



# **Cloud Application Development**

## **Lab-2**

### **Installation of OpenStack in Centos**

**Submitted to: -**

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**Submitted By: -**

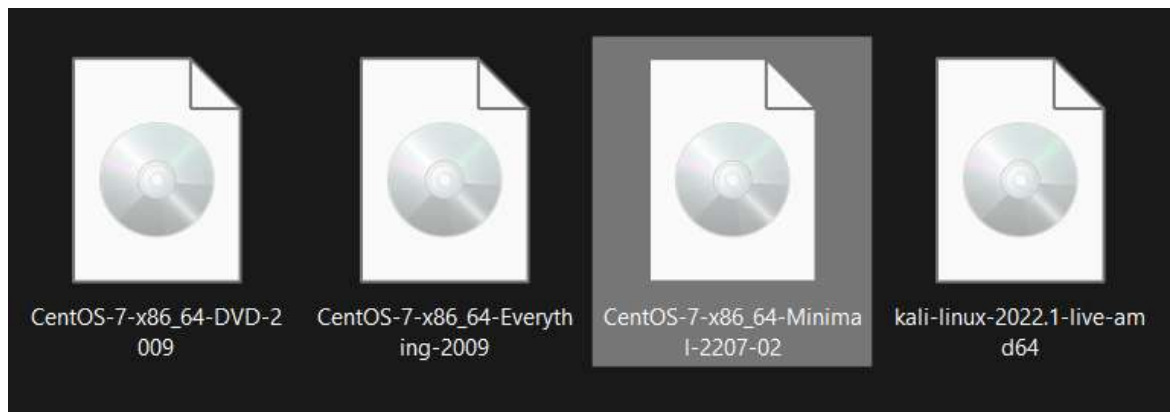
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# Experiment-2

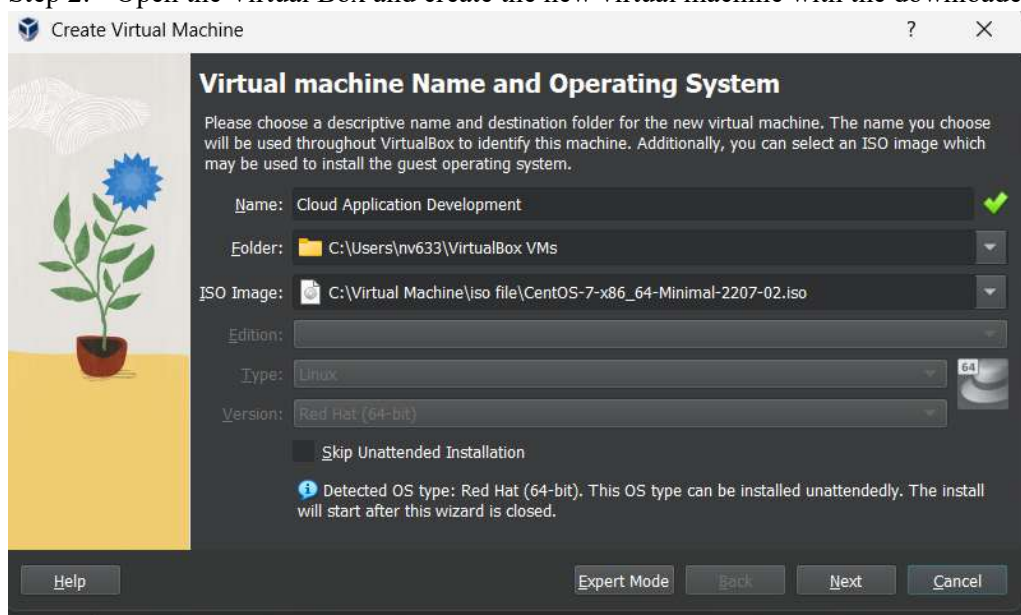
## Installing Open stack in Centos OS


### Task 1:-Installation and configuration of CentOS

Step 1: - Download CentOS iso file (CentOS-7-x86\_64-Minimal-2207-02) from centos.org



Step 2: - Open the Virtual Box and create the new virtual machine with the downloaded iso file





## Create Virtual Machine

### Unattended Guest OS Install Setup

You can configure the unattended guest OS install by modifying username, password, and hostname. Additionally you can enable guest additions install. For Microsoft Windows guests it is possible to provide a product key.

Username and Password

Username:  ✓

Password:  ⓘ

Repeat Password:  ⓘ

Additional Options

Product Key:

Hostname:  ✓

Domain Name:


☐ Install in Background

Guest Additions

Guest Additions ISO:

Help

BackNextCancel



## Create Virtual Machine

### Hardware

You can modify virtual machine's hardware by changing amount of RAM and virtual CPU count. Enabling EFI is also possible.

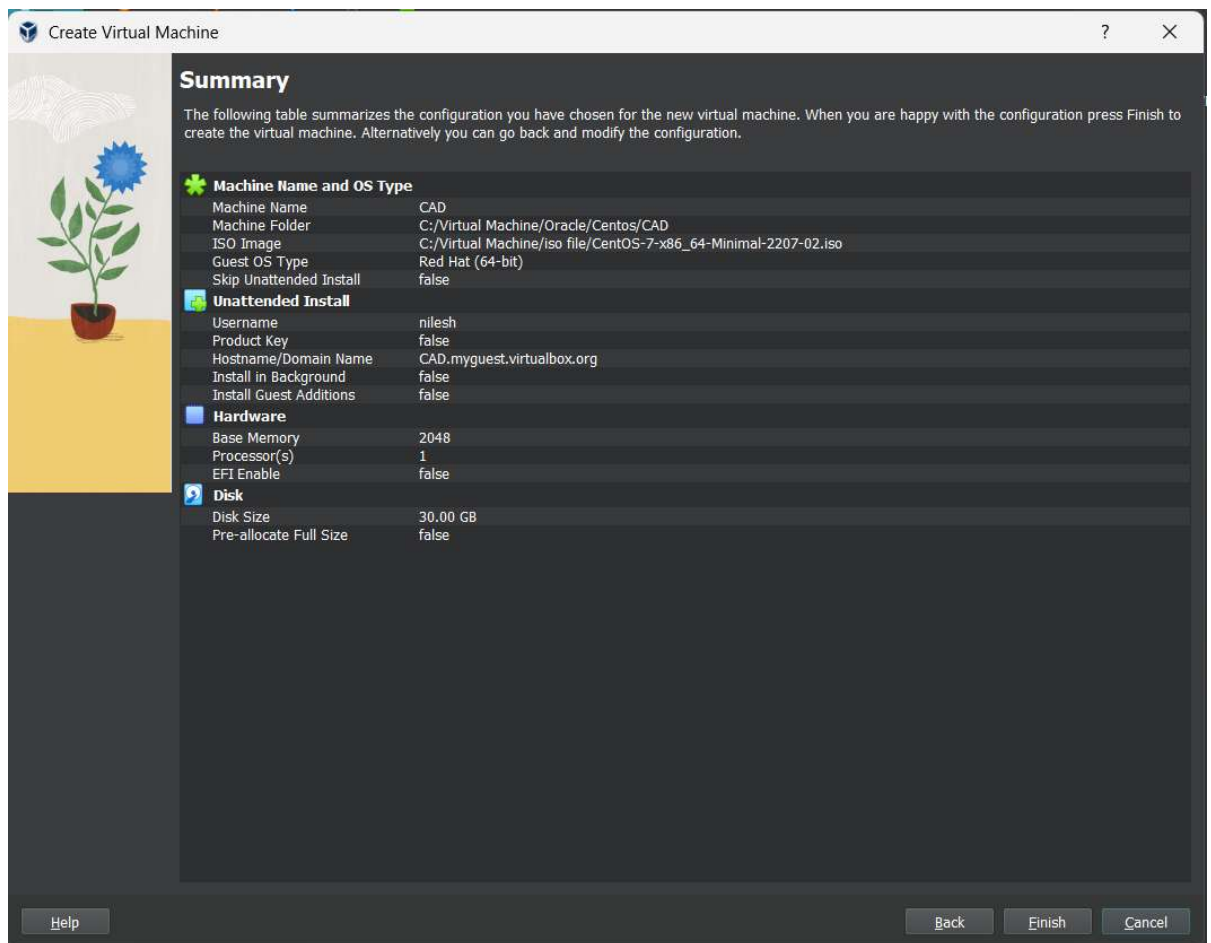
Base Memory:  2048 MB

Processors:  8 CPUs

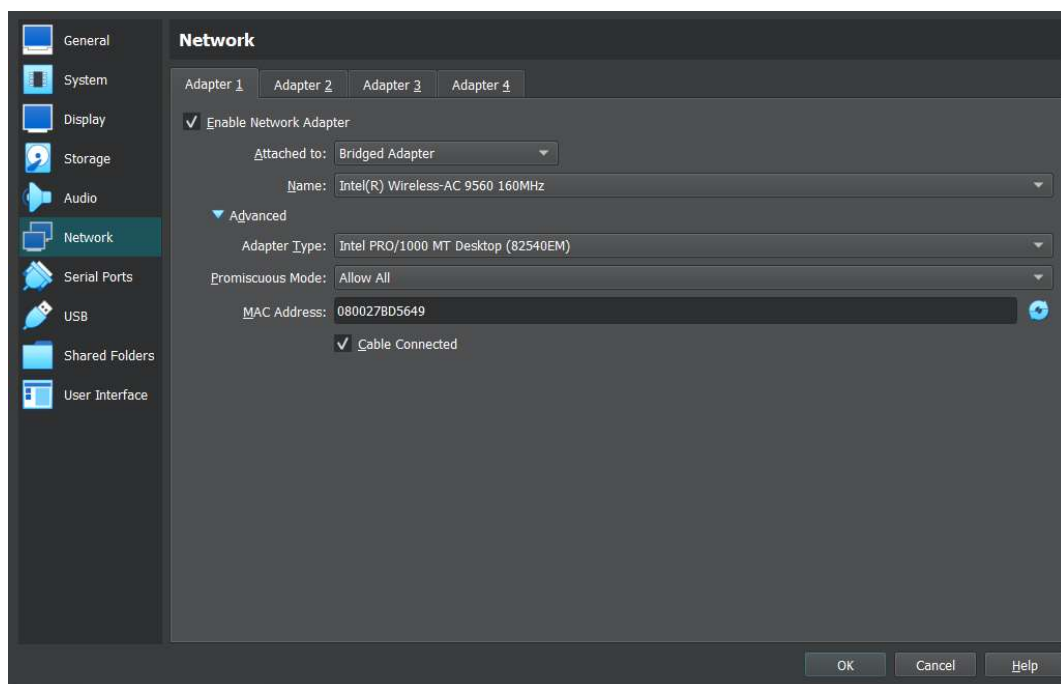
☐ Enable EFI (special OSes only)

Help

BackNextCancel



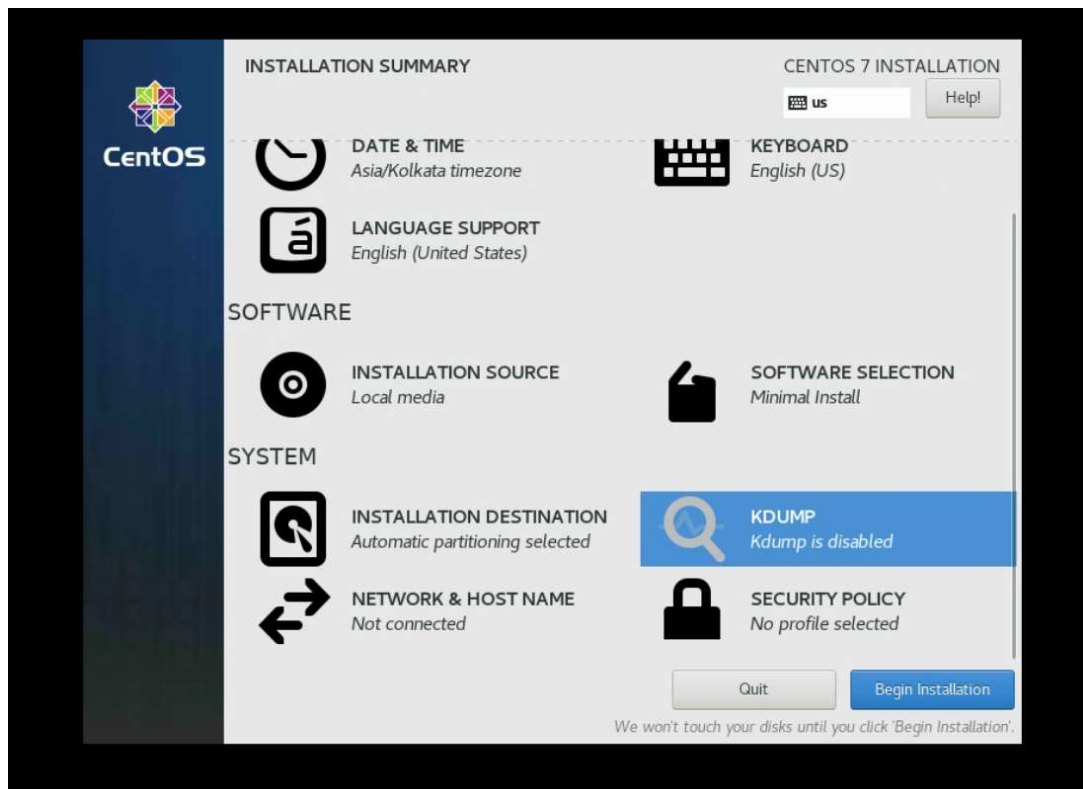
Step 3: -Go to setting of Create virtual machine and change network from NAT to Bridge Adapter and Under advance make Promiscuous mode to “Allow All” and save the settings then start the virtual machine

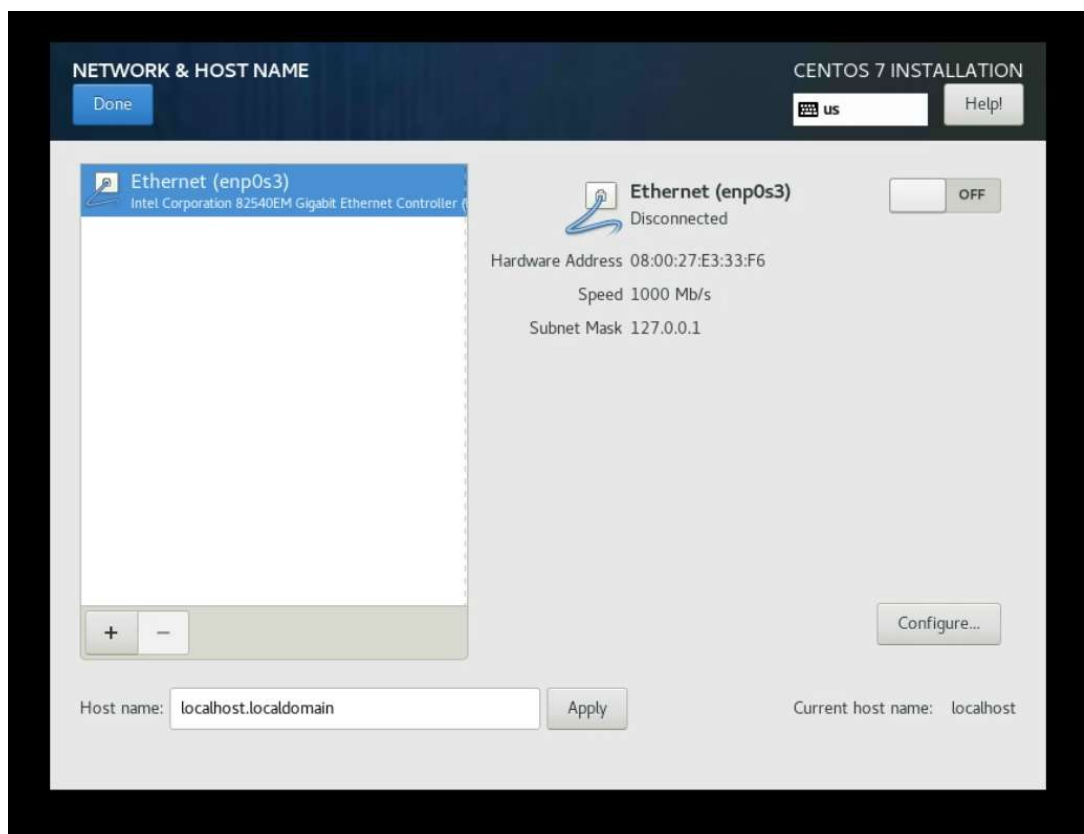
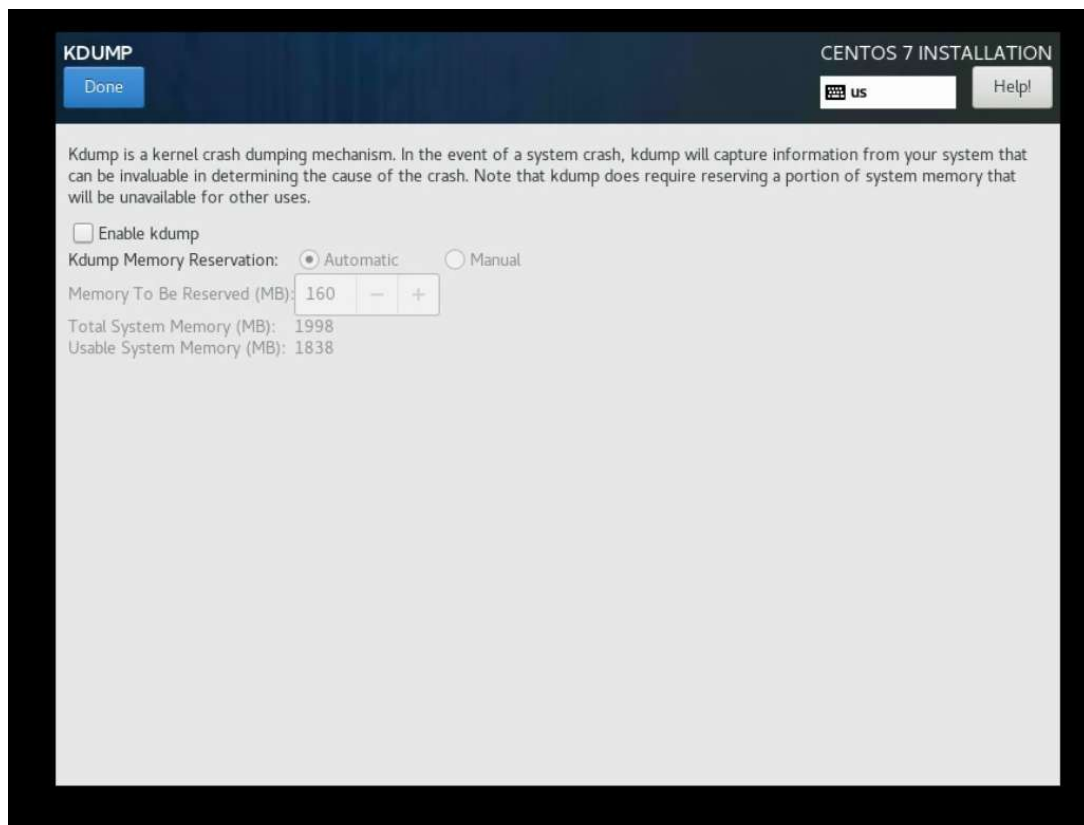


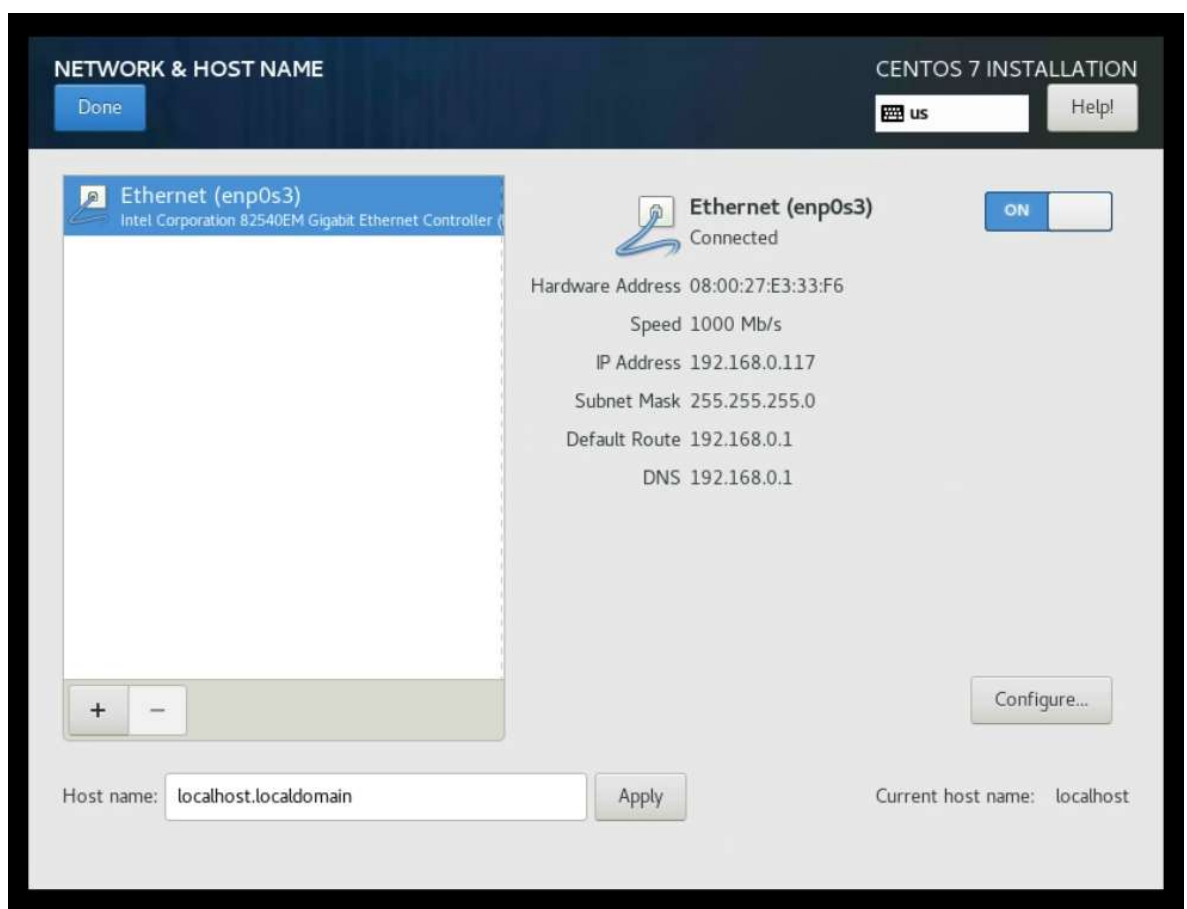
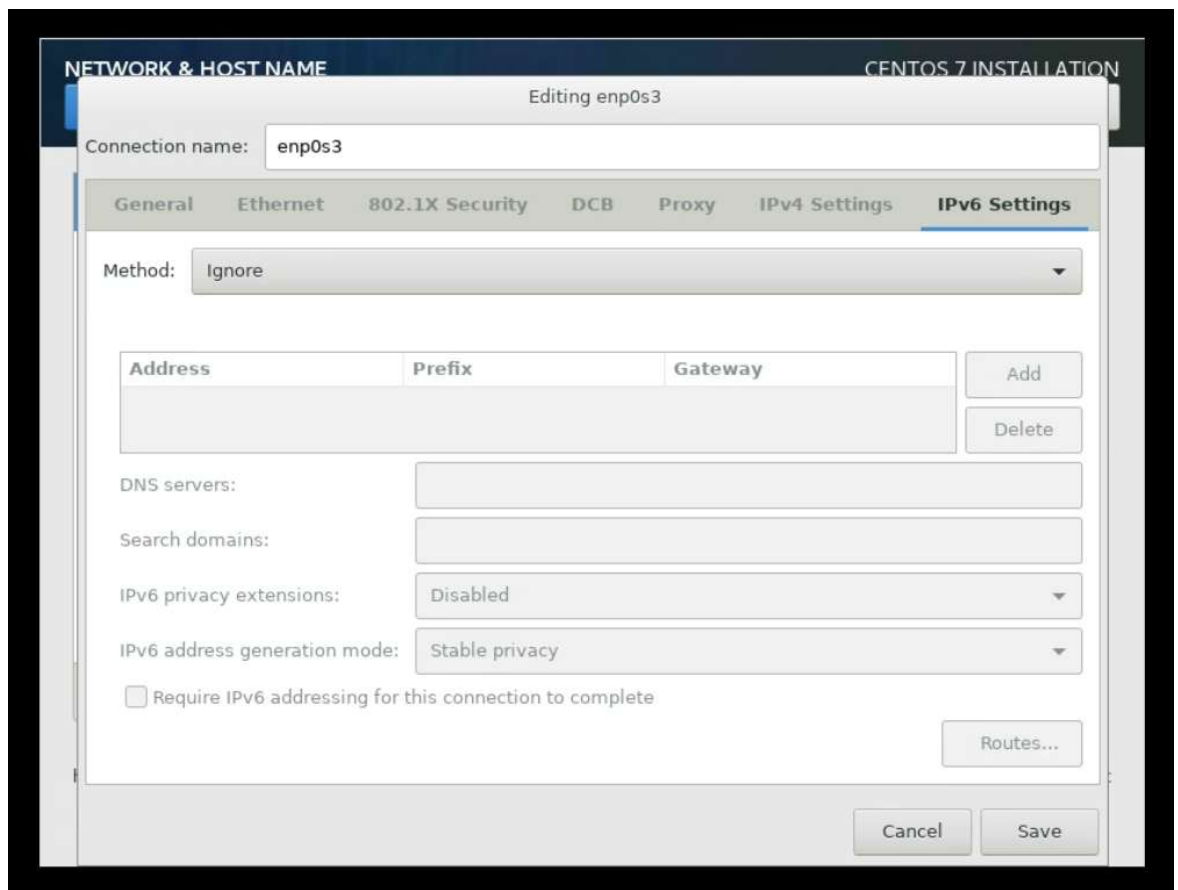
Step 4: -After turning on virtual machine the installation setup will be there.



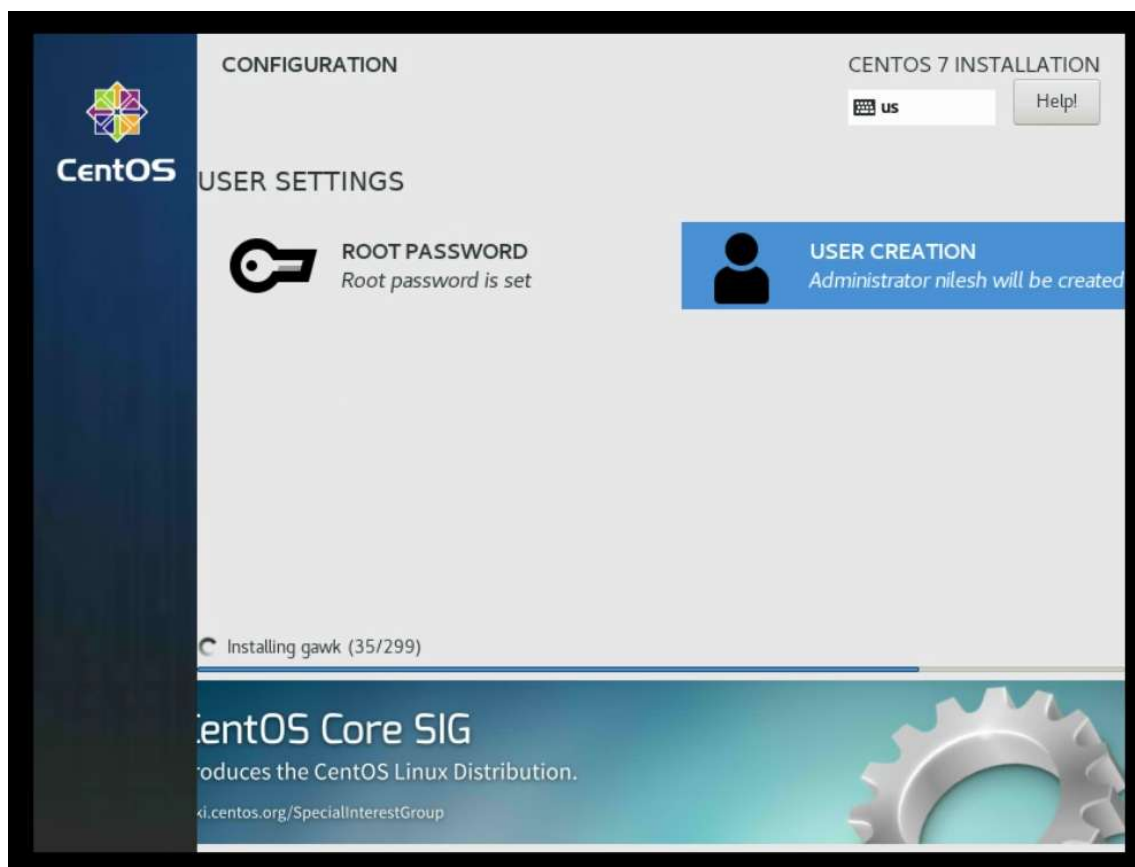
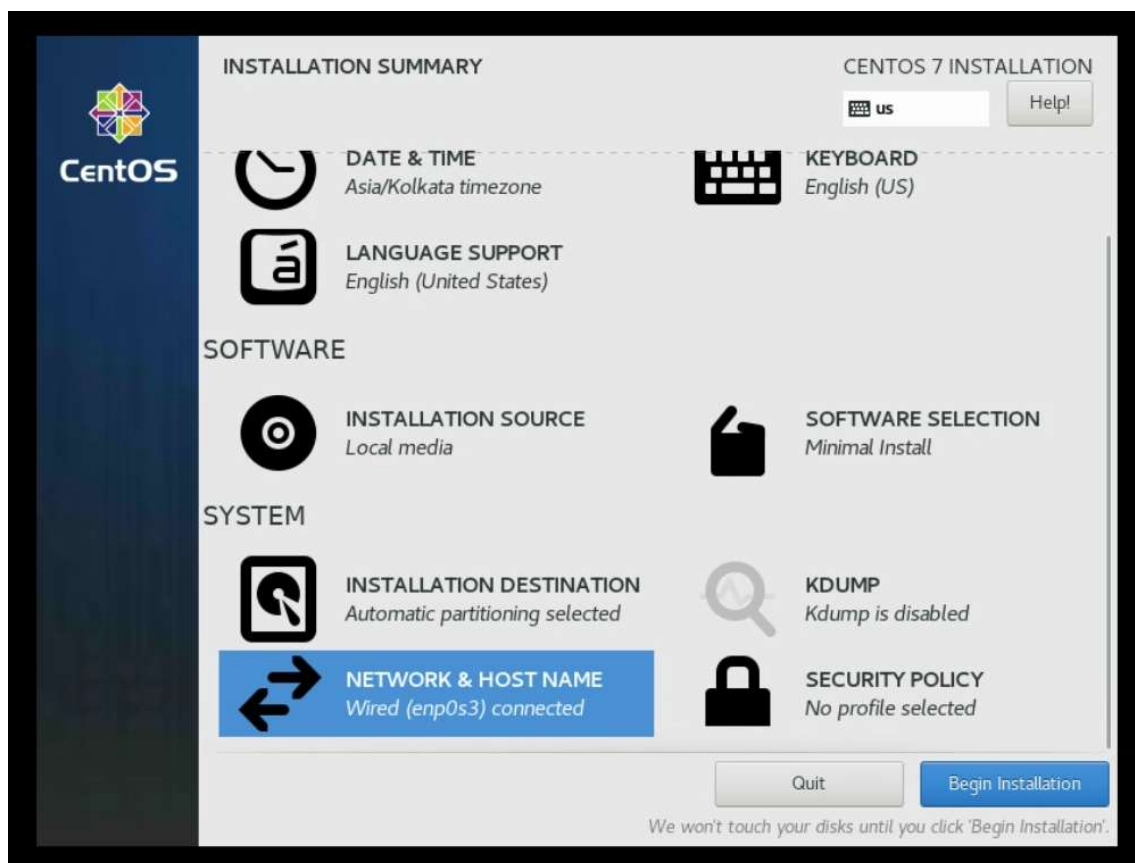
Step 5: - Disable the KDUMP and inside network and host name set IPV6 to ignore.







Step 6: - after the above process click on Begin Installation





## Task 2: - Installation of OpenStack on CentOS

Step 1: - run command “cat /etc/redhat-release ” for checking the release version of your OS

```
[root@localhost nilesh]# cat /etc/redhat-release
CentOS Linux release 7.9.2009 (Core)
[root@localhost nilesh]#
```

Step 2: - Make changes in the environment file which specifies the base environment for all of the processes.

```
[root@localhost nilesh]# vi /etc/environment_

LANG=en_US.utf-8
LC_ALL=en_US.utf-8
_
_
```

Step 3: - check for the status of firewalld and if the status is running then stop the firewalld and finally disable it.

For checking Status: - systemctl status firewalld

For stopping: - systemctl stop firewalld

For disabling: - systemctl disable firewalld

```
[root@localhost nilesh]# systemctl status firewalld
■ firewalld.service - firewalld - dynamic firewall daemon
   Loaded: loaded (/usr/lib/systemd/system/firewalld.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2023-01-30 19:15:56 IST; 11min ago
     Docs: man:firewalld(1)
  Main PID: 711 (firewalld)
    CGroup: /system.slice/firewalld.service
            └─711 /usr/bin/python2 -Es /usr/sbin/firewalld --nofork --nopid

Jan 30 19:15:55 localhost.localdomain systemd[1]: Starting firewalld - dynamic firewall daemon...
Jan 30 19:15:56 localhost.localdomain systemd[1]: Started firewalld - dynamic firewall daemon.
Jan 30 19:15:56 localhost.localdomain firewalld[711]: WARNING: AllowZoneDrifting is enabled. Th...w.
Hint: Some lines were ellipsized, use -l to show in full.
[root@localhost nilesh]# systemctl stop firewalld
[root@localhost nilesh]# systemctl disable firewalld
Removed symlink /etc/systemd/system/multi-user.target.wants/firewalld.service.
Removed symlink /etc/systemd/system/dbus-org.fedoraproject.FirewallD1.service.
[root@localhost nilesh]#
```

Step 4: - check for the status of NetworkManager and if the status is running then stop the NetworkManager and finally disable it.

For checking Status: - systemctl status NetworkManager

For stopping: - systemctl stop NetworkManager

For disabling: - systemctl disable NetworkManager

```
[root@localhost nilesh]# systemctl status NetworkManager
■ NetworkManager.service - Network Manager
   Loaded: loaded (/usr/lib/systemd/system/NetworkManager.service; enabled; vendor preset: enabled)
   Active: active (running) since Mon 2023-01-30 19:15:56 IST; 11min ago
     Docs: man:NetworkManager(8)
   Main PID: 725 (NetworkManager)
    CGroup: /system.slice/NetworkManager.service
            └─725 /usr/sbin/NetworkManager --no-daemon
              └─849 /sbin/dhclient -d -q -sf /usr/libexec/nm-dhcp-helper -pf /var/run/dhclient-ens...

Jan 30 19:15:58 localhost.localdomain NetworkManager[725]: <info> [1675086358.1998] device (en...')
Jan 30 19:15:58 localhost.localdomain NetworkManager[725]: <info> [1675086358.2001] device (en...')
Jan 30 19:15:58 localhost.localdomain NetworkManager[725]: <info> [1675086358.2002] device (en...')
Jan 30 19:15:58 localhost.localdomain NetworkManager[725]: <info> [1675086358.2005] manager: N...AL
Jan 30 19:15:58 localhost.localdomain NetworkManager[725]: <info> [1675086358.2010] manager: N...TE
Jan 30 19:15:58 localhost.localdomain NetworkManager[725]: <info> [1675086358.2013] policy: se...NS
Jan 30 19:15:58 localhost.localdomain dhclient[849]: bound to 192.168.0.117 -- renewal in 3468 ...s.
Jan 30 19:15:58 localhost.localdomain NetworkManager[725]: <info> [1675086358.2130] device (en...d.
Jan 30 19:15:58 localhost.localdomain NetworkManager[725]: <info> [1675086358.2137] manager: N...AL
Jan 30 19:15:58 localhost.localdomain NetworkManager[725]: <info> [1675086358.2140] manager: s...te
Hint: Some lines were ellipsized, use -l to show in full.
[root@localhost nilesh]# systemctl stop NetworkManager
[root@localhost nilesh]# systemctl disable NetworkManager
Removed symlink /etc/systemd/system/multi-user.target.wants/NetworkManager.service.
Removed symlink /etc/systemd/system/dbus-org.freedesktop.nm-dispatcher.service.
Removed symlink /etc/systemd/system/network-online.target.wants/NetworkManager-wait-online.service.
[root@localhost nilesh]# cle
```

Step 5: - Now enable the network service because openstack needs some network script for setting up external network

For enabling Network: -systemctl enable network

For starting the network: - systemctl start network

```
[root@localhost nilesh]# systemctl enable network
network.service is not a native service, redirecting to /sbin/chkconfig.
Executing /sbin/chkconfig network on
[root@localhost nilesh]# systemctl start network
[root@localhost nilesh]# cl_
```

Step 6: - to check our network interface write “cat /etc/sysconfig/network-scripts/ifcfg-enp0s3” command

```
[root@localhost nilesh]# cat /etc/sysconfig/network-scripts/ifcfg-enp0s3
TYPE="Ethernet"
PROXY_METHOD="none"
BROWSER_ONLY="no"
BOOTPROTO="dhcp"
DEFROUTE="yes"
IPV4_FAILURE_FATAL="no"
IPV6INIT="no"
IPV6_AUTOCONF="yes"
IPV6_DEFROUTE="yes"
IPV6_FAILURE_FATAL="no"
IPV6_ADDR_GEN_MODE="stable-privacy"
NAME="enp0s3"
UUID="e4143560-7df8-4485-aa40-f9483e8c7284"
DEVICE="enp0s3"
ONBOOT="yes"
[root@localhost nilesh]# _
```

Step 7: - We need to disable SELINUX because openstack has its own networking component “Neutron”

```
[root@localhost nilesh]# vi /etc/selinux/config
```

```
# This file controls the state of SELinux on the system.
# SELINUX= can take one of these three values:
#   enforcing - SELinux security policy is enforced.
#   permissive - SELinux prints warnings instead of enforcing.
#   disabled - No SELinux policy is loaded.
SELINUX=disabled
# SELINUXTYPE= can take one of three values:
#   targeted - Targeted processes are protected,
#   minimum - Modification of targeted policy. Only selected processes are protected.
#   mls - Multi Level Security protection.
SELINUXTYPE=targeted
```

Step 8: - reboot your pc

```
[root@localhost nilesh]# reboot
```

Step 9: - check weather the SELINUX is disabled or not by getenforce command

```
[root@localhost nilesh]# getenforce
Disabled
```

Step 10: -Now install openstack Train repository package using “sudo yum install -y centos-release-openstack-train” command

```
[root@localhost nileshl]# sudo yum install -y centos-release-openstack-train
Loaded plugins: fastestmirror
Determining fastest mirrors
 * base: repo.extreme-ix.org
 * extras: repo.extreme-ix.org
 * updates: repo.extreme-ix.org
base                                                    | 3.6 kB  00:00:00
extras                                                  | 2.9 kB  00:00:00
updates                                                 | 2.9 kB  00:00:00
(1/4): base/7/x86_64/group_gz                          | 153 kB  00:00:00
(2/4): extras/7/x86_64/primary_db                     | 249 kB  00:00:00
(3/4): base/7/x86_64/primary_db                       | 6.1 MB  00:00:02
(4/4): updates/7/x86_64/primary_db                    | 19 MB  00:00:06

Dependency Installed:
  centos-release-ceph-nautilus.noarch 0:1.2-2.el7.centos
  centos-release-nfs-ganesha28.noarch 0:1.0-3.el7.centos
  centos-release-qemu-ev.noarch 0:1.0-4.el7.centos
  centos-release-storage-common.noarch 0:2-2.el7.centos
  centos-release-virt-common.noarch 0:1-1.el7.centos

Complete!
[root@localhost nileshl]# _
```

Step 11:- install yum utilities using command “sudo yum install yum-utils”

```
[root@localhost nileshl]# sudo yum install yum-utils
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
 * base: repo.extreme-ix.org
 * centos-ceph-nautilus: repo.extreme-ix.org
 * centos-nfs-ganesha28: repo.extreme-ix.org
 * centos-openstack-train: repo.extreme-ix.org
 * centos-qemu-ev: repo.extreme-ix.org
 * extras: repo.extreme-ix.org
 * updates: repo.extreme-ix.org
centos-ceph-nautilus                                  | 3.0 kB  00:00:00
centos-nfs-ganesha28                                 | 3.0 kB  00:00:00
centos-openstack-train                               | 3.0 kB  00:00:00
centos-qemu-ev                                        | 3.0 kB  00:00:00
(1/4): centos-nfs-ganesha28/7/x86_64/primary_db      | 89 kB  00:00:01
(2/4): centos-ceph-nautilus/7/x86_64/primary_db     | 343 kB  00:00:01
(3/4): centos-openstack-train/7/x86_64/primary_db    | 1.2 MB  00:00:02
centos-qemu-ev/7/x86_64/primary_db                   | 1.7 MB  00:00:21 ETA
FAILED

Running transaction
Installing : libxml2-python-2.9.1-6.el7_9.6.x86_64          1/4
Installing : python2-chardet-3.0.4-7.el7.noarch             2/4
Installing : python-kitchen-1.1.1-5.el7.noarch              3/4
Installing : yum-utils-1.1.31-54.el7_8.noarch               4/4
Verifying  : python2-chardet-3.0.4-7.el7.noarch             1/4
Verifying  : python-kitchen-1.1.1-5.el7.noarch             2/4
Verifying  : yum-utils-1.1.31-54.el7_8.noarch              3/4
Verifying  : libxml2-python-2.9.1-6.el7_9.6.x86_64         4/4

Installed:
  yum-utils.noarch 0:1.1.31-54.el7_8

Dependency Installed:
  libxml2-python.x86_64 0:2.9.1-6.el7_9.6          python-kitchen.noarch 0:1.1.1-5.el7
  python2-chardet.noarch 0:3.0.4-7.el7

Complete!
[root@localhost nileshl]#
```

Step 12 : -To open openstack repository in centos write command “sudo yum-config-manager --enable openstack-train”

```
[root@localhost nilesh]# sudo yum-config-manager --enable openstack-train
Loaded plugins: fastestmirror
[root@localhost nilesh]#
```

Step 12 : - update your system with “sudo yum update”

```
[root@localhost nilesh]# sudo yum update -y
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
* base: repo.extreme-ix.org
* centos-ceph-nautilus: repo.extreme-ix.org
* centos-nfs-ganesha28: repo.extreme-ix.org
* centos-openstack-train: repo.extreme-ix.org
* centos-qemu-ev: repo.extreme-ix.org
* extras: repo.extreme-ix.org
* updates: repo.extreme-ix.org
```

Step 13 : - install the packstack using command “sudo yum install -y openstack-packstack”

```
[root@localhost nilesh]# sudo yum install -y openstack-packstack
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
* base: repo.extreme-ix.org
* centos-ceph-nautilus: repo.extreme-ix.org
* centos-nfs-ganesha28: repo.extreme-ix.org
* centos-openstack-train: repo.extreme-ix.org
* centos-qemu-ev: repo.extreme-ix.org
* extras: repo.extreme-ix.org
* updates: repo.extreme-ix.org
Resolving Dependencies
--> Running transaction check
---> Package openstack-packstack.noarch 1:15.1.0-1.el7 will be installed
--> Processing Dependency: openstack-packstack-puppet = 1:15.1.0-1.el7 for package: 1:openstack-packstack-15.1.0-1.el7.noarch
```

# Downloading packages:

(1/137): boost159-atomic-1.59.0-2.el7.1.x86_64.rpm	7.2 kB	00:00:00
(2/137): boost159-chrono-1.59.0-2.el7.1.x86_64.rpm	14 kB	00:00:00
(3/137): boost159-date-time-1.59.0-2.el7.1.x86_64.rpm	21 kB	00:00:00
(4/137): boost159-filesystem-1.59.0-2.el7.1.x86_64.rpm	36 kB	00:00:00
(5/137): Augeas-libs-1.4.0-10.el7.x86_64.rpm	357 kB	00:00:00
(6/137): boost159-locale-1.59.0-2.el7.1.x86_64.rpm	222 kB	00:00:00
(7/137): boost159-log-1.59.0-2.el7.1.x86_64.rpm	380 kB	00:00:00
(8/137): boost159-program-options-1.59.0-2.el7.1.x86_64.rpm	121 kB	00:00:00
(9/137): boost159-system-1.59.0-2.el7.1.x86_64.rpm	9.6 kB	00:00:00
(10/137): boost159-regex-1.59.0-2.el7.1.x86_64.rpm	258 kB	00:00:00
(11/137): boost159-thread-1.59.0-2.el7.1.x86_64.rpm	41 kB	00:00:00
(12/137): cpp-hocon-0.1.6-9.el7.x86_64.rpm	358 kB	00:00:00
(13/137): facter-3.9.3-7.el7.x86_64.rpm	553 kB	00:00:00
(14/137): hiera-1.3.4-5.el7.noarch.rpm	25 kB	00:00:00
(15/137): PyYAML-3.10-11.el7.x86_64.rpm	153 kB	00:00:00
(16/137): jbigkit-libs-2.0-11.el7.x86_64.rpm	46 kB	00:00:00
(17/137): lcms2-2.6-3.el7.x86_64.rpm	150 kB	00:00:00
(18/137): leatherman-1.3.0-9.el7.x86_64.rpm	347 kB	00:00:00
(19/137): libimagequant-2.8.2-2.el7.x86_64.rpm	52 kB	00:00:00
(20/137): libicu-50.2-4.el7_7.x86_64.rpm	6.9 MB	00:00:01
(21/137): libjpeg-turbo-1.2.90-8.el7.x86_64.rpm	135 kB	00:00:00
(22/137): git-1.8.3.1-23.el7_8.x86_64.rpm	4.4 MB	00:00:01
(24/137): libyaml-0.1.4-11.el7_0.x86_64.rpm	55 kB	00:00:00
(25/137): libtiff-4.0.3-35.el7.x86_64.rpm	172 kB	00:00:00
(26/137): openjpeg2-2.3.1-3.el7_7.x86_64.rpm	153 kB	00:00:00
(27/137): openstack-packstack-15.1.0-1.el7.noarch.rpm	191 kB	00:00:00
(28/137): perl-Carp-1.26-244.el7.noarch.rpm	19 kB	00:00:00
(29/137): libwebp-0.3.0-10.el7_9.x86_64.rpm	170 kB	00:00:00
(30/137): openstack-packstack-puppet-15.1.0-1.el7.noarch.rpm	60 kB	00:00:00
(31/137): perl-Error-0.17020-2.el7.noarch.rpm	32 kB	00:00:00
(32/137): perl-Exporter-5.68-3.el7.noarch.rpm	28 kB	00:00:00
(33/137): perl-File-Path-2.09-2.el7.noarch.rpm	26 kB	00:00:00
(34/137): perl-File-Temp-0.23.01-3.el7.noarch.rpm	56 kB	00:00:00
(35/137): perl-Filter-1.49-3.el7.x86_64.rpm	76 kB	00:00:00
(36/137): perl-Getopt-Long-2.40-3.el7.noarch.rpm	56 kB	00:00:00
(36/137): perl-Getopt-Long-2.40-3.el7.noarch.rpm	56 kB	00:00:00
(37/137): perl-Git-1.8.3.1-23.el7_8.noarch.rpm	56 kB	00:00:00
(38/137): perl-HTTP-Tiny-0.033-3.el7.noarch.rpm	38 kB	00:00:00
(39/137): perl-PathTools-3.40-5.el7.x86_64.rpm	82 kB	00:00:00
(40/137): perl-Pod-Perldoc-3.20-4.el7.noarch.rpm	87 kB	00:00:00
(41/137): perl-Encode-2.51-7.el7.x86_64.rpm	1.5 MB	00:00:00
(42/137): perl-Pod-Simple-3.28-4.el7.noarch.rpm	216 kB	00:00:00
(43/137): perl-Pod-Usage-1.63-3.el7.noarch.rpm	27 kB	00:00:00
(44/137): perl-Scalar-List-Utils-1.27-248.el7.x86_64.rpm	36 kB	00:00:00
(45/137): perl-Pod-Escapes-1.04-299.el7_9.noarch.rpm	52 kB	00:00:00
(46/137): perl-Socket-2.010-5.el7.x86_64.rpm	49 kB	00:00:00
(47/137): perl-Storable-2.45-3.el7.x86_64.rpm	77 kB	00:00:00
(48/137): perl-TermReadKey-2.30-20.el7.x86_64.rpm	31 kB	00:00:00
(49/137): perl-Text-ParseWords-3.29-4.el7.noarch.rpm	14 kB	00:00:00
(50/137): perl-Time-HiRes-1.9725-3.el7.x86_64.rpm	45 kB	00:00:00
(51/137): perl-Time-Local-1.2300-2.el7.noarch.rpm	24 kB	00:00:00
(52/137): perl-constant-1.27-2.el7.noarch.rpm	19 kB	00:00:00
(53/137): perl-5.16.3-299.el7_9.x86_64.rpm	8.0 MB	00:00:01
(54/137): perl-macros-5.16.3-299.el7_9.x86_64.rpm	44 kB	00:00:00
(55/137): perl-libs-5.16.3-299.el7_9.x86_64.rpm	690 kB	00:00:00
(56/137): perl-parent-0.225-244.el7.noarch.rpm	12 kB	00:00:00
(57/137): perl-podlators-2.5.1-3.el7.noarch.rpm	112 kB	00:00:00
(58/137): perl-threads-1.87-4.el7.x86_64.rpm	49 kB	00:00:00
(59/137): perl-threads-shared-1.43-6.el7.x86_64.rpm	39 kB	00:00:00
(60/137): puppet-5.5.10-5.el7.noarch.rpm	23 kB	00:00:00
(61/137): puppet-aodh-15.5.0-1.el7.noarch.rpm	50 kB	00:00:00
(63/137): puppet-ceilometer-15.5.0-1.el7.noarch.rpm	61 kB	00:00:00
(64/137): puppet-apache-5.1.0-1.1fa9b1cgit.el7.noarch.rpm	248 kB	00:00:00
(65/137): puppet-certmonger-2.6.0-1.el7.noarch.rpm	21 kB	00:00:00
(66/137): puppet-concat-6.1.0-1.9baa8fcgit.el7.noarch.rpm	36 kB	00:00:00
(67/137): puppet-cinder-15.5.0-1.el7.noarch.rpm	108 kB	00:00:00
(68/137): puppet-corosync-6.0.2-0.2.0rc0.961add3git.el7.noarch.rpm	67 kB	00:00:00
(69/137): puppet-firewall-2.1.0-1.4f4432agit.el7.noarch.rpm	68 kB	00:00:00
(71/137): puppet-gnocchi-15.5.0-1.el7.noarch.rpm	50 kB	00:00:00



```

(72/137): puppet-heat-15.5.0-1.el7.noarch.rpm           | 61 kB 00:00:00
(74/137): puppet-inifile-3.1.0-1.91efcedgit.el7.noarch.rpm | 38 kB 00:00:00
(75/137): puppet-ironic-15.5.0-1.el7.noarch.rpm         | 106 kB 00:00:00
(76/137): puppet-keystone-15.5.0-1.el7.noarch.rpm       | 122 kB 00:00:00
(77/137): puppet-magnum-15.5.0-1.el7.noarch.rpm         | 46 kB 00:00:00
(78/137): puppet-headless-5.5.10-5.el7.noarch.rpm       | 1.6 MB 00:00:00
(79/137): puppet-manila-15.5.0-1.el7.noarch.rpm         | 70 kB 00:00:00
(80/137): puppet-memcached-6.0.0-1.el7.noarch.rpm       | 17 kB 00:00:00
(81/137): puppet-mysql-6.2.0-1.el7.noarch.rpm           | 83 kB 00:00:00
(82/137): puppet-neutron-15.6.0-1.el7.noarch.rpm       | 184 kB 00:00:00
(83/137): puppet-nssdb-1.0.1-1.2ed2a2dgit.el7.noarch.rpm | 6.9 kB 00:00:00
(84/137): puppet-nova-15.8.1-1.el7.noarch.rpm          | 171 kB 00:00:00
(85/137): puppet-openstack_extras-15.4.1-1.el7.noarch.rpm | 42 kB 00:00:00
(86/137): puppet-openstacklib-15.5.0-1.el7.noarch.rpm  | 53 kB 00:00:00
(87/137): puppet-oslo-15.5.0-1.el7.noarch.rpm          | 41 kB 00:00:00
(88/137): puppet-panko-15.5.0-1.el7.noarch.rpm         | 39 kB 00:00:00
(89/137): puppet-placement-2.5.0-1.el7.noarch.rpm      | 33 kB 00:00:00
(90/137): puppet-rabbitmq-10.1.2-1.el7.noarch.rpm      | 263 kB 00:00:00
(91/137): puppet-ovn-15.5.0-1.el7.noarch.rpm           | 22 kB 00:00:00
(92/137): puppet-redis-4.2.2-0.1.0rc1.be8d097git.el7.noarch.rpm | 53 kB 00:00:00
(93/137): puppet-remote-10.0.0-1.7420908git.el7.noarch.rpm | 11 kB 00:00:00
(94/137): puppet-rsync-1.1.1-1.a7d4f84git.el7.noarch.rpm | 21 kB 00:00:00
(95/137): puppet-sahara-15.4.1-1.el7.noarch.rpm        | 52 kB 00:00:00
(96/137): puppet-ssh-6.0.0-1.65570a3git.el7.noarch.rpm | 23 kB 00:00:00
(97/137): puppet-staging-1.0.4-1.b466d93git.el7.noarch.rpm | 78 kB 00:00:00
(98/137): puppet-stdlib-6.1.0-1.5aa891cgit.el7.noarch.rpm | 164 kB 00:00:00
(99/137): puppet-swift-15.5.0-1.el7.noarch.rpm         | 97 kB 00:00:00
(100/137): puppet-tempest-15.4.1-1.el7.noarch.rpm      | 36 kB 00:00:00
(101/137): puppet-trove-15.4.1-1.el7.noarch.rpm        | 58 kB 00:00:00
(102/137): puppet-sysctl-0.0.12-2.a3d160dgit.el7.noarch.rpm | 11 kB 00:00:00
(103/137): puppet-vcrepo-3.0.0-1.b06d5d3git.el7.noarch.rpm | 45 kB 00:00:00
(104/137): puppet-xinetd-3.3.0-1.d768da2git.el7.noarch.rpm | 21 kB 00:00:00
(105/137): puppet-vswitch-11.5.0-1.el7.noarch.rpm      | 35 kB 00:00:00
(106/137): python-enum34-1.0.4-1.el7.noarch.rpm         | 52 kB 00:00:00
(107/137): python-netifaces-0.10.4-3.el7.x86_64.rpm    | 17 kB 00:00:00
(108/137): python-ply-3.4-11.el7.noarch.rpm            | 123 kB 00:00:00
(109/137): python-pyparser-2.14-1.el7.noarch.rpm       | 104 kB 00:00:00
(110/137): python-docutils-0.11-0.3.20130715svn7687.el7.noarch.rpm | 1.5 MB 00:00:00
(111/137): python2-asn1crypto-0.23.0-2.el7.noarch.rpm  | 172 kB 00:00:00
(112/137): python2-cryptography-2.5-1.el7.x86_64.rpm  | 544 kB 00:00:00
(113/137): python2-cffi-1.11.2-1.el7.x86_64.rpm       | 229 kB 00:00:00
(114/137): python2-idna-2.5-1.el7.noarch.rpm           | 94 kB 00:00:00
(115/137): python2-ipaddress-1.0.18-5.el7.noarch.rpm   | 35 kB 00:00:00
(116/137): python2-pbr-5.1.2-2.el7.noarch.rpm          | 1.1 MB 00:00:00
(117/137): python2-netaddr-0.7.19-5.el7.noarch.rpm     | 1.5 MB 00:00:00
(118/137): python2-pillow-5.4.1-3.el7.x86_64.rpm      | 639 kB 00:00:00
(119/137): python2-olefile-0.44-1.el7.noarch.rpm       | 773 kB 00:00:00
(120/137): python2-pyOpenSSL-19.0.0-1.el7.noarch.rpm   | 98 kB 00:00:00
(121/137): ruby-augeas-0.5.0-1.el7.x86_64.rpm         | 23 kB 00:00:00
(122/137): ruby-facter-3.9.3-7.el7.x86_64.rpm        | 12 kB 00:00:00
(123/137): python2-setuptools-40.8.0-1.el7.noarch.rpm  | 652 kB 00:00:00
(124/137): rsync-3.1.2-12.el7_9.x86_64.rpm            | 408 kB 00:00:00
(125/137): ruby-2.0.0.648-39.el7_9.x86_64.rpm        | 73 kB 00:00:00
(126/137): ruby-irb-2.0.0.648-39.el7_9.noarch.rpm     | 94 kB 00:00:00
(127/137): rubygem-bigdecimal-1.2.0-39.el7_9.x86_64.rpm | 85 kB 00:00:00
(128/137): rubygem-io-console-0.4.2-39.el7_9.x86_64.rpm | 56 kB 00:00:00
(129/137): ruby-shadow-1.4.1-23.el7.x86_64.rpm        | 13 kB 00:00:00
(130/137): rubygem-json-1.7.7-39.el7_9.x86_64.rpm     | 82 kB 00:00:00
(131/137): rubygem-psych-2.0.0-39.el7_9.x86_64.rpm    | 84 kB 00:00:00
(132/137): rubygem-pathspect-0.2.1-3.el7.noarch.rpm   | 16 kB 00:00:00
(133/137): rubygem-rdoc-4.0.0-39.el7_9.noarch.rpm     | 324 kB 00:00:00
(134/137): rubygems-2.0.14.1-39.el7_9.noarch.rpm     | 215 kB 00:00:00
(135/137): rubygem-rgen-0.6.6-2.el7.noarch.rpm        | 84 kB 00:00:00
(136/137): ruby-libs-2.0.0.648-39.el7_9.x86_64.rpm   | 2.8 MB 00:00:00
(137/137): yaml-cpp-0.5.1-6.el7.x86_64.rpm            | 176 kB 00:00:00

```

Complete!

[root@localhost nilesh]#

```

[root@localhost nileshl# ip address show
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid_lft forever preferred_lft forever
2: enp0s3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 08:00:27:e3:33:f6 brd ff:ff:ff:ff:ff:ff
    inet 192.168.0.117/24 brd 192.168.0.255 scope global dynamic enp0s3
        valid_lft 6628sec preferred_lft 6628sec
    inet6 fe80::a00:27ff:fee3:33f6/64 scope link
        valid_lft forever preferred_lft forever
[root@localhost nileshl#

```

```

[root@localhost nileshl# packstack --allinone --provision-demo=n --os-neutron-ovs-bridge-mappings=extnet:br-ex --os-neutron-ml2-mechanism-drivers=openvswitch --os-neutron-l2-agent=openvswitch --os-neutron-ovs-bridge-interfaces=br-ex:enp0s3 --os-neutron-ml2-type-drivers=vxlan,flat --os-neutron-ml2-tenant-network-types=vxlan_

```

Welcome to the Packstack setup utility

The installation log file is available at: /var/tmp/packstack/20230130-210434-Jnwe6f/openstack-setup.log

Packstack changed given value to required value /root/.ssh/id\_rsa.pub

Installing:

```

Clean Up [ DONE ]
Discovering ip protocol version [ DONE ]
Setting up ssh keys [ DONE ]
Preparing servers [ DONE ]
Pre installing Puppet and discovering hosts' details [ DONE ]
Preparing pre-install entries [ DONE ]
Setting up CACERT [ DONE ]
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 UNC Proxy entries [ DONE ]
Preparing OpenStack Network-related Nova entries [ DONE ]
Preparing Nova Common 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 ]

```



```

Preparing Nova Common 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 192.168.0.117_controller.pp
192.168.0.107_controller.pp:             [ DONE ]
Applying 192.168.0.107_network.pp
192.168.0.107_network.pp:               [ DONE ]
Applying 192.168.0.107_compute.pp
192.168.0.107_compute.pp:               [ DONE ]
Applying Puppet manifests                [ DONE ]
Finalizing                              [ DONE ]

**** Installation completed successfully ****

Additional information:
* A new answerfile was created in: /root/packstack-answers-20230131-115305.txt
* Time synchronization installation was skipped. Please note that unsynchronized time on server instances might be problem for some OpenStack components.
* File /root/keystonerc_admin has been created on OpenStack client host 192.168.0.107. To use the command line tools you need to source the file.
* To access the OpenStack Dashboard browse to http://192.168.0.107/dashboard .
Please, find your login credentials stored in the keystonerc_admin in your home directory.
* Because of the kernel update the host 192.168.0.107 requires reboot.
* The installation log file is available at: /var/tmp/packstack/20230131-115304-jDBD_W/openstack-setup.log
* The generated manifests are available at: /var/tmp/packstack/20230131-115304-jDBD_W/manifests
[root@localhost nilesh]# [C
bash: [C: command not found
[root@localhost nilesh]#

```