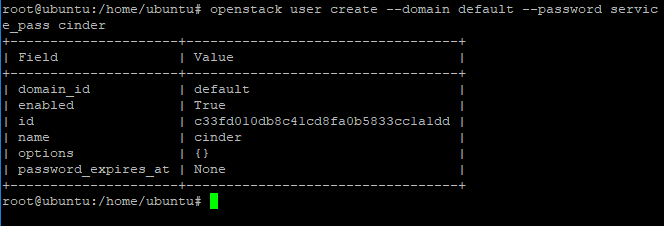
### Lab 06 Install and Configure Cinder

**Step 1 : Create a cinder user**

# openstack user create --domain default --password service\_pass cinder



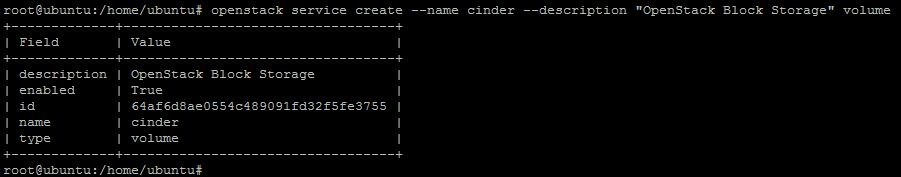
**Step 2 : Add the admin role to the cinder user**

# openstack role add --project service --user cinder admin



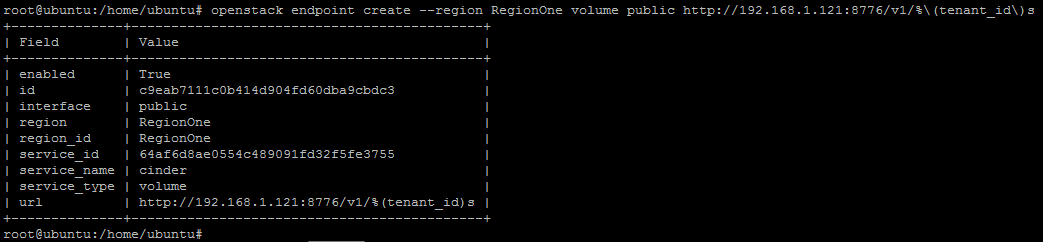
**Step 3 : Create the cinder service entity**

# openstack service create --name cinder --description "OpenStack Block Storage" volume



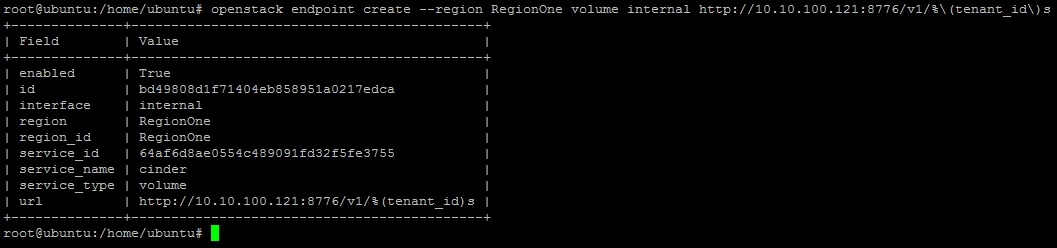
**Step 4 : Create the Block Storage service API endpoints**

# openstack endpoint create --region RegionOne volume public http://192.168.80.142:8776/v1/%\(tenant\_id\)s



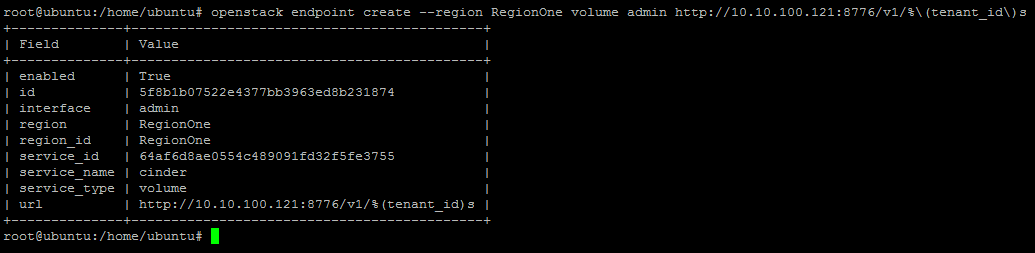
**Step 5 : Create the Block Storage service API endpoints**

# openstack endpoint create --region RegionOne volume internal http://192.168.80.143:8776/v1/%\(tenant\_id\)s



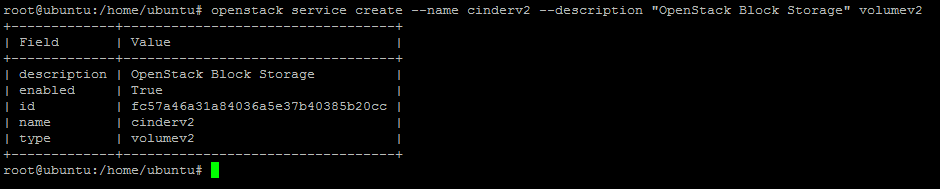
**Step 6 : Create the Block Storage service API endpoints**

# openstack endpoint create --region RegionOne volume admin http://192.168. 80.143:8776/v1/%\(tenant\_id\)s



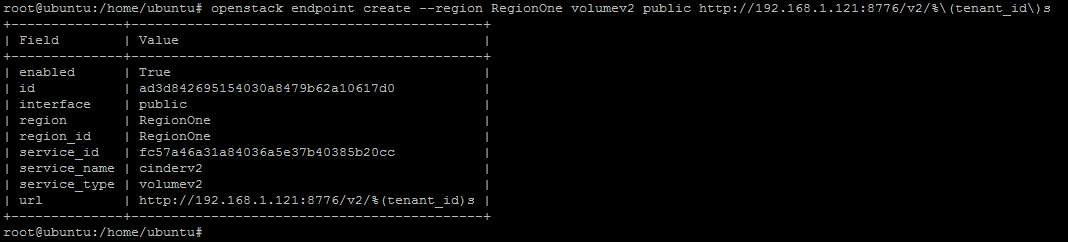
**Step 7 : Create the cinderv2 service entity**

# openstack service create --name cinderv2 --description "OpenStack Block Storage" volumev2



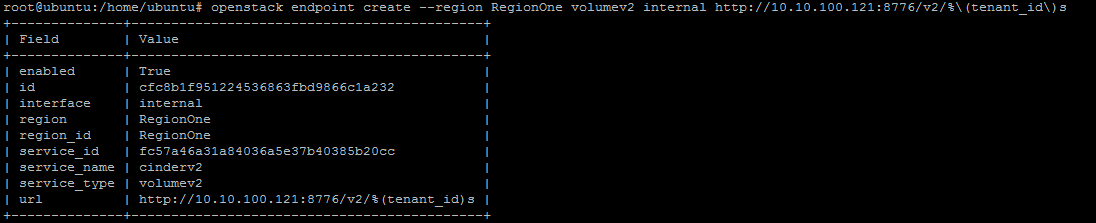
**Step 8 : Create the Block Storage service API endpoints**

# openstack endpoint create --region RegionOne volumev2 public http://192.168.80.142:8776/v2/%\(tenant\_id\)s



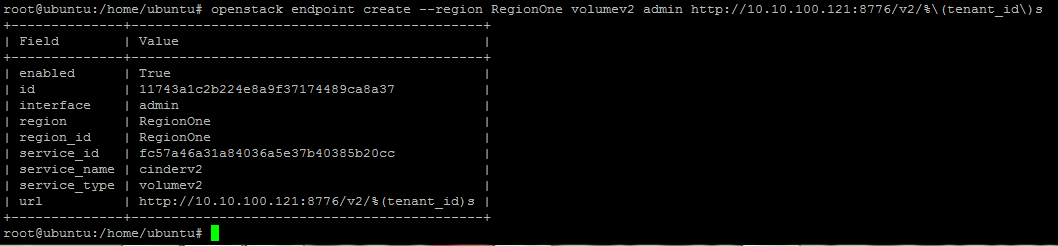
**Step 9 : Create the Block Storage service API endpoints**

# openstack endpoint create --region RegionOne volumev2 internal http://192.168.80.143:8776/v2/%\(tenant\_id\)s



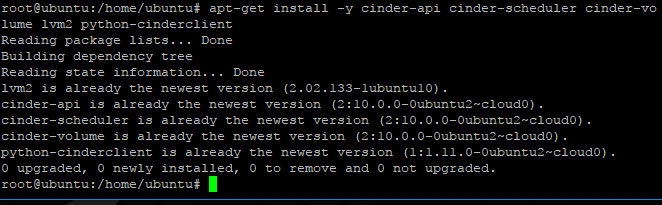
**Step 10 : Create the Block Storage service API endpoints**

# openstack endpoint create --region RegionOne volumev2 admin http://192.168.80.143:8776/v2/%\(tenant\_id\)s



**Step 11 :** **Install Cinder Components**

# apt-get install -y cinder-api cinder-scheduler cinder-volume lvm2 python-cinderclient



**Step 12 :** **Login to database**

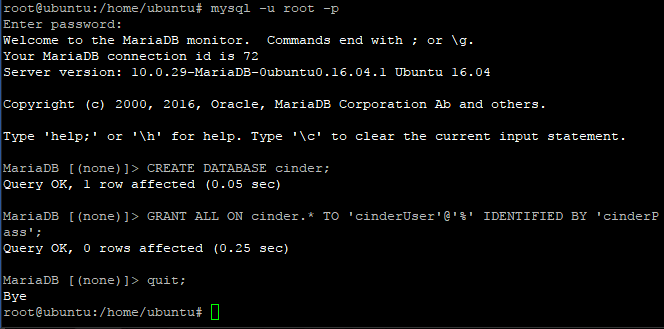
# mysql -u root -p

**Step 13 :** **Create cinder** **database**

# CREATE DATABASE cinder;

GRANT ALL ON cinder.\* TO 'cinderUser'@'%' IDENTIFIED BY 'cinderPass';

quit;



**Step 14 :** **Edit /etc/cinder/cinder.conf**

# vim /etc/cinder/cinder.conf

**Note : Do not delete the existing configuration**

my\_ip = 192.168.80.143

auth\_strategy = keystone

enabled\_backends = lvm

glance\_api\_servers = http://192.168.80.143:9292

transport\_url = rabbit://openstack:rabbit@192.168.80.143

[database]

connection = mysql+pymysql://cinderUser:cinderPass@192.168.80.143/cinder

[keystone\_authtoken]

auth\_uri = http://192.168.80.143:5000

auth\_url = http://192.168.80.143:5000

memcached\_servers = 192.168.80.143:11211

auth\_type = password

project\_domain\_name = default

user\_domain\_name = default

project\_name = service

username = cinder

password = service\_pass

[oslo\_concurrency]

lock\_path = /var/lock/cinder

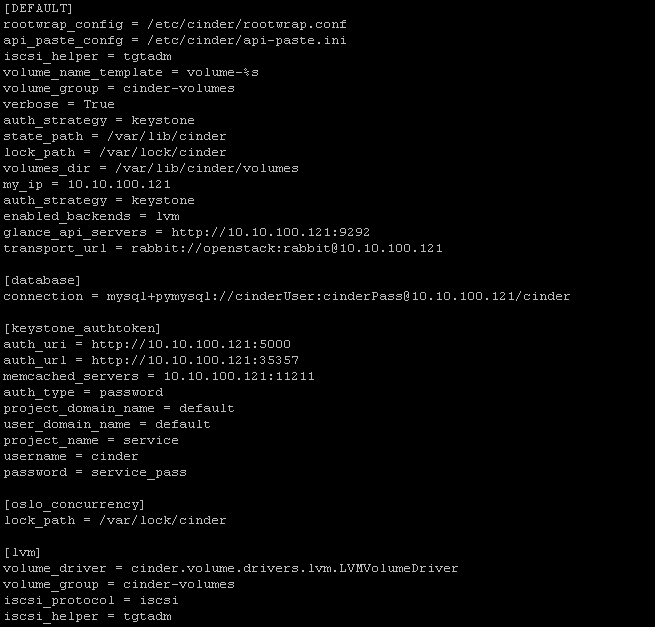
[lvm]

volume\_driver = cinder.volume.drivers.lvm.LVMVolumeDriver

volume\_group = cinder-volumes

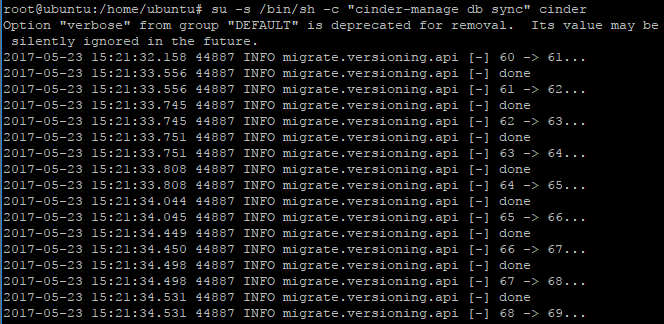
iscsi\_protocol = iscsi

iscsi\_helper = tgtadm



**Step 15 :** **Synchronize Database**

# su -s /bin/sh -c "cinder-manage db sync" cinder



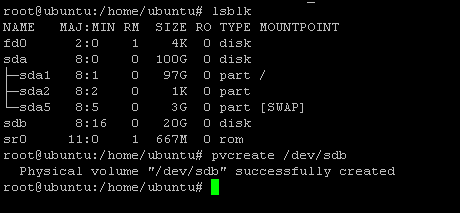
**Step 16 :** **Create Physical volume**

# apt install scsitools

rescan-scsi-bus

lsblk

pvcreate /dev/sdb



**Step 17 :** **Create Volume group**

# vgcreate cinder-volumes /dev/sdb



**Step 18 :** **Restart tgt Cinder Service**

# service tgt restart

service cinder-volume restart

service cinder-scheduler restart

