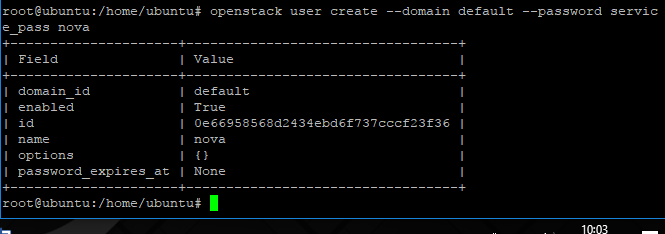
**Lab 07 Installation of nova**

**Step 1 : Create the nova user**

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



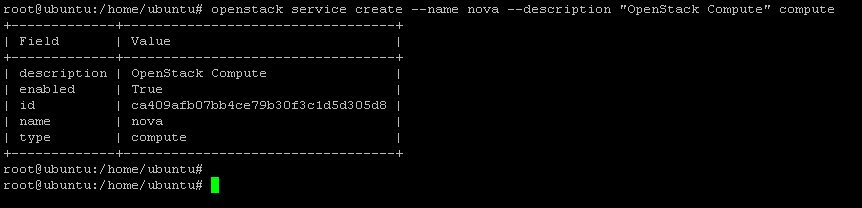
**Step 2 : Add the admin role to the nova user**

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



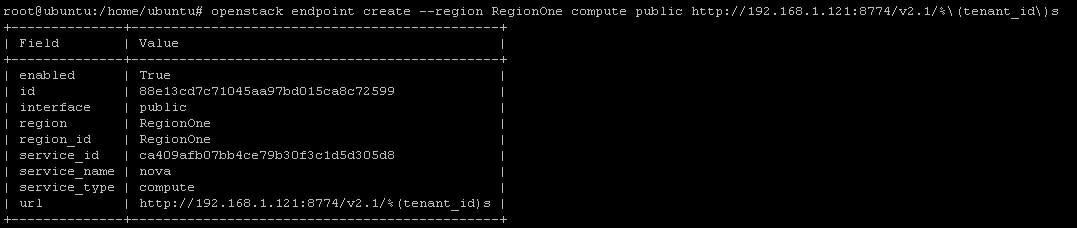
**Step 3: Create the nova service entity**

# openstack service create --name nova --description "OpenStack Compute" compute



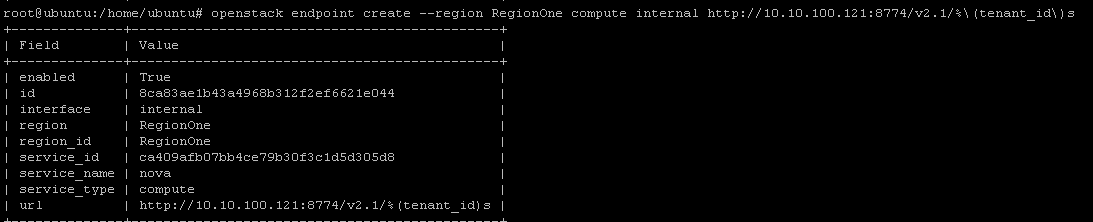
**Step 4 : Create the Compute service API endpoints**

# openstack endpoint create --region RegionOne compute public http://192.168.80.142:8774/v2.1



**Step 5 : Create the Compute service API endpoints**

# openstack endpoint create --region RegionOne compute internal http://192.168.80.143:8774/v2.1



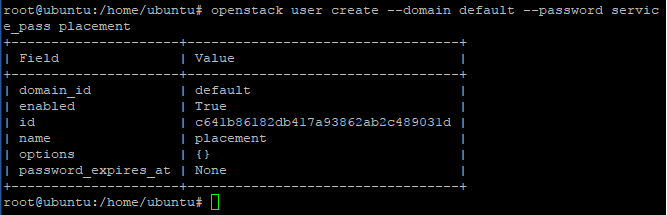
**Step 6 : Create the Compute service API endpoints**

# openstack endpoint create --region RegionOne compute admin http://192.168. 80.143:8774/v2.1



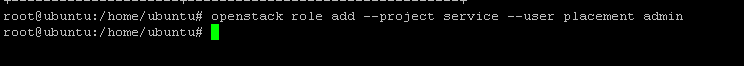
**Step 7 : Create a Placement service user**

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



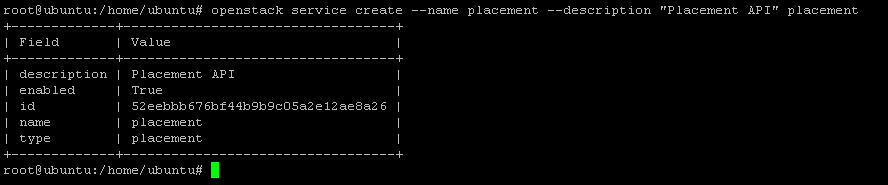
**Step 8 : Add the Placement user to the service project with the admin role**

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



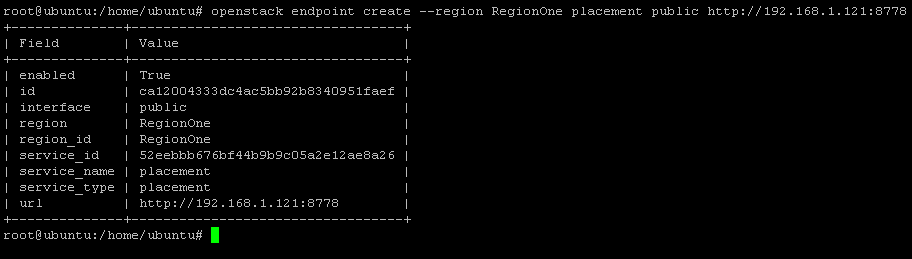
**Step 9: Create the Placement API entity**

# openstack service create --name placement --description "Placement API" placement



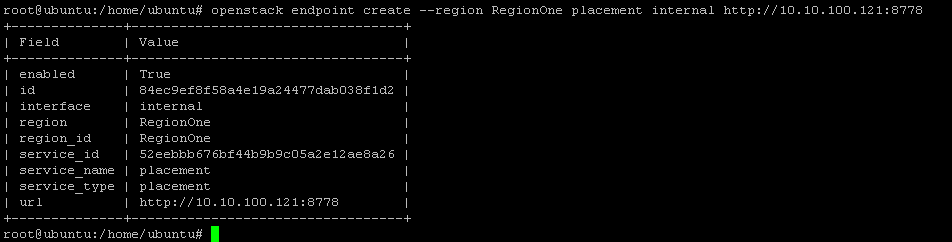
**Step 10: Create the Placement API endpoints**

# openstack endpoint create --region RegionOne placement public http://192.168. 80.142:8778



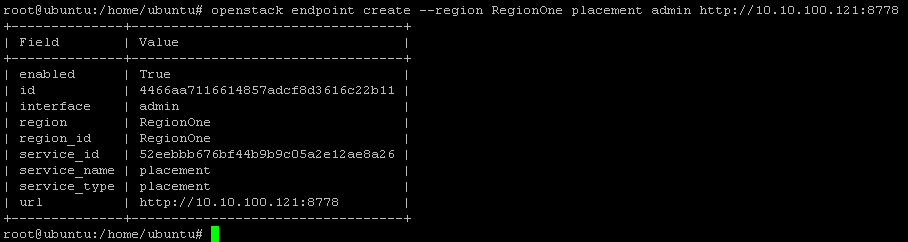
**Step 11: Create the Placement API endpoints**

# openstack endpoint create --region RegionOne placement internal [http://192.168. 80.143:8778](http://192.168.0.60:8778)



**Step 12: Create the Placement API endpoints**

# openstack endpoint create --region RegionOne placement admin http://192.168. 80.143:8778



**Step 13 :** **Install Nova Components**

# apt-get install nova-api nova-conductor nova-consoleauth nova-novncproxy nova-scheduler nova-placement-api python-novaclient nova-compute sysfsutils

**Step 14 :** **login to database**

# mysql -u root -p

**Step 15 :** **Create nova datatabase**

# CREATE DATABASE nova;

GRANT ALL ON nova.\* TO 'novaUser'@'%' IDENTIFIED BY 'novaPass';

CREATE DATABASE nova\_api;

GRANT ALL ON nova\_api.\* TO 'novaUser'@'%' IDENTIFIED BY 'novaPass';

CREATE DATABASE nova\_cell0;

GRANT ALL ON nova\_cell0.\* TO 'novaUser'@'%' IDENTIFIED BY 'novaPass';

quit;

##### 

##### Step 16 : Modify the /etc/nova/nova.conf

# vim /etc/nova/nova.conf

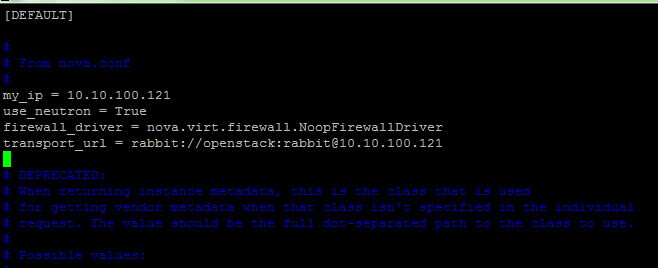
##### Note : Do not delete the existing configuration

my\_ip = 192.168. 80.143

use\_neutron = True

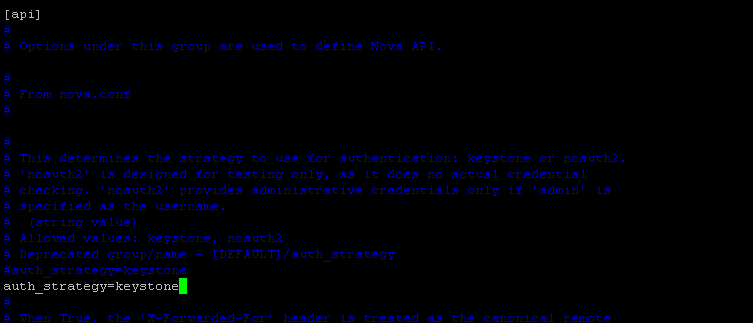
firewall\_driver = nova.virt.firewall.NoopFirewallDriver

transport\_url = rabbit://openstack:rabbit@192.168. 80.143



[api]

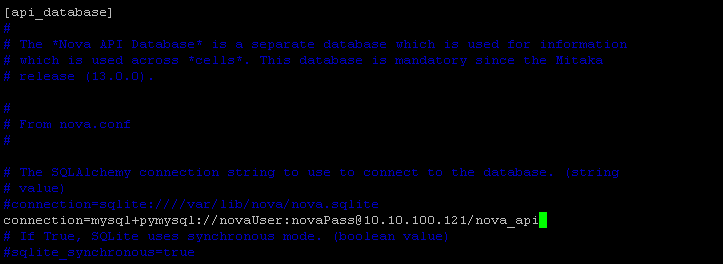
auth\_strategy=keystone



[api\_database]

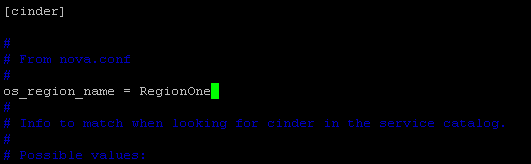
connection=mysql+pymysql://novaUser:novaPass@192.168. 80.143/nova\_api

#connection=sqlite:////var/lib/nova/nova.sqlite (comment this line)



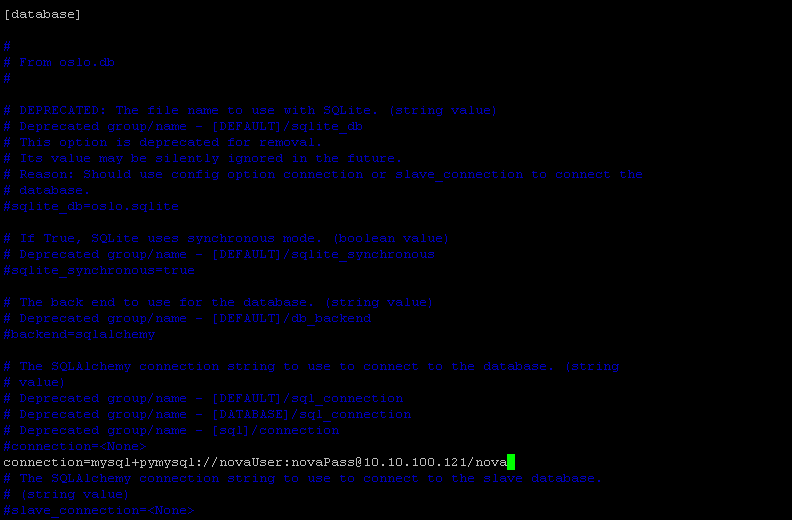
[cinder]

os\_region\_name = RegionOne



[database]

connection=mysql+pymysql://novaUser:novaPass@192.16880.143/nova



[glance]

api\_servers = http://192.168. 80.143:9292



[keystone\_authtoken]

auth\_url = 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

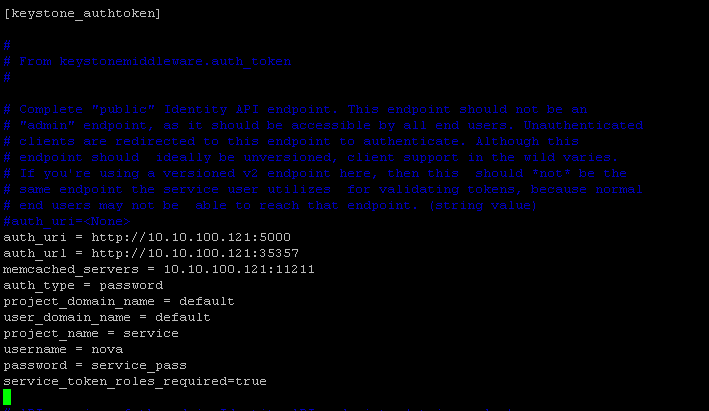
user\_domain\_name = default

project\_name = service

username = nova

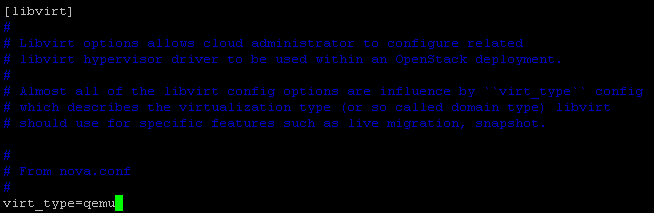
password = service\_pass

service\_token\_roles\_required=true



[libvirt]

virt\_type=qemu



[neutron]

service\_metadata\_proxy = True

metadata\_proxy\_shared\_secret = mystack

url = http://192.168. 80.143:9696

auth\_url = http://192.168. 80.143:5000

auth\_type = password

project\_domain\_name = default

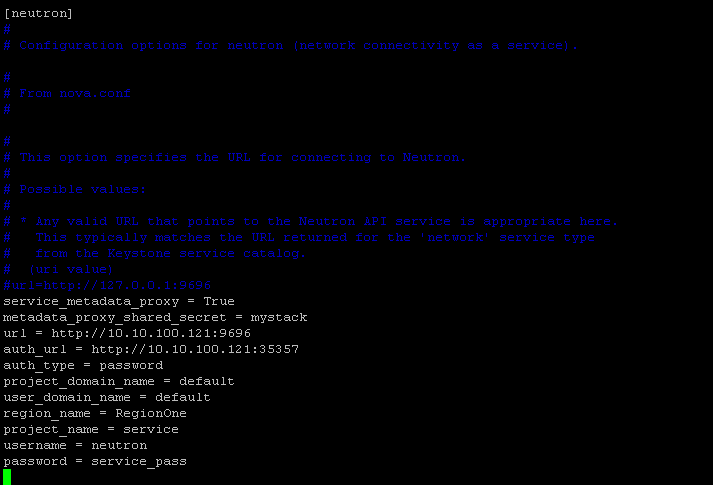
user\_domain\_name = default

region\_name = RegionOne

project\_name = service

username = neutron

password = service\_pass



[placement]

os\_region\_name = RegionOne

project\_domain\_name = Default

project\_name = service

auth\_type = password

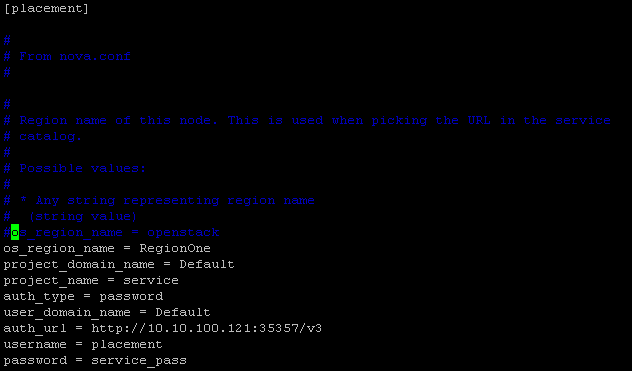
user\_domain\_name = Default

auth\_url = http://192.168. 80.143:5000/v3

username = placement

password = service\_pass

#os\_region\_name = openstack (comment this line)



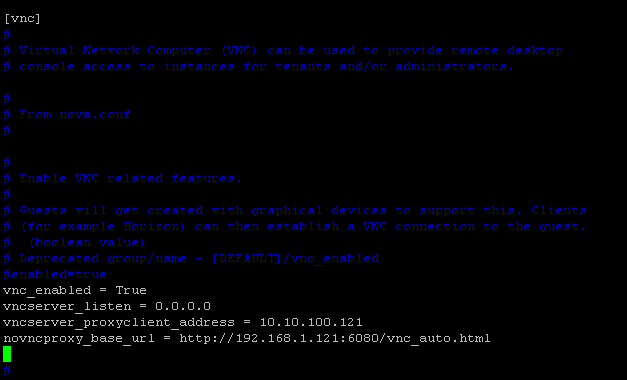
[vnc]

vnc\_enabled = True

vncserver\_listen = 0.0.0.0

vncserver\_proxyclient\_address = 192.168. 80.143

novncproxy\_base\_url = http://192.168. 80.142:6080/vnc\_auto.html



##### Step 17: Modify the /etc/nova/nova-compute.conf

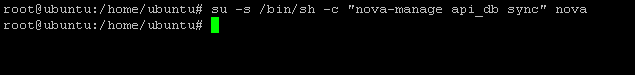
# vim /etc/nova/nova-compute.conf

virt\_type=qemu

##### 

**Step 18 : Synchronize your database**

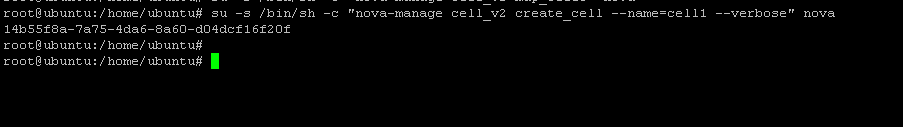
# su -s /bin/sh -c "nova-manage api\_db sync" nova



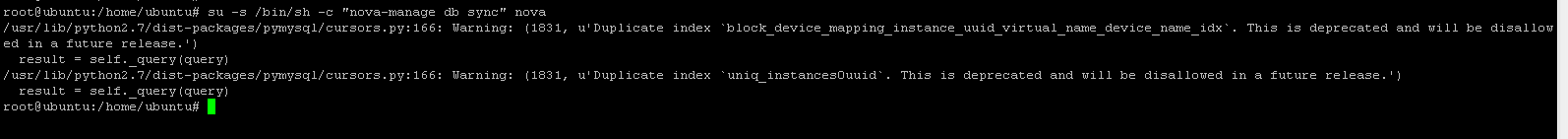
# su -s /bin/sh -c "nova-manage cell\_v2 map\_cell0" nova



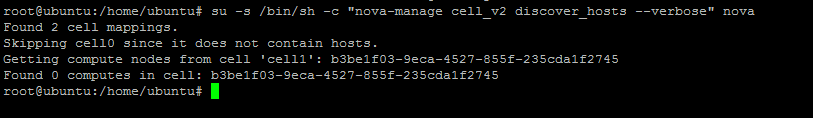
# su -s /bin/sh -c "nova-manage cell\_v2 create\_cell --name=cell1 --verbose" nova



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



# su -s /bin/sh -c "nova-manage cell\_v2 discover\_hosts --verbose" nova



**Step 19 :** **Restart nova-api** **service**

# service nova-api restart

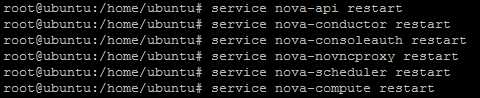
service nova-conductor restart

service nova-consoleauth restart

service nova-novncproxy restart

service nova-scheduler restart

service nova-compute restart



**Step 25 :** **Check for the smiling faces on nova-\* services to confirm your installation**

# openstack compute service list

