**Pre-Requisites**

**Step 1: Install NTP (chrony) service**

#  yum install chrony vim  -y

**Step 2: Enable and Start the Chrony Service**

# systemctl enable chronyd.service

# vim /etc/chrony.conf

server 192.168.6.140 iburst

## (Commnet out the other things)

# systemctl restart chronyd.service

**Step 3: Enable the OpenStack Repository**

#  yum install centos-release-openstack-rocky

**Step 4: Upgrade all the packages**

#  yum upgrade

**Step 5: Install the OpenStack client Packages**

# yum -y update

# yum install python-openstackclient -y

**Step 6: Install the SELinux Package**

#  yum install openstack-selinux -y

**Step 7: Disable the SELinux**

# sed -i 's/enforcing/disabled/g' /etc/selinux/config

Done so because we might require it later in the lab

# setenforce 0

# sestatus

**Step 8: Stop and Disable the Firewall Service**

# systemctl stop firewalld.service

systemctl disable firewalld.service

**Step 9: Stop and Disable the Network Manager**

# systemctl stop NetworkManager.service

systemctl disable NetworkManager.service

**Step 10: Edit the hosts entry file**

#  vim /etc/hosts

Just add the Below one don’t delete anything.

192.168.6.140 rocky.thecloudenabled.com rocky

**Step 11: Edit the Hostname of the Machine**

#  vim /etc/hostname

Erase the Existing and write

rocky

**Step 12: Set the Hostname**

#  hostname rocky

**Step 13: Verify the FQDN**

#  hostname --fqdn

**Step 14: Make the DNS Entry**

**Done only when not configured at the time of installation**

# vim /etc/resolv.conf

nameserver 8.8.8.8

**Step 15: Edit the Interfaces file**

# vim /etc/sysconfig/network-scripts/ifcfg-ens33

DEVICE=ens33

ONBOOT=yes

NETBOOT=yes

IPV6INIT=no

BOOTPROTO=none

NAME=ens33

DEVICETYPE=ovs

TYPE=OVSPort

OVS\_BRIDGE=br-ex

# vim /etc/sysconfig/network-scripts/ifcfg-br-ex

DEVICE=br-ex

ONBOOT=yes

DEVICETYPE=ovs

TYPE=OVSIntPort

OVS\_BRIDGE=br-ex

IPADDR=192.168.6.140

NETMASK=255.255.255.0

GATEWAY=192.168.6.2

DNS1=8.8.8.8

DNS2=192.168.6.2

# vim /etc/sysconfig/network-scripts/ifcfg-ens34

TYPE="Ethernet"

BOOTPROTO="static"

DEFROUTE="yes"

PEERDNS="yes"

PEERROUTES="yes"

IPADDR="192.168.6.141"

NETMASK="255.255.255.0"

IPV6INIT="yes"

NAME="ens34"

DEVICE="ens34"

ONBOOT="yes"

**Step 16: Tell the kernel we'll be using IP's that are not defined in the interfaces file**

# vim /etc/sysctl.conf

net.ipv4.ip\_forward=1

net.ipv4.conf.all.rp\_filter=0

net.ipv4.conf.default.rp\_filter=0

# sysctl -p

**Step 17: Install the OpenvSwitch Package, Enable and Start the OpenvSwitch Service**

#  yum install openstack-neutron-openvswitch -y

# systemctl enable openvswitch.service

systemctl start openvswitch.service

**Step 18: Create a Bridge**

#  ovs-vsctl add-br br-ex

**Step 19: Add the Interface ens33 to Br-ex port**

#  ovs-vsctl add-port br-ex ens33

**Step 20: Restart the System**

#  init 6

**Step 21: Verify the Internet Connectivity**

#  ping 8.8.8.8 (or) ping google.com