VMWARE WORKSTATION PRO 15 setup

Download and install vmware workstation pro:

https://www.vmware.com/go/getworkstation-win
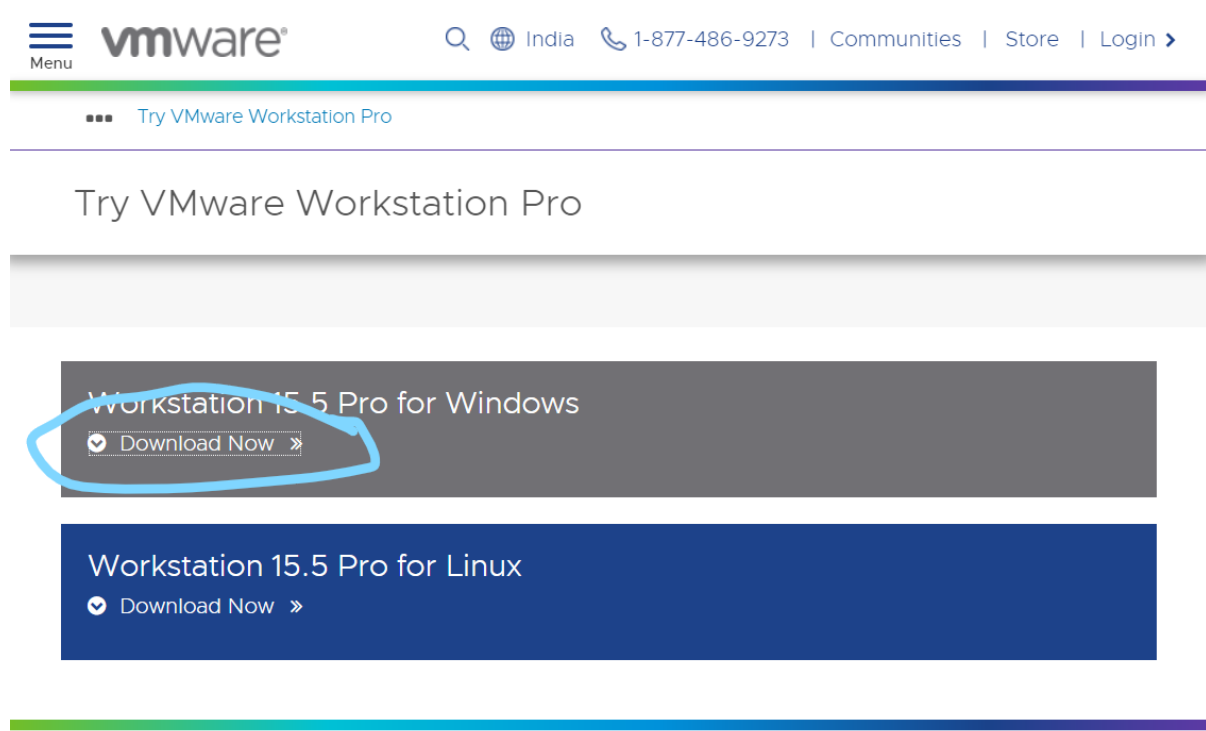
Keys:

Serial Keys:

FU512-2DG1H-M85QZ-U7Z5T-PY8ZD

CU3MA-2LG1N-48EGQ-9GNGZ-QG0UD

GV7N2-DQZ00-4897Y-27ZNX-NV0TD

YZ718-4REEQ-08DHQ-JNYQC-ZQRD0

GZ3N0-6CX0L-H80UP-FPM59-NKAD4

YY31H-6EYEJ-480VZ-VXXZC-QF2E0
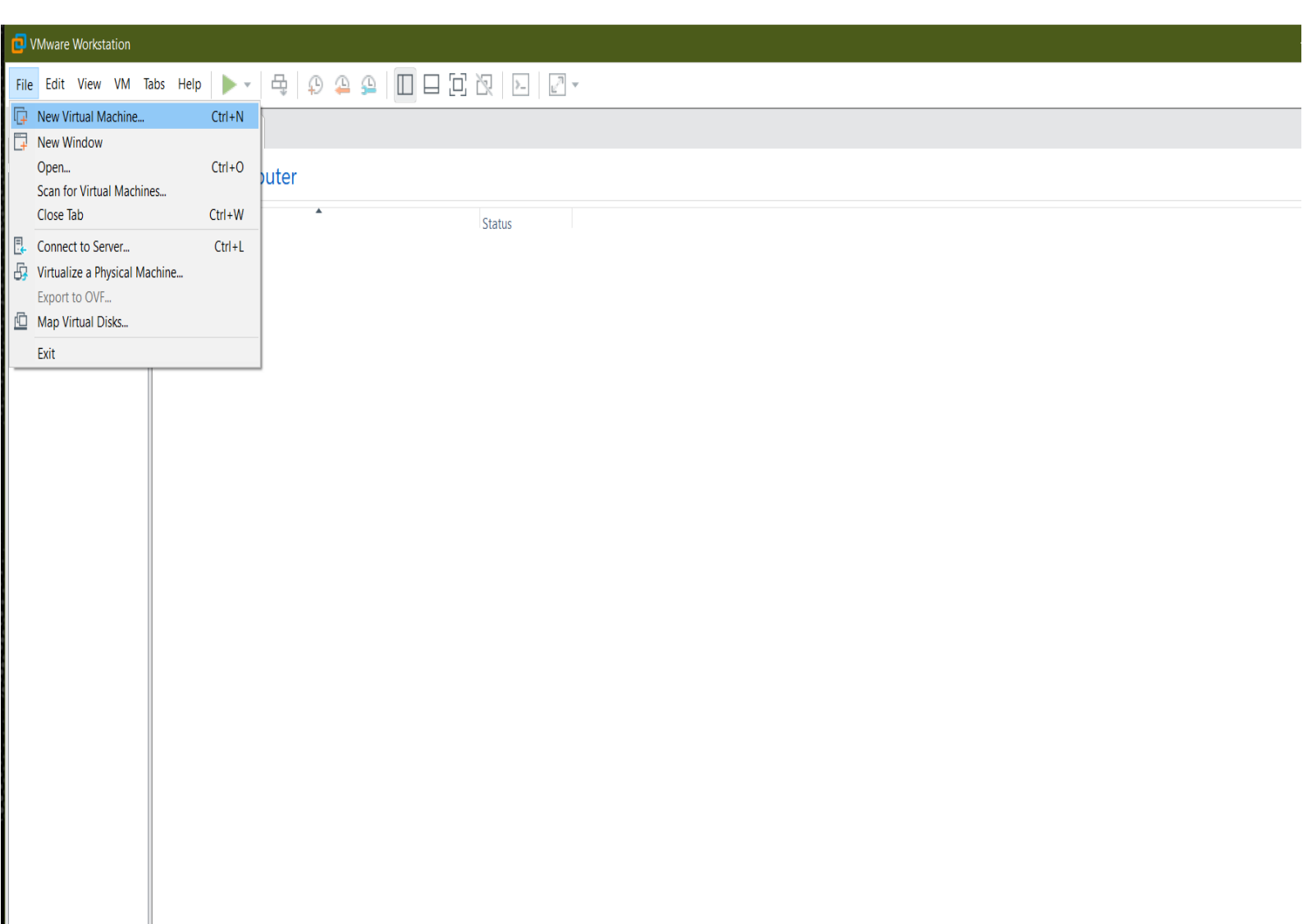
ZG51K-25FE1-H81ZP-95XGT-WV2C0

VG30H-2AX11-H88FQ-CQXGZ-M6AY4

CU7J2-4KG8J-489TY-X6XGX-MAUX2

FY780-64E90-0845Z-1DWQ9-XPRC0

UF312-07W82-H89XZ-7FPGE-XUH80

AA3DH-0PYD1-0803P-X4Z7V-PGHR4

New Virtual Machine Wizard

Welcome to the New Virtual Machine Wizard

VMWARE
WORKSTATION
PRO™ 15.5

What type of configuration do you want?

◉ Typical (recommended)

Create a Workstation 15.x virtual machine in a few easy steps.

○ Custom (advanced)

Create a virtual machine with advanced options, such as a SCSI controller type, virtual disk type and compatibility with older VMware products.

| Help | | < Back | Next > | Cancel |

New Virtual Machine Wizard

Guest Operating System Installation

A virtual machine is like a physical computer; it needs an operating system. How will you install the guest operating system?

Install from:

○ Installer disc:

💿 DVD RW Drive (E:)

○ Installer disc image file (iso):

D:\new volume f\LinuxWorld\share\rhel-server-7.5-x   Browse...

◉ I will install the operating system later.

The virtual machine will be created with a blank hard disk.

| Help | | < Back | Next > | Cancel |

New Virtual Machine Wizard

Select a Guest Operating System
Which operating system will be installed on this virtual machine?

Guest operating system

○ Microsoft Windows
◉ Linux
○ VMware ESX
○ Other

Version

Red Hat Enterprise Linux 7 64-bit ⌄

Help		< Back	Next >	Cancel

New Virtual Machine Wizard

Name the Virtual Machine
What name would you like to use for this virtual machine?

Virtual machine name:

Openstack

Location:

D:\openstack   Browse...

The default location can be changed at Edit > Preferences.

< Back	Next >	Cancel

New Virtual Machine Wizard

Specify Disk Capacity
How large do you want this disk to be?

The virtual machine's hard disk is stored as one or more files on the host computer's physical disk. These file(s) start small and become larger as you add applications, files, and data to your virtual machine.

Maximum disk size (GB): **80.0**

Recommended size for Red Hat Enterprise Linux 7 64-bit: 20 GB

◉ Store virtual disk as a single file
◯ Split virtual disk into multiple files

Splitting the disk makes it easier to move the virtual machine to another computer but may reduce performance with very large disks.

| Help | | < Back | Next > | Cancel |

New Virtual Machine Wizard

Ready to Create Virtual Machine
Click Finish to create the virtual machine. Then you can install Red Hat Enterprise Linux 7 64-bit.

The virtual machine will be created with the following settings:

Name:	Openstack
Location:	D:\openstack
Version:	Workstation 15.x
Operating System:	Red Hat Enterprise Linux 7 64-bit
Hard Disk:	80 GB
Memory:	2048 MB
Network Adapter:	NAT
Other Devices:	CD/DVD, USB Controller, Printer, Sound Card

Customize Hardware...

| < Back | Finish | Cancel |

Hardware

Device	Summary
Memory	8 GB
Processors	1
New CD/DVD (SATA)	Auto detect
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

Memory

Specify the amount of memory allocated to this virtual machine. The memory size must be a multiple of 4 MB.

Memory for this virtual machine: 8192 MB

- 64 GB
- 32 GB
- 16 GB
- 8 GB ◄
- 4 GB
- 2 GB ◄
- 1 GB ◄
- 512 MB
- 256 MB
- 128 MB
- 64 MB
- 32 MB
- 16 MB
- 8 MB
- 4 MB

■ Maximum recommended memory
(Memory swapping may occur beyond this size.)
9.7 GB

■ Recommended memory
2 GB

■ Guest OS recommended minimum
1 GB

The virtual machine will use up to 768 MB of this memory for graphics memory. You can change this amount in the Display settings page.

Add...   Remove

Close   Help

Hardware

Device	Summary
Memory	8 GB
Processors	2
New CD/DVD (SATA)	Auto detect
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

Processors

Number of processors: 2

Number of cores per processor: 1

Total processor cores: 2

Virtualization engine

☑ Virtualize Intel VT-x/EPT or AMD-V/RVI
☑ Virtualize CPU performance counters
☐ Virtualize IOMMU (IO memory management unit)

Add...   Remove

Close   Help

Hardware

Device	Summary
Memory	8 GB
Processors	2
New CD/DVD (SATA)	Auto detect
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

Add... Remove

Device status

☐ Connected
☑ Connect at power on

Connection

○ Use physical drive:

Auto detect

● Use ISO image file:

orld\share\rhel-server-7.5-x86_64-dvd.iso   Browse...

Advanced...

Close   Help

Hardware

Device	Summary
Memory	8 GB
Processors	2
New CD/DVD (SATA)	Using file D:\new volume f\Li...
Network Adapter	NAT
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

Add... Remove

Device status

☐ Connected
☑ Connect at power on

Network connection

● Bridged: Connected directly to the physical network
  ☐ Replicate physical network connection state

○ NAT: Used to share the host's IP address
○ Host-only: A private network shared with the host
○ Custom: Specific virtual network
  VMnet0

○ LAN segment:

LAN Segments...   Advanced...

Close   Help

New Virtual Machine Wizard

Ready to Create Virtual Machine

Click Finish to create the virtual machine. Then you can install Red Hat Enterprise Linux 7 64-bit.

The virtual machine will be created with the following settings:

Name:	Openstack
Location:	D:\openstack
Version:	Workstation 15.x
Operating System:	Red Hat Enterprise Linux 7 64-bit
Hard Disk:	80 GB
Memory:	8192 MB
Network Adapter:	Bridged (Automatic)
Other Devices:	2 CPU cores, CD/DVD, USB Controller, Printer, Sound C...

Customize Hardware...

< Back   **Finish**   Cancel

File   Edit   View   VM   Tabs   Help

Library

Type here to sea...

- My Computer
  - Openstack
  - Shared VMs

My Computer   Openstack

Openstack

▶ Power on this virtual machine

Edit V...

Devices

Memory	8 GB
Processors	2
Hard Disk (SCSI)	80 GB
CD/DVD (SATA)	Using file D:\ne...
Network Adapter	Bridged (Autom...
USB Controller	Present
Sound Card	Auto detect
Printer	Present
Display	Auto detect

Description

Type here to enter a description of this virtual machine.

Virtual Machine Details

State: Powered off
Configuration file: D:\openstack\Openstack.vmx
Hardware compatibility: Workstation 15.x virtual machine
Primary IP address: Network information is not available

Install RHEL 7.5 in minimal

INSTALLATION SUMMARY

RED HAT ENTERPRISE LINUX 7.5 INSTALLA

⌨ us

DATE & TIME
Asia/Kolkata timezone

KEYBOARD
English (US)

LANGUAGE SUPPORT
English (United States)

SOFTWARE

INSTALLATION SOURCE
Local media

SOFTWARE SELECTION
Minimal Install

SYSTEM

INSTALLATION DESTINATION
Automatic partitioning selected

KDUMP
Kdump is disabled

NETWORK & HOST NAME
Wired (ens33) connected

SECURITY POLICY
No profile selected

Quit

Begin Install

We won't touch your disks until you click 'Begin Ins

> winscp all three iso's inside the vm inside /softs

follow screenshot below from 21 :

```
20  mkdir /softs
21  mkdir /softs/add
22  mkdir /softs/RHOSP
23  mkdir /softs/updates
24  mount rhel-7-server-additional-20180628.iso add/
25  mount RHEL70SP-13.0-20180628.2-x86_64.iso RHOSP/
26  mount RHEL70SP-13.0-20180628.2-x86_64.iso updates/
27  mkdir /softs
28  mkdir /softs/add
29  mkdir /softs/RHOSP
30  mkdir /softs/updates
31  cd /softs
32  mount rhel-7-server-additional-20180628.iso add/
33  mount RHEL70SP-13.0-20180628.2-x86_64.iso RHOSP/
34  mount rhel-7.5-server-updates-20180628.iso updates/
```

> mkdir   /softy

> cp -rvf add/   /softy/.

> cp -rvf RHOSP/   /softy/.

> cp -rvf updates/   /softy/.

Configure yum

> vi /etc/yum.repos.d/openstack.repo

```
[rhel]
baseurl=file:///dvd/
gpgcheck=0
```

```
[root@localhost ~]# yum install  net-tools  vim  python-setuptools createrepo -y
Loaded plugins: product-id, search-disabled-repos, subscription-manager
This system is not registered with an entitlement server. You can use subscription-manager to register.
```

```
[root@localhost ~]# cd /softy
[root@localhost softy]# ls
add                    RHOSP   updates
[root@localhost softy]# createrepo -v .
```

Now configure yum for openstack

> vi /etc/yum.repos.d/openstack.repo

```
[rhel]
baseurl=file:///dvd/
gpgcheck=0

[Openstack]
name=Openstack
baseurl=file:///softy/
gpgcheck=0
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
~
```

to clean yum cache run:

> rm -rf /var/cache/yum
> echo 3 > /proc/sys/vm/drop_caches

```
[root@localhost softy]# yum install openstack-packstack -y
Loaded plugins: product-id, search-disabled-repos, subscription-manager
This system is not registered with an entitlement server. You can use subscription-manager to register.
Repository 'rhel' is missing name in configuration, using id
Openstack                                                          | 2.9 kB  00:00:00
rhel                                                               | 4.3 kB  00:00:00
```

> ens33 is device which we use for static ip

```
root@localhost softy]# nmcli con show
AME   UUID                                    TYPE      DEVICE
ns33  29d88ddc-3977-4832-9009-159a7e824c70   ethernet  ens33
root@localhost softy]# route -n
ernel IP routing table
estination      Gateway         Genmask         Flags Metric Ref    Use Iface
.0.0.0          192.168.43.1    0.0.0.0         UG    100    0        0 ens33
92.168.43.0     0.0.0.0         255.255.255.0   U     100    0        0 ens33
root@localhost softy]# ip addr
: 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
: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UP group default qlen 1000
    link/ether 00:0c:29:06:bf:78 brd ff:ff:ff:ff:ff:ff
    inet 192.168.43.5/24 brd 192.168.43.255 scope global noprefixroute dynamic ens33
       valid_lft 2990sec preferred_lft 2990sec
    inet6 2405:205:30c:e0d:147a:8488:7884:0075/64 scope global noprefixroute dynamic
       valid_lft 3595sec preferred_lft 3595sec
    inet6 fe80::5467:2031:81ba:8fa3/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
root@localhost softy]# nmcli con show
AME   UUID                                    TYPE      DEVICE
ns33  29d88ddc-3977-4832-9009-159a7e824c70   ethernet  ens33
root@localhost softy]# nmcli con add con-name osp ifname ens33 type ethernet ip4 192.168.43.5/24  gw4 192.168.43.1 ipv4.dns 192.168.43.1 ipv4.method manual
connection.autoconnect yes

[root@localhost softy]# nmcli con show
NAME   UUID                                    TYPE      DEVICE
ens33  29d88ddc-3977-4832-9009-159a7e824c70   ethernet  ens33
[root@localhost softy]# nmcli con add con-name osp ifname ens33 type ethernet ip4 192.168.43.5/24  gw4 192.168.43.1 ipv4.dns 192.168.43.1 ipv4.method manual
 connection.autoconnect yes
Connection 'osp' (3e8537ee-74d8-4d62-bae6-63eaf9f17c98) successfully added.
[root@localhost softy]# nmcli con show
NAME   UUID                                    TYPE      DEVICE
ens33  29d88ddc-3977-4832-9009-159a7e824c70   ethernet  ens33
osp    3e8537ee-74d8-4d62-bae6-63eaf9f17c98   ethernet  --
[root@localhost softy]# nmcli con up osp
Connection successfully activated (D-Bus active path: /org/freedesktop/NetworkManager/ActiveConnection/2)
[root@localhost softy]# nmcli con down ens33
Error: 'ens33' is not an active connection.
Error: no active connection provided.
[root@localhost softy]# nmcli con show
NAME   UUID                                    TYPE      DEVICE
osp    3e8537ee-74d8-4d62-bae6-63eaf9f17c98   ethernet  ens33
ens33  29d88ddc-3977-4832-9009-159a7e824c70   ethernet  --
[root@localhost softy]# ping goo.gl
PING goo.gl (172.217.167.206) 56(84) bytes of data.
64 bytes from del03s18-in-f14.1e100.net (172.217.167.206): icmp_seq=1 ttl=114 time=46.1 ms
64 bytes from del03s18-in-f14.1e100.net (172.217.167.206): icmp_seq=2 ttl=114 time=55.5 ms
64 bytes from del03s18-in-f14.1e100.net (172.217.167.206): icmp_seq=3 ttl=114 time=57.0 ms
^C
--- goo.gl ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2004ms
rtt min/avg/max/mdev = 46.166/52.895/57.020/4.802 ms
```

ACTIVATE Profile

```
[root@localhost softy]# systemctl stop NetworkManager
[root@localhost softy]# ping goo.gl
PING goo.gl (216.58.200.174) 56(84) bytes of data.
64 bytes from nrt12s11-in-f174.1e100.net (216.58.200.174): icmp_seq=1 ttl=113 time=167 ms
64 bytes from nrt12s11-in-f174.1e100.net (216.58.200.174): icmp_seq=2 ttl=113 time=136 ms
64 bytes from nrt12s11-in-f174.1e100.net (216.58.200.174): icmp_seq=3 ttl=113 time=344 ms
^C
--- goo.gl ping statistics ---
3 packets transmitted, 3 received, 0% packet loss, time 2001ms
rtt min/avg/max/mdev = 136.025/216.203/344.984/91.970 ms
[root@localhost softy]# systemctl disable NetworkManager
Removed symlink /etc/systemd/system/multi-user.target.wants/NetworkManager.service.
Removed symlink /etc/systemd/system/dbus-org.freedesktop.NetworkManager.service.
Removed symlink /etc/systemd/system/dbus-org.freedesktop.nm-dispatcher.service.
```

> If after stopping and disabling network manager the ping
  is working fine then all good till here.
> echo 3 > /proc/sys/vm/drop_caches

```
[root@localhost softy]# echo 3   >   /proc/sys/vm/drop_caches
```

Now time to generate answer file

```
[root@localhost softy]# cd ..
[root@localhost /]# packstack --gen-answer-file=setup.txt
[root@localhost /]# ls
bin  dev  etc  lib    media  op   proc  run   setup.txt  softy  sys  usr
boot dvd  home lib64  mnt    opt  root  sbin  softs      srv    tmp  var
[root@localhost /]#
```

> **Vi setup.txt**

> **NOTE: SCREENSHOT BELOW THAT ARE CHANGED ONLY REST IS SAME**

```
[general]

# Path to a public key to install on servers. If a usable key has not
# been installed on the remote servers, the user is prompted for a
# password and this key is installed so the password will not be
# required again.
CONFIG_SSH_KEY=/root/.ssh/id_rsa.pub

# Default password to be used everywhere (overridden by passwords set
# for individual services or users).
CONFIG_DEFAULT_PASSWORD=redhat
```

```
# Specify 'y' to install OpenStack Object Storage (swift). ['y', 'n']
CONFIG_SWIFT_INSTALL=n

# Specify 'y' to install OpenStack Metering (ceilometer). Note this
# will also automatically install gnocchi service and configures it as
# the metrics backend. ['y', 'n']
CONFIG_CEILOMETER_INSTALL=n

# Specify 'y' to install OpenStack Telemetry Alarming (Aodh). Note
# Aodh requires Ceilometer to be installed as well. ['y', 'n']
CONFIG_AODH_INSTALL=n

# Specify 'y' to install OpenStack Events Service (panko). ['y', 'n']
CONFIG_PANKO_INSTALL=n

# Specify 'y' to install OpenStack Data Processing (sahara). In case
# of sahara installation packstack also installs heat.['y', 'n']
CONFIG_SAHARA_INSTALL=n
```

```
# Comma-separated list of NTP servers. Leave plain if Packstack
# should not install ntpd on instances.
CONFIG_NTP_SERVERS=0.in.pool.ntp.org
```

```
# User name for the Identity service 'admin' user.  Defaults to
# 'admin'.
CONFIG_KEYSTONE_ADMIN_USERNAME=admin

# Password to use for the Identity service 'admin' user.
CONFIG_KEYSTONE_ADMIN_PW=redhat

# Password to use for the Identity service 'demo' user.
CONFIG_KEYSTONE_DEMO_PW=redhat

# Identity service API version string. ['v2.0', 'v3']
CONFIG_KEYSTONE_API_VERSION=v3
```

```
# Base directory containing mount points for Gluster volumes.
CONFIG_MANILA_GLUSTERFS_MOUNT_POINT_BASE=

# Type of NFS server that mediate access to the Gluster volumes
# (Gluster or Ganesha).
CONFIG_MANILA_GLUSTERFS_NFS_SERVER_TYPE=gluster

# Path of Manila host's private SSH key file.
CONFIG_MANILA_GLUSTERFS_PATH_TO_PRIVATE_KEY=

# Remote Ganesha server node's IP address.
CONFIG_MANILA_GLUSTERFS_GANESHA_SERVER_IP=

# Specify 'y' to set up Horizon communication over https. ['y', 'n']
CONFIG_HORIZON_SSL=y  ←
```

```
[root@localhost /]# packstack --answer-file=setup.txt
Welcome to the Packstack setup utility

The installation log file is available at: /var/tmp/packstack/20200626-223503-IFmxgu/opensta

Installing:
Clean Up                                        [ DONE ]
Discovering ip protocol version                 [ DONE ]
Setting up ssh keys                             [ DONE ]
```

Now wait for hour or two or depending on your system

OpenStack is deployed successfully 😊

your login credentials:

Admin account:

Username: admin

Password: redhat

Demo account:

Username: demo

Password: redhat