**Lab 02 Install and Configure Keystone**

**Step 1 : Install keystone packages**

# apt-get install keystone python-openstackclient

**Step 2 :Login to database**

# mysql -u root -p

**Step 3 :Create Keystone database**

# CREATE DATABASE keystone;

GRANT ALL ON keystone.\* TO 'keystoneUser'@'%' IDENTIFIED BY 'keystonePass';

quit;

**Step 4 :Adapt the connection attribute in the /etc/keystone/keystone.conf to the new database**

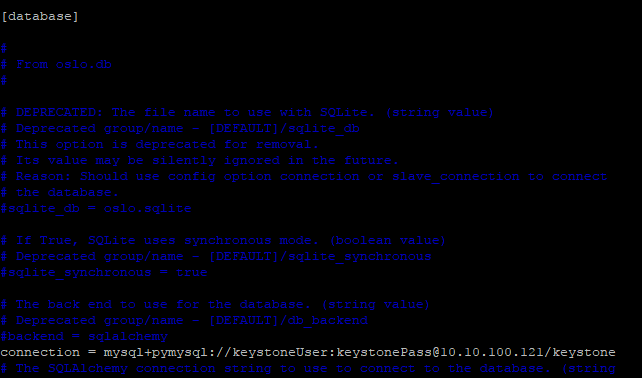
# vim /etc/keystone/keystone.conf

[database]

connection = mysql+pymysql://keystoneUser:keystonePass@192.168.0.60/keystone

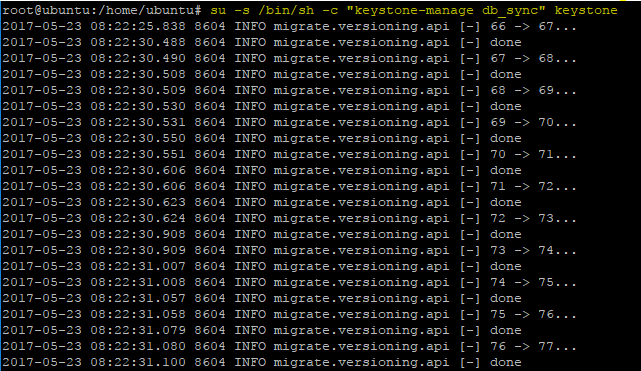
[token]

provider = fernet

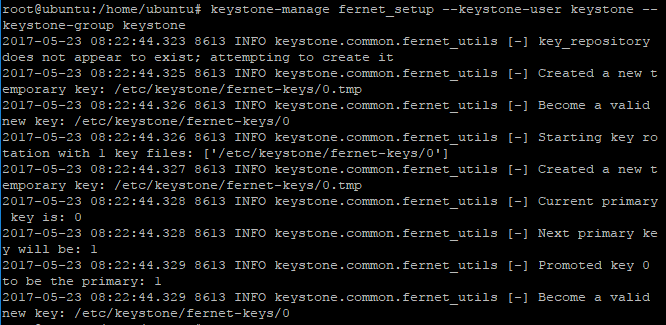
**Step 5:Synchronize the database**

# su -s /bin/sh -c "keystone-manage db\_sync" keystone

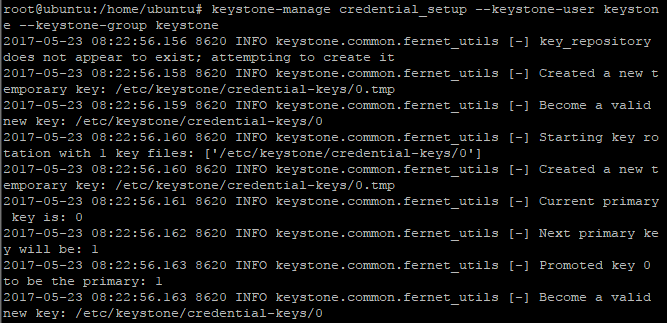


**Step 6: Initialize Fernet key repositories:**

# keystone-manage fernet\_setup --keystone-user keystone --keystone-group keystone



# keystone-manage credential\_setup --keystone-user keystone --keystone-group keystone



**Step 7: Bootstrap the Identity service**

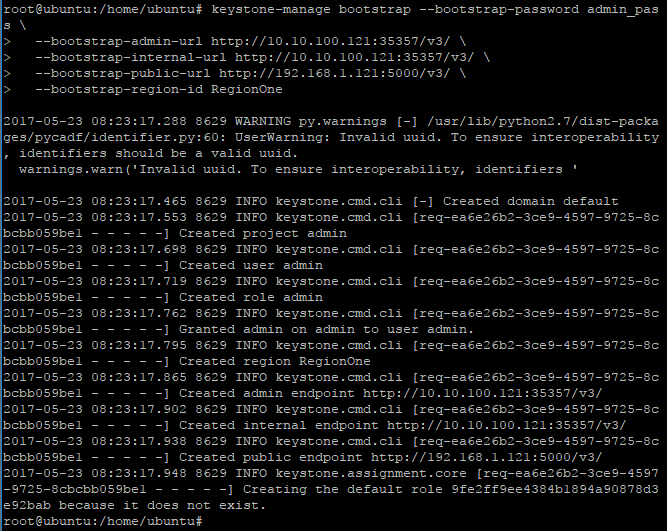
keystone-manage bootstrap --bootstrap-password admin\_pass \

--bootstrap-admin-url http://192.168.0.60:5000/v3/ \

--bootstrap-internal-url http://192.168.0.60:5000/v3/ \

--bootstrap-public-url http://192.168.0.59:5000/v3/ \

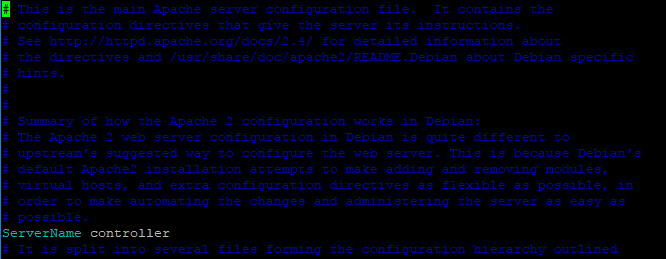
--bootstrap-region-id RegionOne



**Step 8: Configure the Apache HTTP server**[¶](https://docs.openstack.org/ocata/install-guide-ubuntu/keystone-install.html#configure-the-apache-http-server)

# vim /etc/apache2/apache2.conf

ServerName controller



**Step 9: Restart the Apache service and remove the default SQLite database:**

# service apache2 restart

rm -f /var/lib/keystone/keystone.db

**Step 10 :Create a admin credential file**

# vim creds

export OS\_PROJECT\_DOMAIN\_NAME=default

export OS\_USER\_DOMAIN\_NAME=default

export OS\_PROJECT\_NAME=admin

export OS\_USERNAME=admin

export OS\_PASSWORD=admin\_pass

export OS\_AUTH\_URL=http://192.168.0.59:5000/v3

export OS\_IDENTITY\_API\_VERSION=3

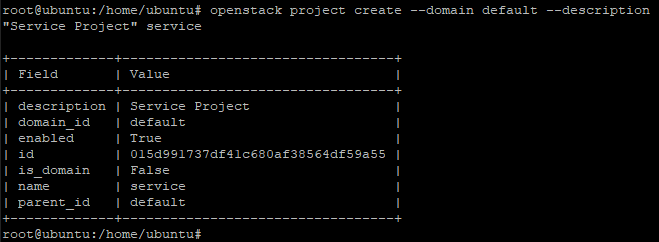
export OS\_IMAGE\_API\_VERSION=2

**Step 11: Now run below command to source credentials**

# source creds

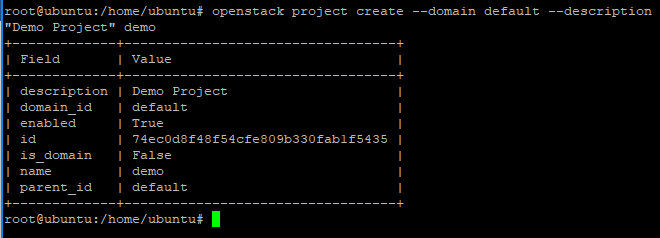
**Step 12:Create the service project**

# openstack project create --domain default --description "Service Project" service



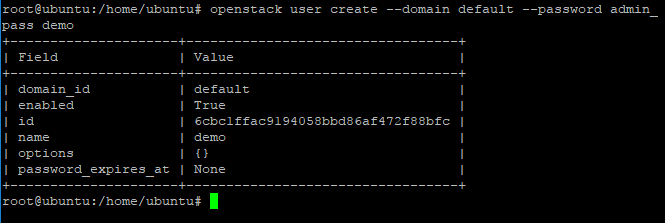
**Step 13:Create demo project**

# openstack project create --domain default --description "Demo Project" demo



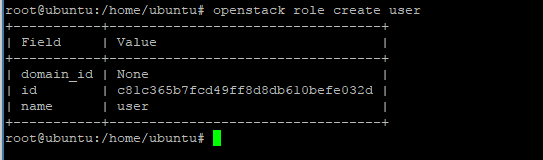
**Step 14 :Create demo user**

# openstack user create --domain default --password demo\_pass demo



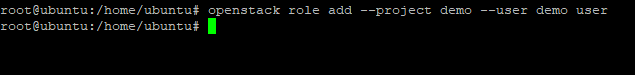
**Step 15 :Create user role**

# openstack role create user



**Step 16 :add user role to demo user**

# openstack role add --project demo --user demo user



**Step 17 :Create a demo credential file**

# vim democreds

export OS\_PROJECT\_DOMAIN\_NAME=default

export OS\_USER\_DOMAIN\_NAME=default

export OS\_PROJECT\_NAME=demo

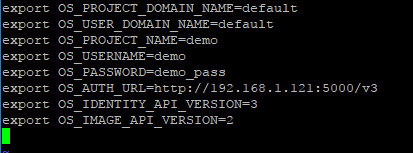
export OS\_USERNAME=demo

export OS\_PASSWORD=demo\_pass

export OS\_AUTH\_URL=http://192.168.0.59:5000/v3

export OS\_IDENTITY\_API\_VERSION=3

export OS\_IMAGE\_API\_VERSION=2



**Step18:Now run below command to source credentials**

# source creds

***// For Getting the user list you have to do “source creds”***

**Step 19 :Test openstack users**

# openstack user list

