

# OPENSTACK KILO

## INSTALLATION USING RDO: SINGLE NODE:

1. Install epel repo

yum install [http://dl.fedoraproject.org/pub/epel/7/x86\\_64/e/epel-release-7-5.noarch.rpm](http://dl.fedoraproject.org/pub/epel/7/x86_64/e/epel-release-7-5.noarch.rpm)

2. Install rdo kilo rpm.

yum install <http://rdo.fedorapeople.org/openstack-kilo/rdo-release-kilo.rpm>

3. Upgrade repos.

yum upgrade

4. Install rdo release rpm.

yum install -y <https://rdoproject.org/repos/rdo-release.rpm>

5. Install packstack

yum install -y openstack-packstack

6. Configure network device properly

```
vi /etc/sysconfig/network-scripts/ifcfg-<interface_name>
```

```
DEVICE="<interface_name>"
```

7. Update sysctl.conf file to allow ip forwarding

```
setenforce 0
```

```
sed -i -e "s/^net.bridge.bridge-nf-call-ip6tables = 0/net.bridge.bridge-nf-call-ip6tables = 1/"  
/etc/sysctl.conf
```

```
sed -i -e "s/^net.bridge.bridge-nf-call-iptables = 0/net.bridge.bridge-nf-call-iptables = 1/"  
/etc/sysctl.conf
```

```
sed -i -e "s/^net.bridge.bridge-nf-call-arptables = 0/net.bridge.bridge-nf-call-arptables = 1/"  
/etc/sysctl.conf
```

8. Set selinux permissions to permissive

```
sed -i "s/SELINUX=.*/SELINUX=permissive/" /etc/selinux/config
```

9. Run below command to install openstack single node installation

```
packstack --allinone
```

# 3 NODE(Controller, Network and Compute):

1. Prepare 3 hosts or 3 Virtual machines with at least 2 GB ram and 40 GB HDD for controller, network and compute nodes
2. For network host add 2 more network interfaces, totally 3 network interfaces for network host.
3. For compute host add 1 more interface, totally 2 network interfaces for compute host.

## Steps to be executed on **Controller host:**

4. Configure network device properly

```
vi /etc/sysconfig/network-scripts/ifcfg-<interface_name>  
DEVICE="<interface_name>"
```

5. Update sysctl.conf file to allow ip forwarding

```
setenforce 0
```

```
sed -i -e "s/^net.bridge.bridge-nf-call-ip6tables = 0/net.bridge.bridge-nf-call-ip6tables = 1/"  
/etc/sysctl.conf
```

```
sed -i -e "s/^net.bridge.bridge-nf-call-iptables = 0/net.bridge.bridge-nf-call-iptables = 1/"  
/etc/sysctl.conf
```

```
sed -i -e "s/^net.bridge.bridge-nf-call-arptables = 0/net.bridge.bridge-nf-call-arptables = 1/"  
/etc/sysctl.conf
```

6. Set selinux permissions to permissive

```
sed -i "s/SELINUX=.*/SELINUX=permissive/" /etc/selinux/config
```

7. Install rdo kilo rpm.

```
yum install http://rdo.fedorapeople.org/openstack-kilo/rdo-release-kilo.rpm
```

8. Upgrade repos.

```
yum upgrade
```

9. Install rdo release rpm.

```
yum install -y https://rdoproject.org/repos/rdo-release.rpm
```

10. Install packstack  
yum install -y openstack-packstack

Steps to be executed on **Network host**:

11. Configure all 3 network interfaces properly.  
vi /etc/sysconfig/network-scripts/ifcfg-<interface\_name>  
DEVICE="<interface\_name>"

12. Update sysctl.conf file to allow ip forwarding  
setenforce 0  
sed -i -e "s/^net.bridge.bridge-nf-call-ip6tables = 0/net.bridge.bridge-nf-call-ip6tables = 1/"  
/etc/sysctl.conf  
sed -i -e "s/^net.bridge.bridge-nf-call-iptables = 0/net.bridge.bridge-nf-call-iptables = 1/"  
/etc/sysctl.conf  
sed -i -e "s/^net.b

13. Set selinux permissions to permissive  
sed -i "s/SELINUX=.\*/SELINUX=permissive/" /etc/selinux/config

Steps to be executed on **Compute host**:

14. Configure all 2 network interfaces properly.  
vi /etc/sysconfig/network-scripts/ifcfg-<interface\_name>  
DEVICE="<interface\_name>"

15. Update sysctl.conf file to allow ip forwarding  
setenforce 0  
sed -i -e "s/^net.bridge.bridge-nf-call-ip6tables = 0/net.bridge.bridge-nf-call-ip6tables = 1/"  
/etc/sysctl.conf  
sed -i -e "s/^net.bridge.bridge-nf-call-iptables = 0/net.bridge.bridge-nf-call-iptables = 1/"  
/etc/sysctl.conf  
sed -i -e "s/^net.b

16. Set selinux permissions to permissive  
sed -i "s/SELINUX=.\*/SELINUX=permissive/" /etc/selinux/config

Steps to be executed on **Controller host**:

17. Generate answer file

```
packstack --gen-answer-file answer.txt
```

18. Edit the answer file as per your requirement for Openstack components.

a. CONFIG\_NETWORK\_HOSTS=<network host ip/host name>

b. CONFIG\_COMPUTE\_HOSTS=<compute host ip/host name>

c. CONFIG\_CONTROLLER\_HOST=<controller host ip/host name>

19. Execute packstack command with answer file

```
packstack --answer-file answer.txt
```

*NOTE: Require RHEL 7 or CentOS 7 or Fedora21  
If using RHEL 7 then disable NetworkManager and  
enable network.*

*systemctl stop NetworkManager*

*systemctl disable NetworkManager*

*systemctl enable network*