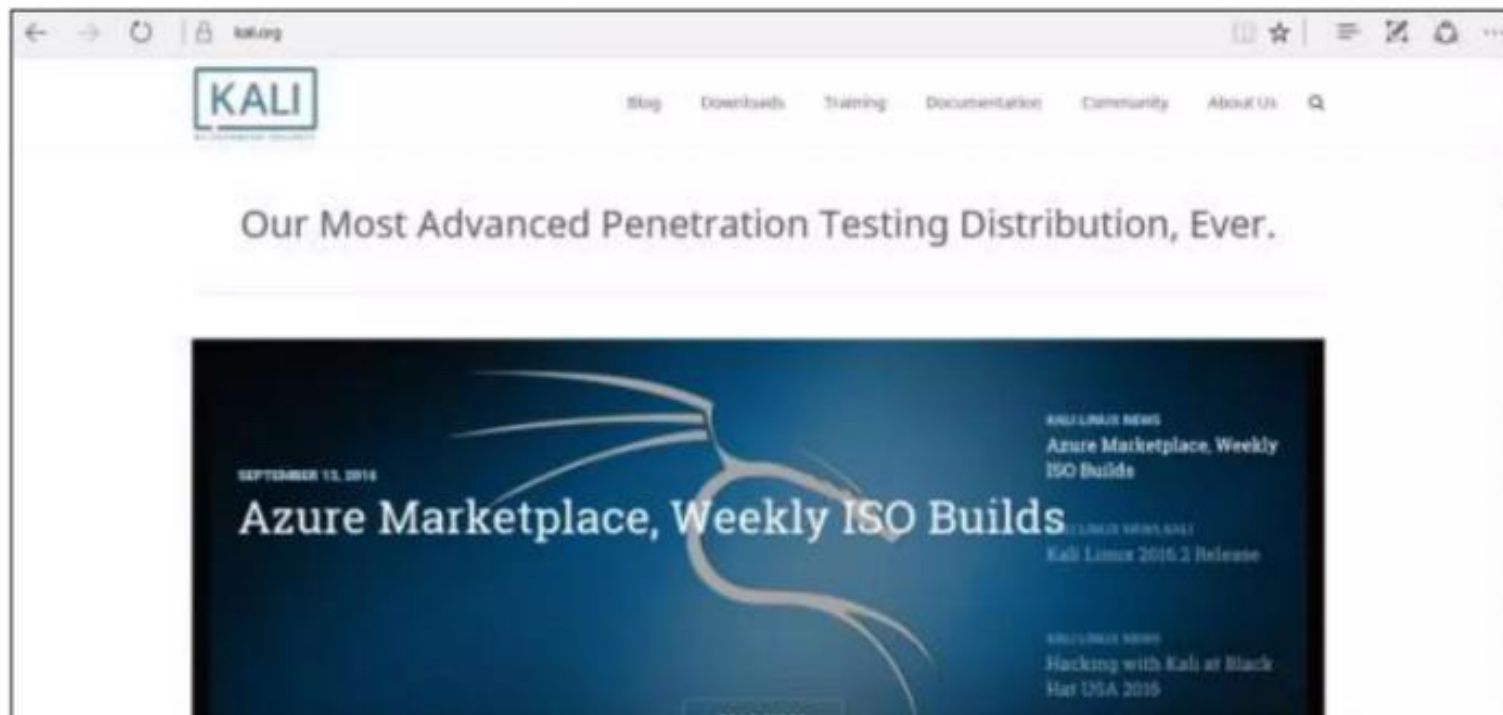# Install Kali Linux

Kali Linux is one of the best security packages of an ethical hacker, containing a set of tools divided by the categories. It is an open source and its official webpage is https://www.kali.org.

Generally, Kali Linux can be installed in a machine as an Operating System, as a virtual machine which we will discuss in the following section. Installing Kali Linux is a practical option as it provides more options to work and combine the tools. You can also create a live boot CD or USB. All this can be found in the following link: https://www.kali.org/downloads/

**BackTrack** was the old version of Kali Linux distribution. The latest release is Kali 2016.1 and it is updated very often.



To install Kali Linux —

- First, we will download the Virtual box and install it.

- Later, we will download and install Kali Linux distribution.

# Download and Install the Virtual Box

A Virtual Box is particularly useful when you want to test something on Kali Linux that you are unsure of. Running Kali Linux on a Virtual Box is safe when you want to experiment with unknown packages or when you want to test a code.

With the help of a Virtual Box, you can install Kali Linux on your system (not directly in your hard disk) alongside your primary OS which can MAC or Windows or another flavor of Linux.

Let's understand how you can download and install the Virtual Box on your system.

**Step 1**: To download, go to https://www.virtualbox.org/wiki/Downloads. Depending on your operating system, select the right package. In this case, it will be the first one for Windows as shown in the following screenshot.

# VirtualBox

## Download VirtualBox

Here, you will find links to VirtualBox binaries and its source code.

### VirtualBox binaries

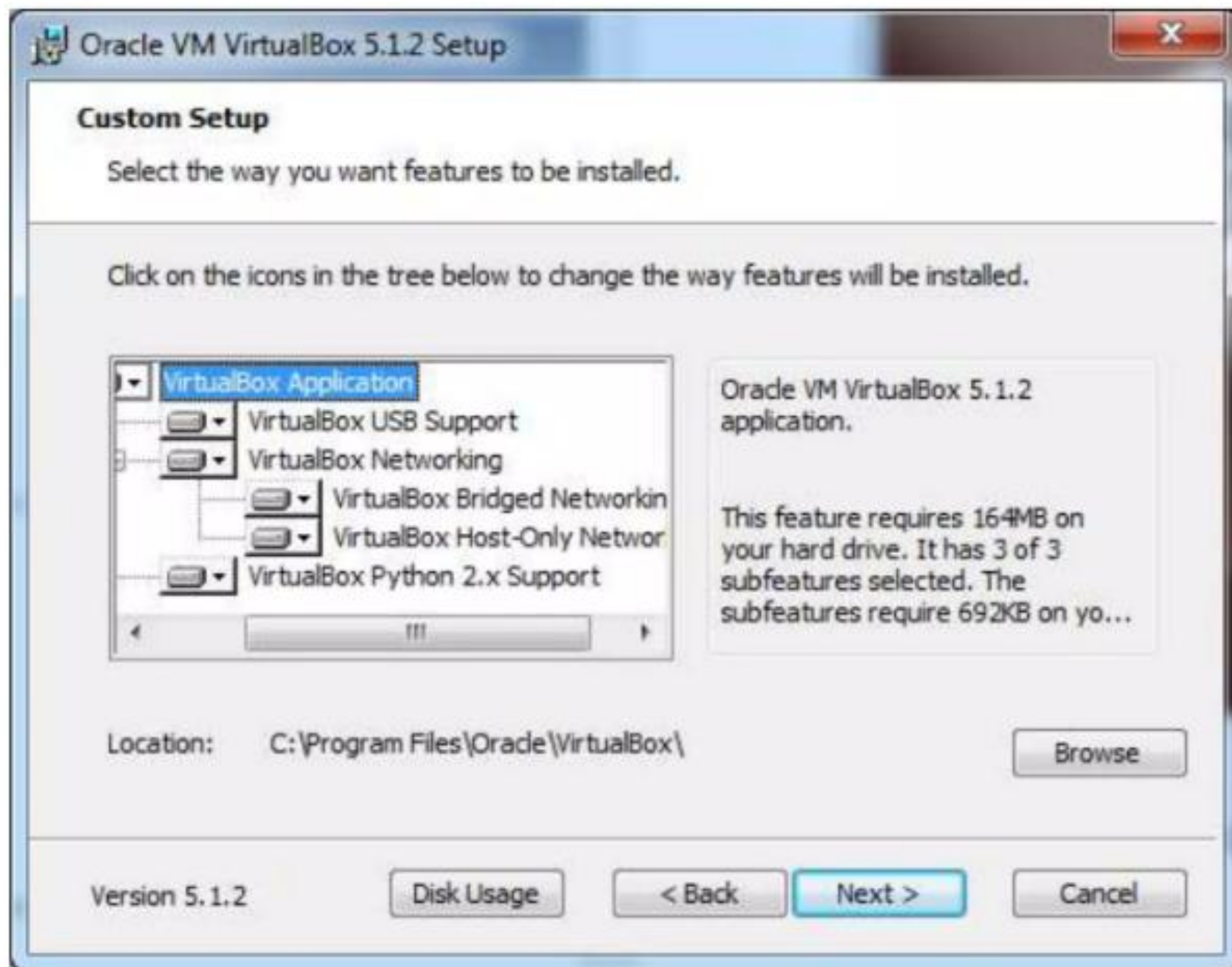By downloading, you agree to the terms and conditions of the respective license.

- **VirtualBox platform packages**. The binaries are released under the terms of the GPL, version 2.
  - **VirtualBox 5.1.2 for Windows hosts** ⇒x86/amd64
  - **VirtualBox 5.1.2 for OS X hosts** ⇒amd64
  - **VirtualBox 5.1.2 for Linux hosts**
  - **VirtualBox 5.1.2 for Solaris hosts** ⇒amd64

- **VirtualBox 5.1.2 Oracle VM VirtualBox Extension Pack** ⇒All supported platforms
  Support for USB 2.0 and USB 3.0 devices, VirtualBox RDP and PXE boot for Intel cards. See this chapter from the User Manual for an introduct
  Extension Pack binaries are released under the VirtualBox Personal Use and Evaluation License (PUEL).
  Please install the extension pack with the same version as your installed version of VirtualBox:
  If you are using **VirtualBox 5.0.26**, please download the extension pack ⇒ **here**.
  If you are using **VirtualBox 4.3.38**, please download the extension pack ⇒ **here**.

**Step 2**: Click **Next**.

Oracle VM VirtualBox 5.1.2 Setup

# Welcome to the Oracle VM VirtualBox 5.1.2 Setup Wizard

The Setup Wizard will install Oracle VM VirtualBox 5.1.2 on your computer. Click Next to continue or Cancel to exit the Setup Wizard.
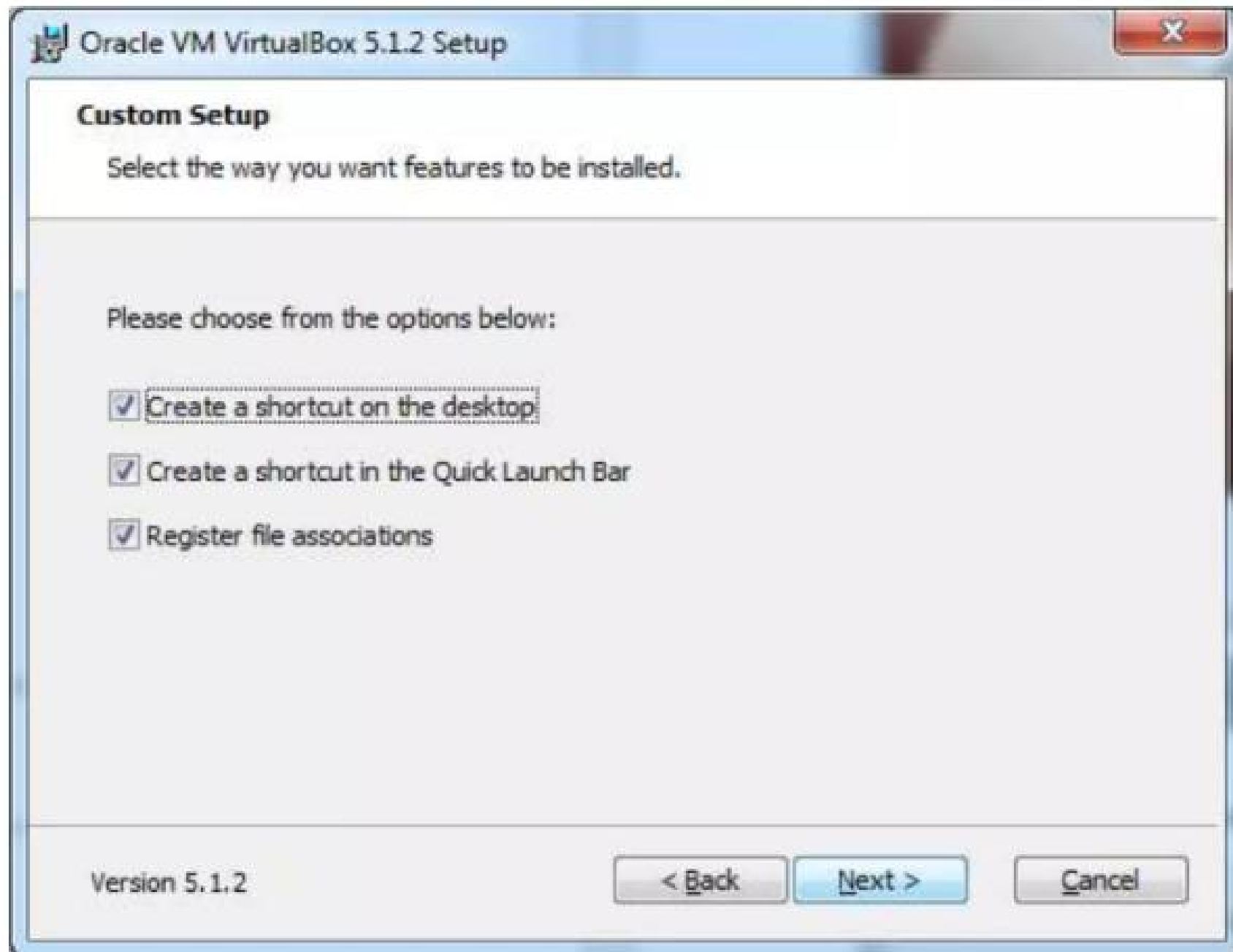
Version 5.1.2

Next >     Cancel

**Step 3**: The next page will give you options to choose the location where you want install the application. In this case, let us leave it as default and click **Next**.

Oracle VM VirtualBox 5.1.2 Setup

**Custom Setup**

Select the way you want features to be installed.

Click on the icons in the tree below to change the way features will be installed.

VirtualBox Application
- VirtualBox USB Support
- VirtualBox Networking
    - VirtualBox Bridged Networkin
    - VirtualBox Host-Only Networ
- VirtualBox Python 2.x Support

Oracle VM VirtualBox 5.1.2 application.

This feature requires 164MB on your hard drive. It has 3 of 3 subfeatures selected. The subfeatures require 692KB on yo...

Location:    C:\Program Files\Oracle\VirtualBox\    Browse

Version 5.1.2    Disk Usage    < Back    Next >    Cancel

**Step 4**: Click **Next** and the following **Custom Setup** screenshot pops up. Select the features you want to be installed and click Next.

Oracle VM VirtualBox 5.1.2 Setup

**Custom Setup**

Select the way you want features to be installed.

Please choose from the options below:

☑ Create a shortcut on the desktop

☑ Create a shortcut in the Quick Launch Bar

☑ Register file associations

Version 5.1.2          < Back     Next >     Cancel

**Step 5**: Click **Yes** to proceed with the installation.

**Step 6**: The **Ready to Install** screen pops up. Click Install.



Oracle VM VirtualBox 5.1.2 Setup

**Ready to Install**

The Setup Wizard is ready to begin the Custom installation.

Click Install to begin the installation. If you want to review or change any of your installation settings, click Back. Click Cancel to exit the wizard.

Version 5.1.2      < Back      Install      Cancel
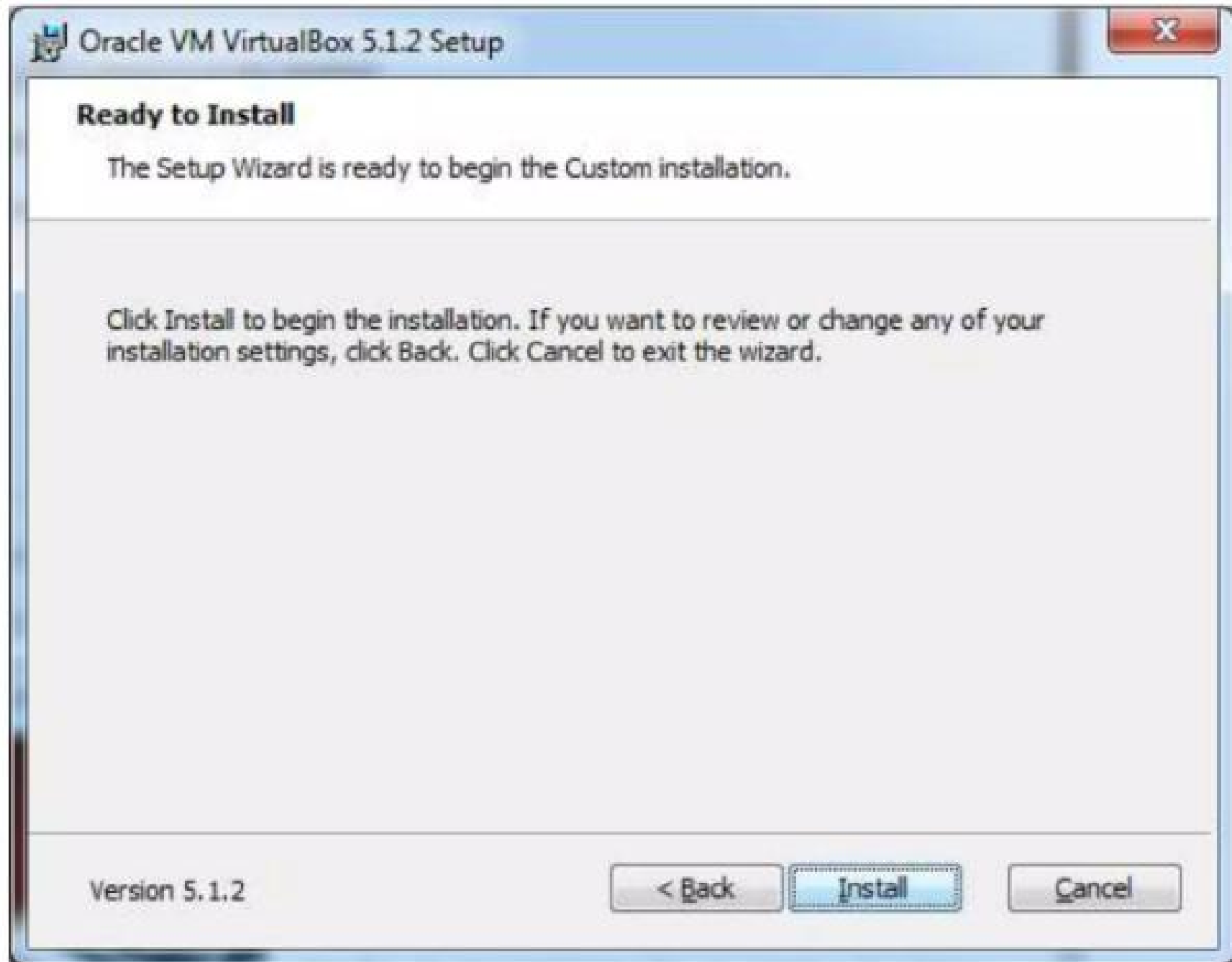
**Step 7**: Click the **Finish** button.



The Virtual Box application will now open as shown in the following screenshot. Now we are ready to install the rest of the hosts for this manual and this is also recommended for professional usage.

**Oracle VM VirtualBox Manager**

File   Machine   Help

New   Settings   Discard   Start

Details   Snapshots

**Welcome to VirtualBox!**

The left part of this window is a list of all virtual machines on your computer. The list is empty now because you haven't created any virtual machines yet.

In order to create a new virtual machine, press the **New** button in the main tool bar located at the top of the window.

You can press the **F1** key to get instant help, or visit www.virtualbox.org for the latest information and news.

# Install Kali Linux

Now that we have successfully installed the Virtual Box, let's move on to the next step and install Kali Linux.

**Step 1**: Download the Kali Linux package from its official website: https://www.kali.org/downloads/



| Image Name | Torrent | Size | Version | SHA1Sum |
|---|---|---|---|---|
| Kali Linux 64 bit VM | Torrent | 2.0G | 2016.1 | 2b49bf1e77c11ecb5618249ca69a46f23a6f5d2d |
| Kali Linux 32 bit VM PAE | Torrent | 2.0G | 2016.1 | e71867a8bbf7ad55fa437eb7c93fd69e450f6759 |

**Step 2**: Click **VirtualBox -> New** as shown in the following screenshot.
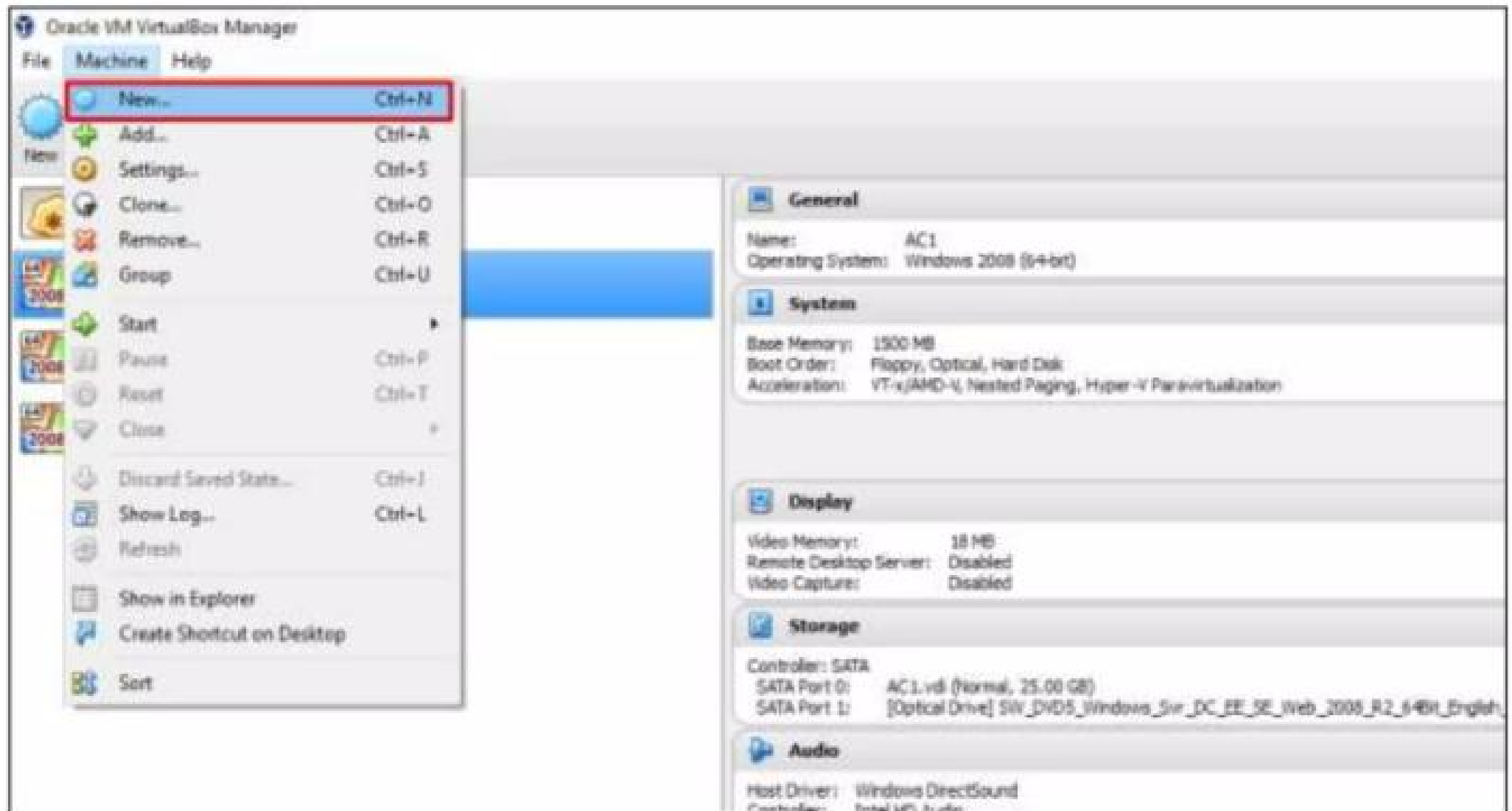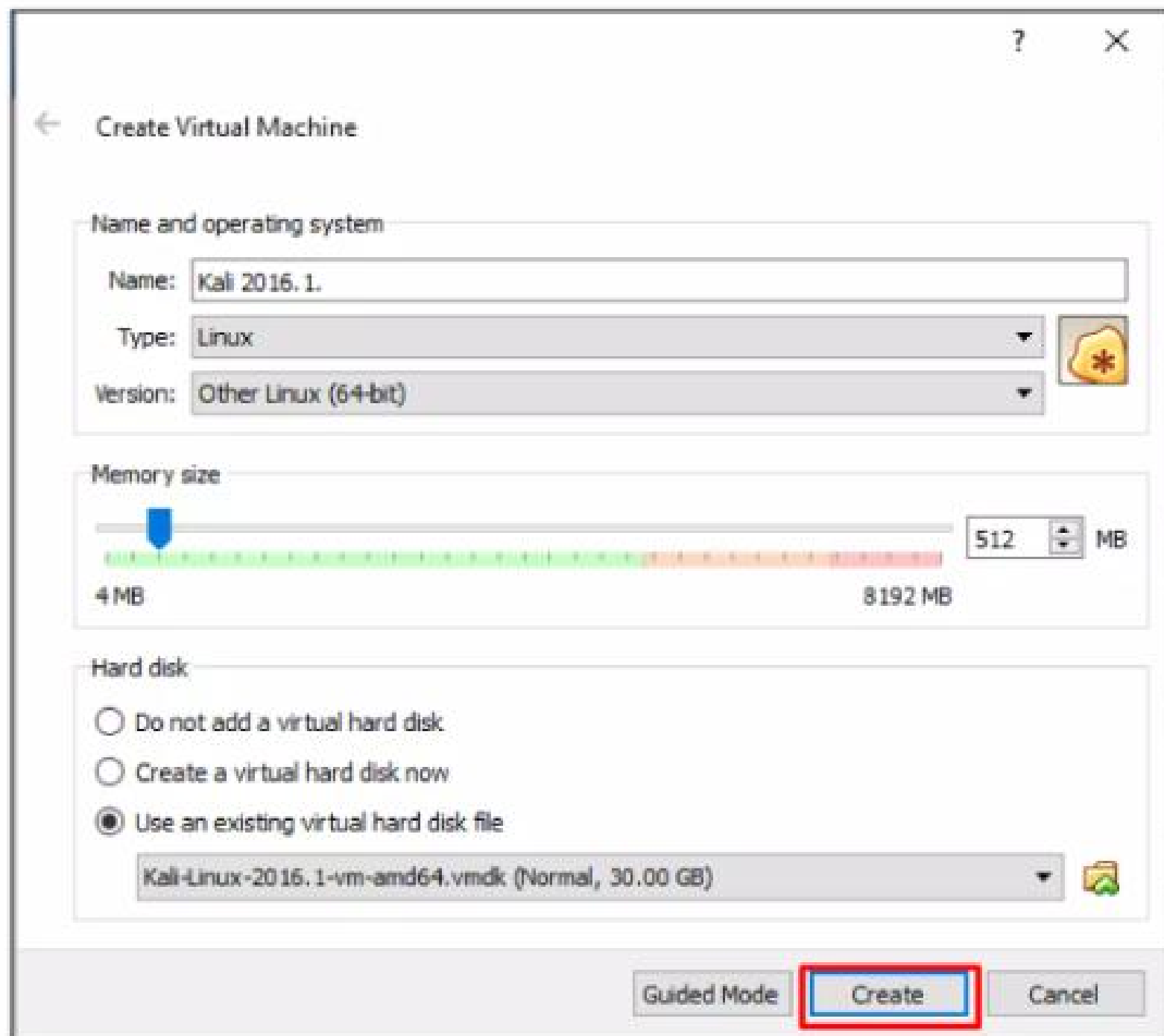
**Step 3**: Choose the right **virtual hard disk file** and click **Open**.
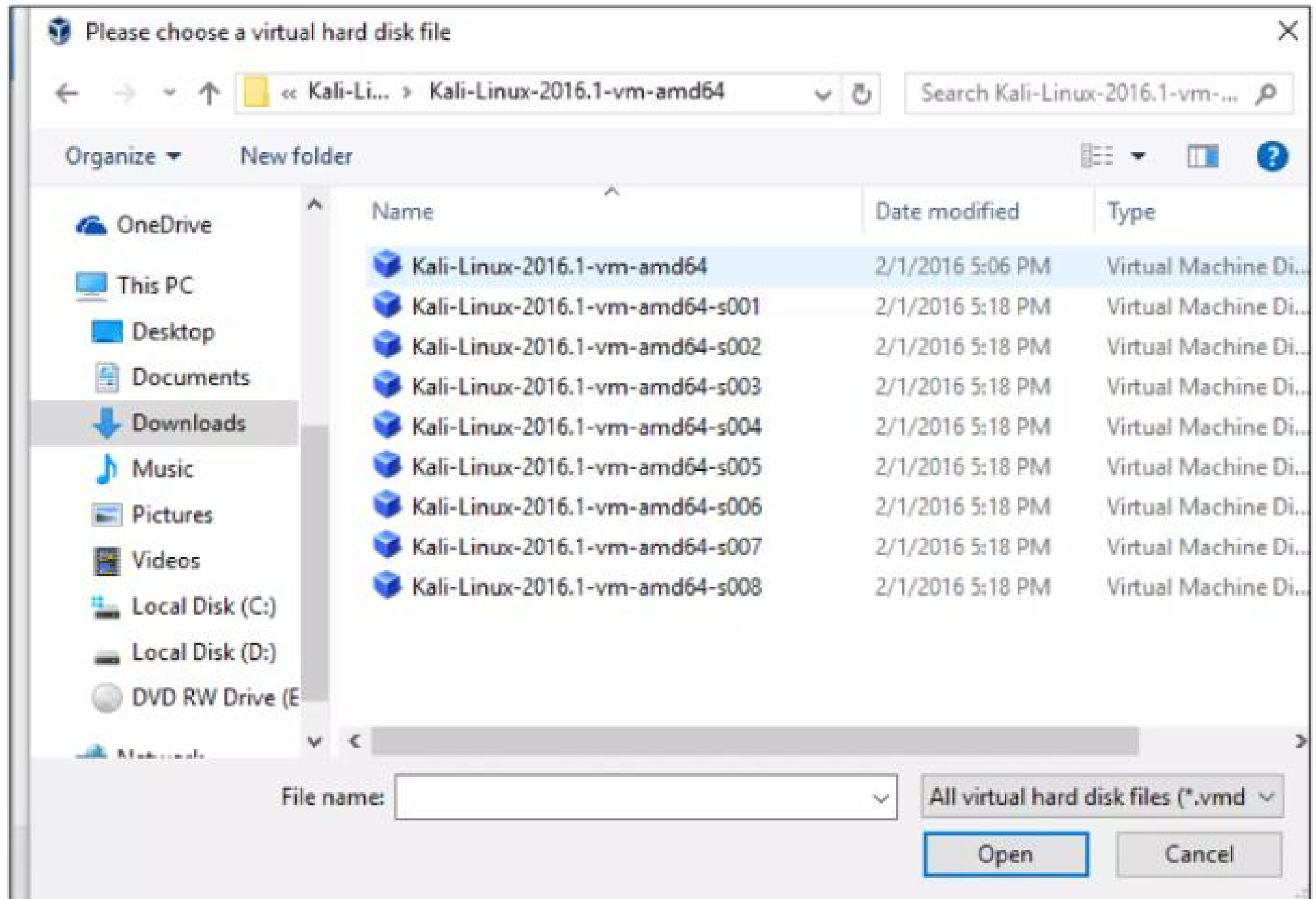
**Step 4**: The following screenshot pops up. Click the **Create** button.

**Step 5**: Start Kali OS. The default username is **root** and the password is **toor**.
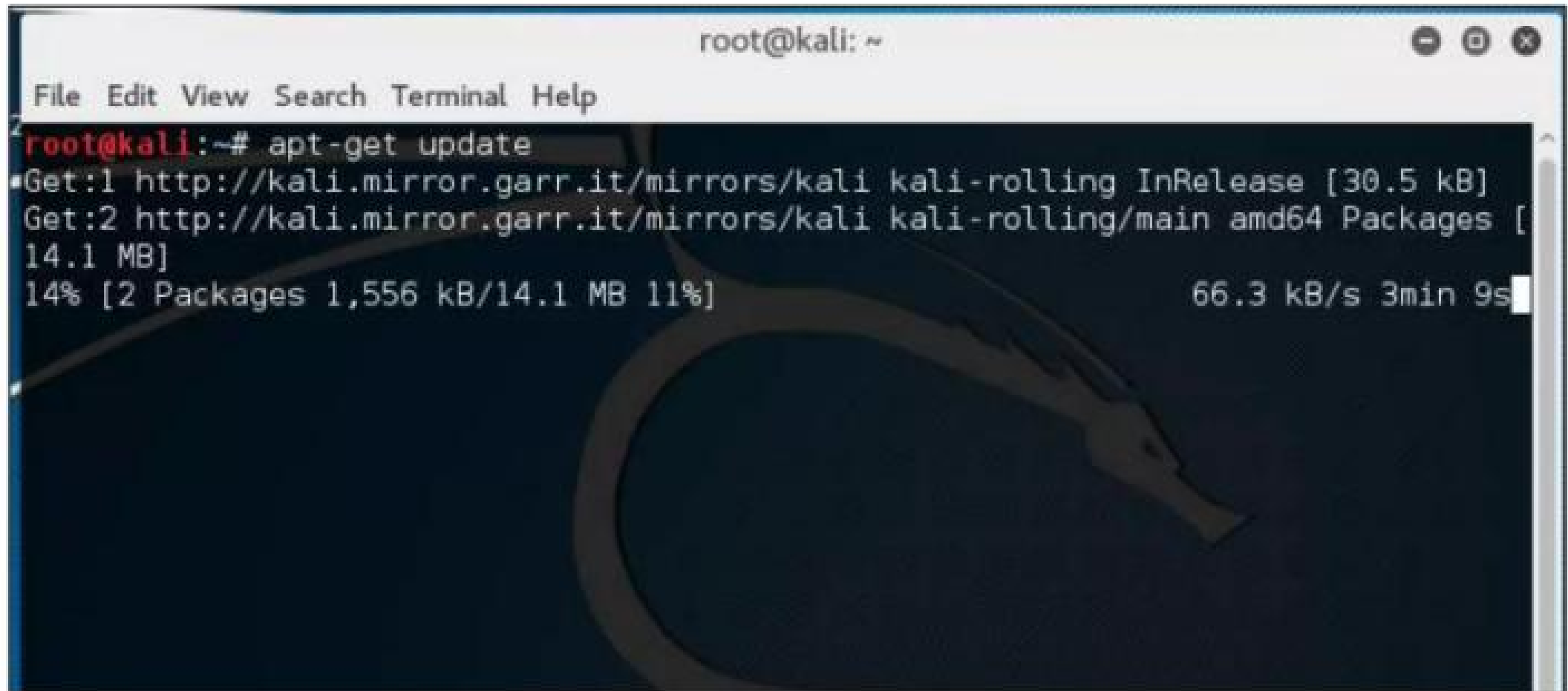
# Update Kali

It is important to keep updating Kali Linux and its tools to the new versions, to remain functional. Following are the steps to update Kali.

**Step 1**: Go to Application -> Terminal. Then, type "apt-get update"  and the update will take place as shown in the following screenshot.

**Step 2**: Now to upgrade the tools, type "apt-get upgrade" and the new packages will be downloaded.

**Step 2**: Now to upgrade the tools, type "apt-get upgrade" and the new packages will be downloaded.



```
Applications ▼    Places ▼    Terminal ▼                          Wed 14:56
                                      root@kali: ~

File  Edit  View  Search  Terminal  Help
Reading package lists... Done
root@kali:~#
root@kali:~#
root@kali:~#
root@kali:~# apt-get upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
Calculating upgrade... Done
The following packages were automatically installed and are no longer required:
  castxml gccxml gdebi-core libasn1-8-heimdal libgssapi3-heimdal
  libhcrypto4-heimdal libhdb9-heimdal libheimbase1-heimdal
  libheimntlm0-heimdal libhx509-5-heimdal libkdc2-heimdal libkrb5-26-heimdal
  libntdb1 libroken18-heimdal libwind0-heimdal python-ctypeslib python-ecdsa
  python-ntdb python-pyatspi python-tidylib vlc-plugin-notify vlc-plugin-samba
Use 'apt autoremove' to remove them.
The following packages have been kept back:
  adwaita-icon-theme apktool backdoor-factory bind9-host binwalk bluez
  bluez-obexd bundler cadaver couchdb cpp cpp-5 cutycapt default-jdk
  default-jre default-jre-headless dnsutils dradis driftnet erlang-asn1
  erlang-base erlang-crypto erlang-eunit erlang-inets erlang-mnesia
  erlang-os-mon erlang-public-key erlang-runtime-tools erlang-snmp erlang-ssl
  erlang-syntax-tools erlang-tools erlang-xmerl evolution-data-server
  evolution-data-server-common file folks-common ftp g++ g++-5 gcc gcc-5
  gcc-5-base gdm3 gedit gedit-common ghostscript girl.2-gdkpixbuf-2.0
  girl.2-gnomedesktop-3.0 girl.2-gst-plugins-base-1.0 girl.2-gstreamer-1.0
```

**Step 3**: It will ask if you want to continue. Type "**Y**" and "**Enter**".

```
  zsh-common
1264 upgraded, 0 newly installed, 0 to remove and 480 not upgraded.
Need to get 955 MB of archives.
After this operation, 162 MB of additional disk space will be used.
Do you want to continue? [Y/n]  Y  ◄───────────
```

**Step 4**: To upgrade to a newer version of Operating System, type "**apt-get dist-upgrade**".