

# OpenStack

OpenStack

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# Update a port in Neutron

- To update a port in neutron you can do the following:

```
neutron port-update --fixed-ip subnet_id=SubNetID,ip_address=X.X.X.X --fixed-ip  
subnet_id=SubNetID,ip_address=X.X.X.X <PORT_ID>
```

\* Don't forget to input the already present IPs in the command or they will be overwritten

- To update a port with alot of IPs (shortcut):

```
neutron port-update PORT_UUID \  
--fixed-ip=subnet_id=SUBNETID,ip_address=192.168.1.{164,165,{167..190}}\  
--fixed-ip=subnet_id=SUBNETID,ip_address=1.1.1.{164..190} \  
--fixed-ip=subnet_id=SUBNETID,ip_address=10.0.0.{4..30} \  
--fixed-ip=subnet_id=SUBNETID,ip_address=172.16.1.{68..94}
```

## Explanation:

*Line 1. replace PORT\_UUID by the port ID*

*Line 2. Will add 192.168.1.164, 192.168.1.165, 192.168.1.167 - 192.168.1.190 (We are basically skipping 192.168.1.166)*

*Line 3. Will add 1.1.1.164 - 1.1.1.190*

*Line 4. Will add 10.0.0..4 - 10.0.0.30*

*Line 5. Will add 172.16.1.68 - 172.16.1.94*

# Openstack commands

## Nova:

- **List of instances**

```
openstack server list  
nova list
```

- **Details on a specific instance**

```
openstack server show <server id>  
nova show <server id>
```

- **Rebuild an instance**

```
openstack server rebuild --image <image-id> <server-id>  
nova rebuild <server-id> <image-id>
```

- **Rebuild an instance with metadata**

```
openstack server set --property <meta> <server-id>  
nova meta <server-id> set <meta>  
nova rebuild --meta <meta> <server-id> <image-id>
```

- **Attach a port to an instance**

```
nova interface-attach --port-id <port id> <instance id>
```

- **Create a instance from a availability zone**

```
nova boot --availability-zone nova:metal01:<ironic-id> --flavor <flavor-id> --image <img-id>  
--nic net-id=<network id>,v4-fixed-ip=<ip-address> <name>  
openstack server create --availability-zone nova:metal01:<ironic-id> --flavor <flavor-id> --  
image <img-id> --nic net-id=<network id>,v4-fixed-ip=<ip-address> <name>
```

- **Create a instance with meta property, sec group, fixed ip, ssh-key**

```
openstack server create --image <image id> --flavor <flavor id> --nic net-id=<network id>,v4-  
fixed-ip=<ip-address> --property <meta-data> --security-group <security group id> --key-name  
<keypair name> vmname
```

- **Create a instance**

```
openstack server create --image <image id> --flavor <flavor id> vmname
```

- **Remove error state from instance**

```
nova reset-state --active <server-id>
```

- **Change the flavour (resize)**

```
openstack server resize --flavor <flavor> <ID>
```

## Neutron:

- **List of subnets and network ID**

```
openstack network list  
neutron net-list
```

- **List of subnets, their IDs and allocation pools:**

```
openstack subnet list  
neutron subnet-list
```

- **List ports**

```
openstack port list  
neutron port-list
```

- **Create port**

```
openstack port create --network <network id> --fixed-ip subnet=<subnet id>,ip-address=<ip-  
address>  
neutron port-create --fixed-ip subnet_id=<subnet id>,ip_address=<X.X.X.X> <network id> <name>
```

- **Update or Set/Unset port**

```
neutron port-update --fixed-ip subnet_id=<subnet id>,ip_address=<ip-address> --fixed-ip
subnet_id=<subnet id>,ip_address=<X.X.X.X> <port id>
openstack port set --fixed-ip subnet=<subnet>,ip-address=<ip-address> <port id>
openstack port unset --fixed-ip subnet=<subnet>,ip-address=<ip-address> <port id>
```

- **Get details on a port**

```
openstack port show <port id>
neutron port-show <port id>
```

- Allowed address pairs - (Allows one port to add additional IP/MAC address pairs on that port to allow traffic that matches those specified values.)

```
neutron port-update <port-uuid> --allowed-address-pairs type=dict list=true
ip_address='0.0.0.0/0'
```

## Glance:

- **List images**

```
openstack image list
glance image-list
```

- **Get details on an image**

```
glance image-show <image id>
```

- **Upload a image**

```
openstack image create --disk-format qcow2 --container-format bare --public --file
./centos7.qcow2 centos7-image
```

- **Delete**

```
openstack image delete <ID>
```

- **Download a image**

```
glance image-download <img-id> --file img.qcow2
```

- **Change state**

```
cinder reset-state --state in-use <id>
```

## Other:

- **List flavors**

```
openstack flavor list
```

- **List keypairs**

```
openstack keypair list
```

- **List Security groups**

```
openstack security group list
```

## Cinder

```
openstack volume set --state error <id>
```

### Stop a migration

### Remove the active volume from the migration state

```
cinder reset-state <id> --reset-migration-status
```

### find the volume in the attaching state and remove it

```
openstack volume list
```

```
cinder reset-state <id> --state error
```

```
cinder reset-state <id> --reset-migration-status
```

```
openstack volume delete <id>
```

# Adding a LVM Cinder Volume

```
mkfs.ext /dev/md0
mkdir /cinder-vol
mount /dev/md0 /cinder-volumes
dd if=/dev/zero of=/cinder-vol/cinder-vol bs=1 count=0 seek=3950G
losetup /dev/loop2 /cinder-vol/cinder-vol
pvcreate /dev/loop2
vgcreate cinder-vol /dev/loop2
```

Double check your work with **pvdisplay** and **vgdisplay**:

```
## [root@openstack ~]# pvdisplay
--- Physical volume ---
PV Name /dev/loop2
VG Name cinder-vol
PV Size <3.86 TiB / not usable 4.00 MiB
Allocatable yes
PE Size 4.00 MiB
Total PE 1011199
Free PE 1011199
Allocated PE 0
PV UUID HwHPNB-48pG-igg4-EU7d-Rucj-vniF-lrYP22

[root@openstack ~]# vgdisplay
--- Volume group ---
VG Name cinder-vol
System ID
Format lvm2
Metadata Areas 1
Metadata Sequence No 1
VG Access read/write
VG Status resizable
MAX LV 0
Cur LV 0
Open LV 0
Max PV 0
Cur PV 1
```

```
Act PV 1
VG Size <3.86 TiB
PE Size 4.00 MiB
Total PE 1011199
Alloc PE / Size 0 / 0
Free PE / Size 1011199 / <3.86 TiB
VG UUID ILuHCP-9822-V1GS-IMu7-eiRu-UD3S-9xqDwY
```

```
vim /etc/cinder/cinder.conf
```

```
## [lvm]
volume_backend_name=lvm
volume_driver=cinder.volume.drivers.lvm.LVMVolumeDriver
iscsi_ip_address=192.168.2.57
iscsi_helper=lioadm
volume_group=cinder-vol
volumes_dir=/cinder-vol/cinder-vol
```

```
systemctl restart openstack-cinder-scheduler
systemctl restart openstack-cinder-volume
```

Update /usr/lib/systemd/system/openstack-lossetup.service

```
## ExecStart=/usr/bin/sh -c '/usr/sbin/losetup -j /cinder-vol/cinder-vol | /usr/bin/grep
/cinder-vol/cinder-vol || /usr/sbin/losetup -f /cinder-vol/cinder-vol'
ExecStop=/usr/bin/sh -c '/usr/sbin/losetup -j /cinder-vol/cinder-vol | /usr/bin/cut -
d : -f 1 | /usr/bin/xargs /usr/sbin/losetup -d'
```



# OpenStack MySQL command

Force delete snapshot

```
use cinder;  
update snapshots set status='deleted', deleted='1' where id = '<id>';  
update snapshots set status='deleted', deleted='1' where id = '<id>';
```