

Environmental Setup

To perform ethical hacking, we have to download the Kali Linux Operating System and we can download Kali Linux OS inside the Virtual box. Here are the basic steps to download the virtual box and Kali Linux.

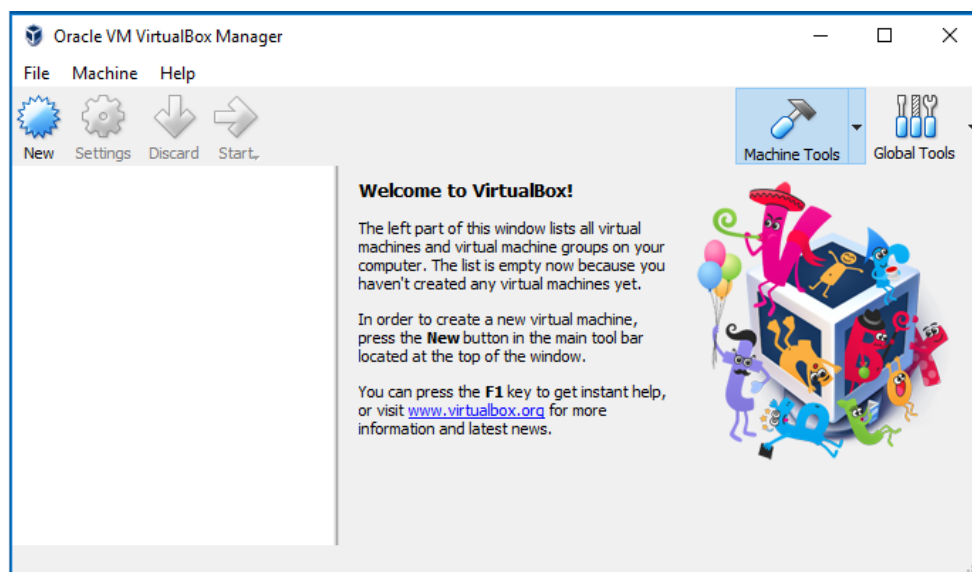
Step 1: Download Virtual Box

In step1, we download the Virtual box because the virtual box allows us to create a virtual machine inside our current operating system. After this, we will download the Kali Linux. A virtual machine is just like a completely separate working machine. You will lose nothing if you install an operating system inside the virtual machine. The operating system will perform just like the install on a separate laptop.

Now using the following link, you can download the virtual box according to your operating system and install it.

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

After installation, the virtual box will be shown as follows:



Step 2: Download Kali Linux

Now we will download the Kali Linux. It contained all the programs and application that we need to use pre-installed and preconfigured that means we just need to install this operating system and start hacking.

There are two ways to install Kali. You can install it as a virtual machine inside your current operating system, or you can download it as a main operating system. In this tutorial, I am going to use a virtual machine.

Use the following link to download the Kali Linux operating system.

<https://www.offensive-security.com/kali-linux-vm-vmware-virtualbox-image-download/>

Now click on Kali Linux Virtual Box Images and download the Kali Linux according to the compatibility of your operating system.

Download Kali Linux VMware and VirtualBox Images

Want to download Kali Linux custom images? We have generated several Kali Linux VMware and VirtualBox images which we would like to share with the community. Note that the images provided below are maintained on a "best effort" basis and all future updates will be listed on this page. Furthermore, Offensive Security does not provide technical support for our contributed Kali Linux images. Support for Kali can be obtained via various methods listed on the Kali Linux Community page. **These images have a default password of "toor" and may have pre-generated SSH host keys.**

Kali Linux VMware Images **Kali Linux VirtualBox Images**

Image Name	Torrent	Size	Version	SHA256Sum
Kali Linux Vbox 64 Bit Ova	Torrent	3.5G	2018.3	e04d717ff9d0fff8d125b23b357bceae2e8e3877af90b678fde5e1bf05e7e8
Kali Linux Vbox 32 Bit Ova	Torrent	3.6G	2018.3	9bb59d8209f080b6e95115b9fe6e40417e27263f8d26a746465257ff7b38fdd9




1. Download the 64-bit version if your computer is 64 bits otherwise, download the 32-bit version.
2. The downloaded file has a .ova extension. If the file doesn't have .ova extension that means you downloaded the wrong file.

After downloading, you will get a file with .ova extension. Now, to install the Kali Linux, you need to just double click on the file and click on the import button.

← Import Virtual Appliance

Appliance settings

These are the virtual machines contained in the appliance and the suggested settings of the imported VirtualBox machines. You can change many of the properties shown by double-clicking on the items and disable others using the check boxes below.

Virtual System 1	
 Name	Kali-Linux-2018.3-vbox-amd64
 Product	Kali Linux
 Product-URL	https://www.kali.org/
 Vendor	Offensive Security
 Vendor-URL	https://www.offensive-security....
 Version	Rolling (2018.3) x64
 Description	Kali Rolling (2018.3) x64...

☐ Reinitialize the MAC address of all network cards

Appliance is not signed

Restore Defaults

Import

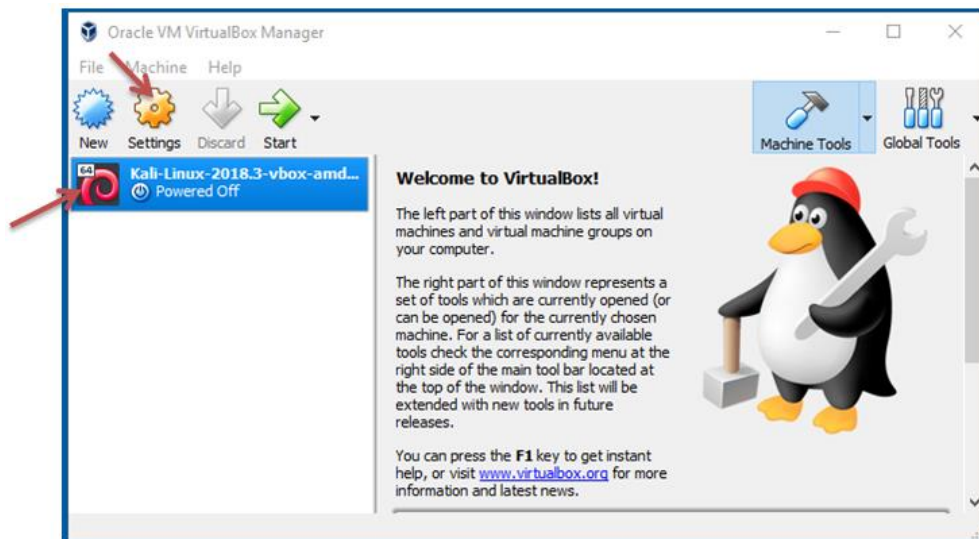
Cancel

After installation, the Kali Linux is ready to use and will look like as follows:

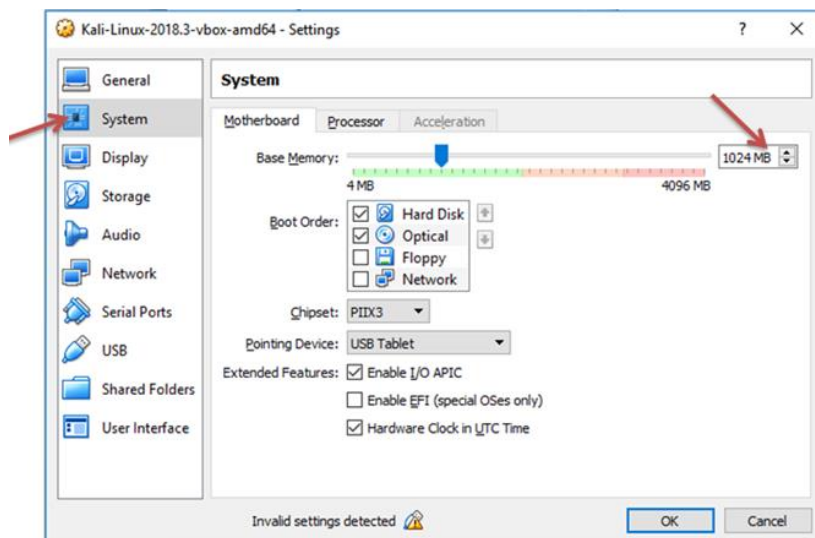


Step 3: Modify some settings of Kali Linux

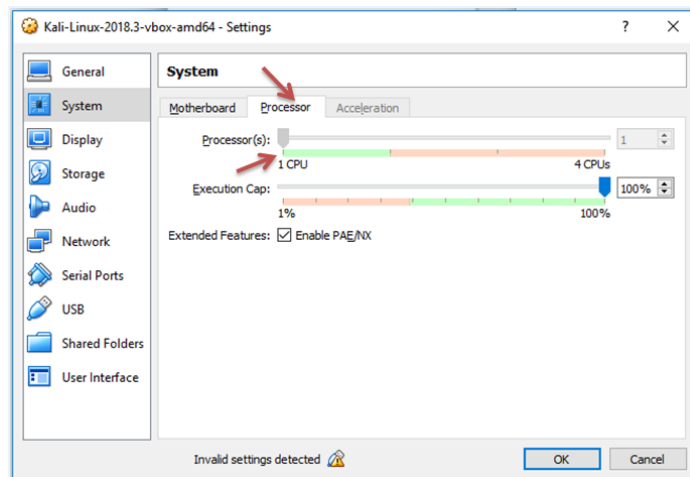
Before starting, we will modify some Settings. So just click on Kali Linux on the left side and then click on the Settings.



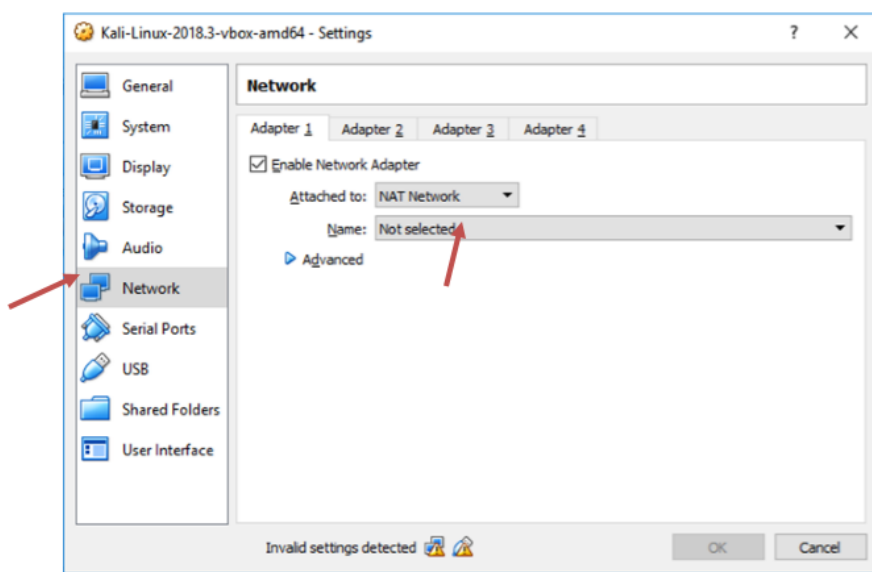
Now click on System and modify the amount of RAM depending on the amount of RAM on your computer. You can give it as 2GB if you want, but 1GB is enough for Kali.



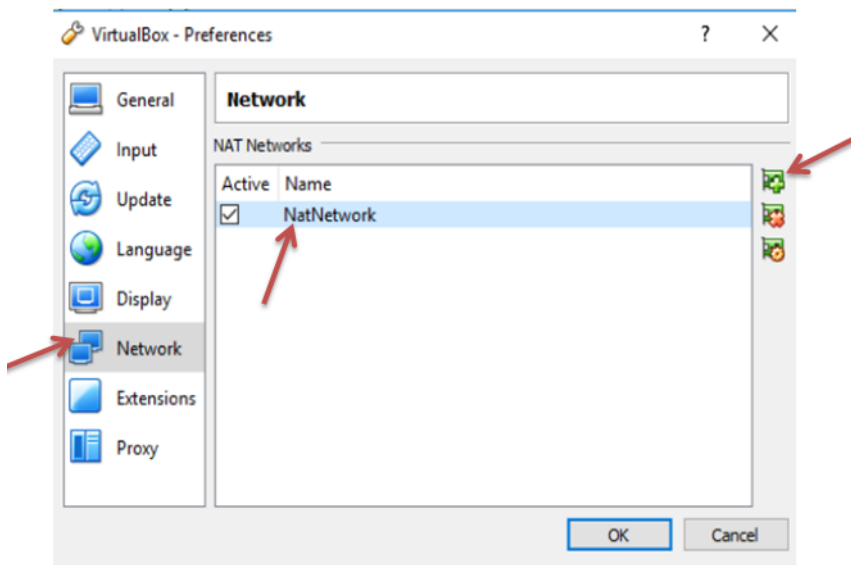
If you click on the Processor, then you can modify the amount of Processor as 2CPU, but 1 CPU is enough for Kali.



Now click on Network Settings and set "Attached to" as "NAT Network" but sometimes the network is automatically created by the virtual box, and sometimes the virtual box doesn't create this network automatically. If it is automatically created, then click OK. If it is not created, then the following screen will be shown:



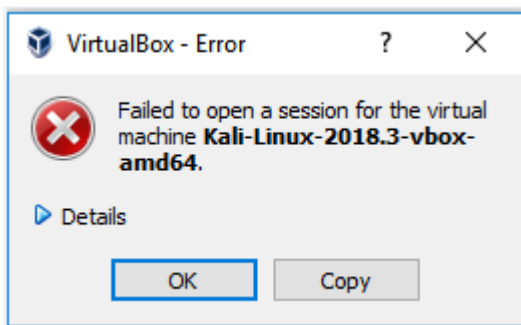
If the virtual box is not automatically created the network, then just go to the VirtualBox → Preferences → Network → + sign. Now you can see that it creates another network.



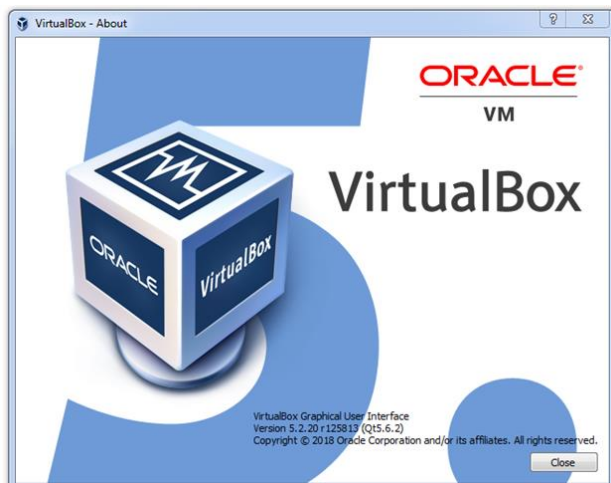
Step 4: Starting of Kali Linux

Now we are starting the Kali Linux by clicking the start button. After clicking two cases will arise:

- Sometimes it will run successfully.
- Sometimes you will get an error like this:



To fix this error, you have to download the **Oracle VM VirtualBox Extension Pack of the same version of VirtualBox**. To find the version of Virtual Box just click on Help then click on About VirtualBox.



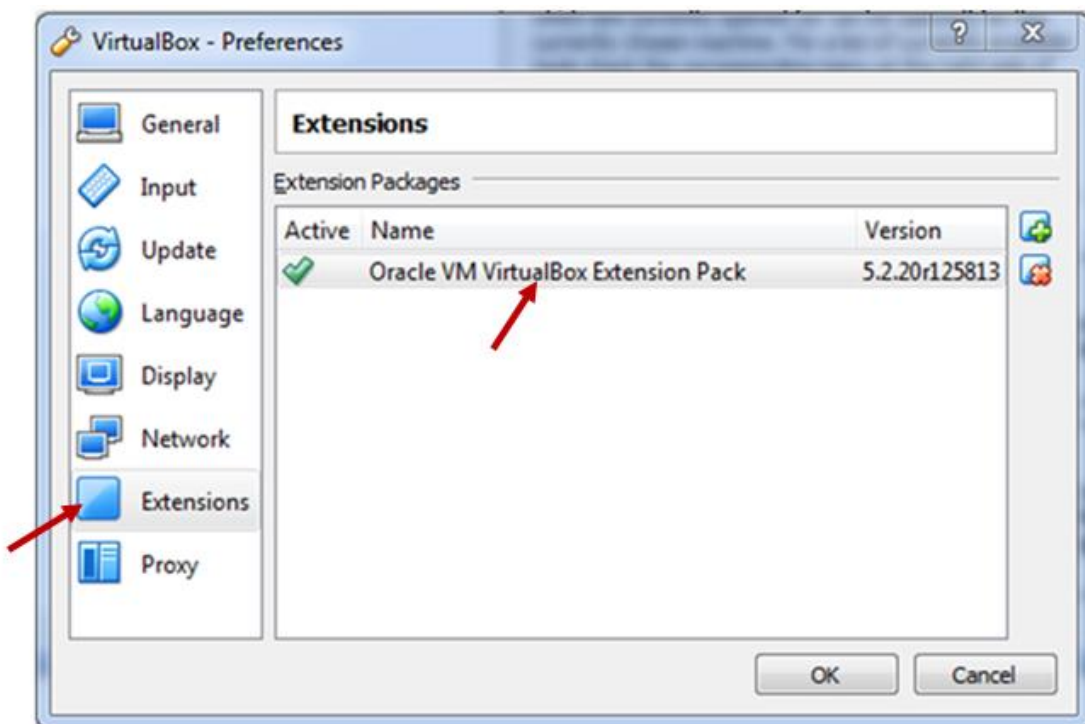
Now download the VirtualBox Extension of 5.2.20 version. Use the following link to download it:

<https://download.virtualbox.org/virtualbox/5.0.20/>

Now click on [Oracle VM VirtualBox Extension Pack-5.0.20.vbox-extpack](#) and download it.

Name	Last modified	Size
Parent Directory		
MD5SUMS	05-Dec-2016 19:05	3.4K
Oracle VM VirtualBox Extension Pack-5.0.20-106931a.vbox-extpack	05-Dec-2016 18:01	16M
Oracle VM VirtualBox Extension Pack-5.0.20.vbox-extpack	05-Dec-2016 18:01	16M
SDKRef.pdf	28-Apr-2016 15:50	2.4M
SHA256SUMS	05-Dec-2016 19:06	4.8K
UserManual.pdf	28-Apr-2016 15:09	3.4M
VBoxGuestAdditions_5.0.20.iso	28-Apr-2016 15:28	56M
VirtualBox-5.0-5.0.20_106931_el5-1.i386.rpm	28-Apr-2016 17:24	80M
VirtualBox-5.0-5.0.20_106931_el5-1.x86_64.rpm	28-Apr-2016 17:24	81M
VirtualBox-5.0-5.0.20_106931_el6-1.i686.rpm	28-Apr-2016 17:24	72M
VirtualBox-5.0-5.0.20_106931_el6-1.x86_64.rpm	28-Apr-2016 17:25	72M
VirtualBox-5.0-5.0.20_106931_el7-1.x86_64.rpm	28-Apr-2016 19:06	67M
VirtualBox-5.0-5.0.20_106931_fedora18-1.i686.rpm	28-Apr-2016 19:06	67M
VirtualBox-5.0-5.0.20_106931_fedora18-1.x86_64.rpm	28-Apr-2016 19:06	67M
VirtualBox-5.0-5.0.20_106931_fedora22-1.i686.rpm	28-Apr-2016 17:25	67M
VirtualBox-5.0-5.0.20_106931_fedora22-1.x86_64.rpm	28-Apr-2016 17:25	67M
VirtualBox-5.0-5.0.20_106931_fedora24-1.i686.rpm	28-Apr-2016 17:25	67M
VirtualBox-5.0-5.0.20_106931_fedora24-1.x86_64.rpm	28-Apr-2016 17:25	67M
VirtualBox-5.0-5.0.20_106931_openSUSE131-1.i586.rpm	28-Apr-2016 19:06	60M

Install the VirtualBox extension pack. After installing, to check it clicks on File → Preferences → Extensions. Here you can see the Oracle VM VirtualBox Extension Pack. Click OK.



Now the problem is fixed, and we can start the virtual machine by clicking the start button.



After starting, it will ask us for the **Username**, and the default Username is root then it will ask us for the **password** and the default password is the reverse of root which is **toor**. Now you will get a screen like this:

