

# Instruction for Kali Linux installation

Note: It is suggested to install Kali Linux in Virtual environment. It works on privileged instructions, so better you install it in virtual box (or in any virtual environment).

## Step 1:

Download the Virtual Box from <https://www.virtualbox.org/wiki/Downloads>

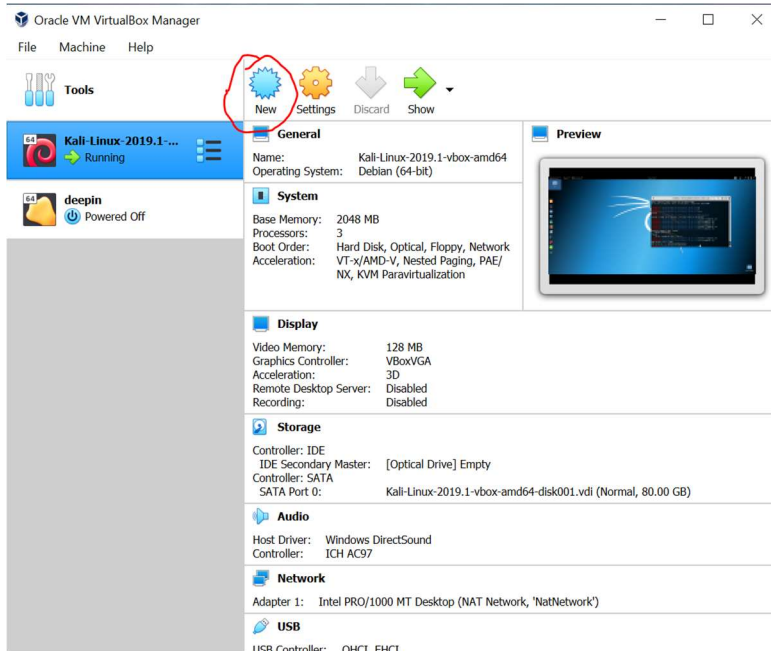
Also download the extension pack.

Kali disc image: <https://cdimage.kali.org/kali-2020.3/kali-linux-2020.3-installer-amd64.iso>

## Step 2:

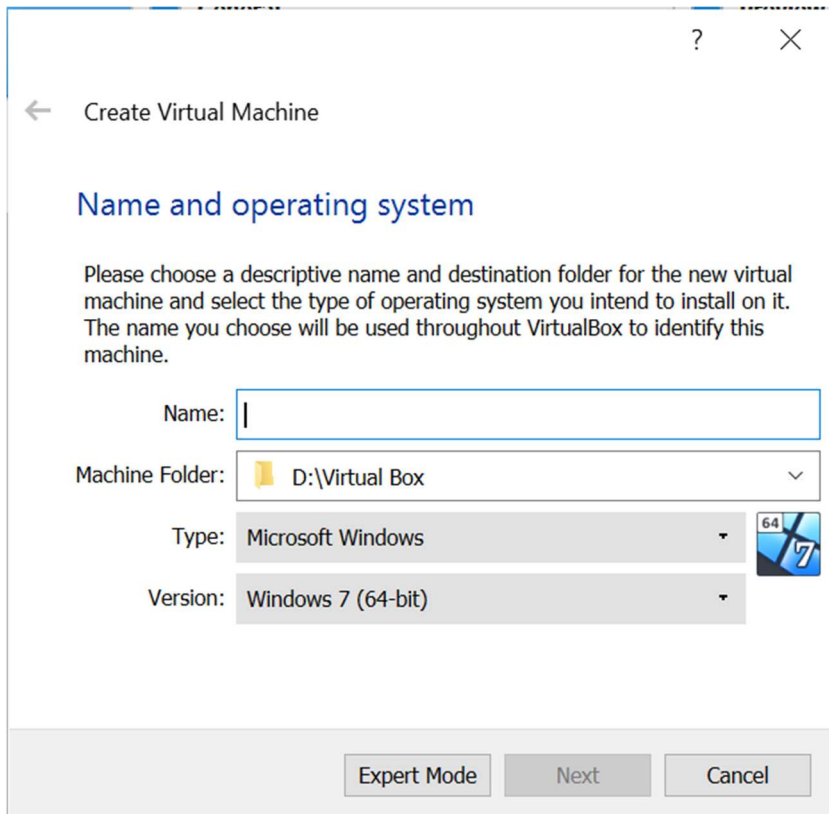
Install the Virtual box and then the Extension pack.

## Step 3:



After installation of VBox click on new.

#### Step 4:



The screenshot shows the 'Create Virtual Machine' wizard in Oracle VM VirtualBox. The title bar includes a help icon (?) and a close icon (X). The window title is 'Create Virtual Machine'. The main heading is 'Name and operating system'. Below this, a paragraph of instructions reads: 'Please choose a descriptive name and destination folder for the new virtual machine and select the type of operating system you intend to install on it. The name you choose will be used throughout VirtualBox to identify this machine.' The form contains four fields: 'Name:' with an empty text box; 'Machine Folder:' with a dropdown menu showing 'D:\Virtual Box'; 'Type:' with a dropdown menu showing 'Microsoft Windows' and a small icon of a Windows 7 logo; and 'Version:' with a dropdown menu showing 'Windows 7 (64-bit)'. At the bottom of the window, there are three buttons: 'Expert Mode', 'Next', and 'Cancel'.

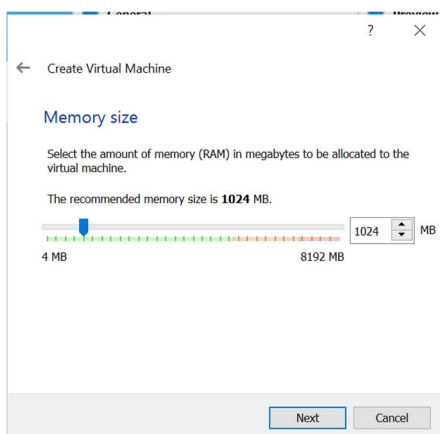
Give the name as you wish.

Specify the folder where you want to keep the machine.

Select the type as LINUX.

Select the Version as Debian 64.

#### Step 5:



The screenshot shows the 'Create Virtual Machine' wizard in Oracle VM VirtualBox, Step 5: Memory size. The title bar includes a help icon (?) and a close icon (X). The window title is 'Create Virtual Machine'. The main heading is 'Memory size'. Below this, a paragraph of instructions reads: 'Select the amount of memory (RAM) in megabytes to be allocated to the virtual machine.' A sub-note states: 'The recommended memory size is 1024 MB.' The form features a horizontal slider bar with a blue handle. The slider has markers at '4 MB', '1024 MB', and '8192 MB'. To the right of the slider, there is a text box containing '1024' and a unit dropdown menu set to 'MB'. At the bottom of the window, there are two buttons: 'Next' and 'Cancel'.

Specify the memory(RAM) at least minimum of 1.5GB.

## Step 6:

← 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

deepin.vhdx (Normal, 64.00 GB)

Create Cancel

Select on create virtual hard disk.

## Step 7:

← 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.

D:\Vbox ubuntu\kali\kali.vhdx

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.

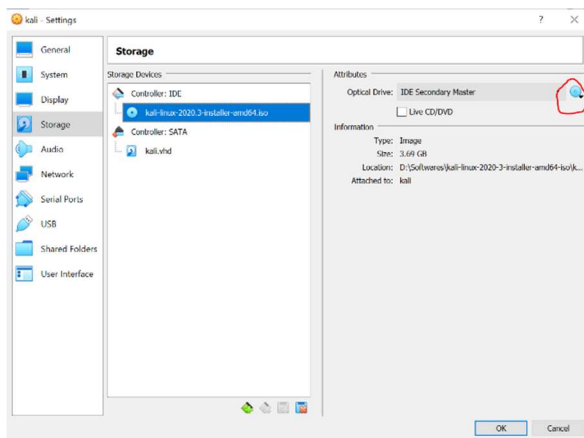
4.00 MB 2.00 TB 8.00 GB

Create Cancel

Create a disk of at least minimum of 30 GB.

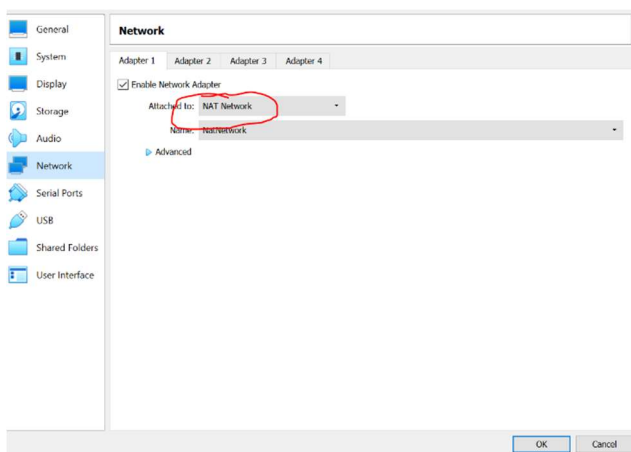
Wait for sometime till the disk is created.

Then select the disk image.



Step 8:

Click on network and change it to NAT network (Mandatory).

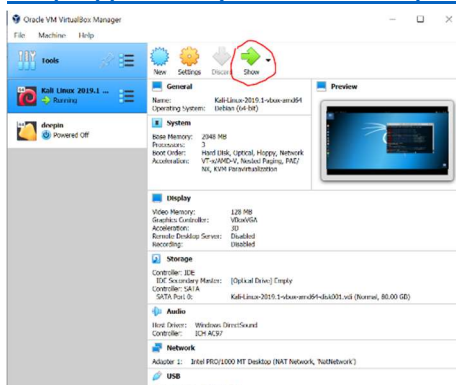


Step 9:

Click on start and then on the install, follow the instructions as it shows.

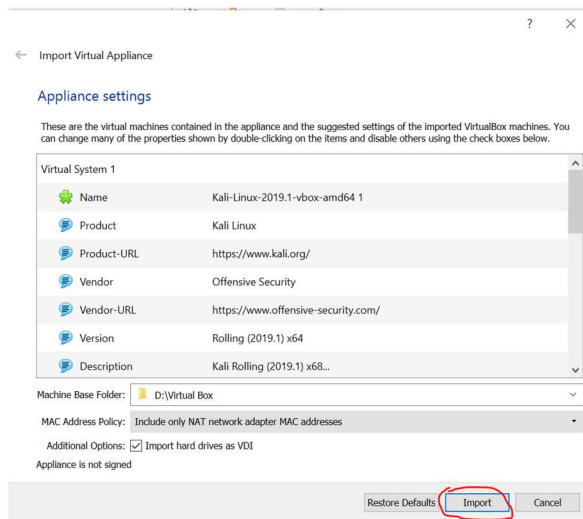
For reference see the video (kali version might differ)

[https://www.youtube.com/watch?v=V\\_Payl5FlgQ](https://www.youtube.com/watch?v=V_Payl5FlgQ)



If you are downloading from the drive link then you can just download the Virtual box and extension and then double click on the downloaded file.

It will pop up the import window. Select the desired folder and click on import.



Once the import is done click on settings and change the network to NAT network.

Increase the memory as per your requirement and then click on start.

It will boot up your kali.



hit enter.

Username: **root** password: **toor**

# Installation Of NS2

1: In the desktop of kali linux create a folder named NS2.

2: Download the ns2 zip file

<http://sourceforge.net/projects/nsnam/files/allinone/ns-allinone-2.35/ns-allinone-2.35.tar.gz/download>

3: Extract the contents to the desktop folder.

4: Go to the folder using terminal.

```
➔ cd Desktop
➔ cd NS2
➔ cd ns-allinone-2.35
➔ ./install
➔ gedit ~/.bashrc
```

➔ Now an editor window appears, please copy and paste the following codes in the end of the text file (note that '/home/abhiram/Desktop/ns-allinone-2.35/octl-1.14' in each line in the below code should be replaced with your location where the 'ns-allinone-2.35.tar.gz' file is extracted)

```
# LD_LIBRARY_PATH
OTCL_LIB=/home/abhiram/Desktop/ns-allinone-2.35/octl-1.14
NS2_LIB=/home/abhiram/Desktop/ns-allinone-2.35/lib
X11_LIB=/usr/X11R6/lib
USR_LOCAL_LIB=/usr/local/lib
export
LD_LIBRARY_PATH=$LD_LIBRARY_PATH:$OTCL_LIB:$NS2_LIB:$X11_LIB:$USR_LOCAL_LIB

# TCL_LIBRARY
TCL_LIB=/home/abhiram/Desktop/ns-allinone-2.35/tcl8.5.10/library
USR_LIB=/usr/lib
export TCL_LIBRARY=$TCL_LIB:$USR_LIB
```

```
# PATH
XGRAPH=/home/abhiram/Desktop/ns-allinone-
2.35/bin:/home/abhiram/Desktop/ns-allinone-
2.35/tcl8.5.10/unix:/home/abhiram/Desktop/ns-allinone-2.35/tk8.5.10/unix
NS=/home/abhiram/Desktop/ns-allinone-2.35/ns-2.35/
NAM=/home/abhiram/Desktop/ns-allinone-2.35/nam-1.15/
PATH=$PATH:$XGRAPH:$NS:$NAM
```

➔ Save and close the text editor and then type the following command on the terminal

```
source ~/.bashrc
```

➔ Close the terminal window and start a new terminal window and now change the directory to ns-2.35 and validate ns-2.35 by executing the following command ( it takes **30 to 45 minutes**)

```
cd ns-2.35
./validate
```

➔ If the installation is successful, then you will be able to see % at the command prompt while typing the following command

```
ns
```

➔ Now type

```
exit
```

**Successfully Installed!**