

Kali Linux Setup

Overview

Kali Linux is most popular penetration testing and offensive security testing suite that comes pre-loaded with dozens of tools. Kali Linux is a Debian based distribution. VirtualBox is a powerful x86 and AMD64/Intel64 virtualization product. Virtualbox is a type-2 (aka hosted) hypervisor. Type-2 hypervisors run on a conventional operating systems just as other computer programs do. A guest operating system runs as a process on the host. Type-2 hypervisors abstract guest operating systems from the host operating system.

Site: <https://www.kali.org/>
<https://www.virtualbox.org/>

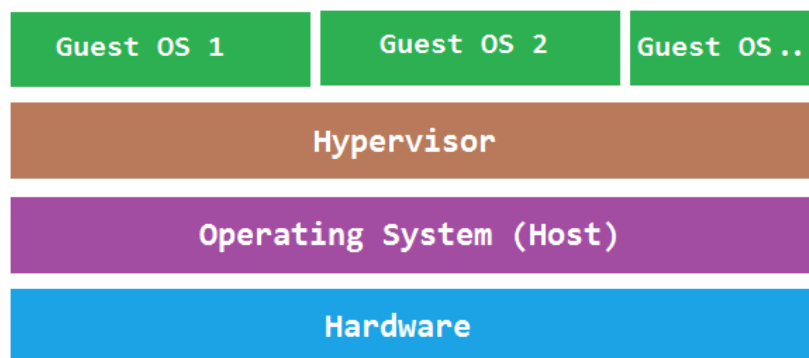
Terminology

The following table defines some of the key terms you will need to understand:

Term	Definition
Hypervisor / Virtual Machine Monitor (VMM)	A piece of computer software, firmware or hardware that creates and runs virtual machines. A computer on which a hypervisor runs one or more virtual machines is called a <i>host</i> machine, and each virtual machine is called a <i>guest</i> machine.

Architecture

The following diagram illustrates a type-2 hypervisor.



Lab Instructions

This set up comes with packages and configurations that would have been needed if choosing to install a simple image from kali. <https://www.kali.org/downloads/>

Tools and devices required for the install:

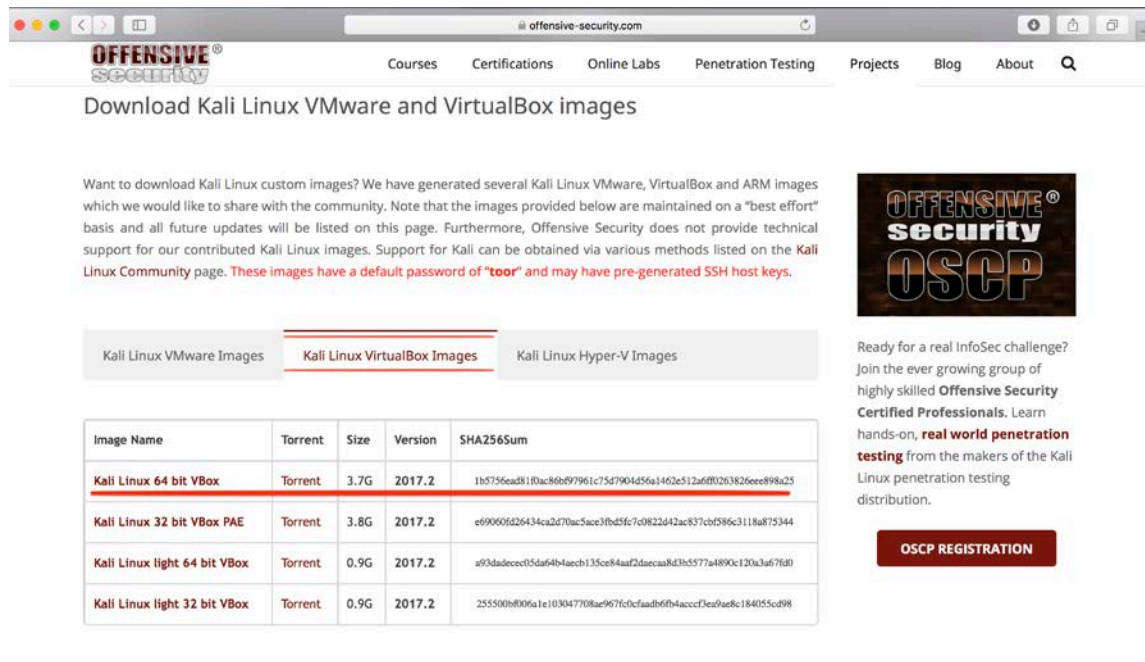
- VirtualBox: <https://www.virtualbox.org/wiki/Downloads>
- Device with 8GB RAM minimum
- Device storage with at least 50 GB empty

Set up:

Download the Kali ova from the offensive security website: <https://www.offensive-security.com/kali-linux-vmware-virtualbox-image-download/>

Click on Kali Linux VirtualBox Image.

Select the Kali Linux 64 bit VBox Image to start the download.



The screenshot shows the website www.offensive-security.com with the navigation menu: Courses, Certifications, Online Labs, Penetration Testing, Projects, Blog, About. The main heading is "Download Kali Linux VMware and VirtualBox images".

Text on the page: "Want to download Kali Linux custom images? We have generated several Kali Linux VMware, VirtualBox and ARM 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.**"

Navigation tabs: Kali Linux VMware Images, **Kali Linux VirtualBox Images**, Kali Linux Hyper-V Images

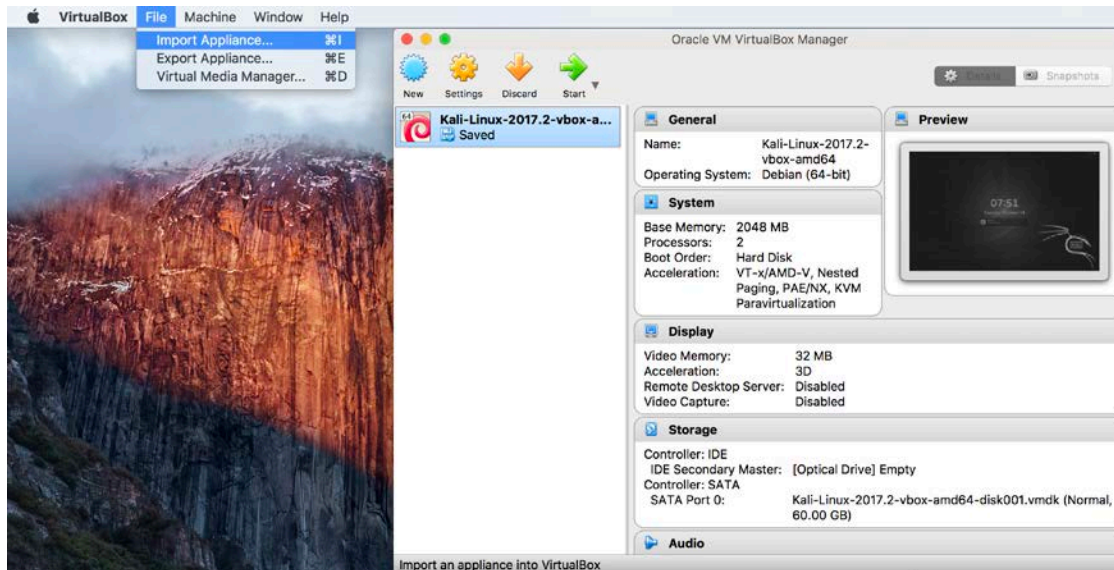
Image Name	Torrent	Size	Version	SHA256Sum
Kali Linux 64 bit VBox	Torrent	3.7G	2017.2	1b5756ead81f0ac86b97961c75d7904d56a1462e512a6ff0263826eee898a25
Kali Linux 32 bit VBox PAE	Torrent	3.8G	2017.2	e69060fd26434ca2d70ac5acc3bd5fc7c0922d42ac837cbf586c3118a875344
Kali Linux light 64 bit VBox	Torrent	0.9G	2017.2	a93dadecce05da64b4aebc135ce84af2daecaa8d3b5577a4890c120a3a67fd0
Kali Linux light 32 bit VBox	Torrent	0.9G	2017.2	255500b8006a1e103047708ae967cfcfaadb6fb4accf3ea9ae8c184055cd98

OSCP REGISTRATION

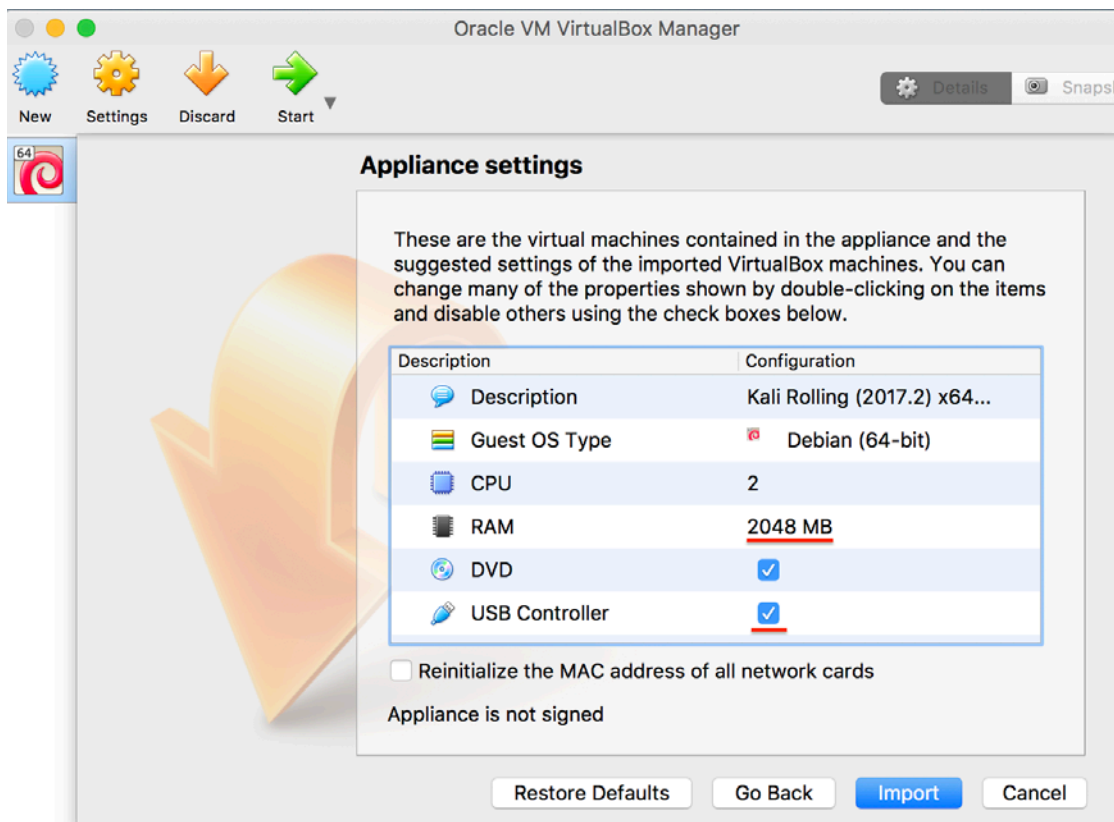
Once the download is done, you can verify the hash under sha256sum from offensive security's website of the downloaded image. Below is the Unix command to verify the hash:
`shasum -a 256 <name of the downloaded ova>`

For a windows machine, please follow the instructions in the following link:
<https://support.microsoft.com/en-us/help/889768/how-to-compute-the-md5-or-sha-1-cryptographic-hash-values-for-a-file>

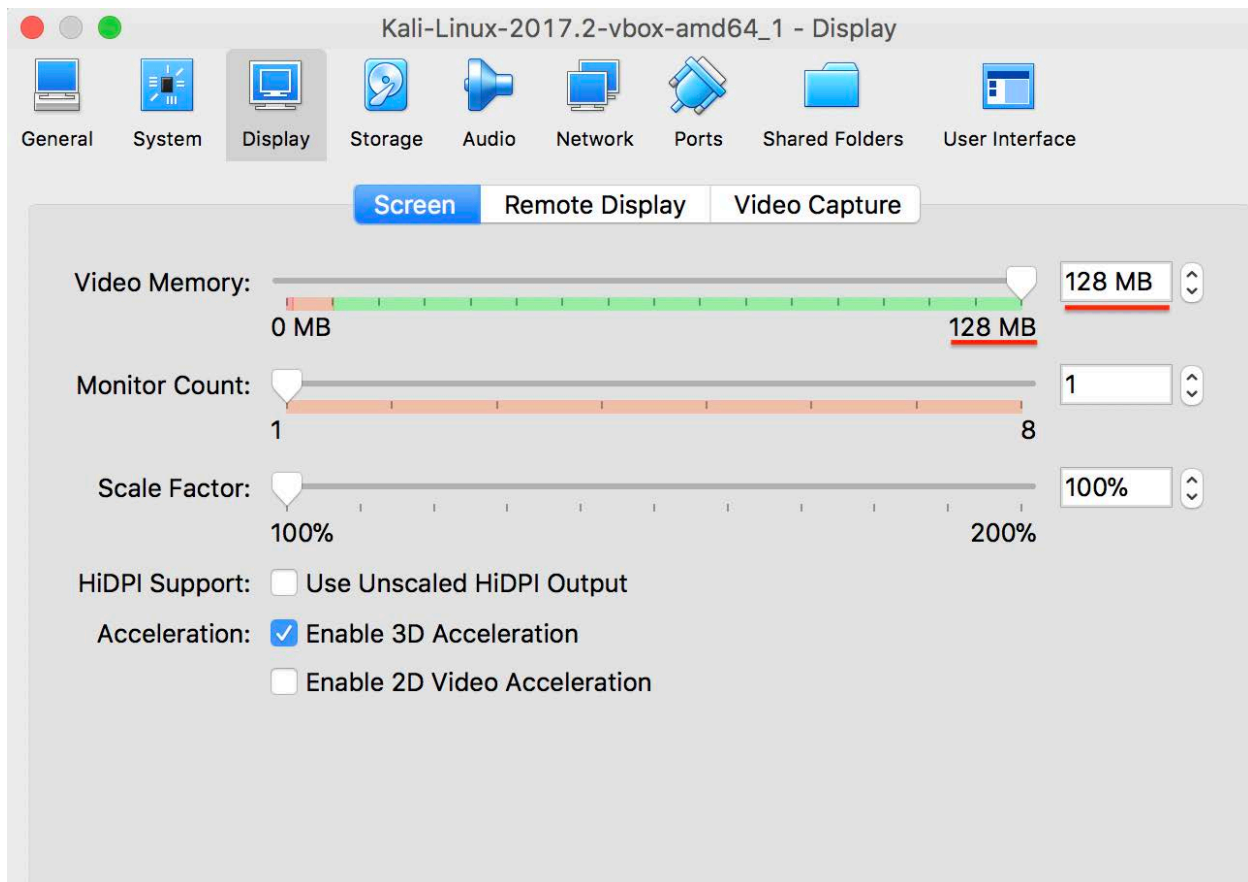
After making sure that the two hashes are matching, open virtualbox and select “import appliance”.



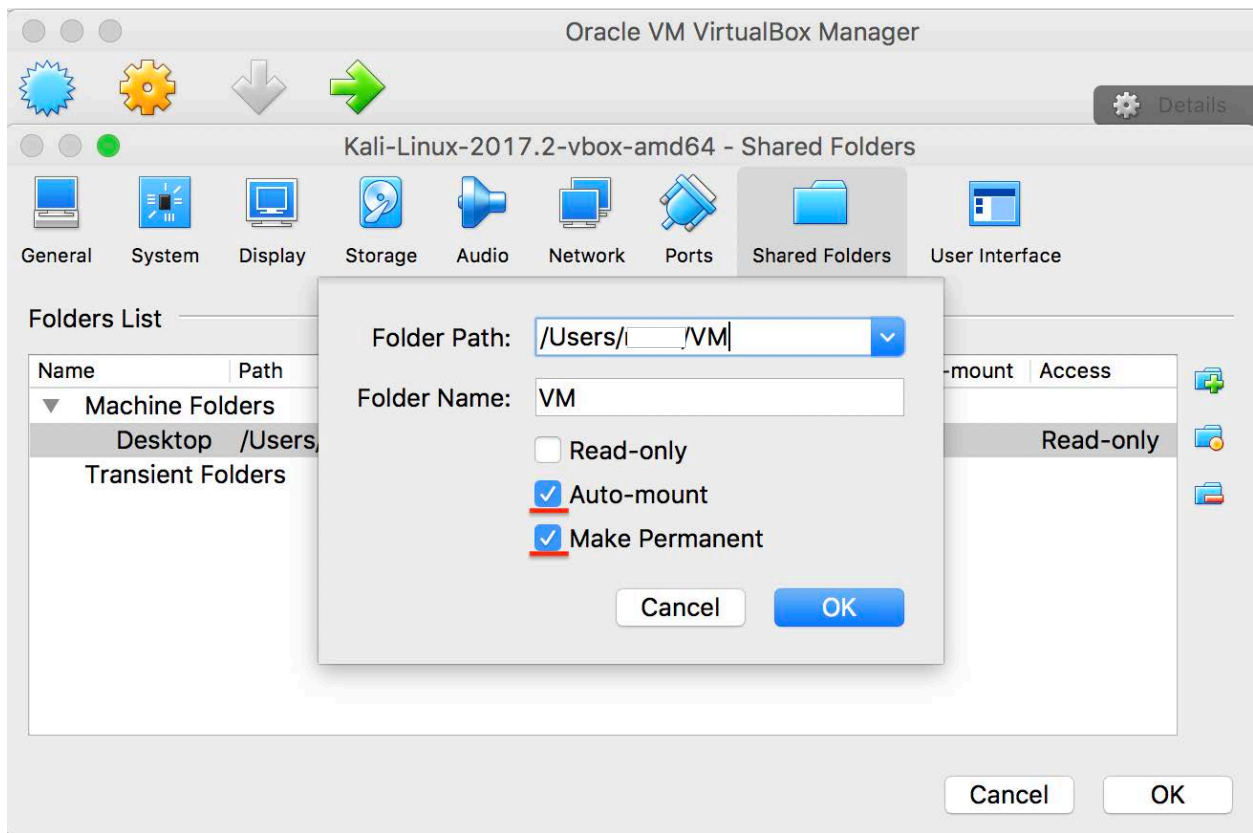
In the appliance settings, change the “RAM” to a higher or lower amount based on your device capacity, a minimum of 2048 MB is highly recommended. Unselect the “USB Controller”.



After configuring those appliance settings, start to import the appliance. Once the import is finished, go into Settings → Display → Screen and change the video memory to 128 MB



Finally, create a Shared Folder. Go into Settings → Shared Folder → Add a folder. Create a specific path and folder for this shared folder. Select Auto-Mount and Make Permanent -if prompted-.



You can now start your VM, your default credentials should be root-toor.