

CentOS 7 VM Setup

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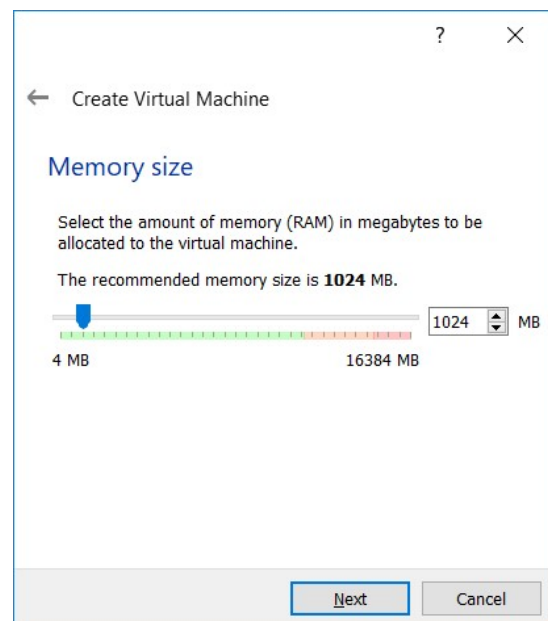
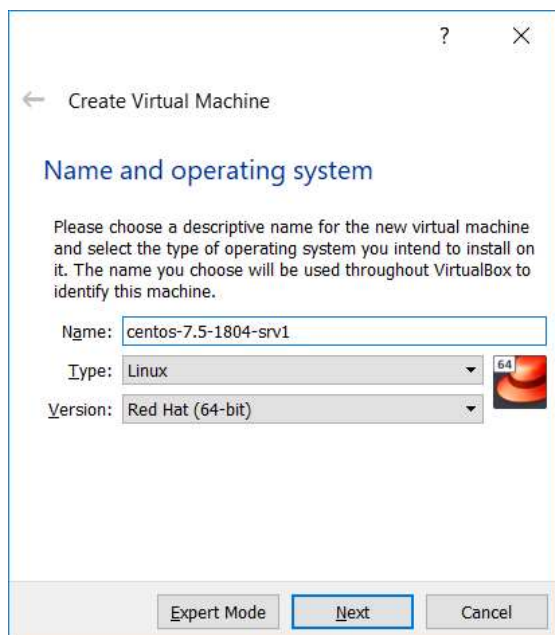
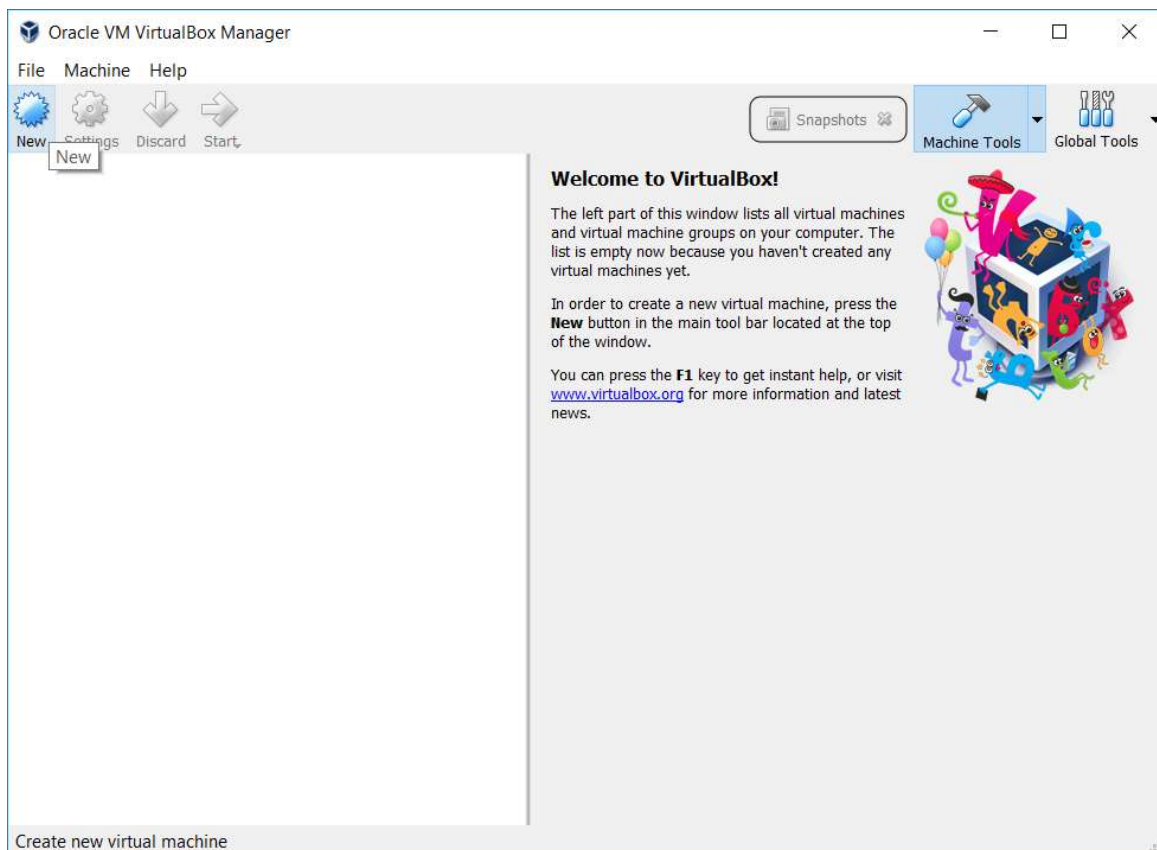
Objective

Describe the steps required to create the CentOS 7 Virtual Box VM

Prerequisites

- Oracle Virtual-Box
- 30 GB of free disk space
- 8 GB of RAM
- Virtualization technologies (VT-x or AMD-V) are support and enabled
- CentOS-7-x86_64-DVD-XXXX.iso (can be downloaded from <https://www.centos.org/download/>)

Create the srv1 VM



?

×

← Create Virtual Machine

Hard disk

If you wish you can add a virtual hard disk to the new machine. You can either create a new hard disk file or select one from the list or from another location using the folder icon.


If you need a more complex storage set-up you can skip this step and make the changes to the machine settings once the machine is created.


The recommended size of the hard disk is **8.00 GB**.

☐ Do not add a virtual hard disk

☒ Create a virtual hard disk now

☐ Use an existing virtual hard disk file

 centos7_desktop.vdi (Normal, 60.00 GB)



Create

Cancel

?

×

← Create Virtual Hard Disk

Hard disk file type

Please choose the type of file that you would like to use for the new virtual hard disk. If you do not need to use it with other virtualization software you can leave this setting unchanged.

☒ VDI (VirtualBox Disk Image)

☐ VHD (Virtual Hard Disk)

☐ VMDK (Virtual Machine Disk)

Expert Mode

Next

Cancel

?

×

← Create Virtual Hard Disk

Storage on physical hard disk

Please choose whether the new virtual hard disk file should grow as it is used (dynamically allocated) or if it should be created at its maximum size (fixed size).

A **dynamically allocated** hard disk file will only use space on your physical hard disk as it fills up (up to a maximum **fixed size**), although it will not shrink again automatically when space on it is freed.

A **fixed size** hard disk file may take longer to create on some systems but is often faster to use.

☒ Dynamically allocated

☐ Fixed size

Next

Cancel

?


×

← Create Virtual Hard Disk

File location and size

Please type the name of the new virtual hard disk file into the box below or click on the folder icon to select a different folder to create the file in.

centos-7.5-1804-srv1



Select the size of the virtual hard disk in megabytes. This size is the limit on the amount of file data that a virtual machine will be able to store on the hard disk.

4.00 MB

2.00 TB

8.00 GB

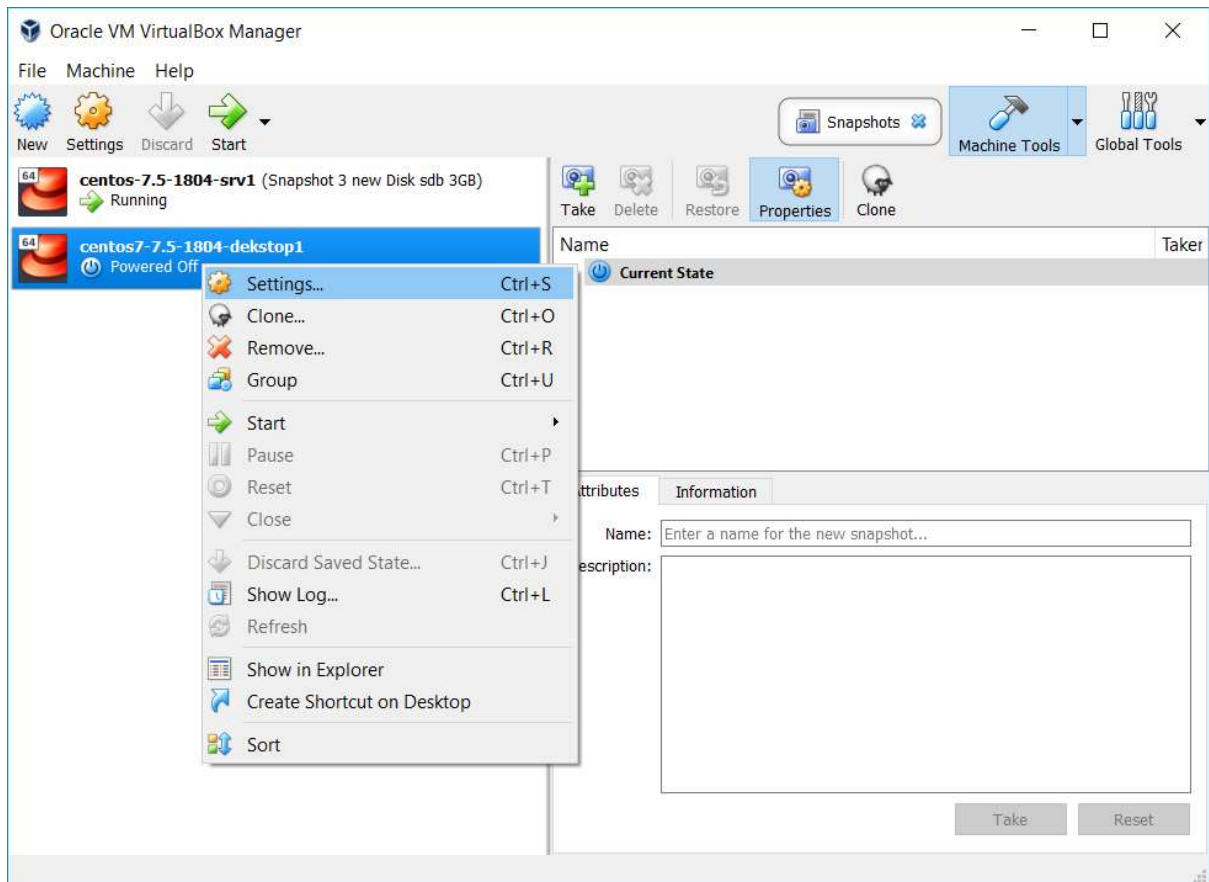
Create

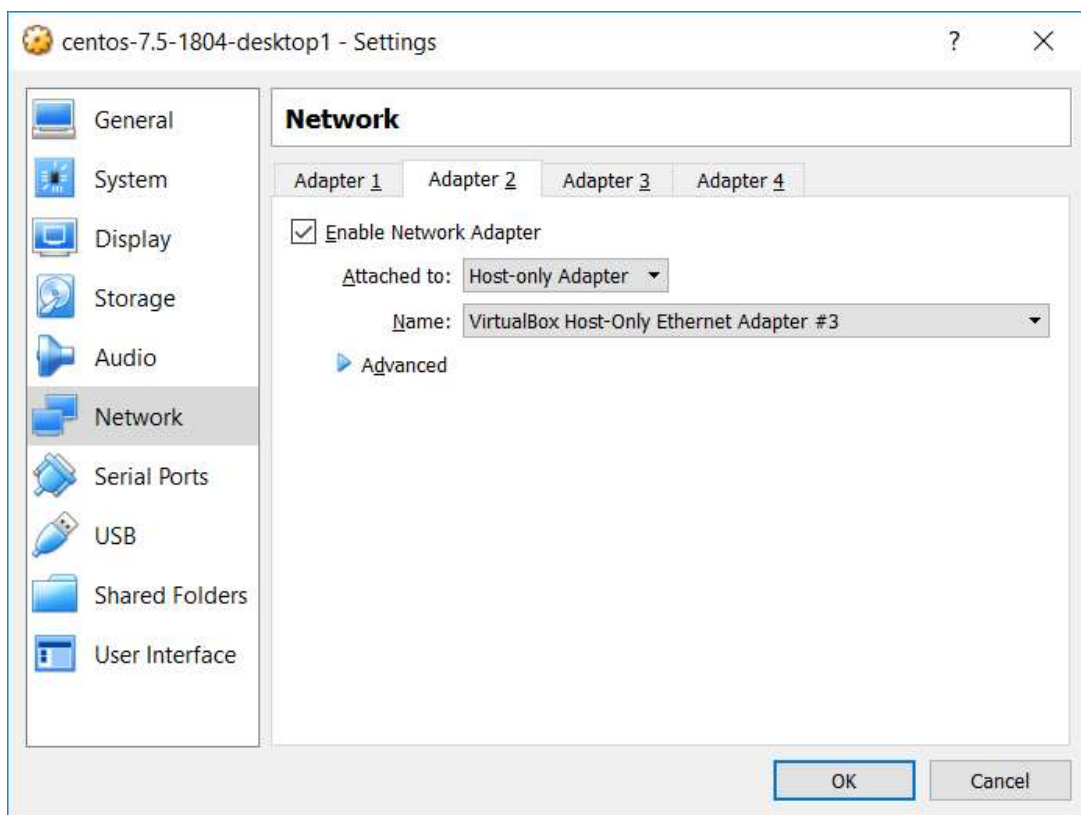
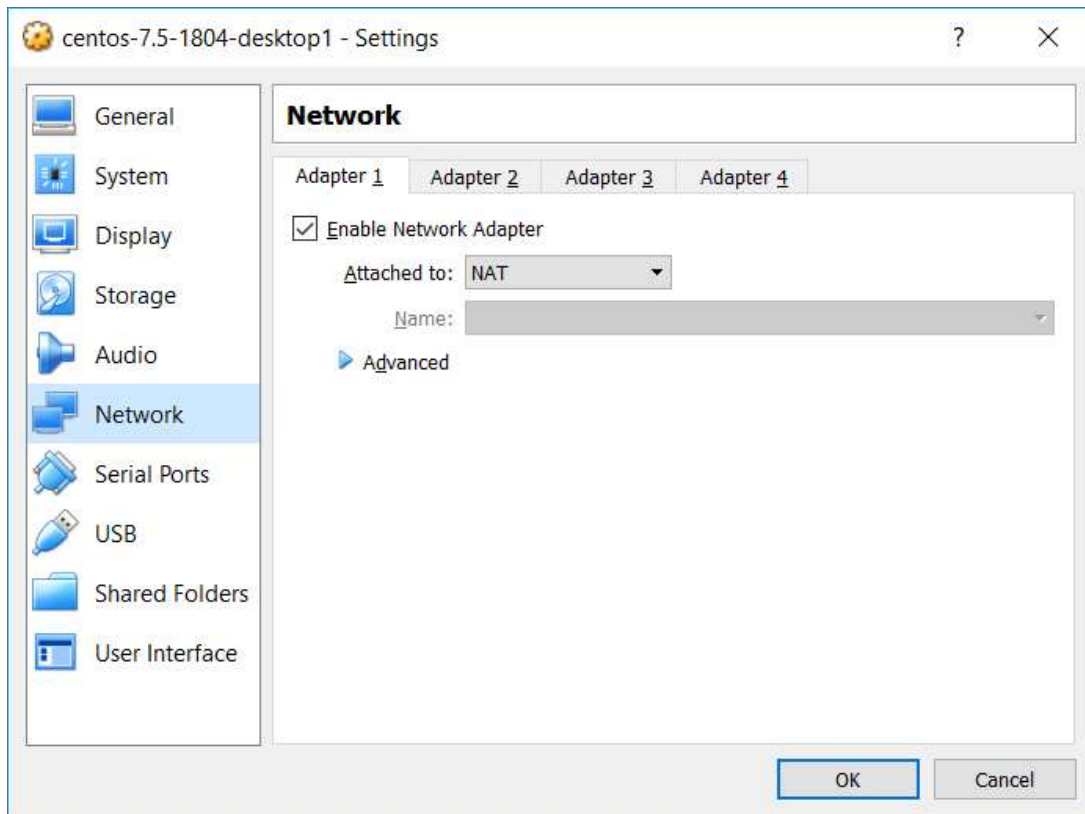
Cancel

Update the network setting to make use of 2 network adapters.

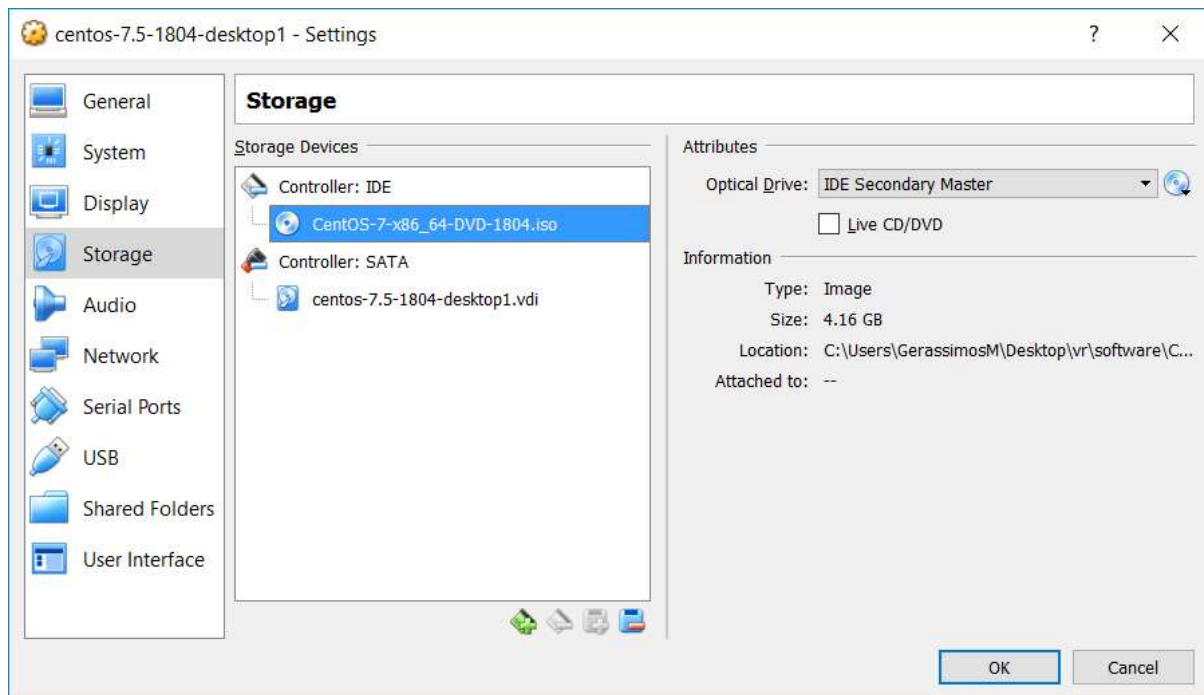
Adapter 1 => NAT mode

Adapter 2 => Host-only Adapter

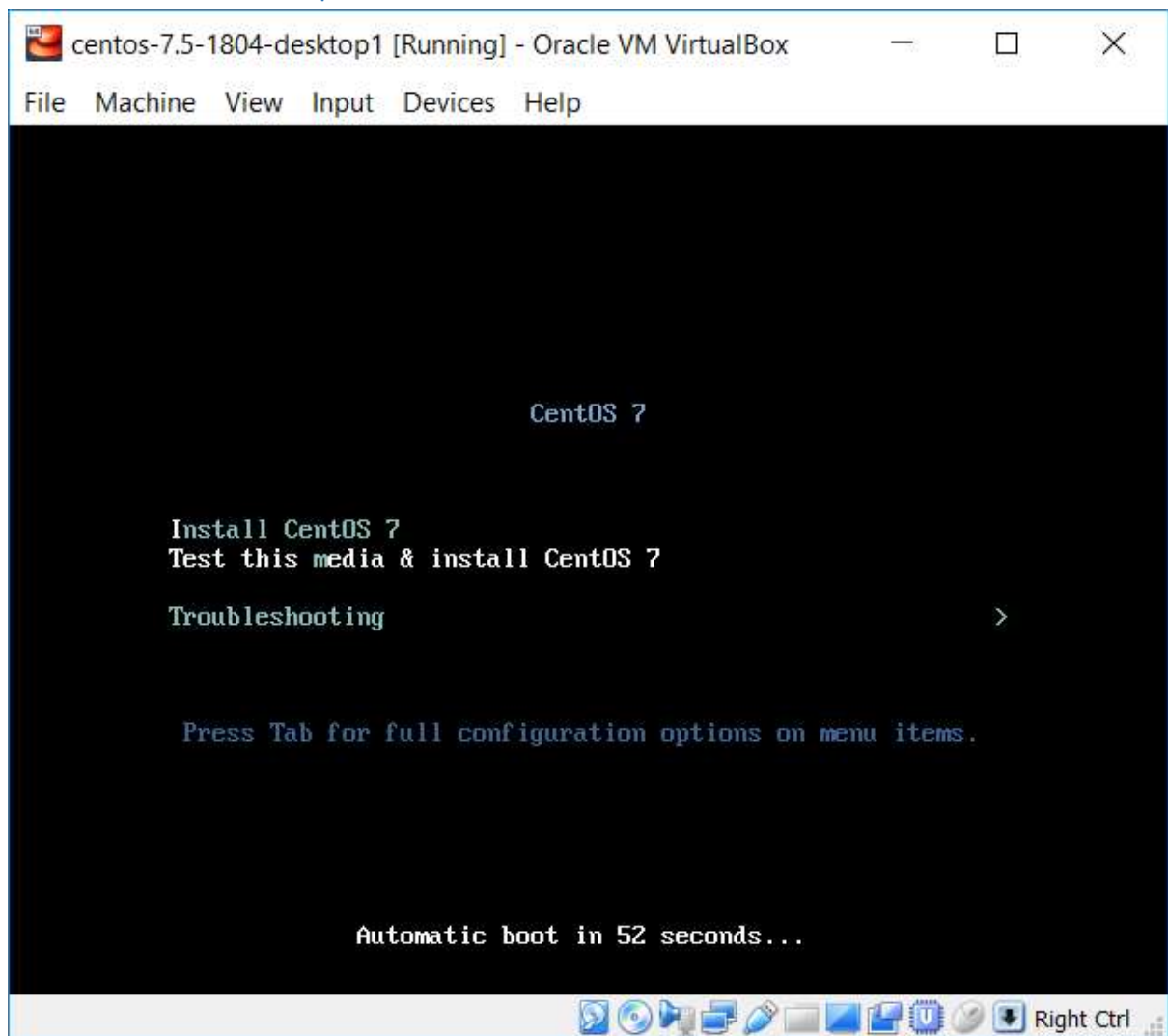


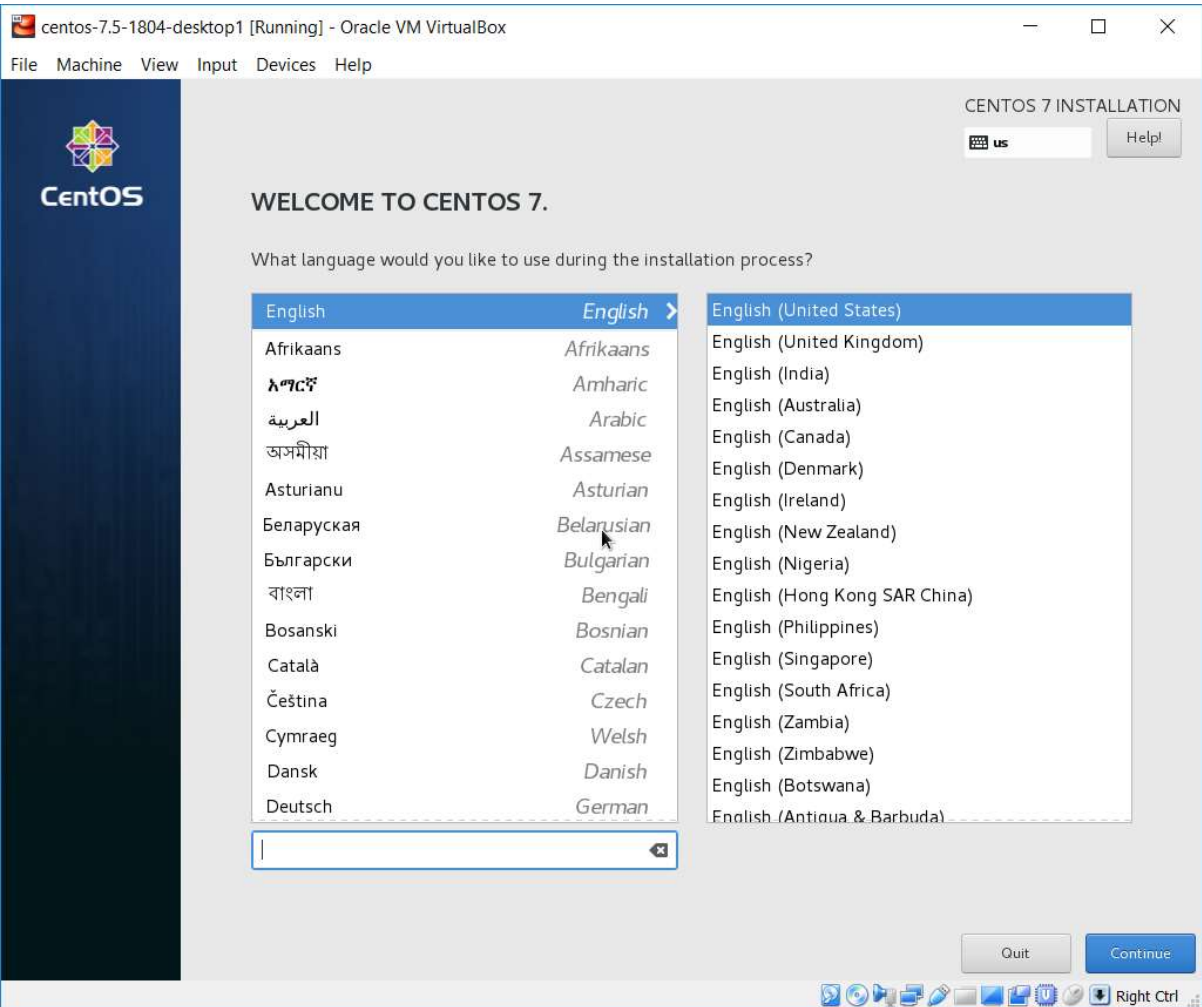


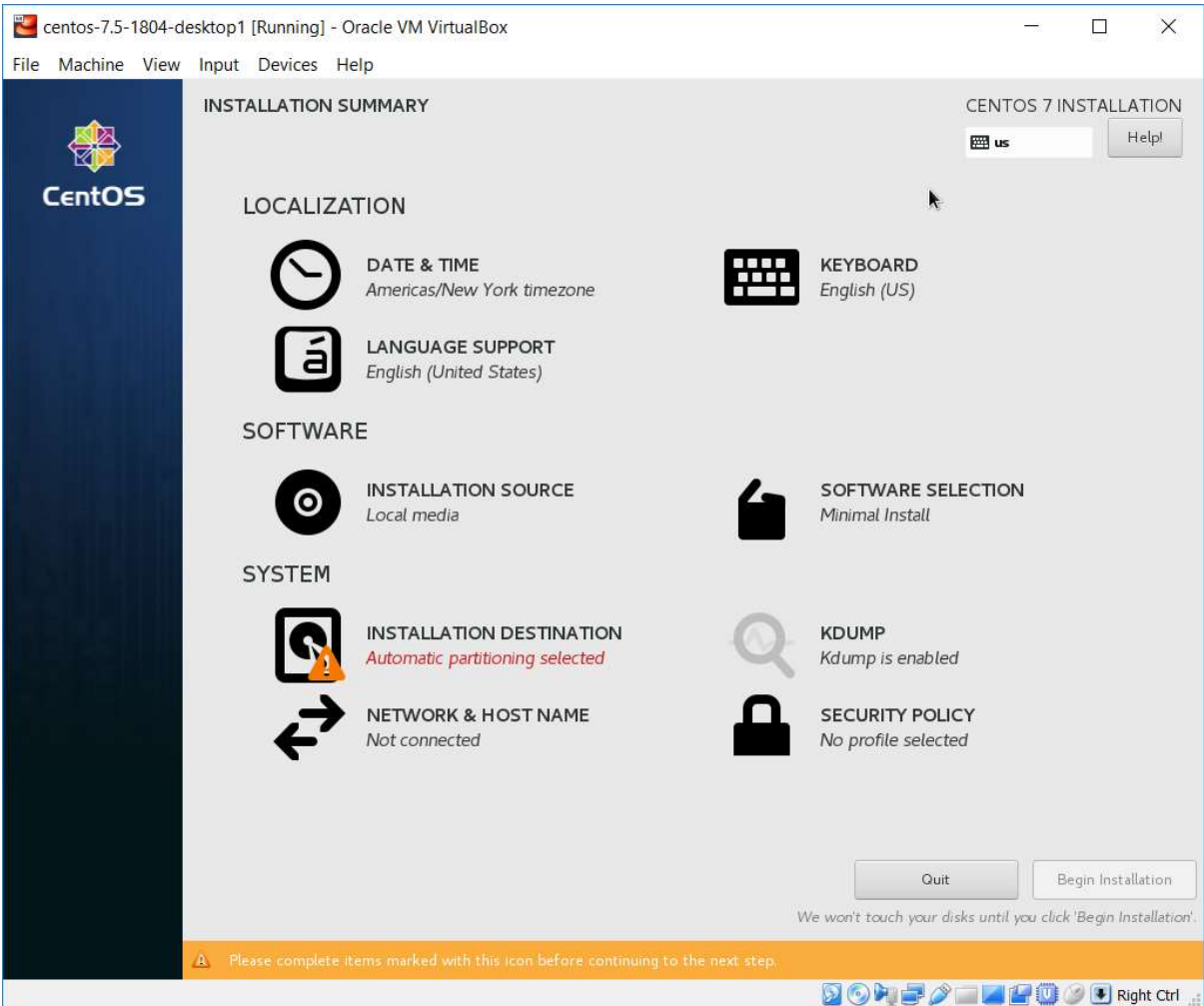
Insert the “CentOS-7-x86_64-DVD-1804.iso” in the virtual DVD-ROM



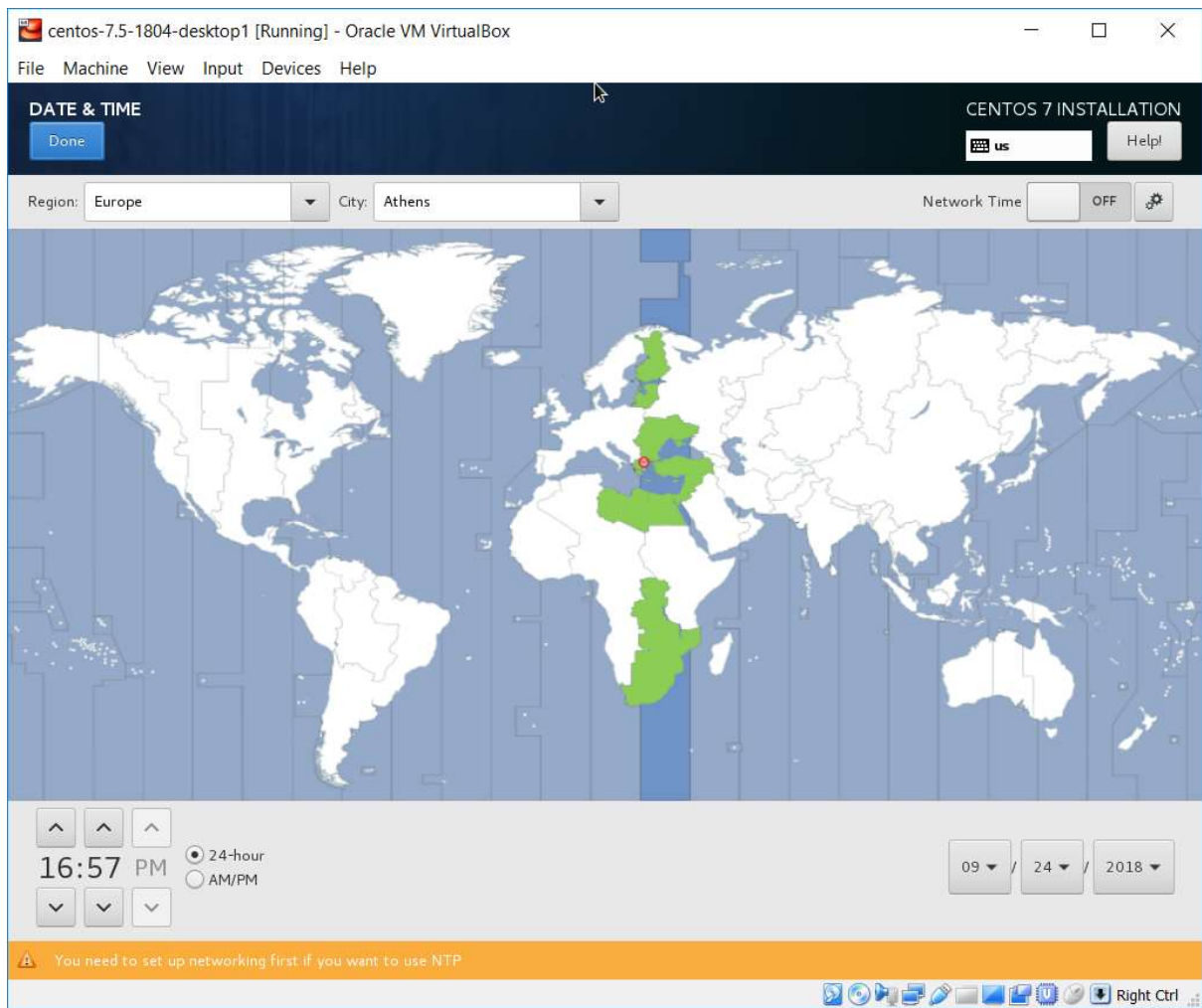
O.S Installation Steps



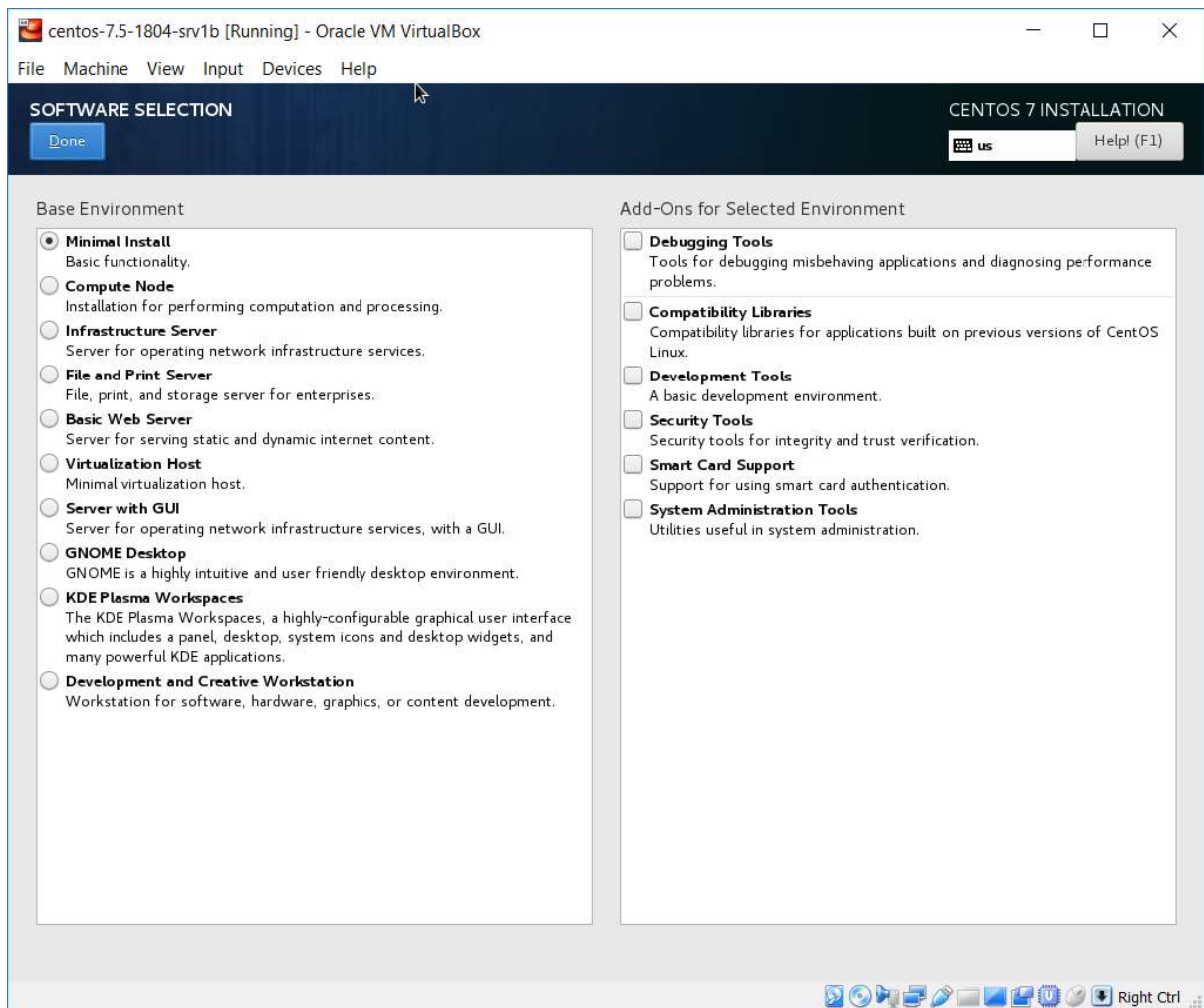




Select "Date & Time" and then select your time zone

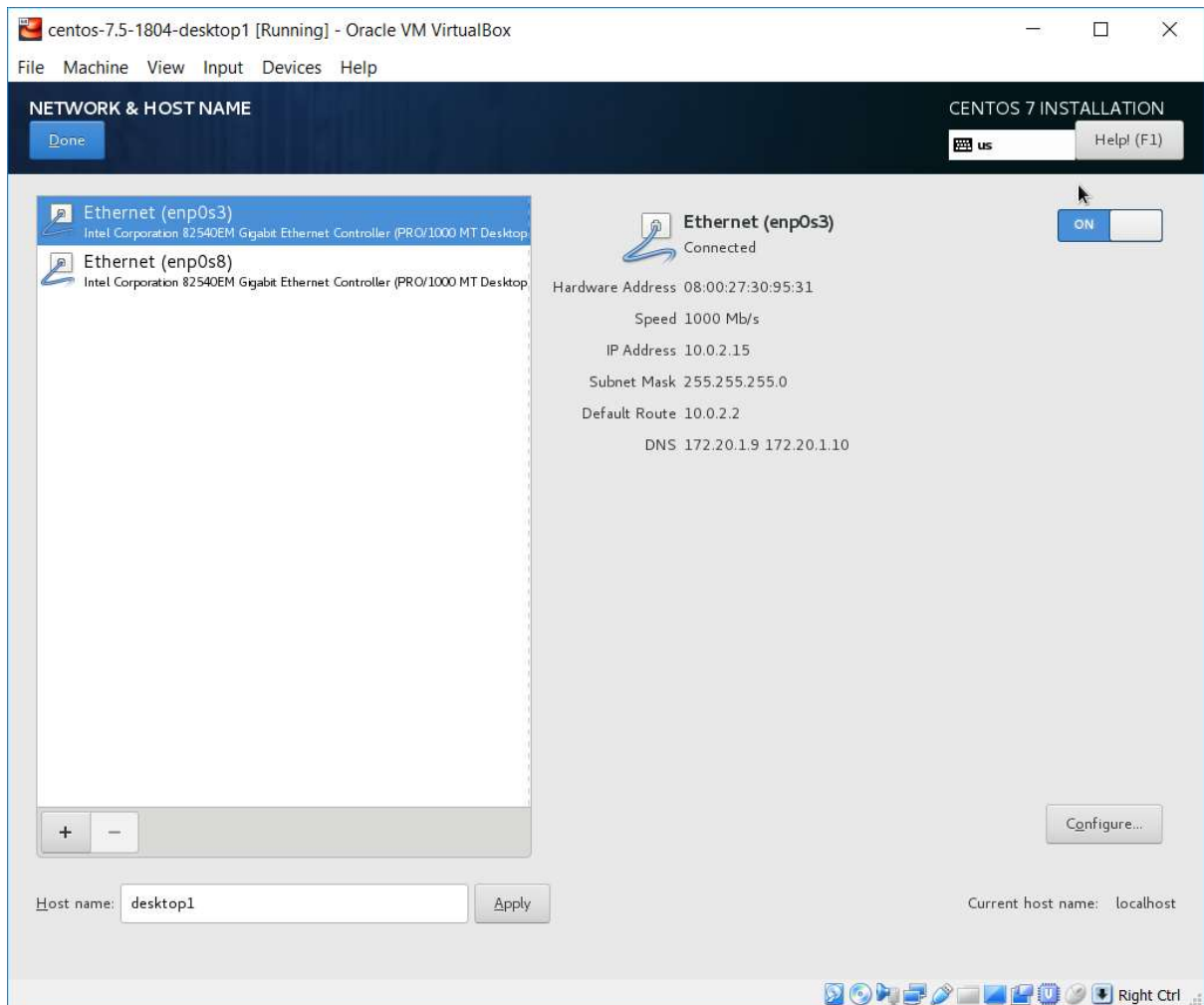


Select "Software Selection" and the select "Minimal Install"

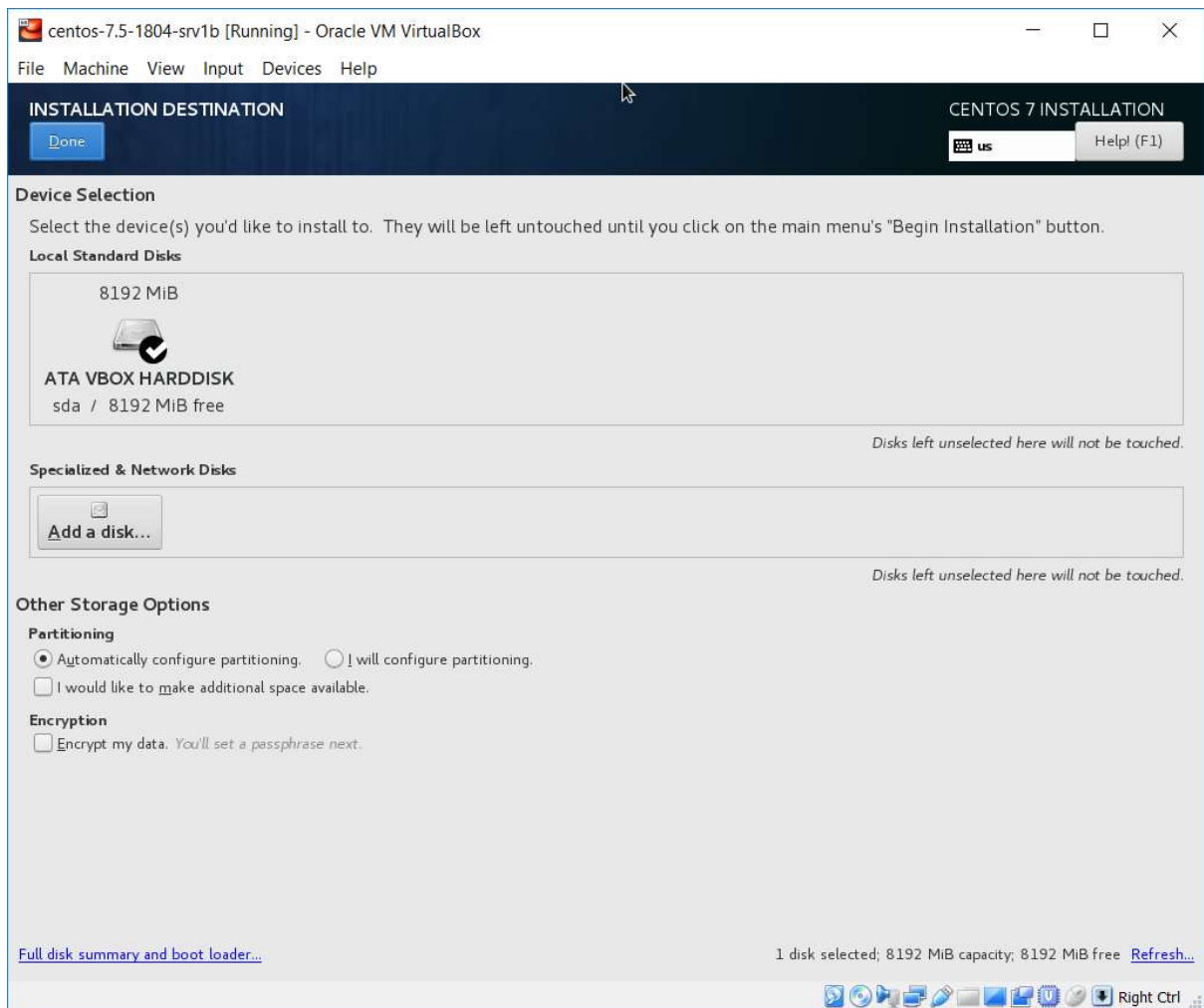


Select the “Network & Hostname”

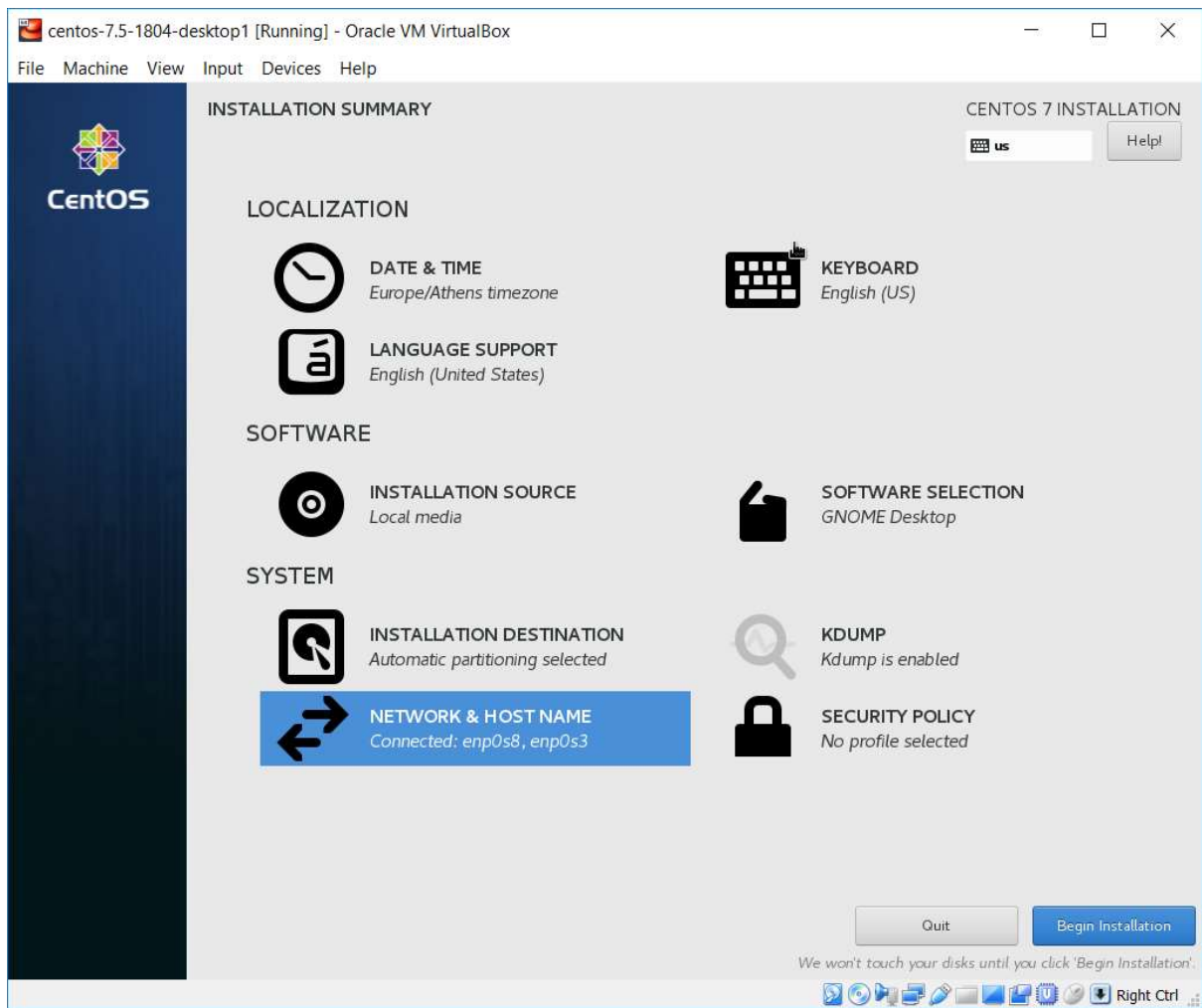
- Set the “Host name” field (srv1)
- Turn on all network interfaces



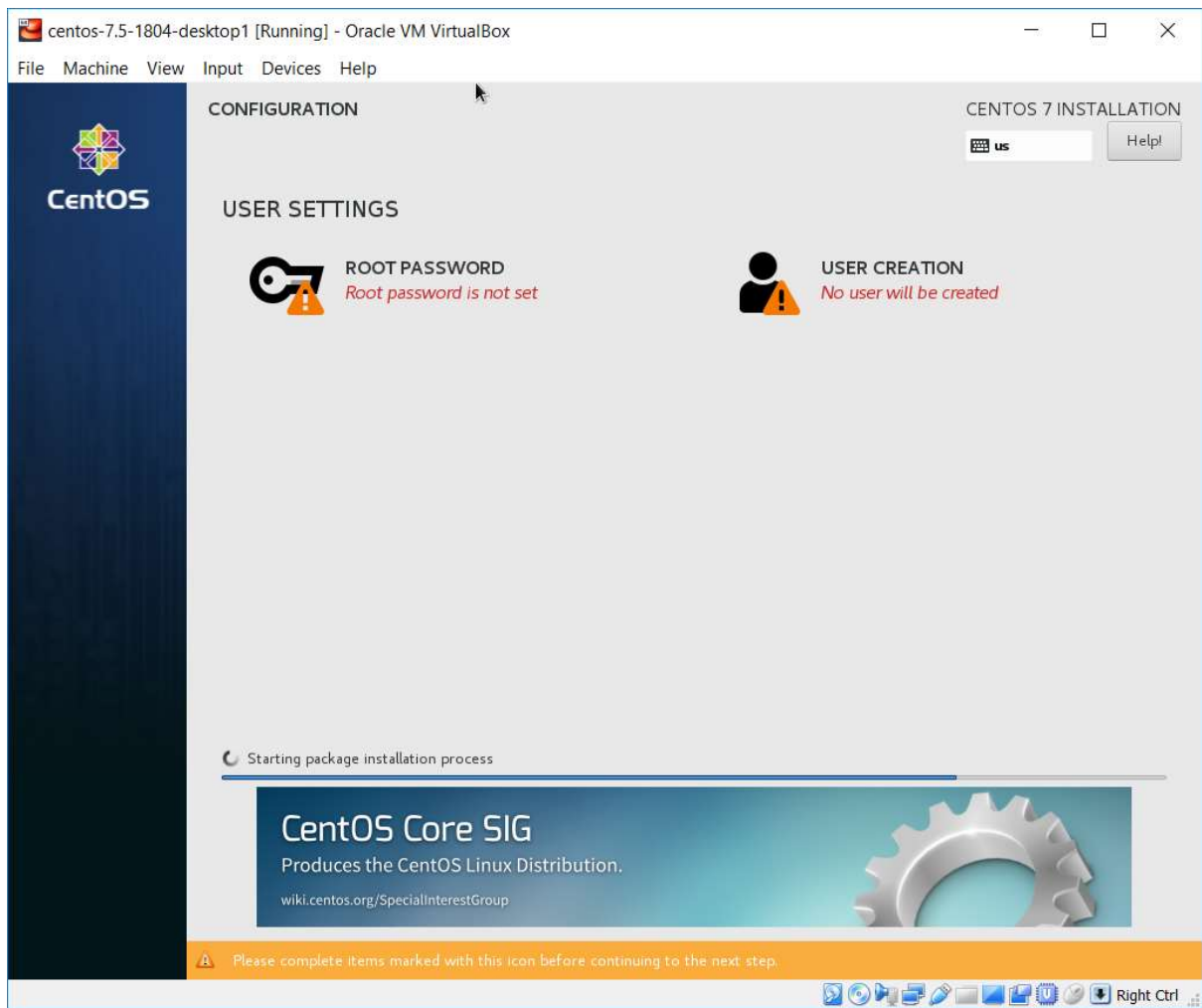
Select the "INSTALLATION DESTINATION" leave all the default selections and press Done

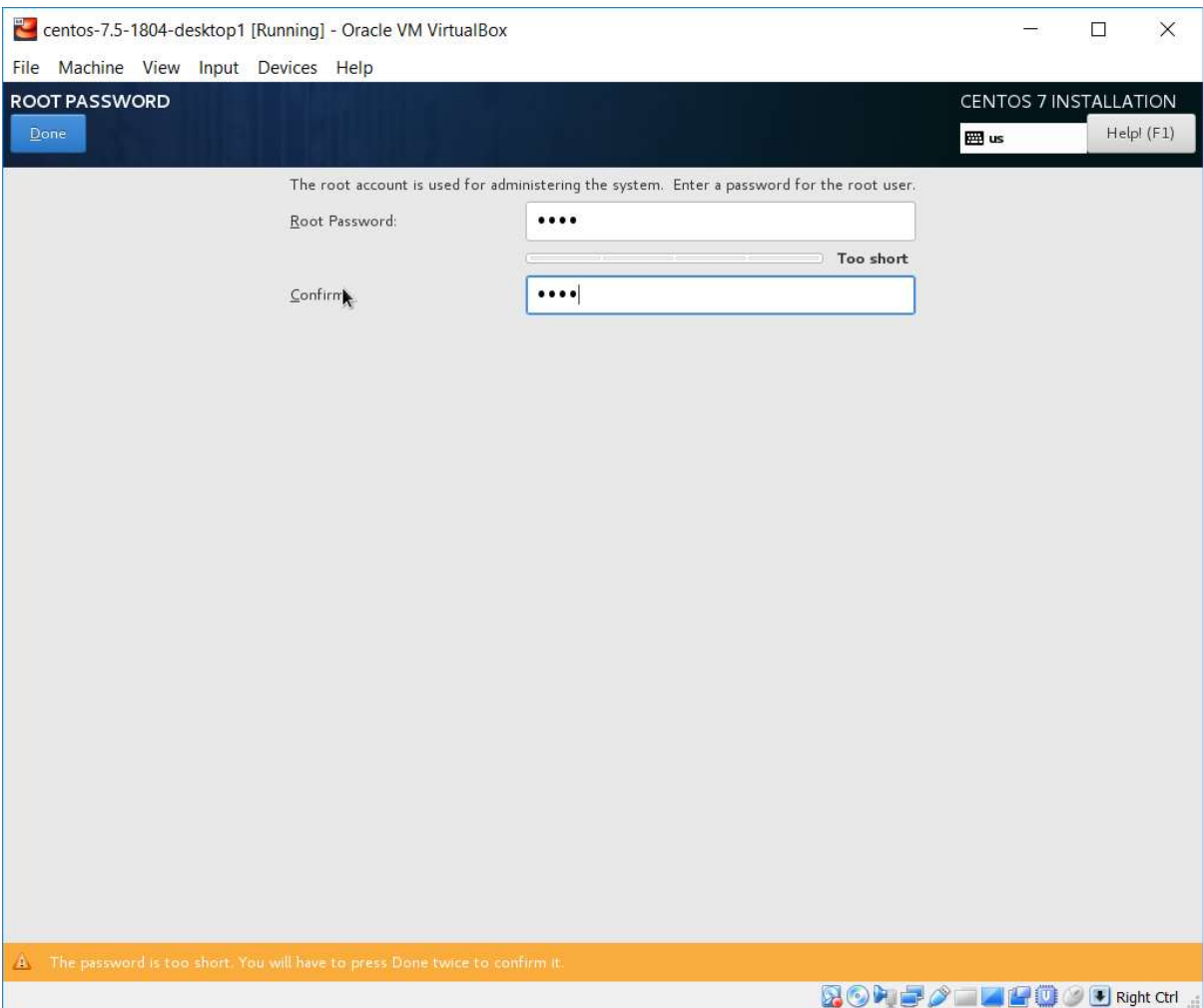


Press the “Begin Installation” button



Set password for root user and create a regular user





centos-7.5-1804-desktop1 [Running] - Oracle VM VirtualBox

File Machine View Input Devices Help

CREATE USER CENTOS 7 INSTALLATION

[Done](#) us [Help!](#)

Full name

User name

Tip: Keep your user name shorter than 32 characters and do not use spaces.

☐ Make this user administrator


☒ Require a password to use this account


Password

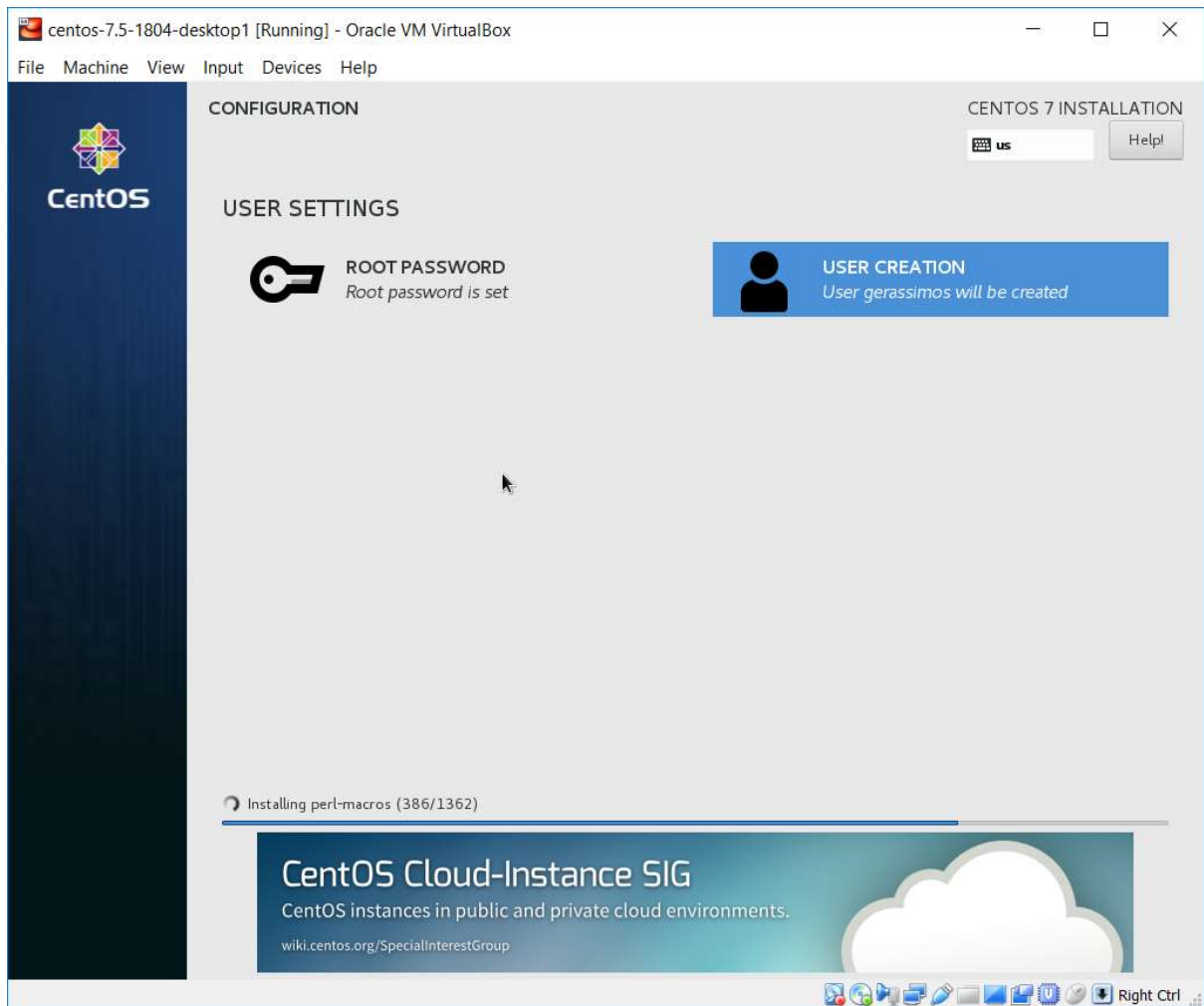
Weak

Confirm password

[Advanced...](#)

 The password you have provided is weak. The password contains the user name in some form. You will have to press Done twice to confirm it..

 Right Ctrl



When the installation process is completed press the “Reboot” button

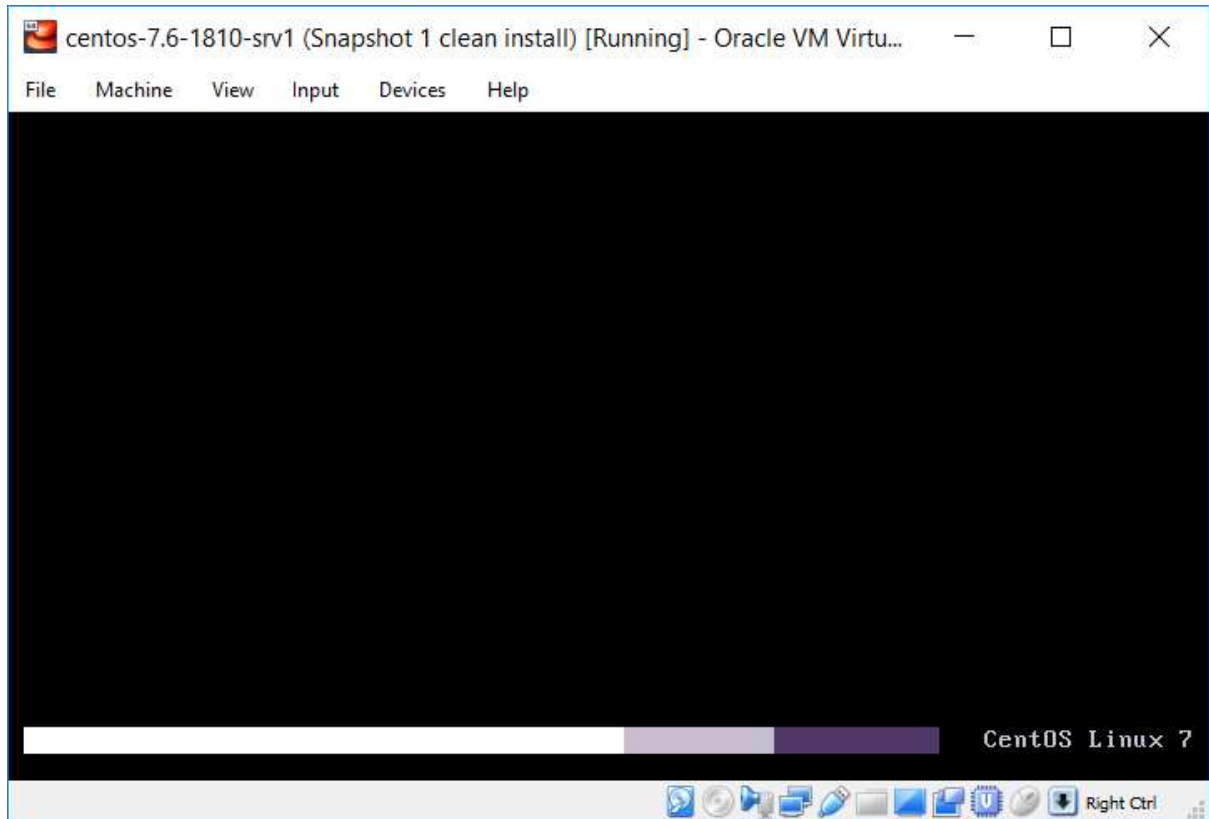
Note:

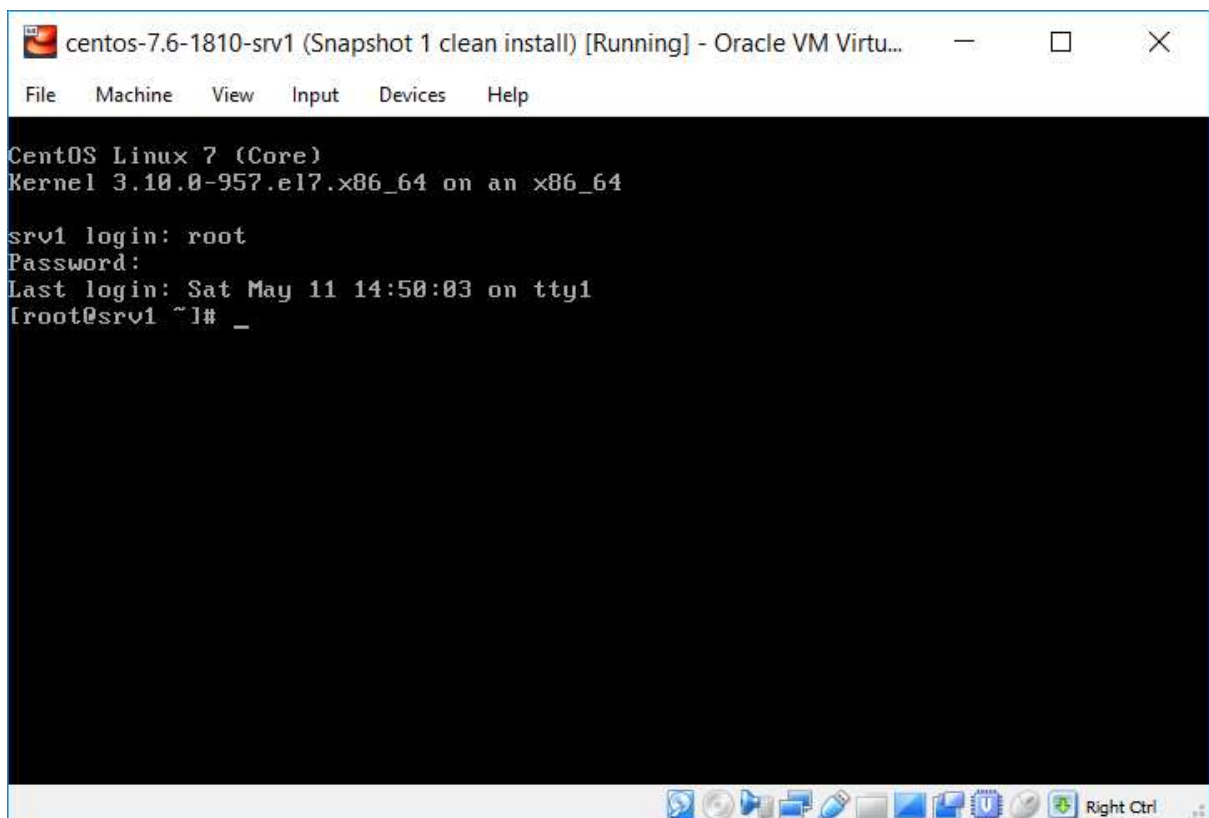
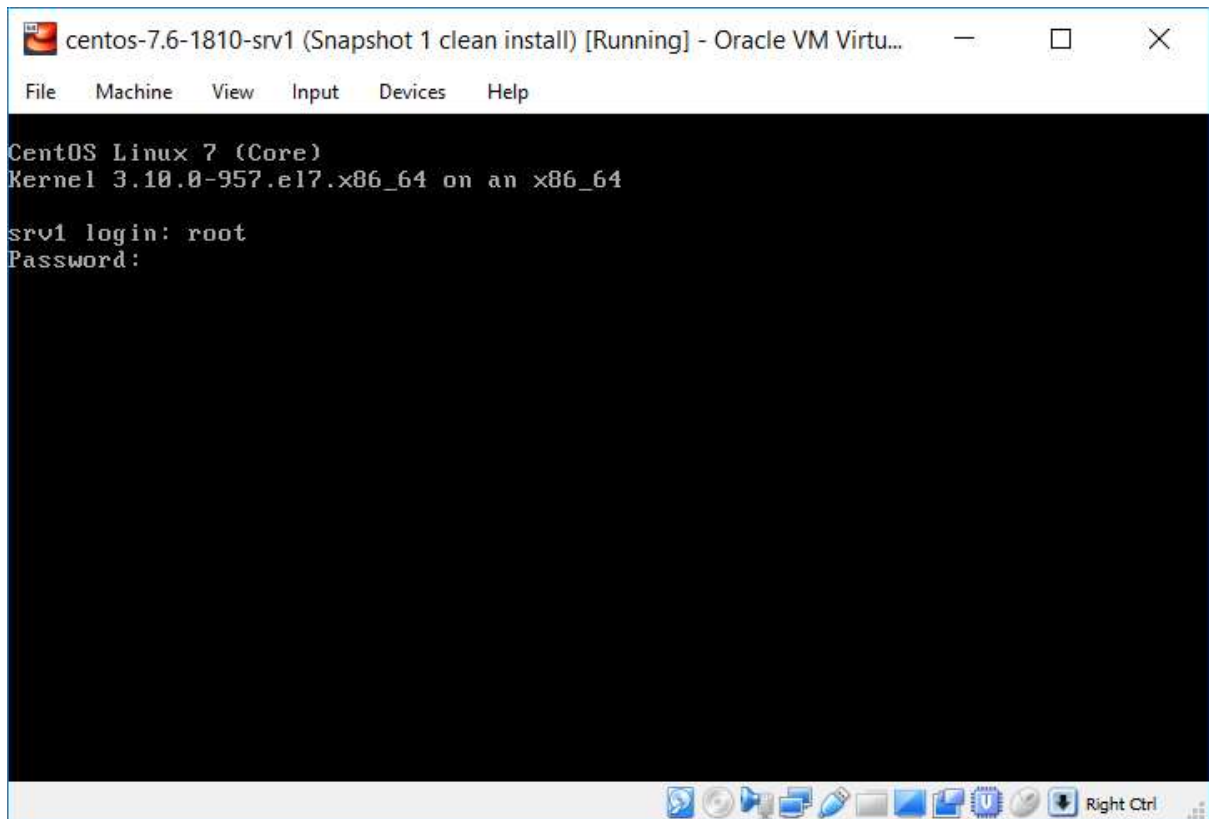
After the “Reboot” operation complete the steps about keyboard and localization that may appears.

Basic setup steps on first start

1. Login as root user and complete the final setup steps

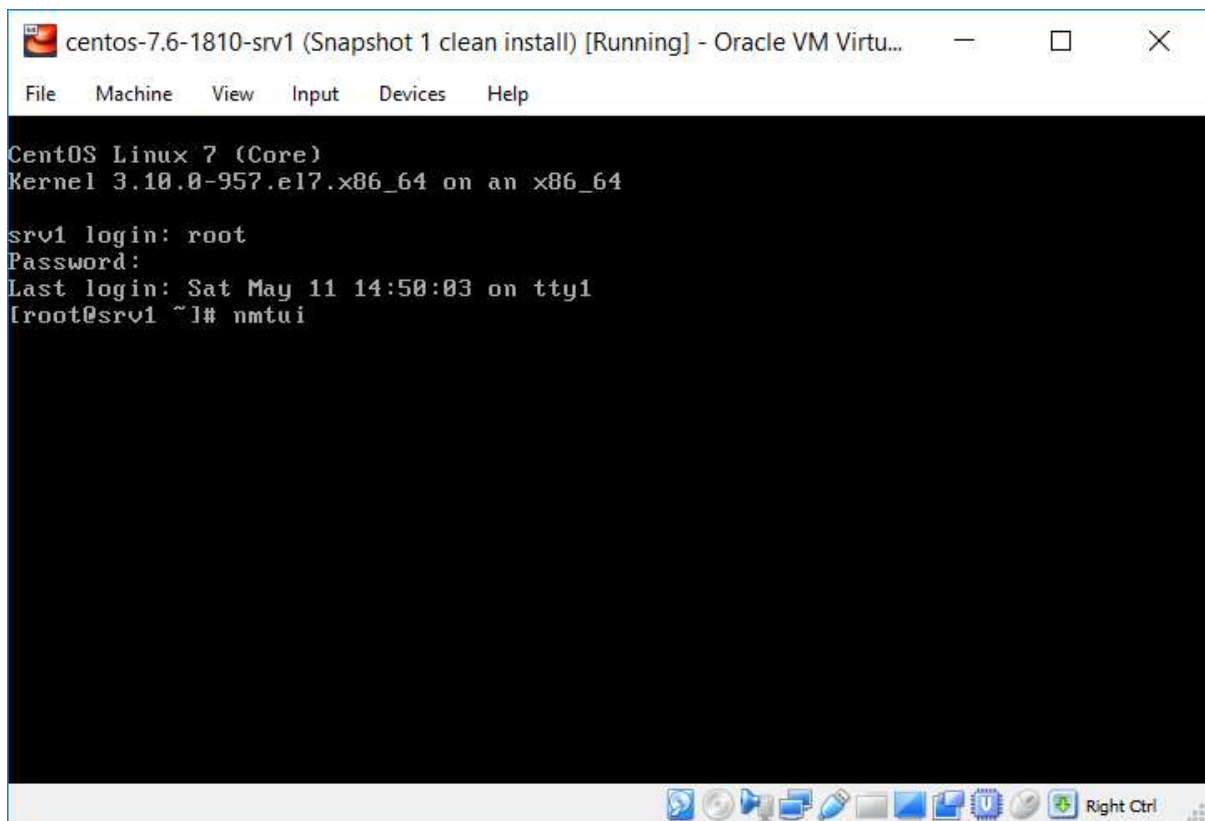
Boot the vm and login as root user from the terminal window:





2. Enable the auto-connect for the Host-only network interface ()

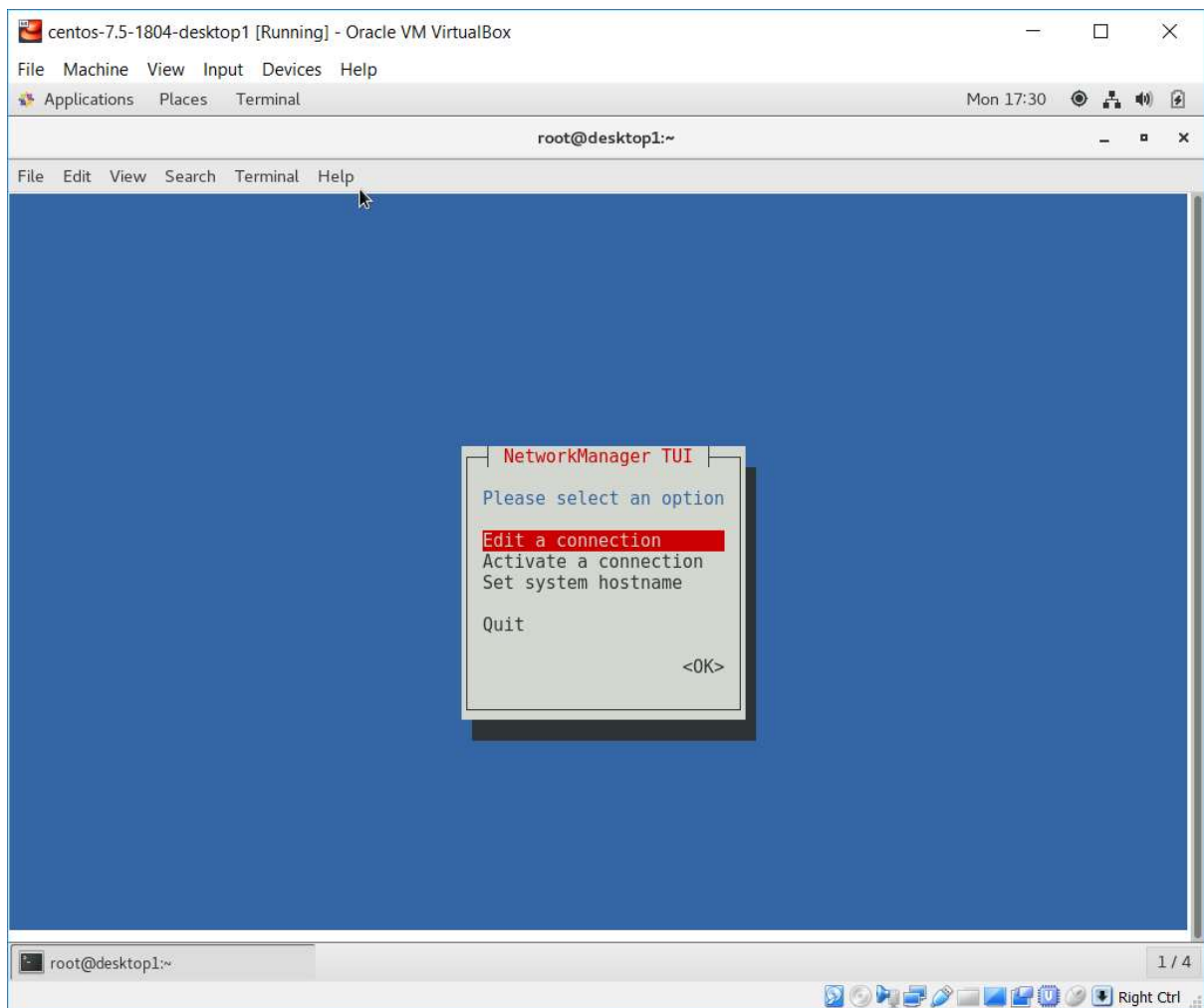
From the terminal window execute the “nmtui” command to start the “text” graphical interface of the “Network Manager”

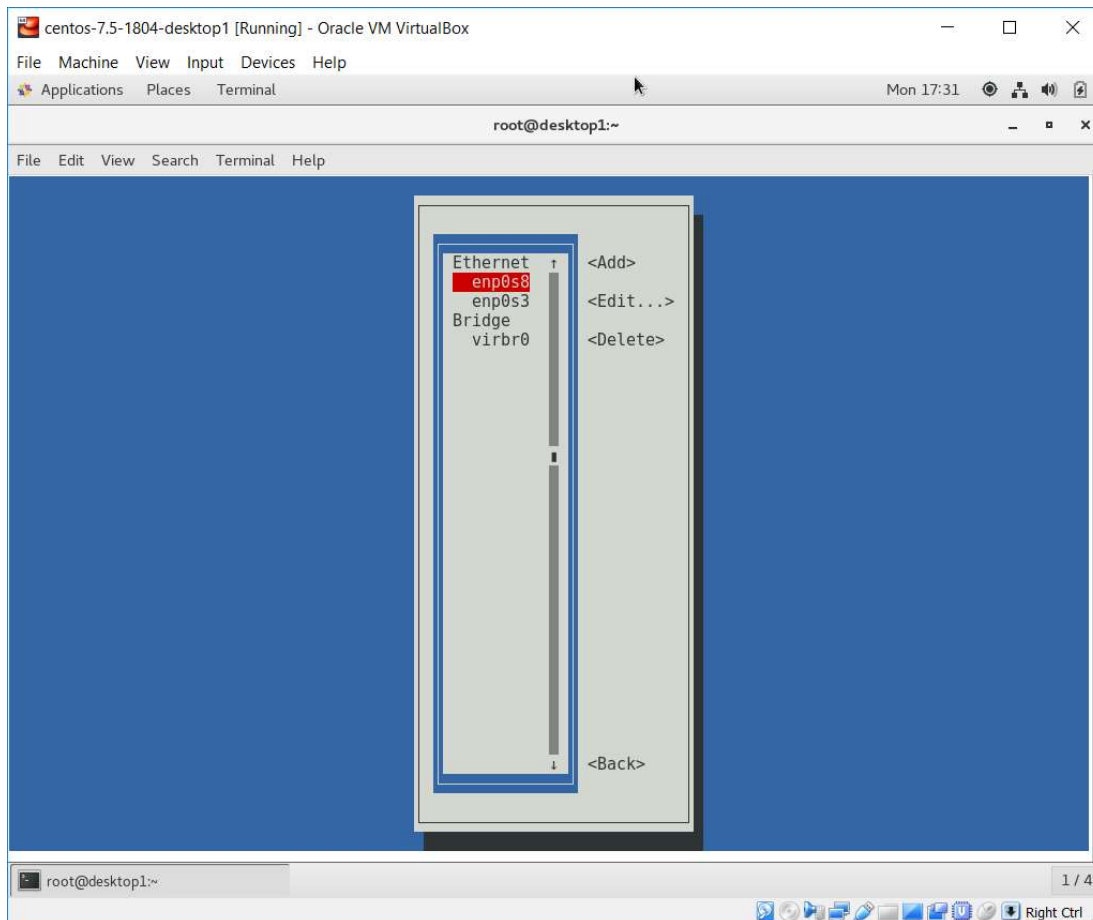


```
centos-7.6-1810-srv1 (Snapshot 1 clean install) [Running] - Oracle VM Virtu...
File Machine View Input Devices Help

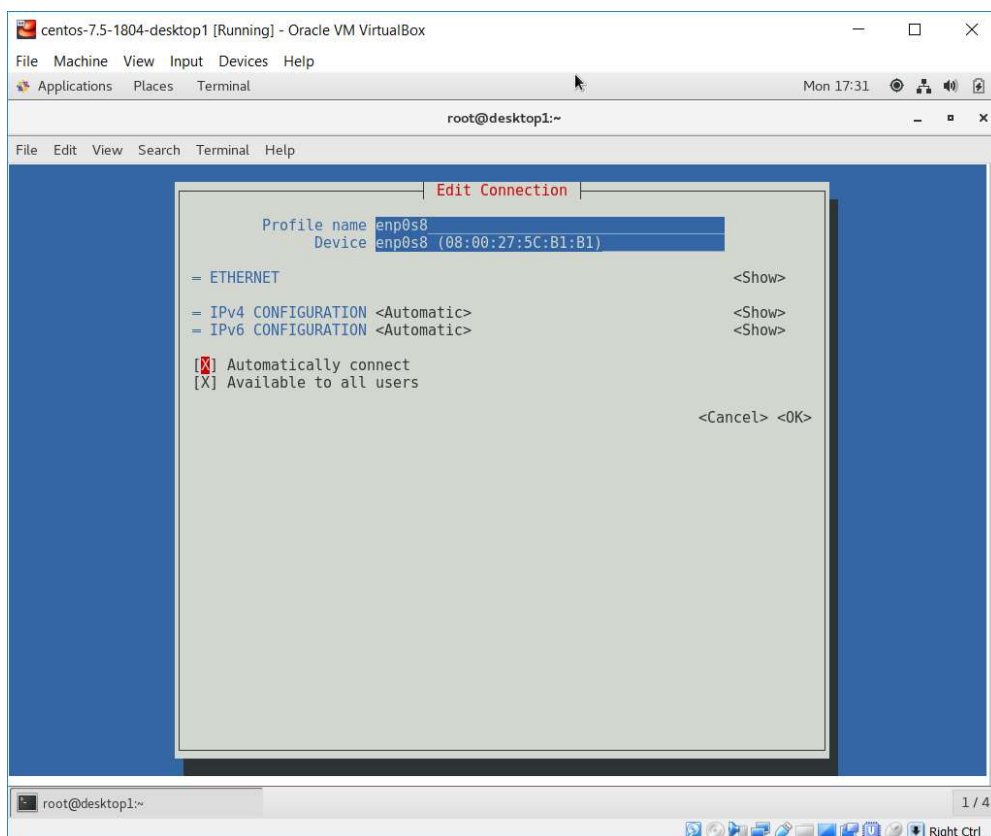
CentOS Linux 7 (Core)
Kernel 3.10.0-957.el7.x86_64 on an x86_64

srv1 login: root
Password:
Last login: Sat May 11 14:50:03 on tty1
[root@srv1 ~]# nmtui
```





Enable the “Automatically connect” check box and press OK



Use the navigation buttons (“Back” and “Quit”) to exit the “text” graphical interface of the “Network Manager”

3. Verify the network setting

From the terminal windows execute the “ip a” to display the network settings

```
# ip a | grep "inet "  
    inet 127.0.0.1/8 scope host lo  
    inet 10.0.2.15/24 brd 10.0.2.255 scope global noprefixroute dynamic enp0s3  
    inet 192.168.99.100/24 brd 192.168.99.255 scope global noprefixroute enp0s8
```

We can now use the IP address (192.168.99.100) of the host-only network interface from the host system to connect to the VM using an ssh client such as “putty”

4. Install bash completion package by executing the following command:

```
root@srv1 # yum install -y bash-completion
```

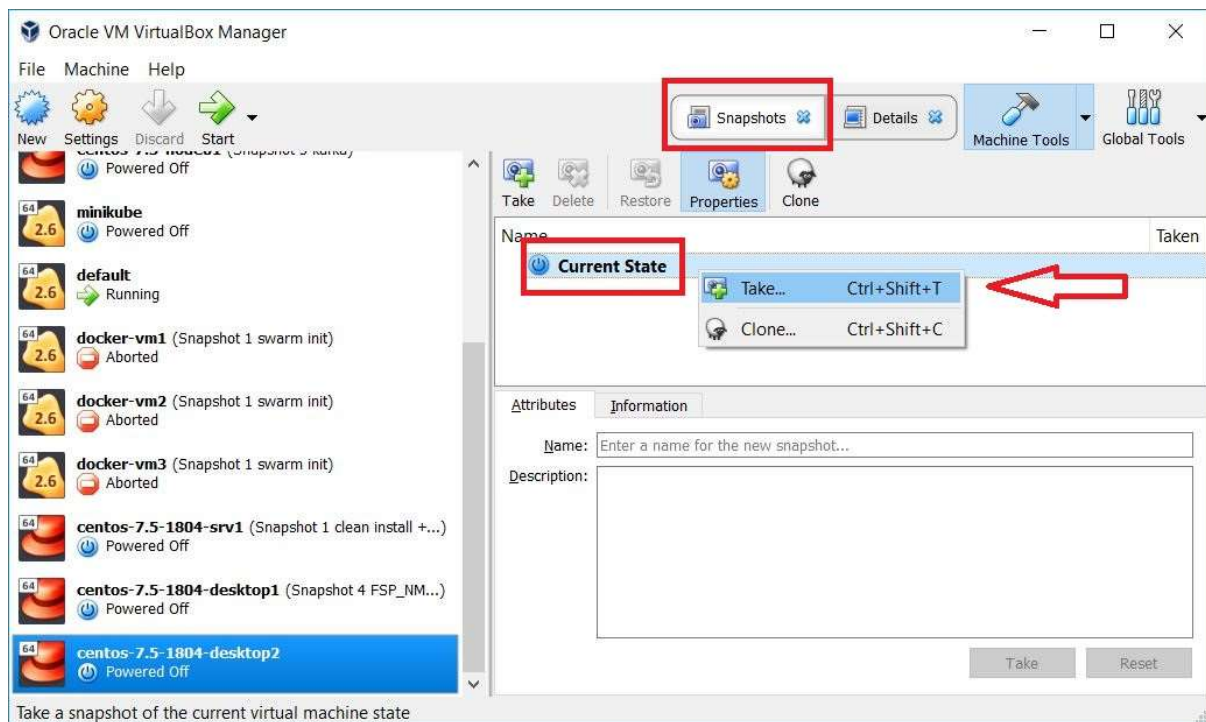
```
...
```


Final take a VirtualBox snapshot of the VM

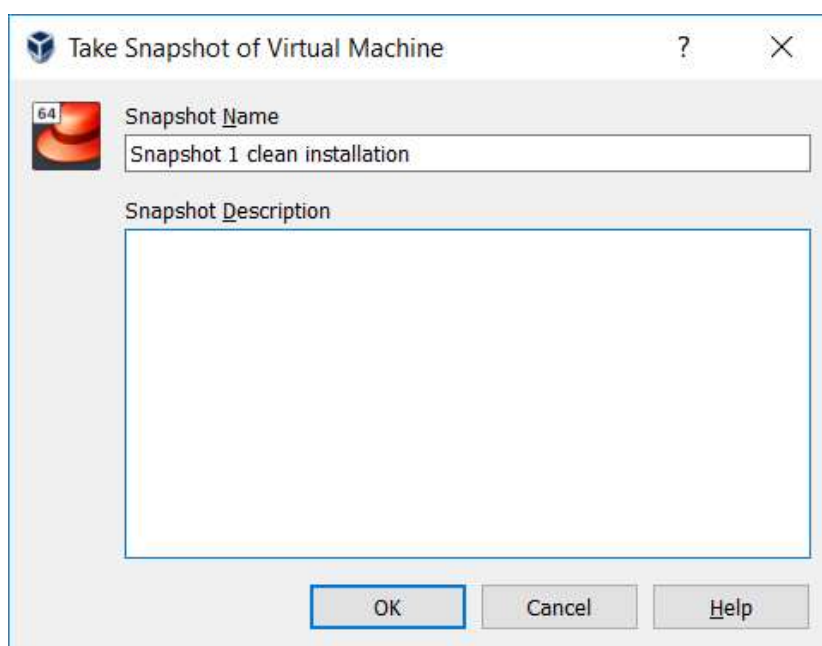
Note;

This will store the current state if the VM in a file, later this state can be restored.

From the Virtual Box main window selected the VM, then press the “Snapshots” button, then right click on the “Current Sate” tree item from the upper right panel and



From the popup window fill the “Snapshot Name” and optionally the “Snapshot Description” fields and press the “OK” button



Verify that the Snapshot has been successfully created, the Snapshot tree will look like the following:

