

# ORACLE LINUX 7.8 INSTALLATION

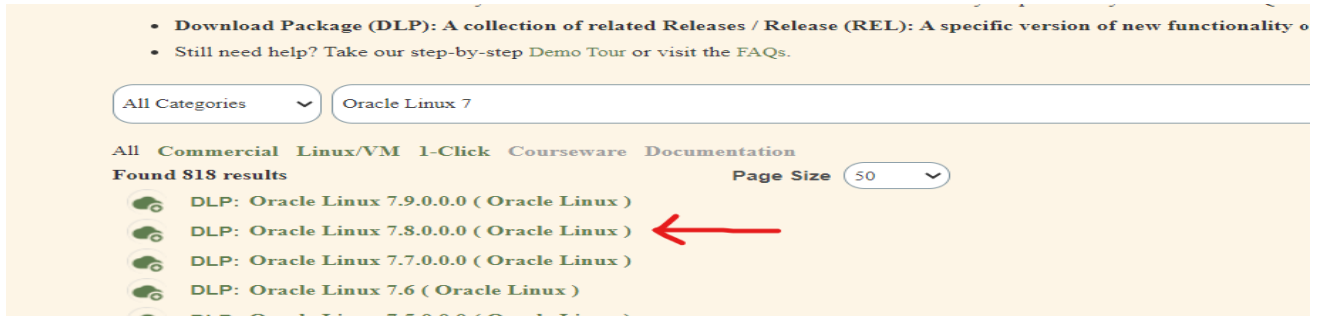
## 1. Download OS and Oracle Virtualbox:

<https://yum.oracle.com/oracle-linux-isos.html>

or

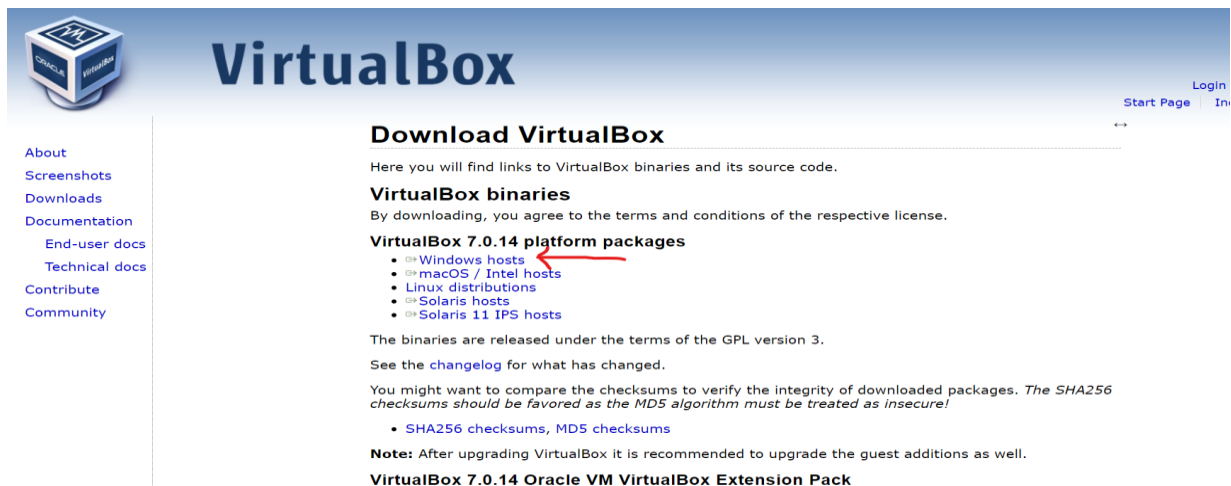
<https://edelivery.oracle.com/osdc/faces/SoftwareDelivery>

Download 7.8 Linux version

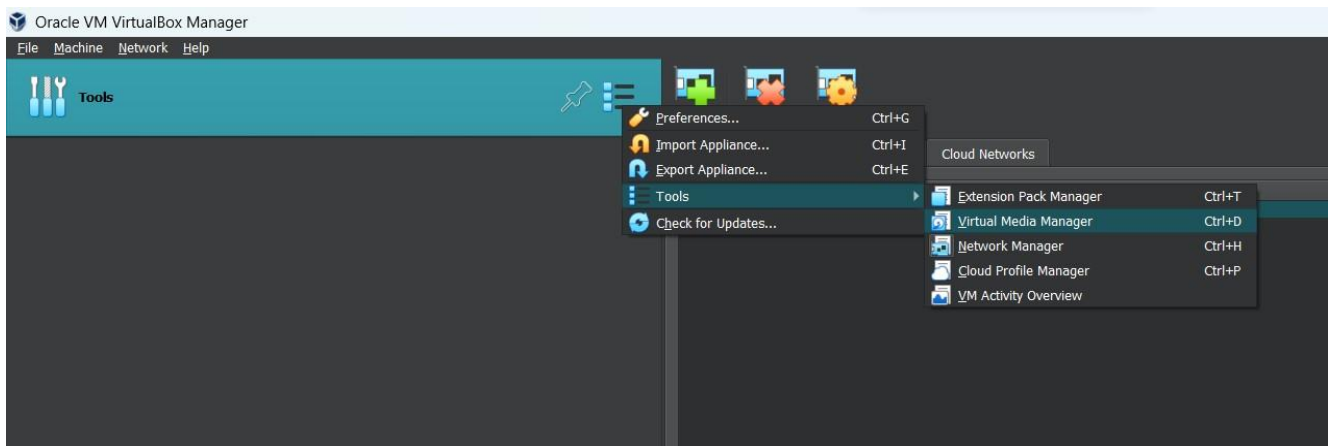


## ➤ Oracle Virtualbox Software:

<https://www.virtualbox.org/wiki/Downloads>



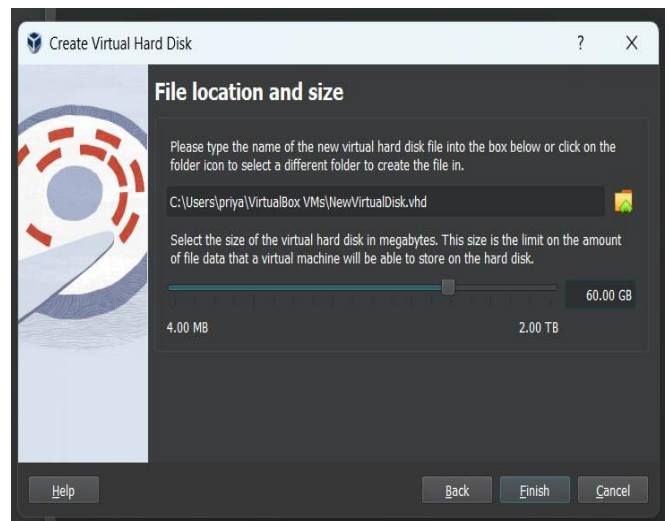
## 2. Open Virtual-Box click on the file >> tool >> Virtual Media Manager >>



➤ Click on create.

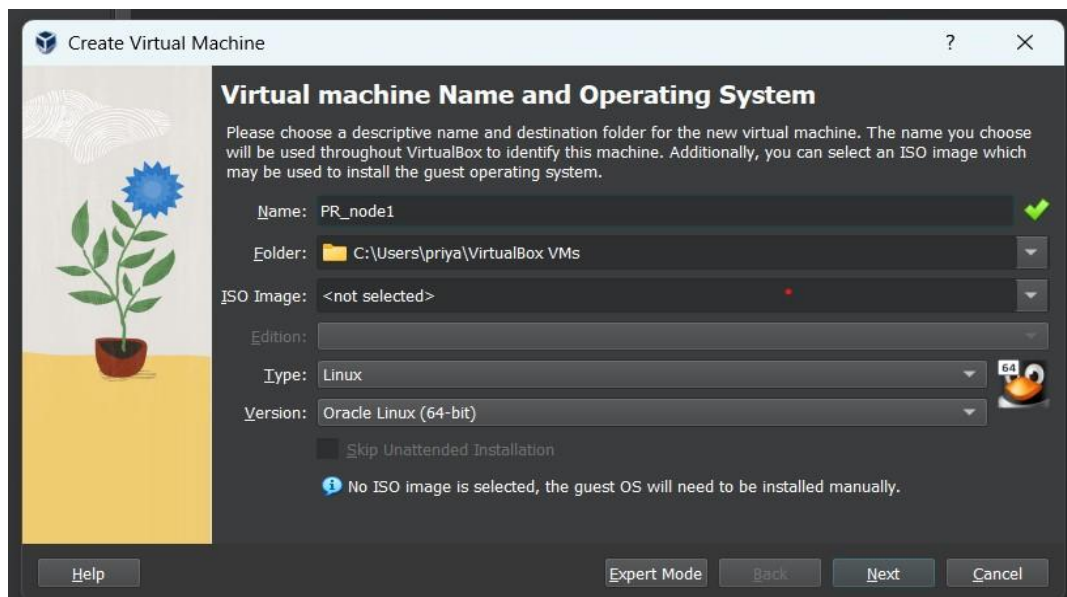
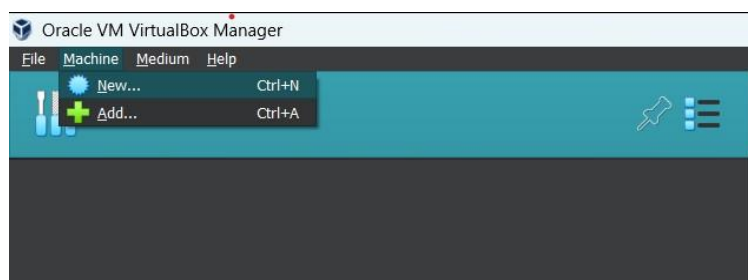


# Select VHD >> click next.



# Select the Disk size for OS as per requirement.

### 3. Click on the Machine >> New >>



Give machine name (any)

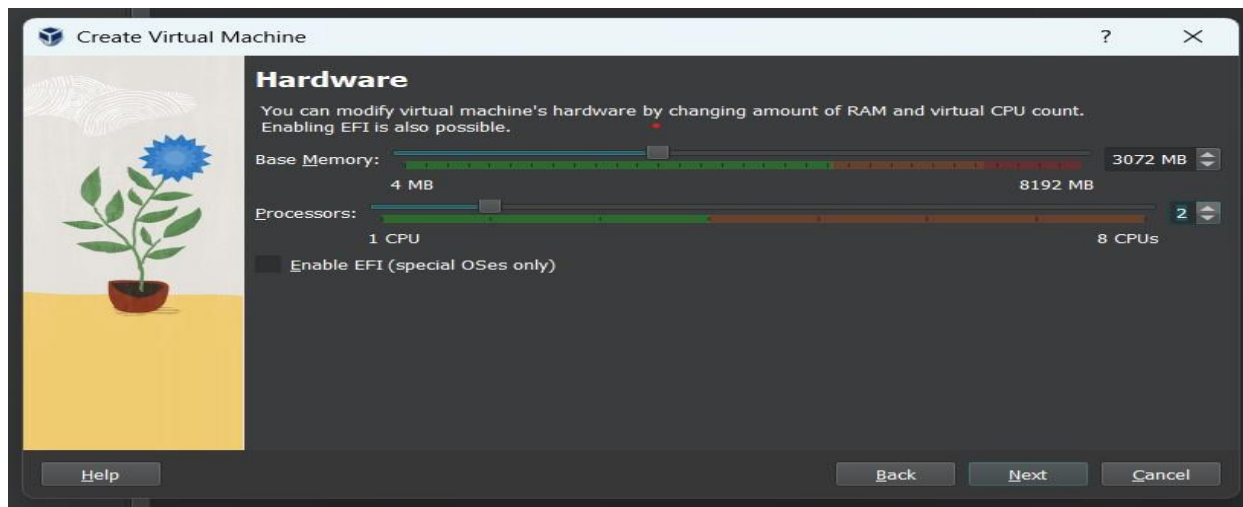
Type : Linux

Version : Oracle Linux (64-bit)

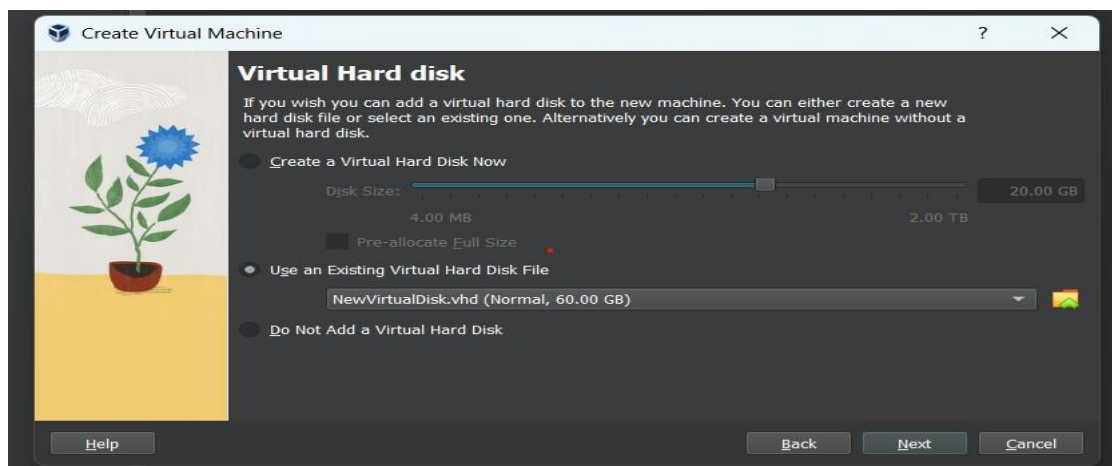
➤ Click Next

Memory: 3G

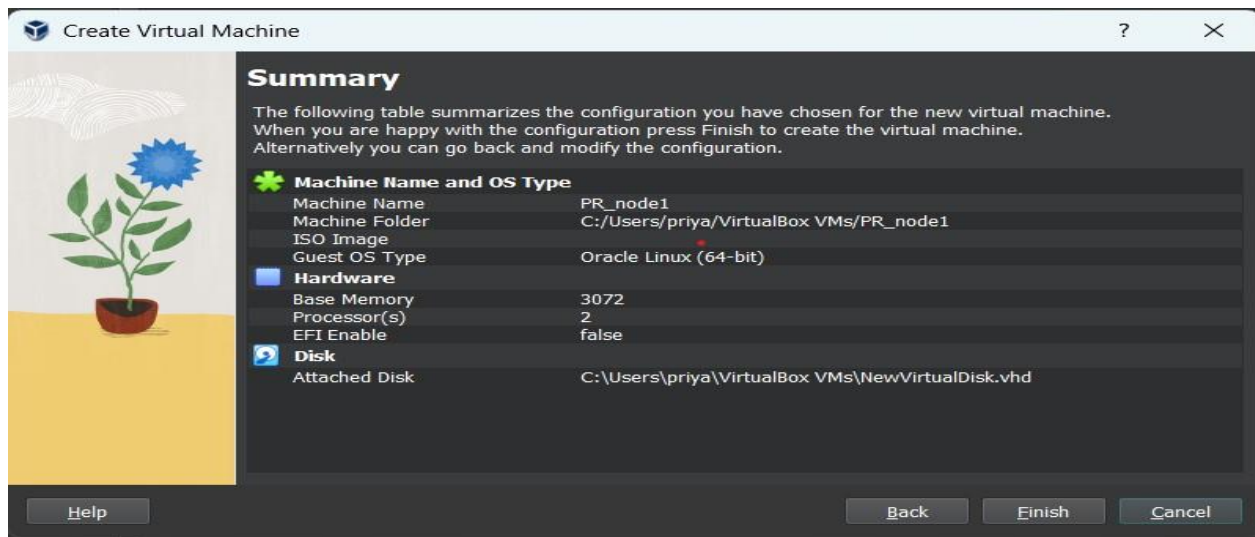
CPU: 1 or 2



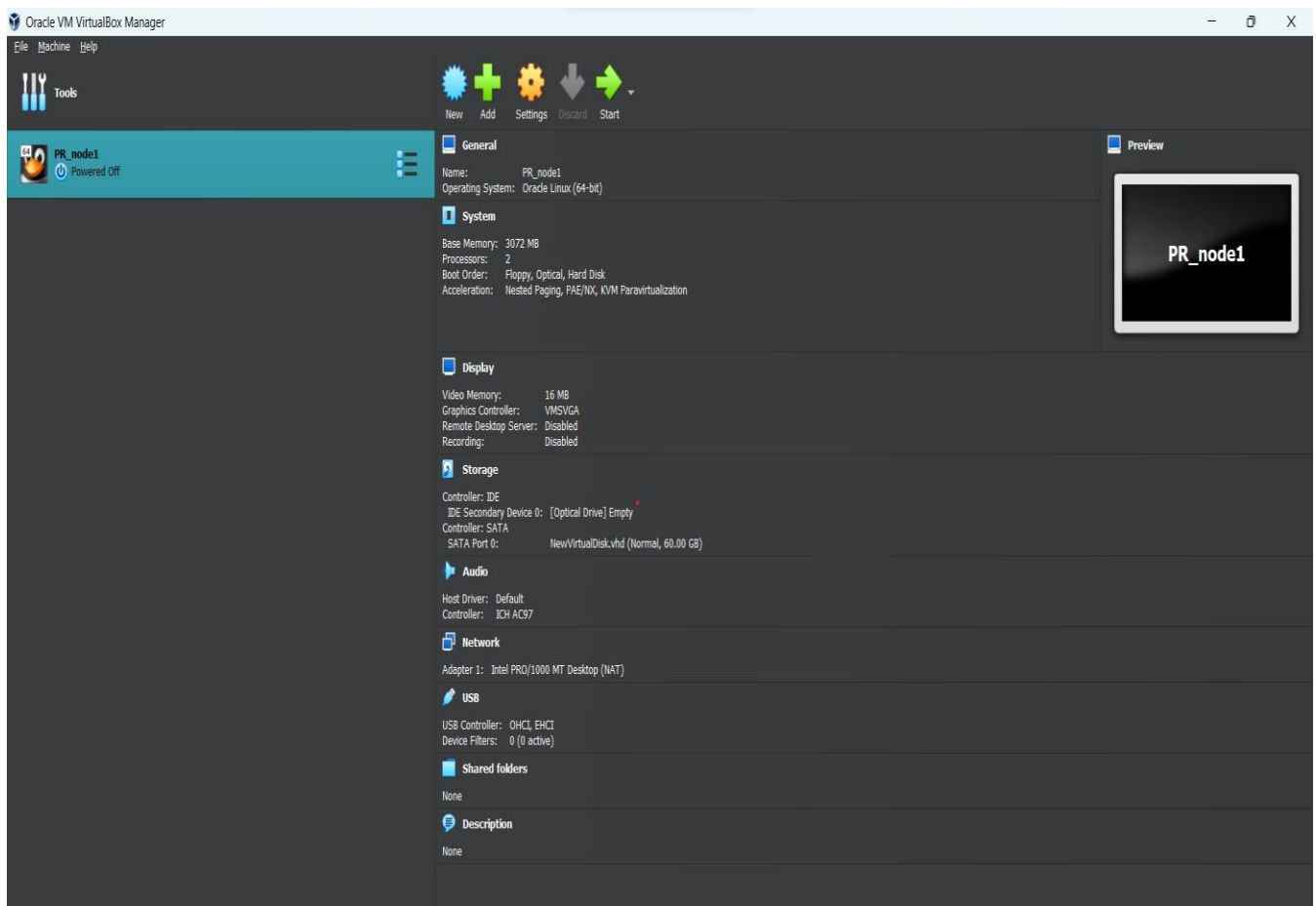
➤ Next



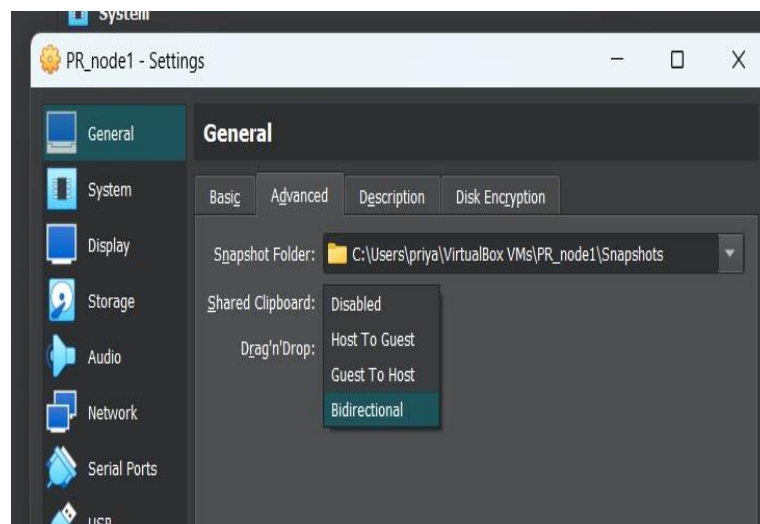
Select >> Use an existing Virtual Hard Disk file >> Where we created in the first step.



➤ Finish.

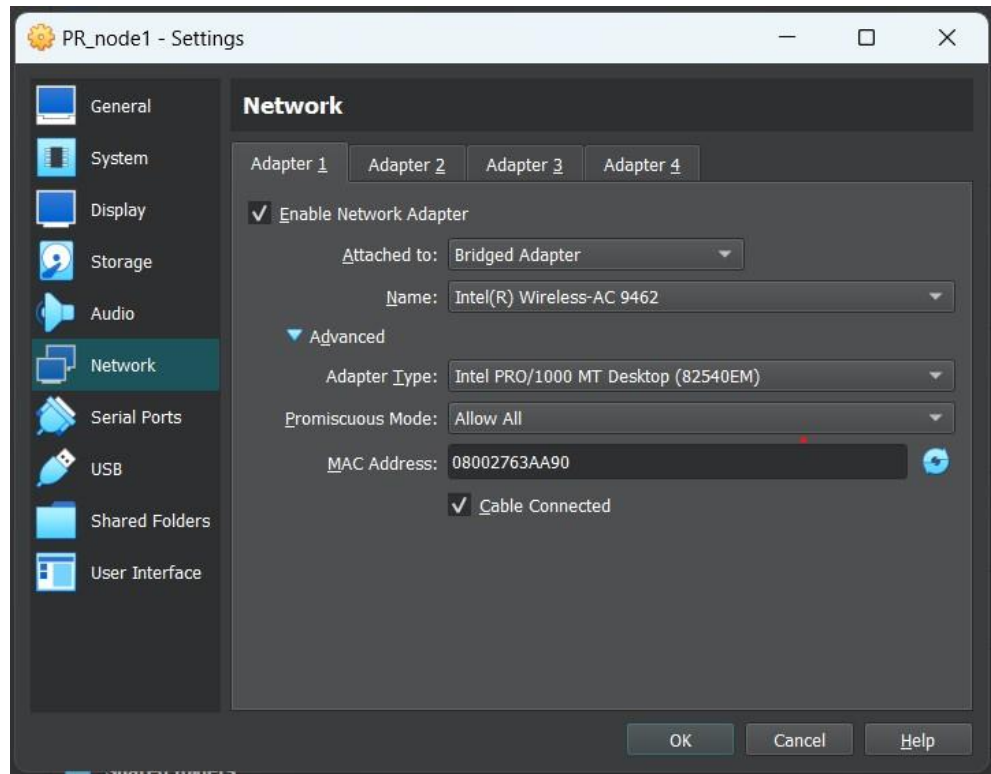


>> Now change the below parameter:



#### 4. Network adapter:

Click on setting symbol.



Click Network >>

If you are installing only single node then network setting should be:

Enable adapter 1 >> Bridge adapter.

Enable adapter 2 >> Bridge adapter.

If you are installing RAC setup then,

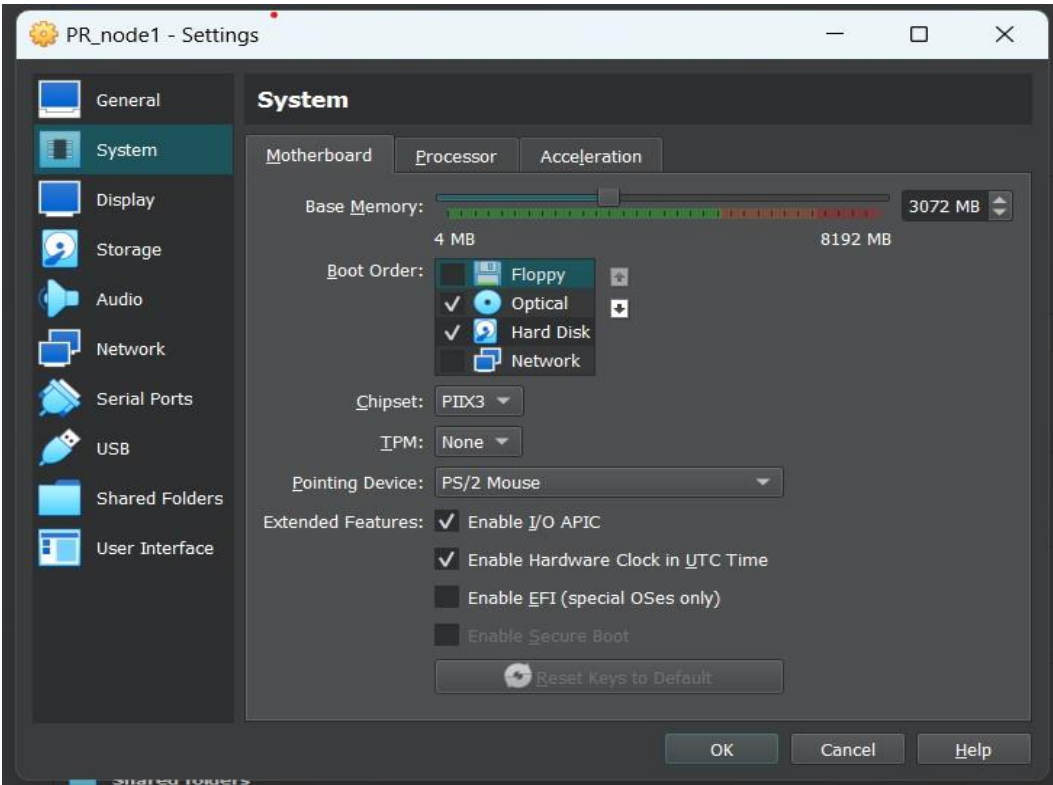
Enable adapter 1 >> Internet adapter.

Enable adapter 2 >> Bridge adapter.

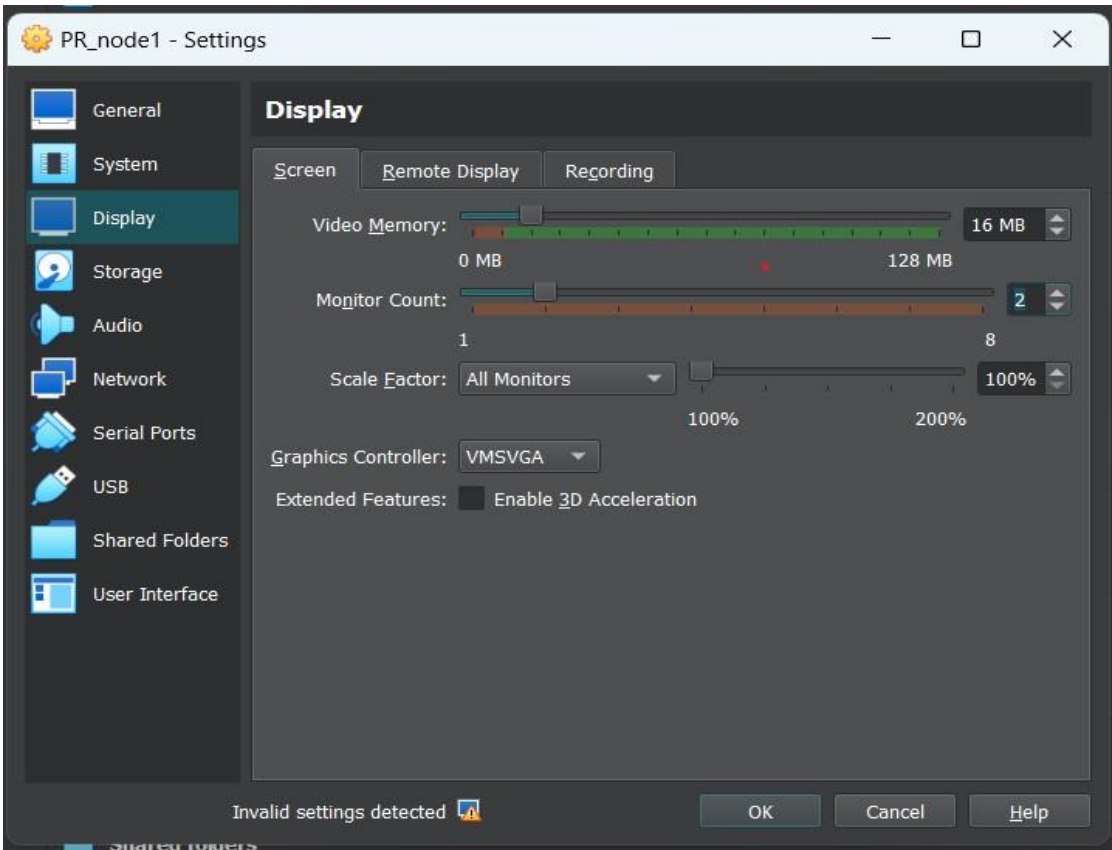
Enable adapter 3 >> Bridge adapter.

5. System:

Click on system >> Un-check Floppy in boot order.



6. Display:

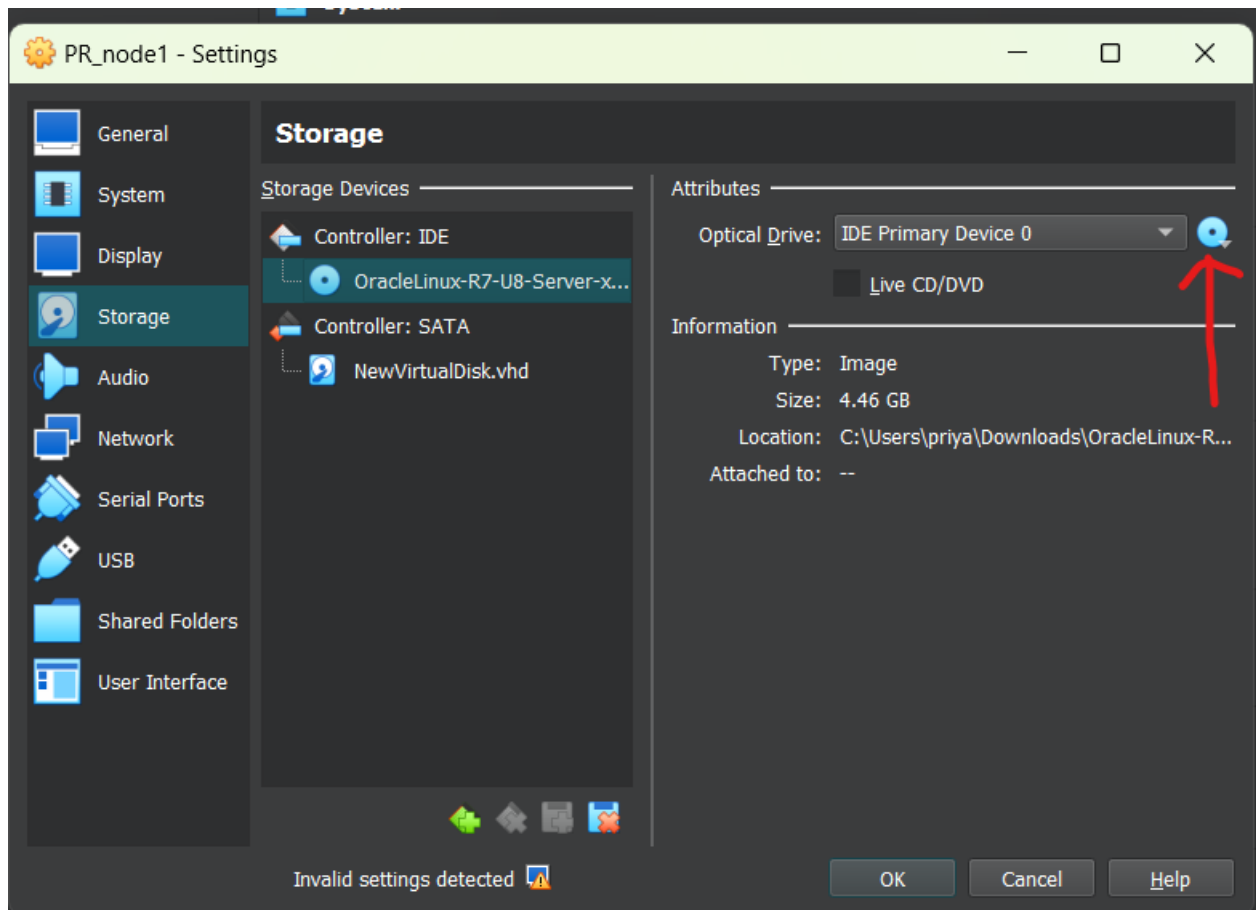


## 7. Storage:

Click on empty >>

Click on round disk >> from there select .iso file (OS image) or downloaded Linux server iso file.

<https://yum.oracle.com/oracle-linux-isos.html>



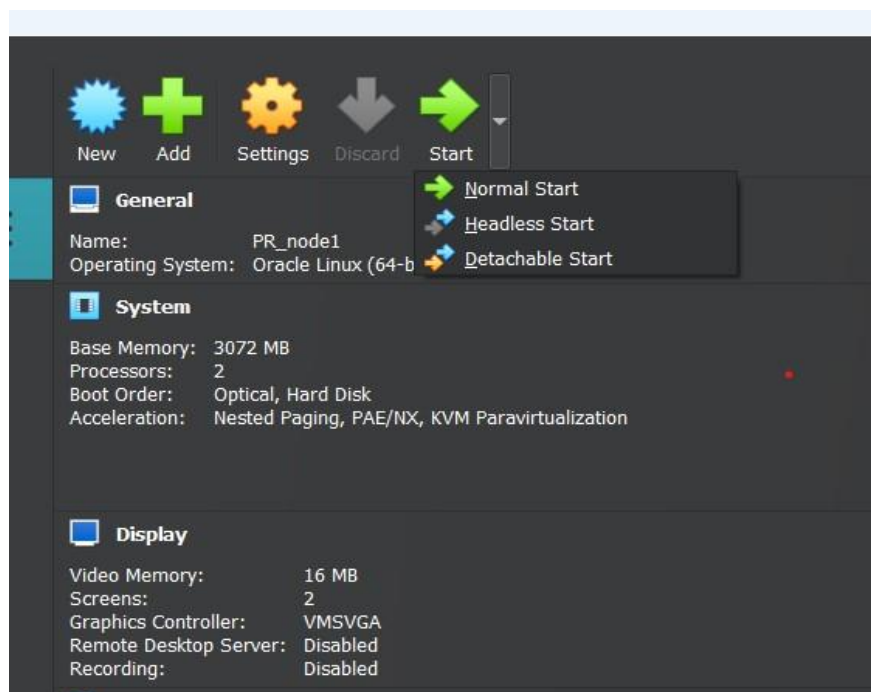
Click OK.

Now we done with machine setup.



## 8. Machine startup.

Click on the start symbol >> Click on normal start.



>> Wait for 60 sec.



>> Press esc for aborting.



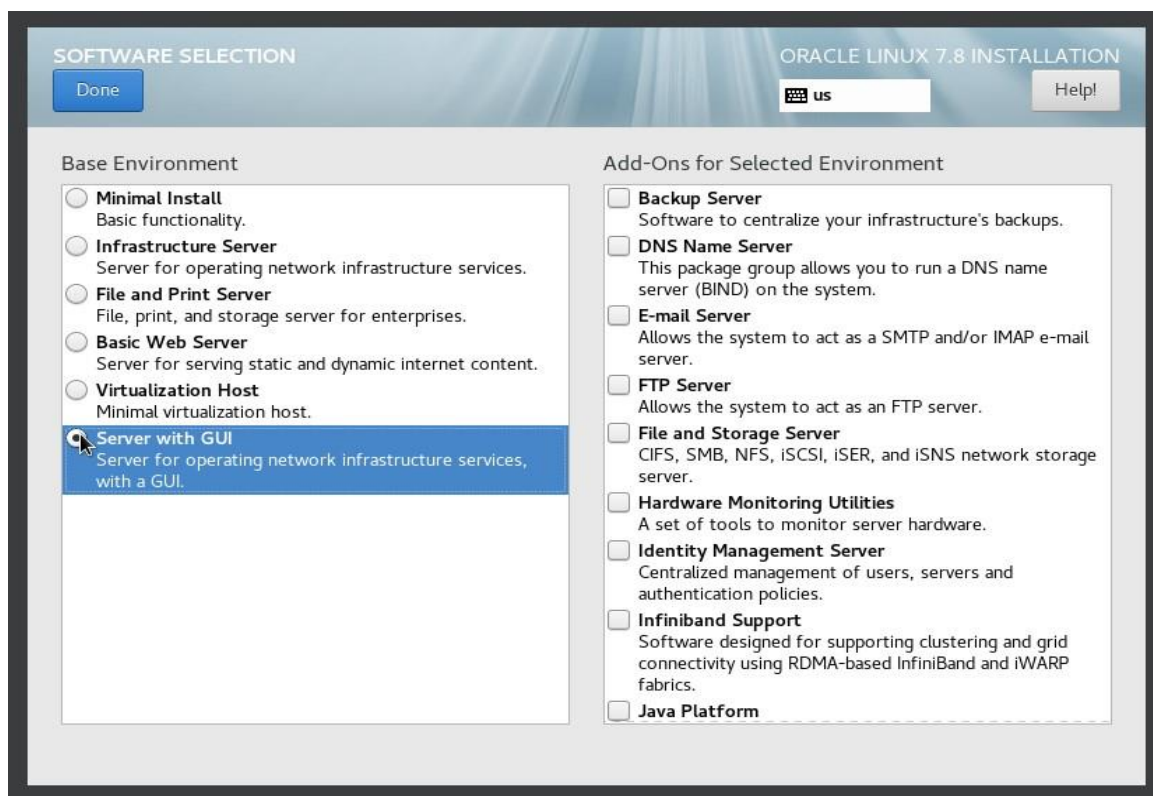
## 9. Select Language & country, Click next.



## 10. Software selection.

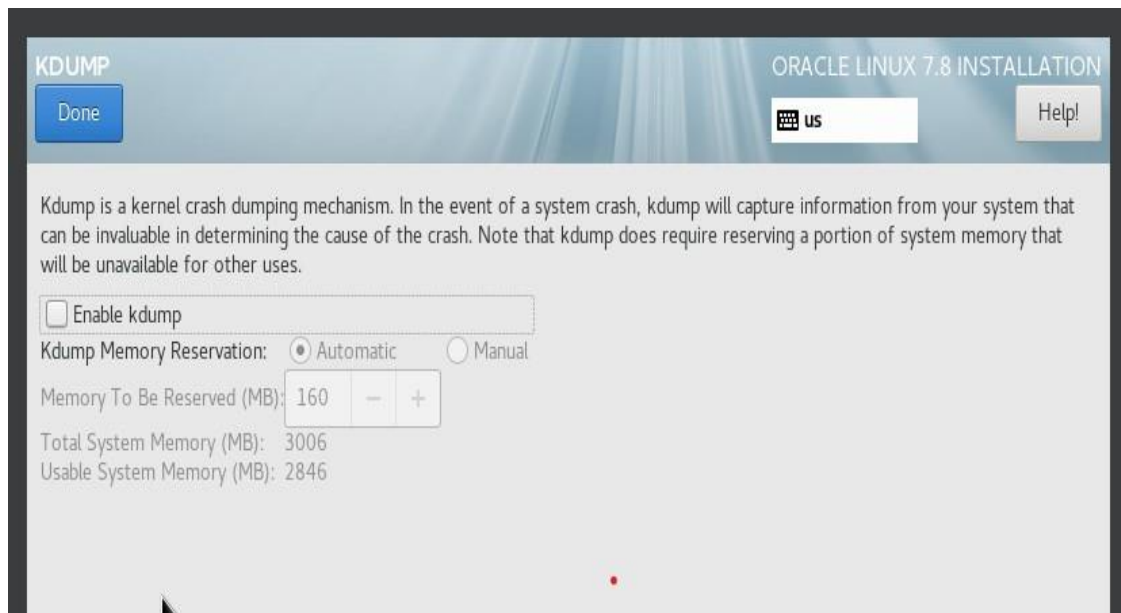
Click on Server with GUI >> In Add-ons select >>

- Large system performance.
- Performance tool.
- Compatible tool.
- System administration tool

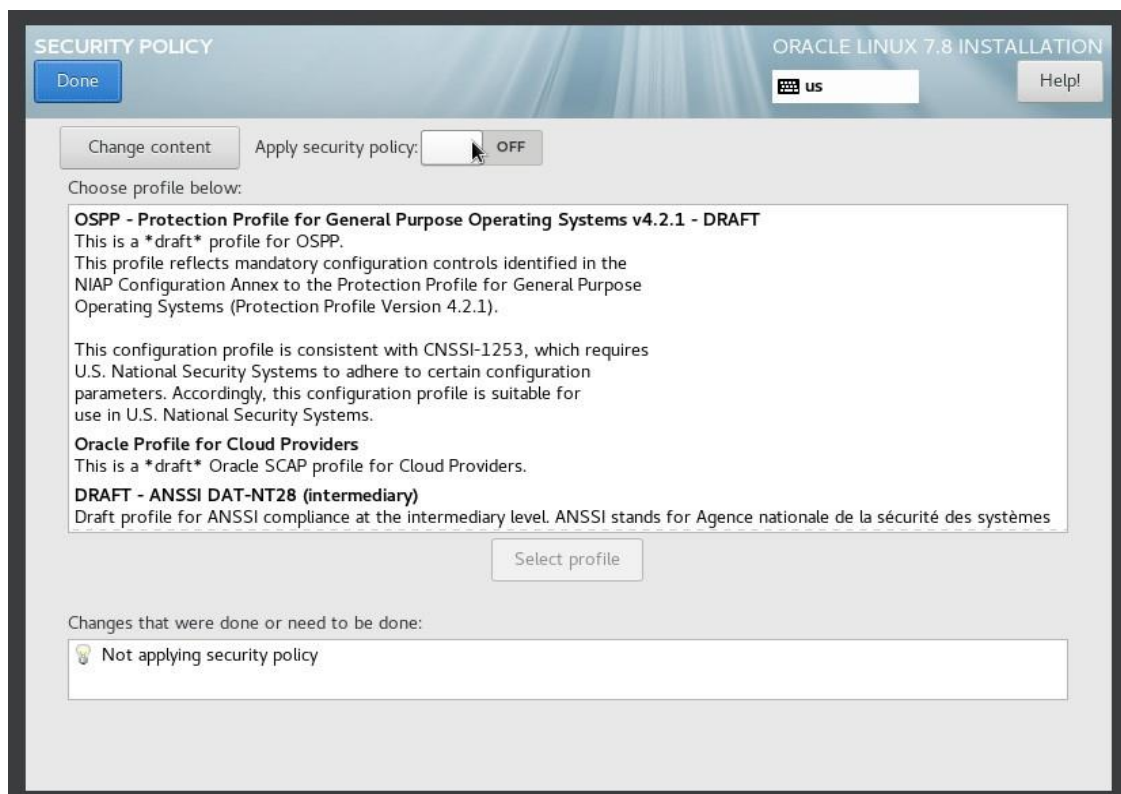


- Click Done.

## 11. On KDUMP by unchecking enable box.



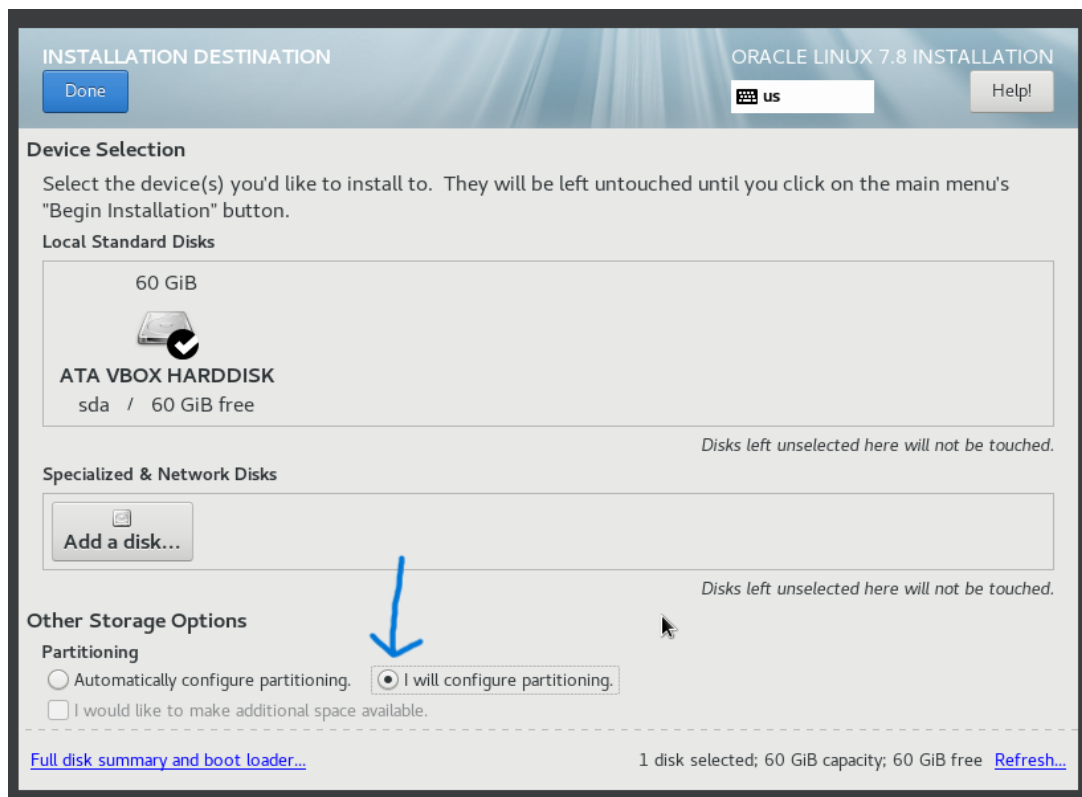
## 12. Disable security policy.



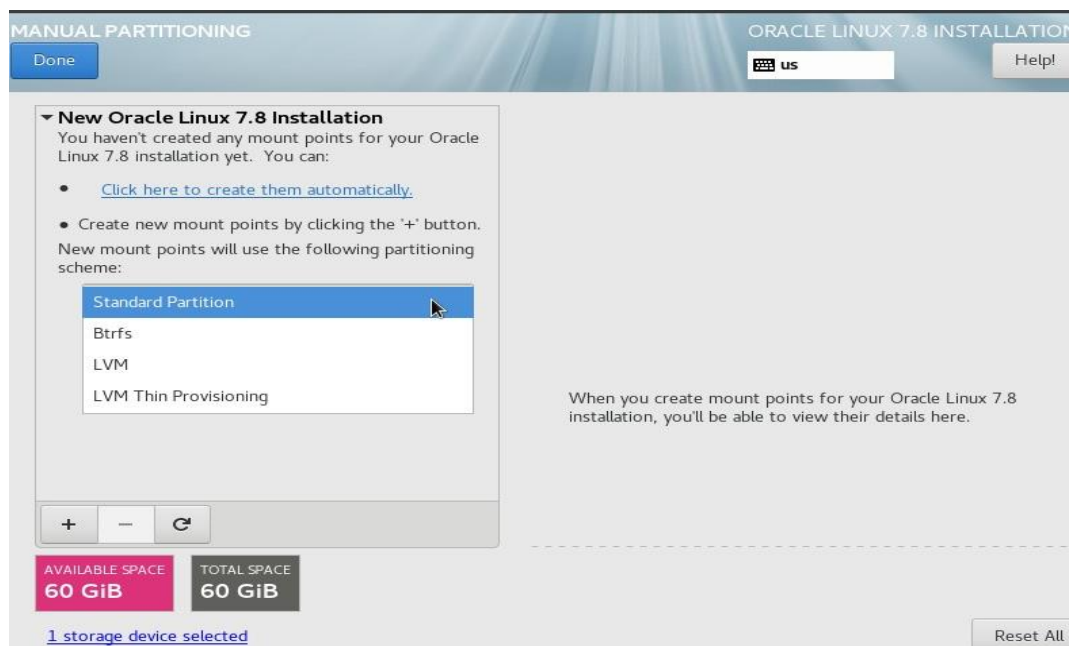
### 13. INSTALLATION DESTINATION:

Click on >> Installation destination

Select manual method by clicking on “I will configure partition”:

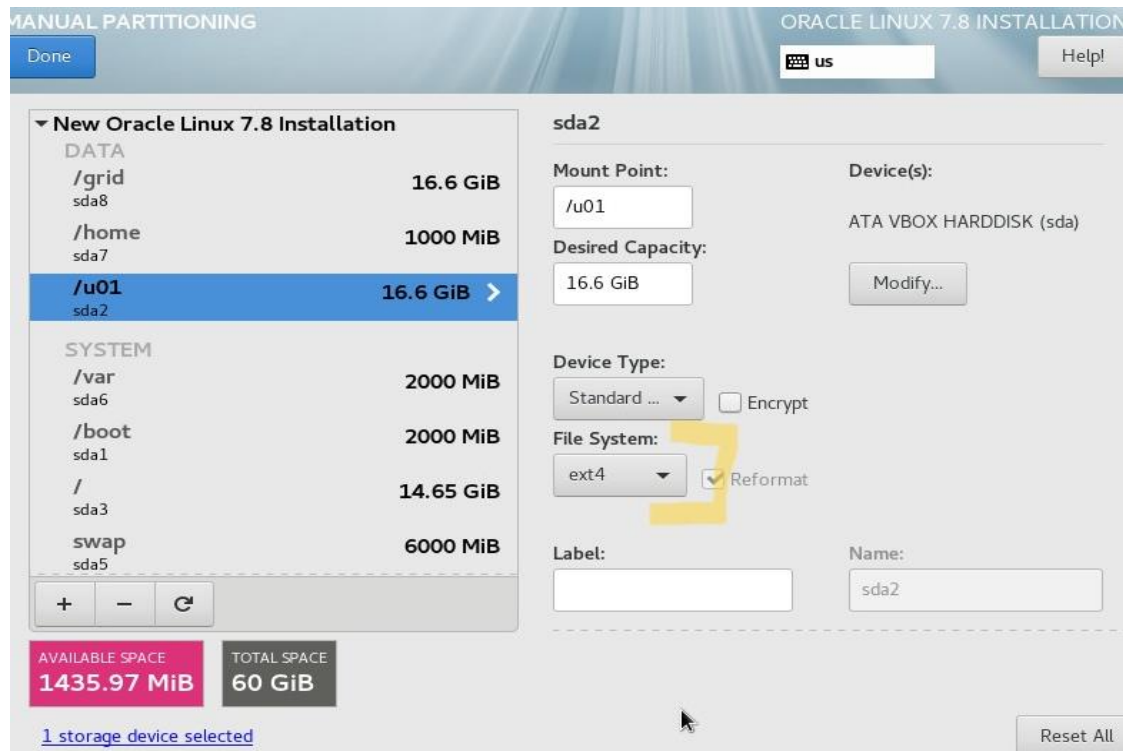


➤ Click on DONE



➤ Select Standard Partition as in the image and Click on '+' icon:

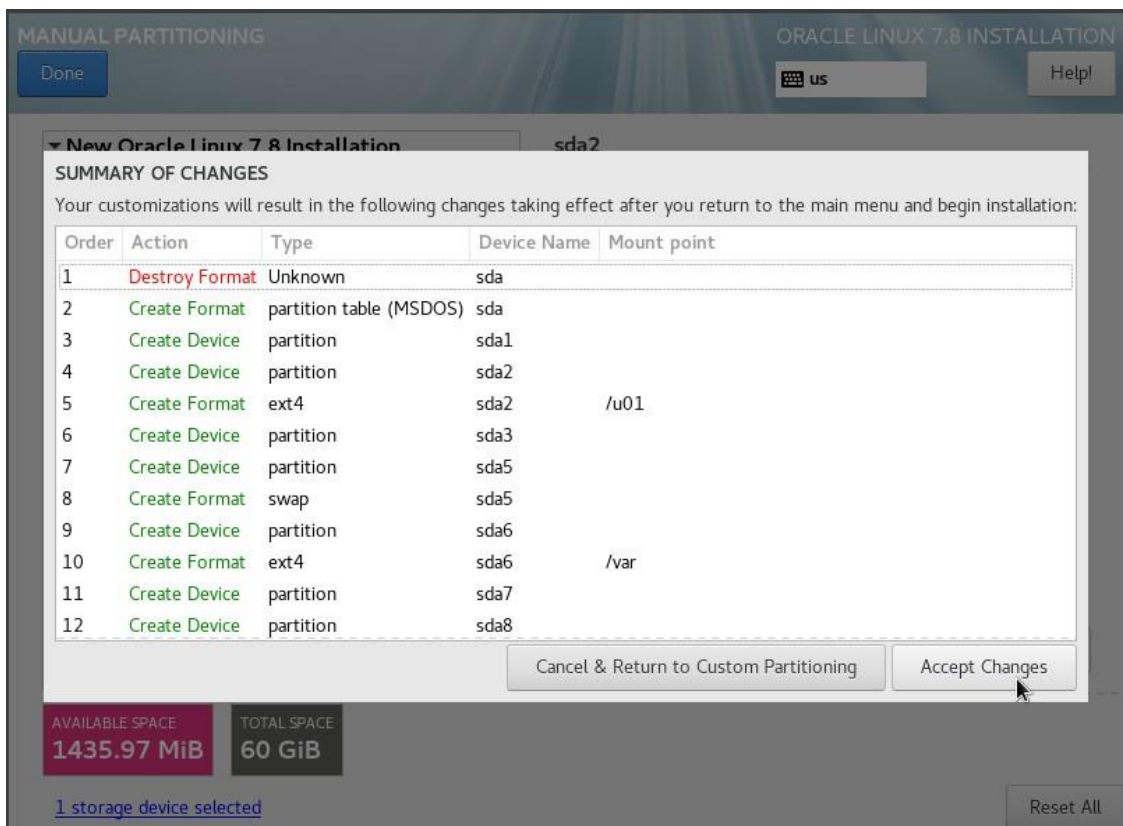
➤ Now start to create mount points:



- Make all file system to **ext4** but for swap keep swap only:

Click DONE >>

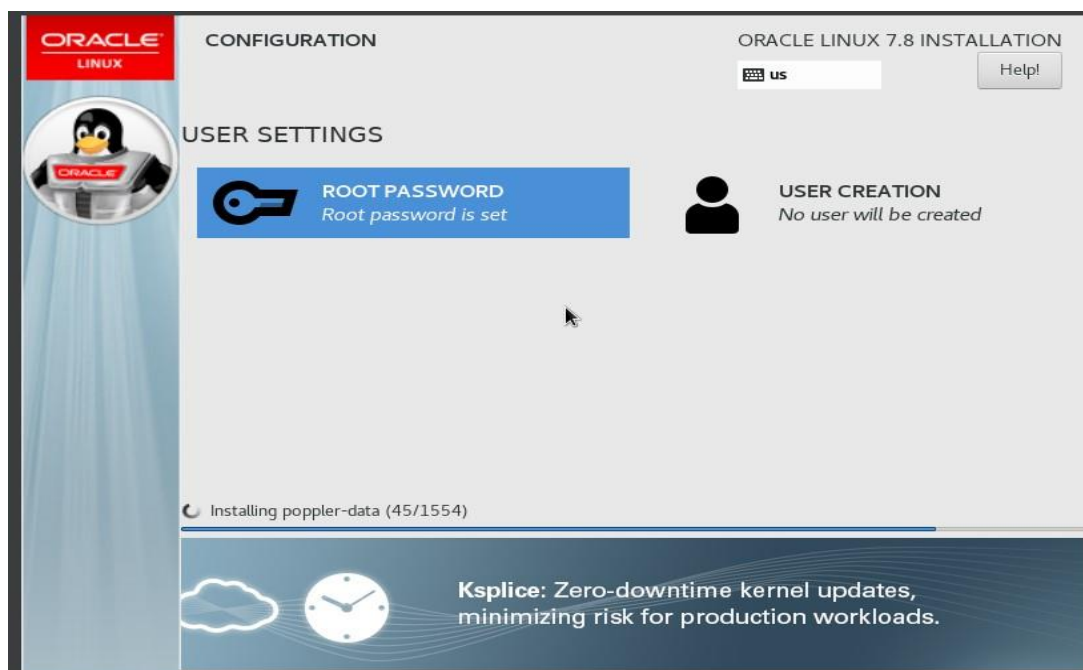
Then, Accept changes.



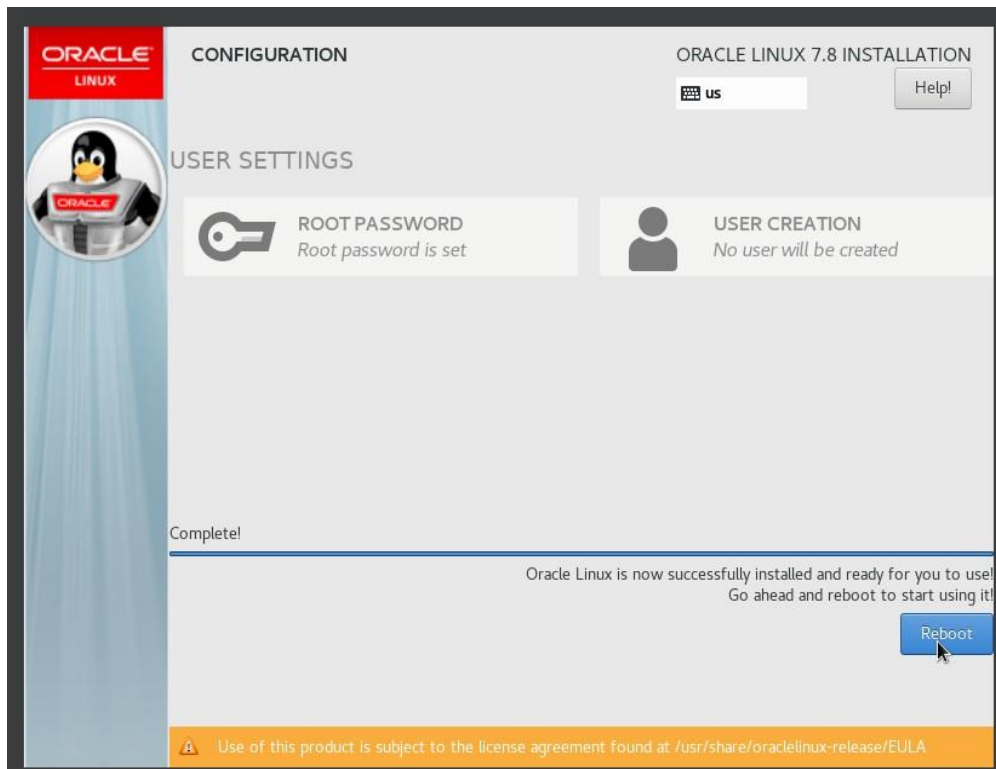
- Click on BEGIN INSTALLATION:



- Set root password:

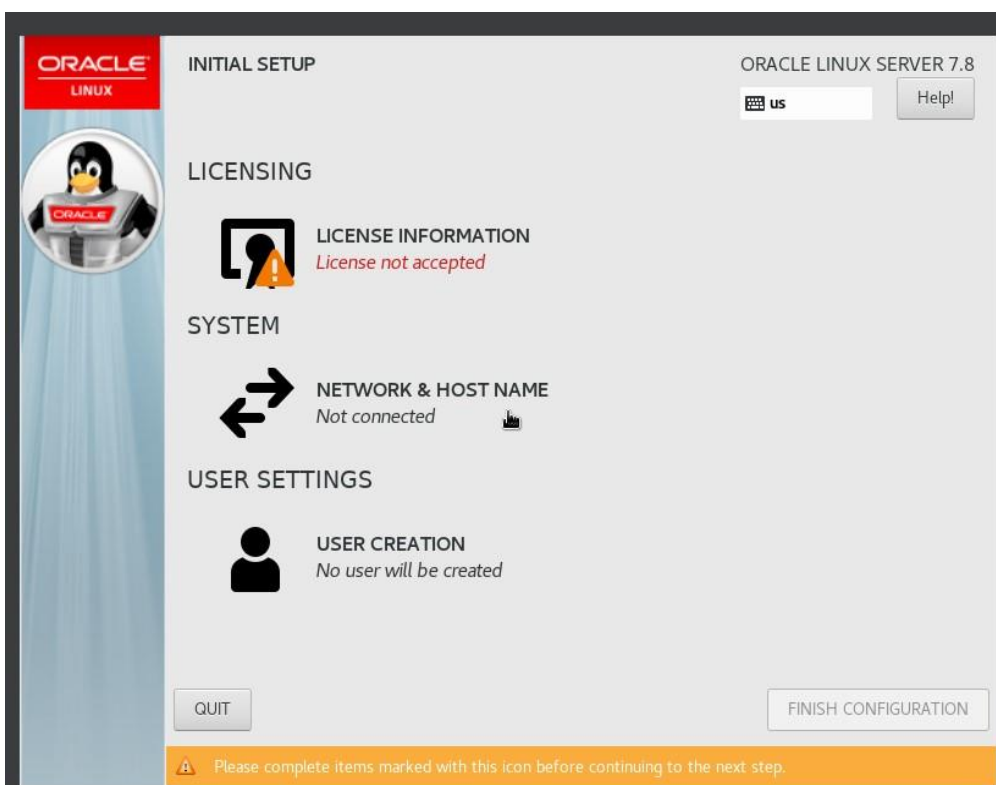


.....It will take 10-15 minutes to install.....

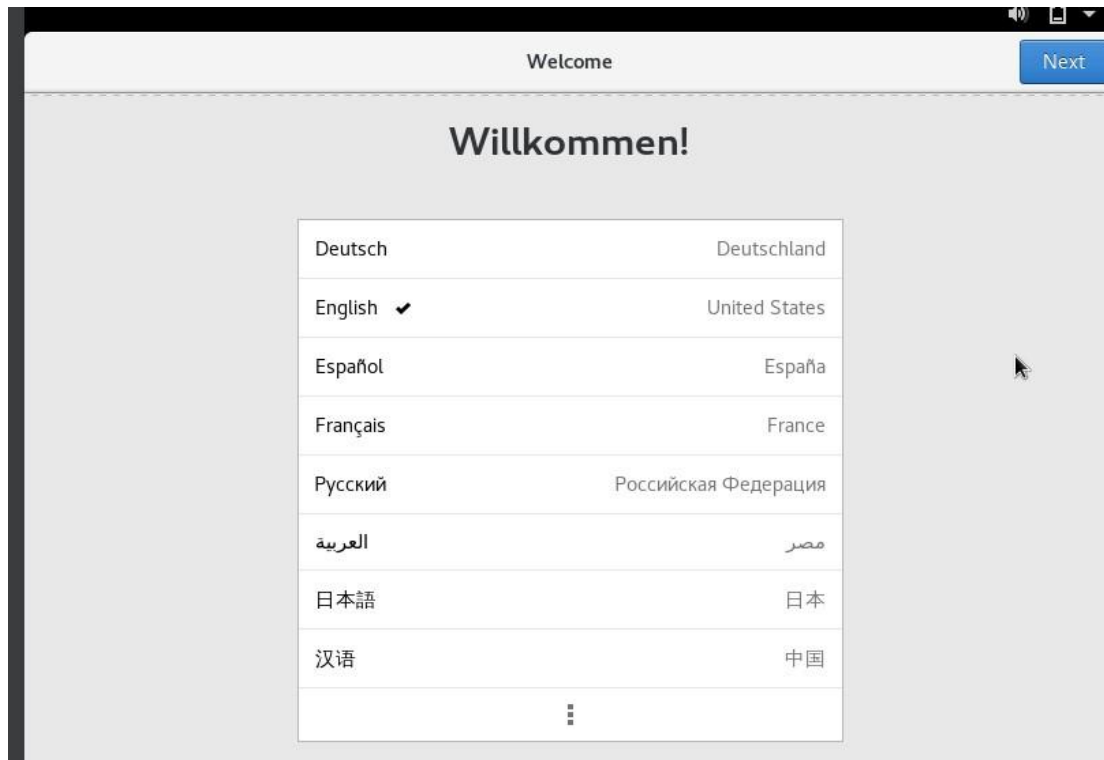


14. After completion click on “REBOOT”.

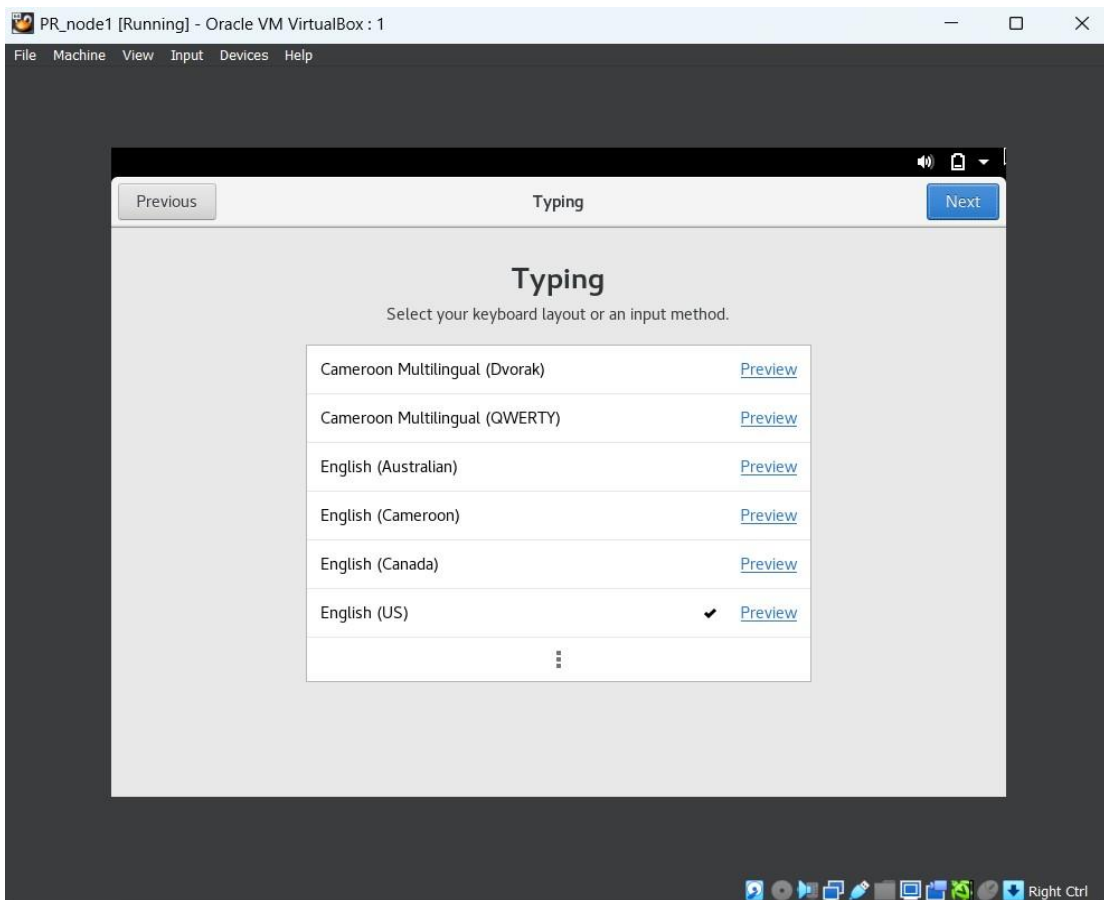
Accept License agreement. >> Done



➤ Click on Finish Configuration.

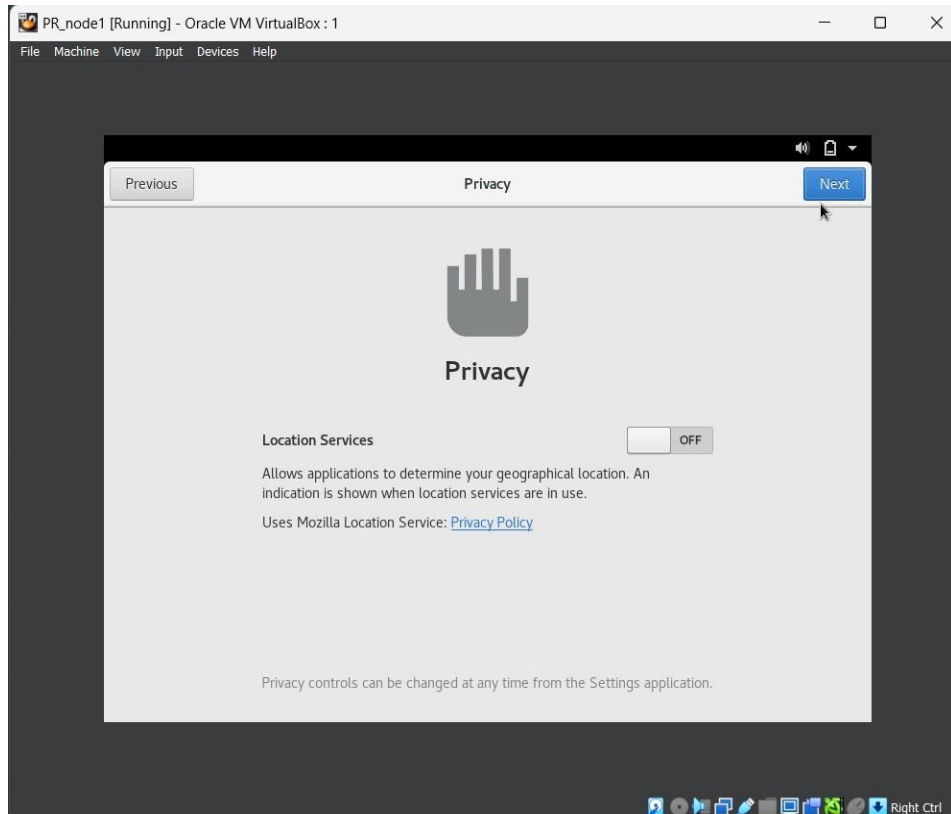


➤ Next.

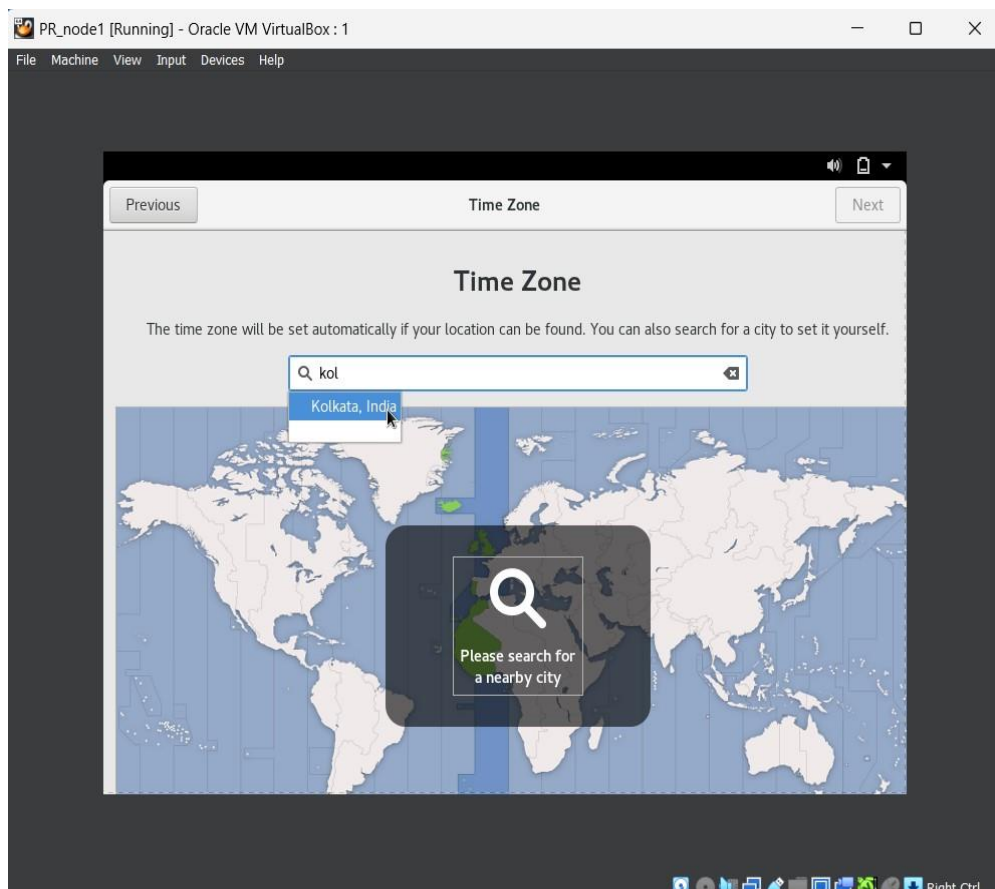


➤ Next.

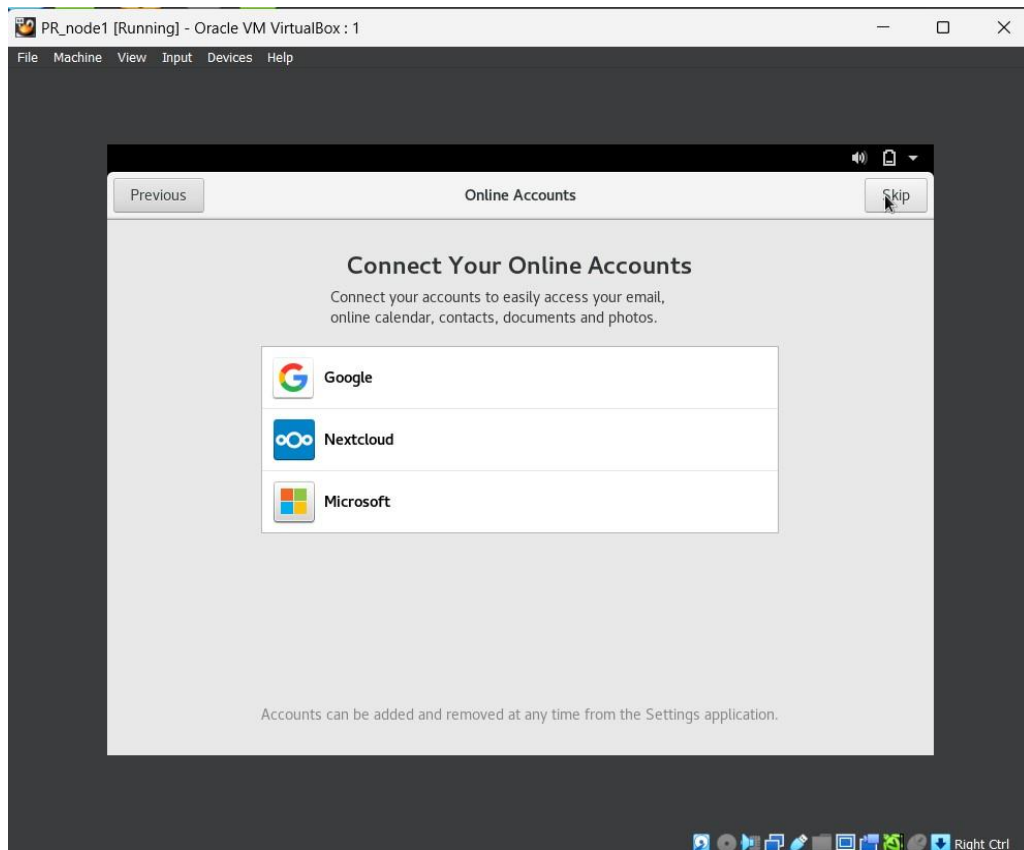




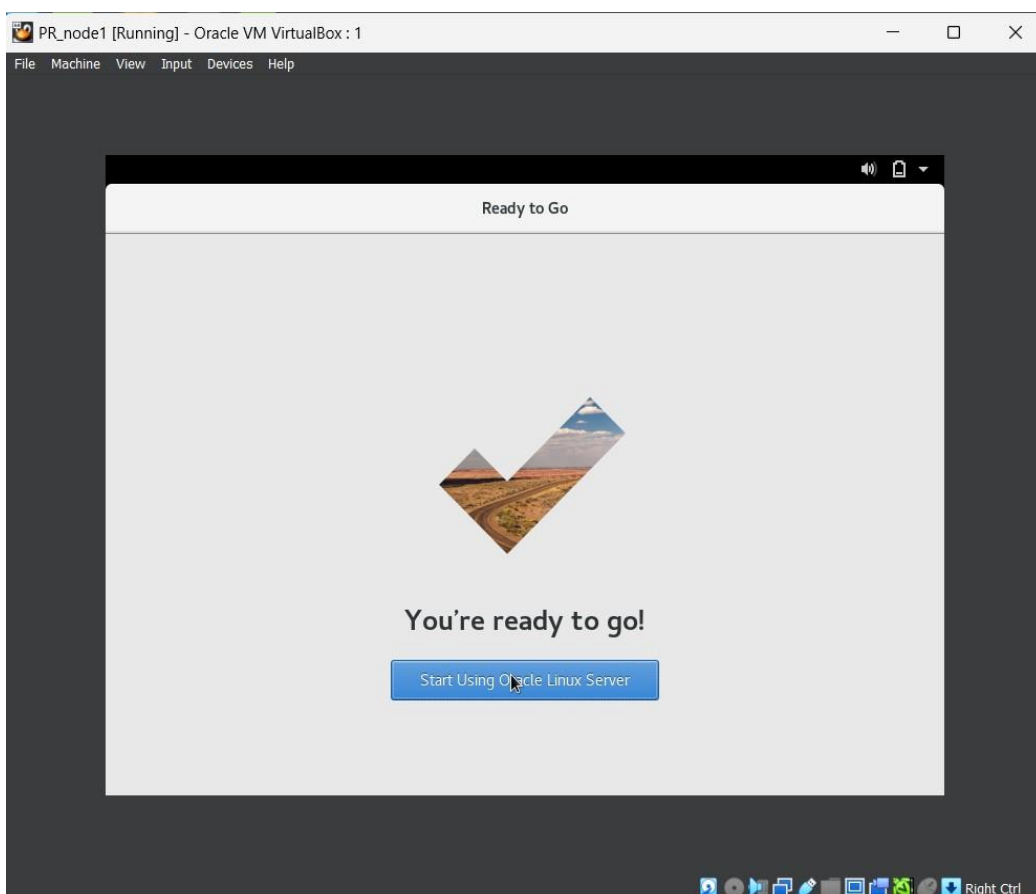
- Turn off location & Next.



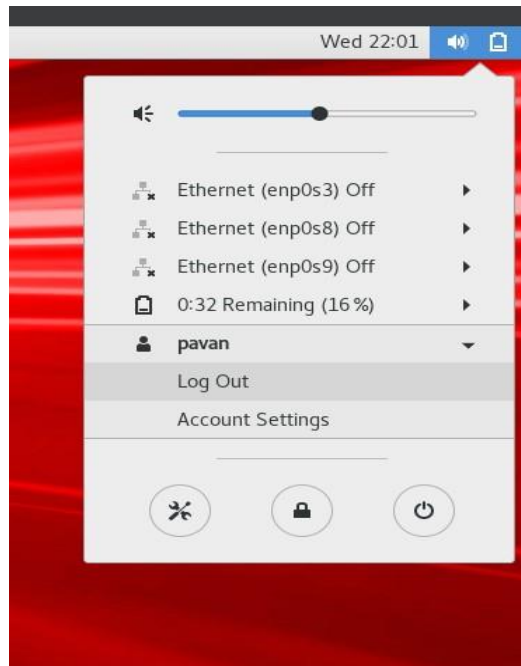
- Set time zone & Click, Next.



➤ Select skip & Next.

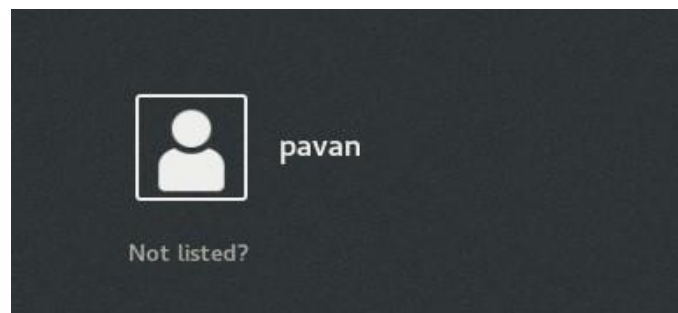


- Here next step Create user and password >> Next.
- Logout from user.



- Click on Not listed.

And use root user and password.

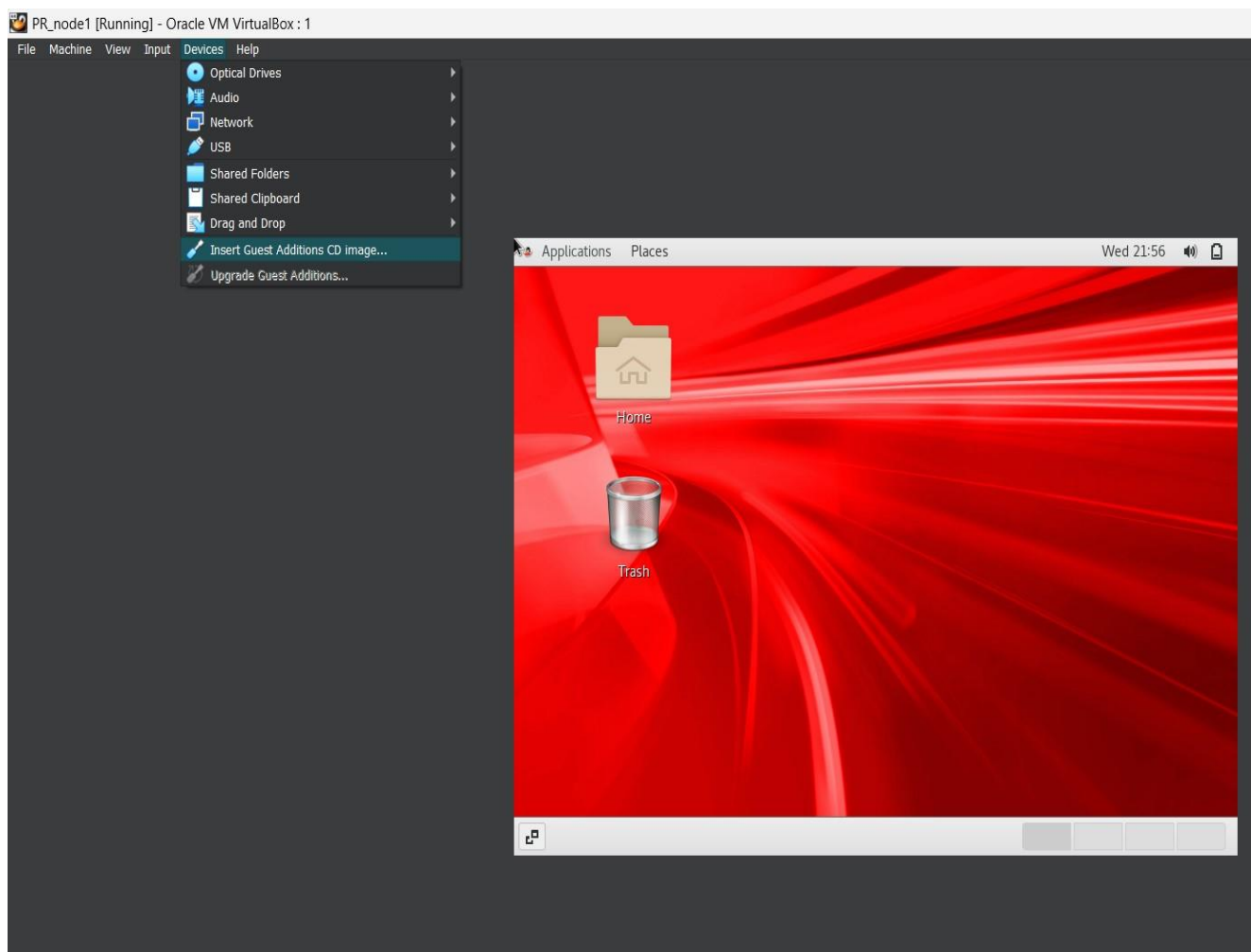


Use control key to manage screen size.

## 15. Image guest addition:

Click on devices >> Click on Insert guest additions >>

Click on Run >> to install guest additions, After complete, you can maximize your screen.

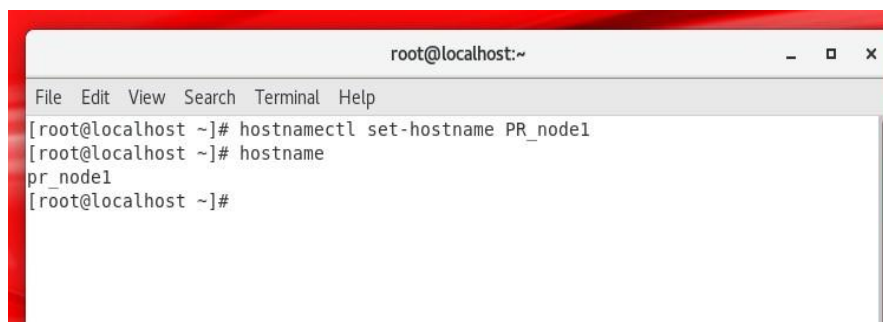


Now open the terminal and set up host-name to your machine:

Run below command using root user only,

Command: `hostnamectl set-hostname pr_node1`

In my case I have set : `hostnamectl set-hostname pr.node1`



```
[root@pr ~]#  
[root@pr ~]# hostname  
pr.node1  
[root@pr ~]#  
[root@pr ~]#  
[root@pr ~]#
```

## 16. Network set-ups:

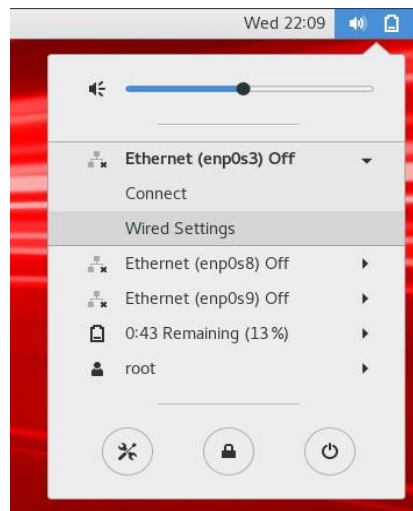
Firstly check the IP address of internet or wifi connected to your system,

```
Wireless LAN adapter Wi-Fi:
Connection-specific DNS Suffix . : 
Description . . . . . : Intel(R) Wireless-AC 9462
Physical Address. . . . . : C8-5E-A9-05-E6-F0
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . : Yes
IPv6 Address. . . . . : 
Temporary IPv6 Address. . . . . : 
Link-Local IPv6 Address . . . . . : 
IPv4 Address. . . . . : 172.20.10.2(Preferred)
Subnet Mask . . . . . : 255.255.255.240
Lease Obtained. . . . . : 
```

➤ Here my wifi network adapter ip is 172.20.10.2:

Hence I will use same ip subnet for Public ip for linux machine in range 172.20.10.(any number).

For eg: 172.20.10.6

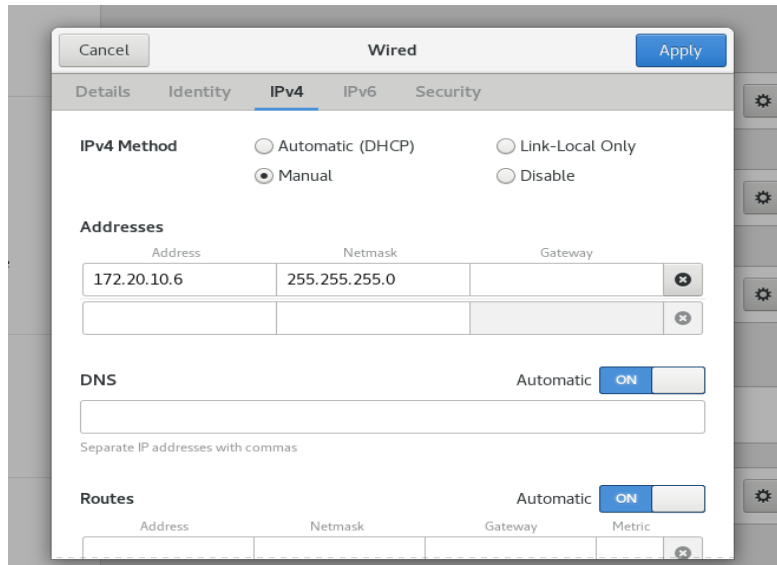


>> Click on wired settings. (in case only 2 Ethernet shows as non rac setup):

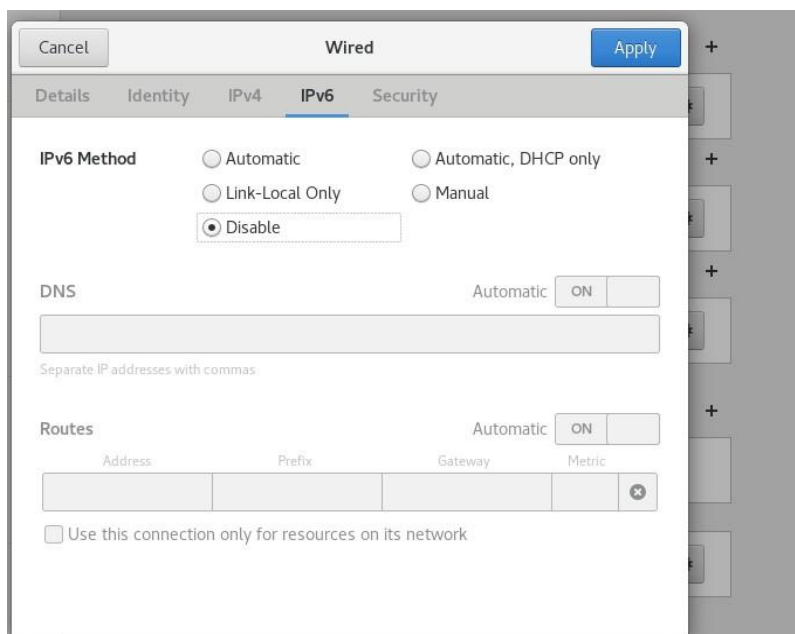
- Click on setting symbol
- Check the check box on Connect automatically



➤ IPv4, Select manual and enter the ip of wifi or ethernet address



- Disable IPv6.



- APPLY.

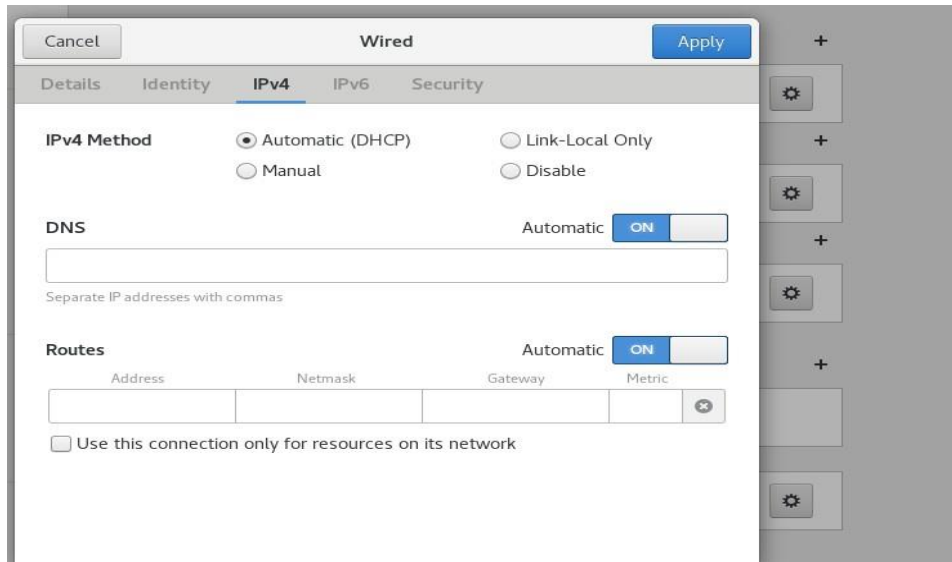
- **Now for second adapter,**

check box connect automatically

- In IPv4 >> select DHCP (i.e, AUTOMATIC)

Do disable for IPv6 :

- APPLY.



- To Disable IPv6, add the following lines to `/etc/sysctl.conf`:

```

File Edit View Search Terminal Help
# sysctl settings are defined through files in
# /usr/lib/sysctl.d/, /run/sysctl.d/, and /etc/sysctl.d/.
#
# Vendors settings live in /usr/lib/sysctl.d/.
# To override a whole file, create a new file with the same in
# /etc/sysctl.d/ and put new settings there. To override
# only specific settings, add a file with a lexically later
# name in /etc/sysctl.d/ and put new settings there.
#Disable IPv6:
net.ipv6.conf.all.disable_ipv6 = 1
net.ipv6.conf.default.disable_ipv6 = 1
net.ipv6.conf.lo.disable_ipv6 = 1
# For more information, see sysctl.conf(5) and sysctl.d(5).
]

```

`ifconfig |grep grep inet`

here you will see inet6 also

`vi /etc/sysctl.conf`

add below lines in file

- **Disable IPv6:**

`net.ipv6.conf.all.disable_ipv6 = 1`

`net.ipv6.conf.default.disable_ipv6 = 1`

`net.ipv6.conf.lo.disable_ipv6 = 1`



```

[root@pr_node1 ~]#
[root@pr_node1 ~]#
[root@pr_node1 ~]# ifconfig |grep inet
    inet 172.20.10.2 netmask 255.255.255.0 broadcast 172.20.10.255
    inet6 2409:40f2:1a:45c1:a00:27ff:fe63:aa90 prefixlen 64 scopeid 0x0<global>
    inet6 fe80::a00:27ff:fe63:aa90 prefixlen 64 scopeid 0x20<link>
    inet 172.20.10.3 netmask 255.255.255.240 broadcast 172.20.10.15
    inet6 fe80::a00:27ff:fe9d:6f2b prefixlen 64 scopeid 0x20<link>
    inet6 2409:40f2:1a:45c1:a00:27ff:fe9d:6f2b prefixlen 64 scopeid 0x0<global>
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
[root@pr_node1 ~]#
[root@pr_node1 ~]# /sbin/sysctl -p
net.ipv6.conf.all.disable_ipv6 = 1
net.ipv6.conf.default.disable_ipv6 = 1
net.ipv6.conf.lo.disable_ipv6 = 1
[root@pr_node1 ~]#
[root@pr_node1 ~]# ifconfig |grep inet
    inet 172.20.10.2 netmask 255.255.255.0 broadcast 172.20.10.255
    inet 172.20.10.3 netmask 255.255.255.240 broadcast 172.20.10.15
    inet 127.0.0.1 netmask 255.0.0.0
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
[root@pr_node1 ~]#
[root@pr_node1 ~]#
[root@pr_node1 ~]#

```

**Command:** `sbin/sysctl -p` [ to disable the ipv6]

`ifconfig|grep inet,`

## 17. Disable Firewall using below commands:

`systemctl disable firewalld-service`

`systemctl stop firewalld-service`

```

[root@pr_node1 ~]#
[root@pr_node1 ~]# hostname -i
172.20.10.2
[root@pr_node1 ~]#
[root@pr_node1 ~]# systemctl disable firewalld.service
Removed symlink /etc/systemd/system/multi-user.target.wants/firewalld.service.
Removed symlink /etc/systemd/system/dbus-org.fedoraproject.FirewallD1.service.
[root@pr_node1 ~]# systemctl stop firewalld.service
[root@pr_node1 ~]#
[root@pr_node1 ~]#
[root@pr_node1 ~]#

```

### ➤ Set `cat /etc/hosts` file:

Add below entries in `/etc/hosts` >> remove all and then add

- For below changes open putty session using yours statics ip mentioned during network configuration,

In this case my ip is 172.20.10.6

```
root@pr:~  
File Edit View Search Terminal Help  
[root@pr ~]#  
[root@pr ~]#  
[root@pr ~]# hostname -i  
172.20.10.6  
[root@pr ~]#  
[root@pr ~]#  
[root@pr ~]#  
[root@pr ~]#  
[root@pr ~]# cat /etc/hosts  
127.0.0.1 localhost.db.com localhost  
#public  
172.20.10.6 pr.node1 pr  
[root@pr ~]#  
[root@pr ~]# hostname -i  
172.20.10.6  
[root@pr ~]#
```

----- Add below lines in /etc/hosts [ For single instance database] -----

127.0.0.1 localhost.db.com localhost

**#public**

172.20.10.6 pr.node1 pr

---

For RAC setup: Add below entries in /etc/hosts

127.0.0.1 localhost.db.com localhost

**#private:**

172.20.10.2 pr.node1-priv.db.com pr-priv

172.20.10.3 pr.node2-priv.db.com pr-priv

**#public:**

172.20.10.6 pr.node1-pub.db.com pr-pub

172.20.10.7 pr.node2-pub.db.com pr-pub

**#Virtual:**

172.20.10.9 pr.node1-vip.db.com pr-vip

172.20.10.10 pr.node2-vip.db.com pr-vip

**#SCAN:**

172.20.10.2 pr.node1-scan.db.com pr-scan

172.20.10.2 pr.node2-scan.db.com pr-scan

172.20.10.2 pr.node3-scan.db.com pr-scan

~~~~~END~~~~~

---