --debug list
```

```
openstack --debug server list
```

4.3 其他

4.3.1 如何获取 CLI 源代码

云平台当前支持OpenStack Individual CLI、OpenStack Unified CLI和Extended CLI。

- **OpenStack Individual CLI源代码：**

版本：6.0.2

<https://github.com/openstack/python-novaclient>

版本：2.5.0

<https://github.com/openstack/python-glanceclient>

版本：3.5.1

<https://github.com/openstack/python-keystoneclient>

版本：6.0.1

<https://github.com/openstack/python-neutronclient>

版本：1.9.0

<https://github.com/openstack/python-cinderclient>

版本：1.5.1

<https://github.com/openstack/python-heatclient>

版本：2.3.0

<https://github.com/openstack/python-designateclient>

- **OpenStack Unified CLI源代码：**

<https://github.com/openstack/python-openstackclient/tree/master>

版本：3.2.1

- **Extended CLI 源代码：**

https://github.com/huaweicloudsdk/osc_antiddos

https://github.com/huaweicloudsdk/osc_ces

https://github.com/huaweicloudsdk/osc_kms

https://github.com/huaweicloudsdk/osc_auto_scaling

https://github.com/huaweicloudsdk/osc_vbs

https://github.com/huaweicloudsdk/osc_workspace

A OpenStack 客户端命令行

OpenStack组件与云服务的对应关系：

OpenStack组件	云服务
Keystone	IAM
Nova	ECS
Neutron	VPC
Cinder	EVS
Glance	IMS
Designate	DNS

OpenStack Individual CLI

序号	组件	功能	命令行	备注
1	Nova	Create Server	nova boot	-
2	Nova	List Servers	nova list	-
3	Nova	Show Server Details	nova show	-
4	Nova	Update Server	nova rename	-
5	Nova	Delete Server	nova delete	-
6	Nova	Resize Server	nova resize	-
7	Nova	Confirm Resized Server	nova resize-confirm	-
8	Nova	Revert Resized Server	nova resize-revert	-
9	Nova	List Flavors	nova flavor-list	-
10	Nova	Show Flavor Details	nova flavor-show	-

序号	组件	功能	命令行	备注
11	Nova	Update or Delete Metadata	nova meta	-
12	Nova	Stop Server	nova stop	-
13	Nova	Start Server	nova start	-
14	Nova	Lock Server	nova lock	-
15	Nova	Unlock Server	nova unlock	-
16	Nova	Get Server Action By Request ID	nova instance-action	-
17	Nova	List Servers Action	nova instance-action-list	-
18	Nova	Attach Volume	nova volume-attach	-
19	Nova	Detach Volume	nova volume-detach	-
20	Nova	List Keypairs	nova keypair-list	-
21	Nova	Add Keypair	nova keypair-add	-
22	Nova	Show Keypair Details	nova keypair-show	-
23	Nova	Delete Keypair	nova keypair-delete	-
24	Nova	Show Quota Details	nova quota-show	-
25	Nova	Show Default Quota Details	nova quota-defaults	-
26	Nova	Attach Interface	nova interface-attach	-
27	Nova	List Port Interfaces	nova interface-list	-
28	Nova	Detach Interface	nova interface-detach	-
29	Nova	Show Server Password Details	nova get-password	-
30	Nova	Clear Admin Password	nova clear-password	-
31	Nova	Create Image	nova image-create	-
32	Nova	List Images	nova image-list	-

序号	组件	功能	命令行	备注
33	Nova	Show Image Details	nova image-show	-
34	Nova	Delete Image	nova image-delete	-
35	Nova	Reboot Server Hard	nova reboot --hard	-
36	Nova	Reboot Server Soft	nova reboot	-
37	Nova	List Attached Volumes	nova volume-attachments	-
38	Nova	List Networks	nova network-list	-
39	Nova	Create Security Group	nova secgroup-create	-
40	Nova	Delete Security Group	nova secgroup-delete	-
41	Nova	List Security Group	nova secgroup-list	-
42	Nova	Create Security Group Rule	nova secgroup-add-rule	-
43	Nova	Delete Security Group Rule	nova secgroup-delete-rule	-
44	Nova	Create Server Group	nova server-group-create	-
45	Nova	List Server Groups	nova server-group-list	-
46	Nova	Get Server Group Detail	nova server-group-get	-
47	Nova	Delete Server Group	nova server-group-delete	-
48	Nova	Rebuild Server	nova rebuild	-
49	Nova	Show Absolute Limits	nova limits	-
50	Nova	Associate Floating IP with Server	nova floating-ip-associate	-
51	Nova	Dissociate Floating IP From Server	nova floating-ip-disassociate	-
52	Nova	List Floating Ips	nova floating-ip-list	-
53	Nova	List API Versions	nova version-list	-

序号	组件	功能	命令行	备注
54	Nova	Update Security Group	nova secgroup-update	-
55	Nova	List Server Security Groups	nova list-secgroup	-
56	Nova	List Floating Ip Pools	nova floating-ip-pool-list	-
57	Cinder	Create Volume	cinder create	-
58	Cinder	List Volumes	cinder list	-
59	Cinder	Delete Volume	cinder delete	-
60	Cinder	Show Volume Details	cinder show	-
61	Cinder	Show Volume Metadata Details	cinder metadata-show	-
62	Cinder	Update Volume Metadata	cinder metadata	You can update only the volume metadata, namely, you can set only the value of action in the CLI.
63	Cinder	List Snapshots	cinder snapshot-list	-
64	Cinder	Delete snapshot	cinder snapshot-delete	-
65	Cinder	Show snapshot Details	cinder snapshot-show	-
66	Cinder	Create snapshot	cinder snapshot-create	-
67	Cinder	Show Quota Details	cinder quota-show	-
68	Cinder	List Backups	cinder backup-list	-
69	Cinder	Show Backup Details	cinder backup-show	-
70	Cinder	Delete Backup	cinder backup-delete	-
71	Cinder	Extend Volume	cinder extend	-
72	Cinder	Update Volume	cinder rename	-

序号	组件	功能	命令行	备注
73	Cinder	Update snapshot	cinder snapshot- rename	-
74	Cinder	Create metadata	cinder snapshot- metadata	action=set
75	Cinder	Show snapshot metadata	cinder snapshot- metadata-show	-
76	Cinder	Update snapshot metadata	cinder snapshot- metadata-update- all	-
77	Cinder	Delete snapshot metadata	cinder snapshot- metadata	action=unset
78	Cinder	Update Volume Metadata	cinder metadata- update-all	-
79	Cinder	Set volume bootable	cinder set- bootable	-
80	Cinder	Set volume readonly	cinder readonly- mode-update	-
81	Cinder	List api extensions	cinder list- extensions	-
82	Cinder	Querying EVS disk types	cinder type-list	-
83	Cinder	Querying details about an EVS disk type	cinder type-show	-
84	Cinder	Restore backup	cinder backup- restore	-
85	Glance	Show Image Details	glance image- show	-
86	Glance	List Images	glance image-list	-
87	Glance	Delete Image	glance image- delete	-
88	Glance	Update Image Tag Definition	glance image-tag- update	-
89	Glance	Delete Image Tag Definition	glance image-tag- delete	-

序号	组件	功能	命令行	备注
90	Glance	Create Image Metadata	glance image-create	Constraint: You can set the value of the disk-format parameter to vhd instead of other values, such as raw. The value of the --min-disk parameter must be greater than or equal to the disk size (in GB) indicated by the image file.
91	Glance	Upload Image File	glance image-upload	Constraint: The supported formats must be qcow2, vmdk, and vhd instead of other formats, such as zvhd.
92	Neutron	Create Port	neutron port-create	The admin_state_up attribute can only be true. The fixed_ip attribute contains only one port and a fixed IP address. device_owner is read-only. security_groups supports only one security group.

序号	组件	功能	命令行	备注
93	Neutron	Update Port	neutron port-update	The admin_state_up attribute can only be true. The fixed_ip attribute contains only one port and a fixed IP address. device_owner is read-only. security_groups supports only one security group.
94	Neutron	Delete Port	neutron port-delete	The admin_state_up attribute can only be true. The fixed_ip attribute contains only one port and a fixed IP address. device_owner is read-only. security_groups supports only one security group.

序号	组件	功能	命令行	备注
95	Neutron	List Ports	neutron port-list	The admin_state_up attribute can only be true. The fixed_ip attribute contains only one port and a fixed IP address. device_owner is read-only. security_groups supports only one security group.
96	Neutron	Show port Details	neutron port-show	The admin_state_up attribute can only be true. The fixed_ip attribute contains only one port and a fixed IP address. device_owner is read-only. security_groups supports only one security group.

序号	组件	功能	命令行	备注
97	Neutron	List Networks	neutron net-list	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of shared. provider:network_type supports only VXLAN.
98	Neutron	Show network Details	neutron net-show	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of shared. provider:network_type supports only VXLAN.
99	Neutron	Create network	neutron net-create	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of shared. provider:network_type supports only VXLAN.

序号	组件	功能	命令行	备注
100	Neutron	Update network	neutron net-update	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of shared. provider:network_type supports only VXLAN.
101	Neutron	Delete network	neutron net-delete	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of shared. provider:network_type supports only VXLAN.
102	Neutron	List subnets	neutron subnet-list	IPv6 is not supported.
103	Neutron	Show subnet Details	neutron subnet-show	IPv6 is not supported.
104	Neutron	Create subnet	neutron subnet-create	IPv6 is not supported.
105	Neutron	Update subnet	neutron subnet-update	IPv6 is not supported.
106	Neutron	Delete subnet	neutron subnet-delete	IPv6 is not supported.

序号	组件	功能	命令行	备注
107	Neutron	List routers	neutron router-list	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of distributed. Only the tenant who has the administrator right can set the value of ha.
108	Neutron	Show router Details	neutron router-show	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of distributed. Only the tenant who has the administrator right can set the value of ha.

序号	组件	功能	命令行	备注
109	Neutron	Create router	neutron router-create	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of distributed. Only the tenant who has the administrator right can set the value of ha.
110	Neutron	Update router	neutron router-update	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of distributed. Only the tenant who has the administrator right can set the value of ha.

序号	组件	功能	命令行	备注
111	Neutron	Delete router	neutron router-delete	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of distributed. Only the tenant who has the administrator right can set the value of ha.
112	Neutron	List router ports	neutron router-port-list	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of distributed. Only the tenant who has the administrator right can set the value of ha.

序号	组件	功能	命令行	备注
113	Neutron	Add router interface	neutron router-interface-add	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of distributed. Only the tenant who has the administrator right can set the value of ha.
114	Neutron	Delete router interface	neutron router-interface-delete	The admin_state_up attribute can only be true. Only the tenant who has the administrator right can set the value of distributed. Only the tenant who has the administrator right can set the value of ha.
115	Neutron	List floating IPs	neutron floatingip-list	floating_network_id supports only fixed external networks.
116	Neutron	Show floating IP Details	neutron floatingip-show	floating_network_id supports only fixed external networks.

序号	组件	功能	命令行	备注
117	Neutron	Create floating IP	neutron floatingip-create	floating_network_id supports only fixed external networks.
118	Neutron	Associate floating IP	neutron floatingip-associate	floating_network_id supports only fixed external networks.
119	Neutron	Delete floating IP	neutron floatingip-delete	floating_network_id supports only fixed external networks.
120	Neutron	Disassociate floating IP	neutron floatingip-disassociate	floating_network_id supports only fixed external networks.
121	Neutron	List security groups	neutron security-group-list	You cannot set the name field to default when creating and updating the field. Ethertype does not support IPv6.
122	Neutron	Show security group Details	neutron security-group-show	You cannot set the name field to default when creating and updating the field. Ethertype does not support IPv6.

序号	组件	功能	命令行	备注
123	Neutron	Create security group	neutron security-group-create	You cannot set the name field to default when creating and updating the field. Ethertype does not support IPv6.
124	Neutron	Update security group	neutron security-group-update	You cannot set the name field to default when creating and updating the field. Ethertype does not support IPv6.
125	Neutron	Delete security group	neutron security-group-delete	You cannot set the name field to default when creating and updating the field. Ethertype does not support IPv6.
126	Neutron	List security group rules	neutron security-group-rule-list	You cannot set the name field to default when creating and updating the field. Ethertype does not support IPv6.

序号	组件	功能	命令行	备注
127	Neutron	Show security group rule Details	neutron security-group-rule-show	You cannot set the name field to default when creating and updating the field. Ethertype does not support IPv6.
128	Neutron	Create security group rule	neutron security-group-rule-create	You cannot set the name field to default when creating and updating the field. Ethertype does not support IPv6.
129	Neutron	Delete security group rule	neutron security-group-rule-delete	You cannot set the name field to default when creating and updating the field. Ethertype does not support IPv6.

OpenStack Unified CLI

序号	组件	功能	命令行	备注
1	Nova	List Servers	openstack server list	-
2	Nova	Show Server Details	openstack server show	-
3	Nova	Update Server	openstack server set	Constraint: Only the VM name can be updated.
4	Nova	Delete Server	openstack server delete	-

序号	组件	功能	命令行	备注
5	Nova	Resize Server	openstack server resize --flavor	-
6	Nova	Confirm Resized Server	openstack server resize --confirm	-
7	Nova	Revert Resized Server	openstack server resize --revert	-
8	Nova	List Flavors	openstack flavor list	-
9	Nova	Show Flavor Details	openstack flavor show	-
10	Nova	Stop Server	openstack server stop	-
11	Nova	Start Server	openstack server start	-
12	Nova	Lock Server	openstack server lock	-
13	Nova	Unlock Server	openstack server unlock	-
14	Nova	Detach Volume	openstack server remove volume	-
15	Nova	List Keypairs	openstack keypair list	-
16	Nova	Add Keypair	openstack keypair create	-
17	Nova	Show Keypairs	openstack keypair show	-
18	Nova	Delete Keypair	openstack keypair delete	-
19	Nova	Create Image	openstack server image create	-
20	Nova	Reboot Server Hard	openstack server reboot --hard	-
21	Nova	Reboot Server Soft	openstack server reboot --soft	-
22	Nova	Create Server(old)	openstack server create	-
23	Nova	Resize Server	openstack server resize	-

序号	组件	功能	命令行	备注
24	Nova	Rebuild Server	openstack server rebuild	-
25	Nova	List Server Group	openstack server group list	-
26	Nova	Create Server Group	openstack server group create	-
27	Nova	Show Server Group	openstack server group show	-
28	Nova	Delete Server Group	openstack server group delete	-
29	Nova	Show Absolute Limits	openstack limits show	-
30	Cinder	Create Volume	openstack volume create	-
31	Cinder	List Volumes	openstack volume list	-
32	Cinder	Delete Volume	openstack volume delete	-
33	Cinder	Show Volume	openstack volume show	-
34	Cinder	List Backups	openstack volume backup list	-
35	Cinder	Show Backup Details	openstack volume backup show	-
36	Cinder	Delete Backup	openstack volume backup delete	-
37	Cinder	Extend Volume	openstack volume set	Constraint: Only the name, description, property, and size can be configured.
38	Cinder	List Volumes Details	openstack volume list	-
39	Cinder	List snapshots with details	openstack snapshot list	-

序号	组件	功能	命令行	备注
40	Cinder	Show snapshot	openstack snapshot show	-
41	Cinder	Delete snapshot	openstack snapshot delete	-
42	Cinder	Create snapshot	openstack snapshot create	-
43	Cinder	Update snapshot	openstack snapshot set	-
44	Cinder	Querying EVS disk types	openstack volume type list	-
45	Cinder	Querying details about an EVS disk type	openstack volume type show	-
46	Cinder	List Backups with details	openstack volume backup list	-
47	Cinder	Delete backup	openstack volume backup delete	-
48	Cinder	Restore backup	openstack volume backup restore	-
49	Glance	Show Image Details	openstack image show	-
50	Glance	List Images	openstack image list	-
51	Glance	Delete Image	openstack image delete	-
52	Glance	Update Image Tag Definition	openstack image set --tag	Constraint: The image whose status is queued cannot be configured with labels.
53	Glance	Delete Image Tag Definition	openstack image unset --tag	-

序号	组件	功能	命令行	备注
54	Glance	Create Image	openstack image create	Constraint: You can set the value of the disk-format parameter to vhd instead of other values, such as raw. The value of the --min-disk parameter must be greater than or equal to the disk size (in GB) indicated by the image file.
55	Neutron	Create Port	openstack port create	Constraint: The device-owner, device, no-security-group, mac-address, and disable fields cannot be configured.
56	Neutron	Update Port	openstack port set	Constraint: The device-owner, device, no-security-group, and disable fields cannot be configured.
57	Neutron	Delete Port	openstack port delete	-
58	Neutron	List Ports	openstack port list	-

序号	组件	功能	命令行	备注
59	Neutron	Show port	openstack port show	-
60	Neutron	List Networks	openstack network list	-
61	Neutron	Show network Details	openstack network show	-
62	Neutron	Create network	openstack network create	Constraint: The share field cannot be configured.
63	Neutron	Update network	openstack network set	Constraint: The share field cannot be configured.
64	Neutron	Delete network	openstack network delete	-
65	Neutron	List subnets	openstack subnet list	-
66	Neutron	Show subnet Details	openstack subnet show	-
67	Neutron	Create subnet	openstack subnet create	-
68	Neutron	Update subnet	openstack subnet set	Constraint: The host-route field cannot be configured.
69	Neutron	Delete subnet	openstack subnet delete	-
70	Neutron	List routers	openstack router list	-
71	Neutron	Show router Details	openstack router show	-
72	Neutron	Create router	openstack router create	Constraint: The ha, distributed, and disable fields cannot be configured.

序号	组件	功能	命令行	备注
73	Neutron	Update router	openstack router set	The disable field cannot be configured.
74	Neutron	Delete router	openstack router delete	-
75	Neutron	Add router interface	openstack router add port	-
76	Neutron	Delete router interface	openstack router remove port	-
77	Neutron	List floating IPs	openstack floating ip list	-
78	Neutron	Show floating IP Details	openstack floating ip show	-
79	Neutron	Create floating IP	openstack floating ip create	-
80	Neutron	Associate floating IP	openstack server add floating ip	-
81	Neutron	Delete floating IP	openstack floating ip delete	-
82	Neutron	Disassociate floating IP	openstack server remove floating ip	-
83	Neutron	List security groups	openstack security group list	-
84	Neutron	Show security group	openstack security group show	-
85	Neutron	Create security group	openstack security group create	-
86	Neutron	Update security group	openstack security group set	-
87	Neutron	Delete security group	openstack security group delete	-
88	Neutron	List security group rules	openstack security group rule list	-
89	Neutron	Show security group rule	openstack security group rule show	-
90	Neutron	Create security group rule	openstack security group rule create	-

序号	组件	功能	命令行	备注
91	Neutron	Delete security group rule	openstack security group rule delete	-
92	DNS	Create new zone	openstack zone create	-
93	DNS	List Zones	openstack zone list	-
94	DNS	Show zone Details	openstack zone show	-
95	DNS	Delete zone	openstack zone delete	-
96	DNS	Create new recordset	openstack recordset create	-
97	DNS	List Recordsets in a zone	openstack recordset list	-
98	DNS	Show recordset Details	openstack recordset show	-
99	DNS	Delete recordset	openstack recordset delete	-
100	DNS	Set floatingip ptr record	openstack ptr record set	-
101	DNS	List floatingip ptr records	openstack ptr record list	-
102	DNS	Unset floatingip ptr record	openstack ptr record unset	-
103	DNS	Show floatingip ptr record Details	openstack ptr record show	-
104	Keystone	List services in the service catalog	openstack catalog list	-
105	Keystone	Display service catalog Details	openstack catalog show	-
106	Keystone	List endpoints	openstack endpoint list	-
107	Keystone	Create new federation protocol	openstack federation protocol create	-
108	Keystone	Delete federation protocol(s)	openstack federation protocol delete	-

序号	组件	功能	命令行	备注
109	Keystone	List federation protocols	openstack federation protocol list	-
110	Keystone	Set federation protocol properties	openstack federation protocol set	-
111	Keystone	Display federation protocol Details	openstack federation protocol show	-
112	Keystone	Create new identity provider	openstack identity provider create	-
113	Keystone	Delete identity provider(s)	openstack identity provider delete	-
114	Keystone	List identity providers	openstack identity provider list	-
115	Keystone	Set identity provider properties	openstack identity provider set	-
116	Keystone	Show identity provider Details	openstack identity provider show	-
117	Keystone	Create new mapping	openstack mapping create	-
118	Keystone	Delete mapping(s)	openstack mapping delete	-
119	Keystone	List mappings	openstack mapping list	-
120	Keystone	Set mapping properties	openstack mapping set	-
121	Keystone	Show mapping Details	openstack mapping show	-
122	Keystone	List module versions	openstack module list	-
123	Keystone	List projects	openstack project list	-
124	Keystone	Show project Details	openstack project show	-
125	Keystone	List services	openstack service list	-
126	Keystone	Show service Details	openstack service show	-

序号	组件	功能	命令行	备注
127	Keystone	Issue new token	openstack token issue	-
128	Keystone	Create new user	openstack user create	-
129	Keystone	Delete user(s)	openstack user delete	-
130	Keystone	List users	openstack user list	-
131	Keystone	Set user properties	openstack user set	-
132	Keystone	Show user Details	openstack user show	-
133	Keystone	Change current user password	openstack user password set	-
134	Keystone	Display help	openstack help	-

Extended CLI

序号	组件	功能	命令行	备注
1	Cloud Eye	Add Metric Data	openstack metric data create	-
2	Cloud Eye	List Metrics	openstack metric list	-
3	Cloud Eye	List Metric Data	openstack metric data list	-
4	Cloud Eye	List Favorite Metrics	openstack metric favorite list	Only the data of the old console can be queried through the API.
5	Cloud Eye	List Alarms	openstack alarm list	-
6	Cloud Eye	Show Alarm	openstack alarm show	-
7	Cloud Eye	Enable Alarm	openstack alarm enable	-
8	Cloud Eye	Disable Alarm	openstack alarm disable	-
9	Cloud Eye	Delete Alarm	openstack alarm delete	-

序号	组件	功能	命令行	备注
10	Cloud Eye	List Quotas	openstack quota list	-
11	Auto Scaling	Querying AS Configurations	openstack as config list	-
12	Auto Scaling	Creating an AS Configuration	openstack as config create	-
13	Auto Scaling	Querying AS Configuration Details	openstack as config show	-
14	Auto Scaling	Deleting an AS Configuration	openstack as config delete	-
15	Auto Scaling	Creating an AS Group	openstack as group create	-
16	Auto Scaling	Modifying an AS Group	openstack as group edit	-
17	Auto Scaling	Querying AS Groups	openstack as group list	-
18	Auto Scaling	Querying AS Group Details	openstack as group show	-
19	Auto Scaling	Enabling an AS Group	openstack as group resume	-
20	Auto Scaling	Disabling an AS Group	openstack as group pause	-
21	Auto Scaling	Deleting an AS Group	openstack as group delete	-
22	Auto Scaling	Querying Instances in an AS Group	openstack as instance list	-
23	Auto Scaling	Removing Instances from an AS Group	openstack as instance remove	-
24	Auto Scaling	Batch Adding Instances	openstack as instance add	-
25	Auto Scaling	Creating an AS Policy	openstack as policy create	-
26	Auto Scaling	Modifying an AS Policy	openstack as policy edit	-
27	Auto Scaling	Querying AS Policies	openstack as policy list	-

序号	组件	功能	命令行	备注
28	Auto Scaling	Disabling an AS Policy	openstack as policy pause	-
29	Auto Scaling	Querying AS Policy Details	openstack as policy show	-
30	Auto Scaling	Enabling an AS Policy	openstack as policy resume	-
31	Auto Scaling	Executing an AS Policy	openstack as policy execute	-
32	Auto Scaling	Deleting an AS Policy	openstack as policy delete	-
33	Auto Scaling	Querying Scaling Action Logs	openstack as log list	-
34	Auto Scaling	Querying Quotas for AS Groups and AS Configurations	openstack as quota list	-
35	Auto Scaling	Querying Quotas for AS Instances and AS Policies	openstack as quota list	-
36	Volume Backup Service	Create Volume Backup	openstack volume backup ext create	-
37	Volume Backup Service	Restore Volume Backup	openstack volume backup ext restore	-
38	Volume Backup Service	Show Volume Backup Job	openstack volume backup job show	-
39	Key Management Service	Creating a Key	openstack kms key create	-
40	Key Management Service	Enabling a Key	openstack kms key enable	-
41	Key Management Service	Disabling a Key	openstack kms key disable	-

序号	组件	功能	命令行	备注
42	Key Management Service	Scheduling the Deletion of a Key	openstack kms key schedule deletion	-
43	Key Management Service	Canceling the Scheduled Deletion of a Key	openstack kms key cancel deletion	-
44	Key Management Service	Querying the List of Keys	openstack kms key list	-
45	Key Management Service	Querying the Information About a Key	openstack kms key show	-
46	Key Management Service	Creating Random Data	openstack kms random generate	-
47	Key Management Service	Creating a Data Encryption Key	openstack kms datakey create	-
48	Key Management Service	Creating a Plaintext-Free DEK	openstack kms datakey create --without-plain-text	-
49	Key Management Service	Encrypting a DEK	openstack kms datakey encrypt	-
50	Key Management Service	Decrypting a DEK	openstack kms datakey decrypt	-
51	Workspace	Querying the Desktop List	openstack desktop list	-
52	Workspace	Querying the Desktop Details List	openstack desktop Details list	-
53	Workspace	Creating Desktops	openstack desktop create	-
54	Workspace	Deleting Desktops	openstack desktop delete	-
55	Workspace	Restarting Desktops	openstack desktop reboot	-
56	Workspace	Starting Desktops	openstack desktop start	-

序号	组件	功能	命令行	备注
57	Workspace	Shutting Down Desktops	openstack desktop stop	-
58	Workspace	Modifying Desktop Attributes	openstack desktop edit	-
59	Workspace	Querying Desktop Details	openstack desktop show	-
60	Workspace	Querying the Desktop User List	openstack desktop user list	-
61	Workspace	Querying Desktop User Login Records	openstack desktop login list	-
62	Workspace	Applying for Workspace	openstack workspace enable	-
63	Workspace	Querying Workspace Details	openstack workspace show	-
64	Workspace	Modifying Workspace Attributes	openstack workspace edit	-
65	Workspace	Canceling Workspace	openstack workspace disable	-
66	Workspace	Querying Policies	openstack workspace policy show	-
67	Workspace	Modifying Policies	openstack workspace policy edit	-
68	Workspace	Querying the Product List	openstack workspace product list	-
69	Workspace	Asynchronous Job Query	openstack workspace job show	-
70	AntiDDOS	Antiddos config	openstack antiddos config	-
71	AntiDDOS	Open Antiddos	openstack antiddos open	-

序号	组件	功能	命令行	备注
72	AntiDDOS	Close Antiddos	openstack antiddos close	-
73	AntiDDOS	Display Antiddos settings	openstack antiddos show	-
74	AntiDDOS	Update Antiddos settings	openstack antiddos set	-
75	AntiDDOS	Display Antiddos related task Details	openstack antiddos task show	-
76	AntiDDOS	List AntiDDos status	openstack antiddos status list	-
77	AntiDDOS	Display AntiDDos status	openstack antiddos status show	-
78	AntiDDOS	List AntiDDos report	openstack antiddos daily	-
79	AntiDDOS	List AntiDDos logs	openstack antiddos logs	-
80	AntiDDOS	List AntiDDos weekly protection statistics	openstack antiddos weekly	-
81	AntiDDOS	Display Antiddos alert settings	openstack antiddos alert config show	openstack antiddos alert config show --os-antiddos-api-version=2 This command is supported only by versions later than python openstack client3.9.0.