OpenStack Cheat Sheet
Version : 2.0
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1. Nova

1.1 Management

Services status:

```
$ sudo nova-manage service list
```

Enable/disable a service:

```
$ sudo nova-manage service enable|disable --host=host
     --service=nova-compute
```

Add a new network:

```
$ sudo nova-manage network create --label vlan1
     --fixed_range_v4 10.0.1.0/24 --num_networks 1
     --network_size 256 --vlan 1
```

Remove a network, first disassociate it to a project:

```
$ sudo nova-manage project scrub projectname
$ sudo nova-manage network delete [cidr]
```

List networks:

```
$ sudo nova-manage network list
```

Add a floating IPs address range:

```
$ sudo nova-manage floating create --pool [my-pool]
     --ip_range 172.17.1.32/27
```

Add a floating to your tenant (you will get a floating IP address, but unused):

```
$ nova floating-ip-create [my-pool]
```

Associate IP to an instance (specific tenant, according to your credentials)

```
$ nova add-floating-ip [my-instance] [ip]
```

Check the status of the floating IPs (tenant related):

```
$ nova floating-ip-list
```

List all instances running on every compute node:

```
$ sudo nova-manage vm list | column -t
```

1.2 Common

Add a new security group:

```
$ nova secgroup-create web-server "Web server running"
```

Add rule to this group:

```
$ nova secgroup-add-rule web-server tcp 80 80 0.0.0.0/0
```

Add a security rules, allow ping and ssh:

```
$ nova secgroup-add-rule web-server icmp -1 -1 0.0.0.0/0
$ nova secgroup-add-rule web-server tcp 22 22 0.0.0.0/0
```

Create credential:

```
$ nova keypair-add my_key > mey_key.pem
$ chmod 600 *.pem
```

List instances from the tenant in your credential:

```
$ nova list
```

Boot a new instance:

```
$ nova boot --flavor [flavor-id] --image [image-id] --key_name [key1]
       --security_groups [default] [instance-name]
```

Delete an instance:

```
$ nova delete [INSTANCE_ID]
```

Take a snapshot from an instance but first commit the buffer cache to disk:

```
my-instance:~$ sync
my-instance:~$ sudo echo 3 | sudo tee /proc/sys/vm/drop_caches
$ nova image-create [instance-id] [snapshot-name]
```

Get precise information about a specific instance:

```
$ nova show [instance-name]
```

Perform a block_migration:

```
$ nova live-migration --block_migrate [INSTANCE_ID] [TARGET_SERVER]
```

2. Glance

Add an image to glance (public):

```
$ glance add name="my-image" is_public=True|False disk_format=qcow2
      container_format=ovf architecture=x86_64 < my-image.img
```

Check the glance backend:

```
$ glance index
```

Same with nova-common:

```
$ nova image-list
```

Set an image to public:

```
$ glance update [image-id] is_public=true
```

3. Keystone

List all the tenants:

```
$ keystone tenant-list
```

List all users:

```
$ keystone user-list
```

Create a new user:

```
$ keystone user-create --name [username] --tenant_id [tenant-id]
      --pass [password] --email [email] --enabled true
```

4. Cinder

Create new volume:

```
$ cinder create --display-name myvol 1
```

List cinder volume:

```
$ cinder list
```

List cinder volume using nova-management:

```
$ nova volume-list
```

Attach volume to instance:

```
$ nova volume-attach [instance-id] [vol-name] /dev/vdc
```

5. Neutron

List floating ip:

```
$ neutron floatingip-list
```

Create router:

```
$ neutron router-list
```

List all router:

```
$ neutron router-list
```

List all subnet:

```
$ neutron subnet-list
```

Load Balance as a Service:

```
$ neutron lb-pool-create --lb-method ROUND_ROBIN --name mypool
      --protocol HTTP --subnet-id [subnet-id]
$ neutron lb-member-create --address [server1-ip] --protocol-port 80 mypool
$ neutron lb-member-create --address [server2-ip] --protocol-port 80 mypool
$ neutron lb-healthmonitor-create --delay 3 --type HTTP --max-retries 3
      --timeout 3
$ neutron lb-healthmonitor-associate [healthmonitor-uuid] mypool
$ neutron lb-vip-create --name myvip --protocol-port 80 --protocol HTTP
      --subnet-id [subnet-id] mypool
```

6. Heat

Create a new stack:

```
$ heat stack-create [stack name] -f [template-file]
       -P "InstanceType=m1.medium;KeyName=silent;LinuxDistribution=F17"
```

List all resources from your stack:

```
$ heat resource-list [stack name]
```

7. Ceilometer

List all alarm:

```
$ ceilometer alarm list
```