Installation of OpenStack in CentOS-7 desktop.
- IP address of the machine is 10.23.209.87
- Checked whether it is connecting with Google. Gave `wget https://www.google.com`
- Installed RDO project rpm from https://rdoproject.org/repos/rdo-release.rpm.
- Installed OpenStack-Queens version using `yum install centos-release-openstack-queens`.

```
Installed:
  centos-release-openstack-queens.x86_64 0:1-1.el7.centos

Dependency Installed:
  centos-release-ceph-luminous.noarch 0:1.0-1.el7.centos        centos-release-qemu-ev.noarch 0:1.0-3.el7.centos
  centos-release-storage-common.noarch 0:1-2.el7.centos          centos-release-virt-common.noarch 0:1-1.el7.centos

Complete!
```

- Enabled OpenStack Configuration Manager. Using `yum-config-manager –enable openstack-queens`

- Updated yum using `yum update`, but at first showed issues with mirrorlist. Then the repository /etc/yum.repo.d/CentOS-QEMU-EV.repo is hardcoded.
  Hard coded
  from: baseurl=https://mirror.centos.org/$contentdir/$releasever/virt/$basearch/kvm-common/
  to: baseurl=https://mirror.centos.org/centos- 7/7/virt/$basearch/kvm-common/.

```
File   Edit   View   Search   Terminal   Help
# CentOS-QEMU-EV.repo
#
# Please see http://wiki.centos.org/SpecialInterestGroup/Virtualization for more
# information

[centos-qemu-ev]
name=CentOS-$releasever - QEMU EV
#baseurl=http://mirror.centos.org/$contentdir/$releasever/virt/$basearch/kvm-common/
baseurl=http://mirror.centos.org/centos-7/$releasever/virt/$basearch/kvm-common/
```

- Installed OpenStack-PackStack using `yum install openstack-packstack`
  It threw some minor errors and we resolve it using wget method. The link in the mirrorlist is not accessible (Error 403).Hence we downloaded it using `wget` command.

```
                                        1548938@localhost:~

File   Edit   View   Search   Terminal   Help
http://mirror.centos.org/$contentdir/7/virt/x86_64/kvm-common/repodata/repomd.xml: [Errno 14] HTTP Error 404 - Not Found
[root@localhost ~]# yum install openstack-packstack
Loaded plugins: fastestmirror, langpacks
Repository rdo-trunk-queens-tested is listed more than once in the configuration
base
centos-ceph-luminous
centos-openstack-queens
http://mirror.centos.org/%24contentdir/7/virt/x86_64/kvm-common/repodata/repomd.xml: [Errno 14] HTTP Error 404 - Not Found
Trying other mirror.
To address this issue please refer to the below knowledge base article

https://access.redhat.com/articles/1320623
```

- Created an answer-file using `packstack --gen-answer-file='date +"%d.%m.%y"'.conf`
- Edited the answer-file to select the services that are to be installed.
- With minimum service configuration started the installation part.

```
File   Edit   View   Search   Terminal   Help
Preparing AMQP entries                                    [ DONE ]
Preparing MariaDB entries                                 [ DONE ]
Fixing Keystone LDAP config parameters to be undef if empty[ DONE ]
Preparing Keystone entries                                [ DONE ]
Preparing Glance entries                                  [ DONE ]
Checking if the Cinder server has a cinder-volumes vg[ DONE ]
Preparing Cinder entries                                  [ DONE ]
Preparing Nova API entries                                [ DONE ]
Creating ssh keys for Nova migration                      [ DONE ]
Gathering ssh host keys for Nova migration                [ DONE ]
Preparing Nova Compute entries                            [ DONE ]
Preparing Nova Scheduler entries                          [ DONE ]
Preparing Nova VNC Proxy entries                          [ DONE ]
Preparing OpenStack Network-related Nova entries          [ DONE ]
Preparing Nova Common entries                             [ DONE ]
Preparing Neutron LBaaS Agent entries                     [ DONE ]
Preparing Neutron API entries                             [ DONE ]
Preparing Neutron L3 entries                              [ DONE ]
Preparing Neutron L2 Agent entries                        [ DONE ]
Preparing Neutron DHCP Agent entries                      [ DONE ]
Preparing Neutron Metering Agent entries                  [ DONE ]
Checking if NetworkManager is enabled and running         [ DONE ]
Preparing OpenStack Client entries                        [ DONE ]
Preparing Horizon entries                                 [ DONE ]
Preparing Swift builder entries                           [ DONE ]
Preparing Swift proxy entries                             [ DONE ]
Preparing Swift storage entries                           [ DONE ]
Preparing Gnocchi entries                                 [ DONE ]
Preparing Redis entries                                   [ DONE ]
Preparing Ceilometer entries                              [ DONE ]
Preparing Aodh entries                                    [ DONE ]
Preparing Puppet manifests                                [ DONE ]
Copying Puppet modules and manifests                      [ DONE ]
Applying 10.23.209.87_controller.pp
Testing if puppet apply is finished: 10.23.209.87_controller.pp  [ / ]█
```

- It threw many errors as follows:

```
Applying 10.23.209.87_controller.pp
10.23.209.87_controller.pp:                    [ ERROR ]
Applying Puppet manifests                      [ ERROR ]

ERROR : Error appeared during Puppet run: 10.23.209.87_controller.pp
Error: Execution of '/usr/bin/yum -d 0 -e 0 -y install openstack-neutron' returned 1: Failed to download pre
6] No more mirrors to try.
You will find full trace in log /var/tmp/packstack/20180712-114314-240yb5/manifests/10.23.209.87_controller.
Please check log file /var/tmp/packstack/20180712-114314-240yb5/openstack-setup.log for more information
```

To rectify this error. We explicitly gave `yum -d 0 -e 0 -y install openstack-neutron`.
- We started running the answer-file again.
- Similarly other errors such as installation of iptables-services, python-keystoneclient, openstack-heat-api, openstack-heat-common, openstack-dashboard, openstack-nova-api,

and openstack-nova-conductor were resolved in the same manner.
- Installation using answer-file took minimum of 60mins-90mins.
- After installation the machine slowed down.