

# OpenStack Single Node Deployment

Steps to install and configure OpenStack on Centos7.x Using RDO

## Requirements:

Operating System: Centos 7.x -64 bit

Hostname: gbo.com (steps below)

IP Address: 192.168.2.227

## Prerequisites:

1. Minimum one network adapter with internet connection.
2. Virtualization should be enabled.
3. Enable the CentOS-Vault.repo under /etc/yum.repos.d (follow the steps below)
4. Disable Network Manager.

## Step1: Setting Hostname

```
hostnamectl set-hostname gbo.com
```

Check..

```
[root@gbo /]# hostname  
gbo.com  
[root@gbo /]#
```

## Step2: Enable the CentOS-Vault.repo under /etc/yum.repos.d

```
[root@gbo /]# cd /etc/yum.repos.d  
[root@gbo yum.repos.d]# ls  
CentOS-Base.repo  CentOS-Debuginfo.repo  CentOS-Media.repo  CentOS-Vault.repo  rdo-release.repo  
CentOS-CR.repo    CentOS-fasttrack.repo   CentOS-Sources.repo  rdo-qemu-ev.repo   rdo-testing.repo  
[root@gbo yum.repos.d]#
```

Edit the CentOS-Vault.repo as below.

```
[root@gbo yum.repos.d]# vi CentOS-Vault.repo
```

After entering this command file opens like below and edit enabled =1 as below.

```
CentOS Vault contains rpms from older releases in the CentOS-7
# tree.

#c7.0.1406
[C7.0.1406-base]
name=CentOS-7.0.1406 - Base
baseurl=http://vault.centos.org/7.0.1406/os/$basearch/
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
enabled=1

[C7.0.1406-updates]
name=CentOS-7.0.1406 - Updates
baseurl=http://vault.centos.org/7.0.1406/updates/$basearch/
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
enabled=1

[C7.0.1406-extras]
name=CentOS-7.0.1406 - Extras
baseurl=http://vault.centos.org/7.0.1406/extras/$basearch/
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
enabled=1

[C7.0.1406-centosplus]
name=CentOS-7.0.1406 - CentOSPlus
baseurl=http://vault.centos.org/7.0.1406/centosplus/$basearch/
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
enabled=1

[C7.0.1406-fasttrack]
name=CentOS-7.0.1406 - CentOSPlus
baseurl=http://vault.centos.org/7.0.1406/fasttrack/$basearch/
gpgcheck=1
gpgkey=file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
enabled=1

# C7.1.1503
[C7.1.1503-base]
name=CentOS-7.1.1503 - Base
baseurl=http://vault.centos.org/7.1.1503/os/$basearch/
"CentOS-Vault.repo" 147L, 3830C
```

### Step3: Disable Network Manager

```
[root@gbo /]# systemctl stop NetworkManager.service
```

Lets begin...

### Step4: Install RDO Repository

Update the packages and install the RDO repository using below command.

```
[root@gbo /]# yum -y update
```

```
[root@gbo /]# yum -y install https://www.rdoproject.org/repos/rdo-release.rpm
```

RDO is RPM Distribution of Openstack . RDO is free distribution of redhat linux packages(CentOS,Fedora and RHEL)

### Step5: Install the Openstack Installer “PackStack”

Packstack is a utility uses Puppet modules to deploy various parts of Openstack.

```
[root@gbo /]# yum -y install openstack-packstack
```

### Step6: Deploy the OpenStack

PackStack can be used to install every OpenStack services on separate servers, an ‘all in one’ server, or any combination of these. There are three ways PackStack can be run.

1.packstack

3.packstack --gen-answer-file=<file> [options] / packstack --answer-file=<file>

Third option allow you to generate default answer file , edit the default answer file , then run packstack a second time using this answer file.

```
[root@gbo /]# packstack --gen-answer-file=/root/answer.txt
```

Edit the answer.txt file to set the required parameters, we can customize which services to be installed using answer file as below.

```
[root@gbo /]# vi /root/answer.txt
```

Edit these parameters as shown below then save and exit

```
CONFIG_PROVISION_DEMO=n
```

```
CONFIG_KEYSTONE_ADMIN_PW=gb@123
```

```
CONFIG_NAGIOS_INSTALL=n
```

**Step4:** Install the OpenStack using answer file as below

```
[root@gbo /]# packstack --answer-file /root/answer.txt
```

Installation process take few minutes after installation is successfully completed it shows some paths where credentials are stored and also shows link to the dashboard, through that link you will able to access the dashboard by entering the credentials you will open the console as below...

