

## Lab Setup Instructions

Most labs would be conducted on the Kali Linux Virtual Machine using VirtualBox. Instructions for installing the VirtualBox software and importing the Kali Linux VM are given. We **recommend** VirtualBox, but instructions for importing the machine in VMware are also available at the end.

**Link for Kali Linux VM (VirtualBox, Recommended):**

<https://www.dropbox.com/s/y71nhxheuffirpc/Kali-Linux-VM-VirtualBox.zip?dl=0>

**Link for Kali Linux VM (VMware):**

<https://www.dropbox.com/s/e4i11g9obs5yrug/Kali-Linux-VMware.ova?dl=0>

**Note:** When expanded, the VM would require at least 10GB. If you experience any problem during lab setup, please drop us a message.

### The VirtualBox Route

#### Installing VirtualBox

To run the virtual machine, you need a VMware player such as VirtualBox. VirtualBox is free for use as an educational tool and can be downloaded from the following link: <https://www.virtualbox.org>

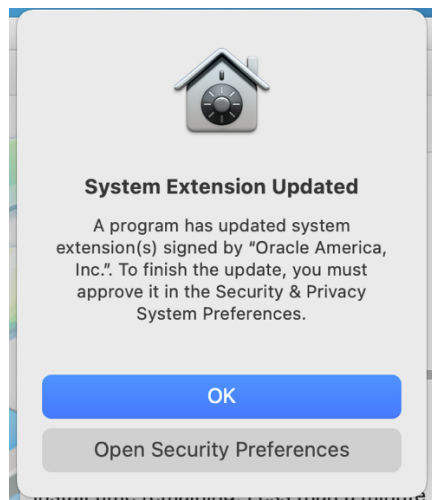


Click the “Download VirtualBox 6.1” button and you will be taken to the download page.

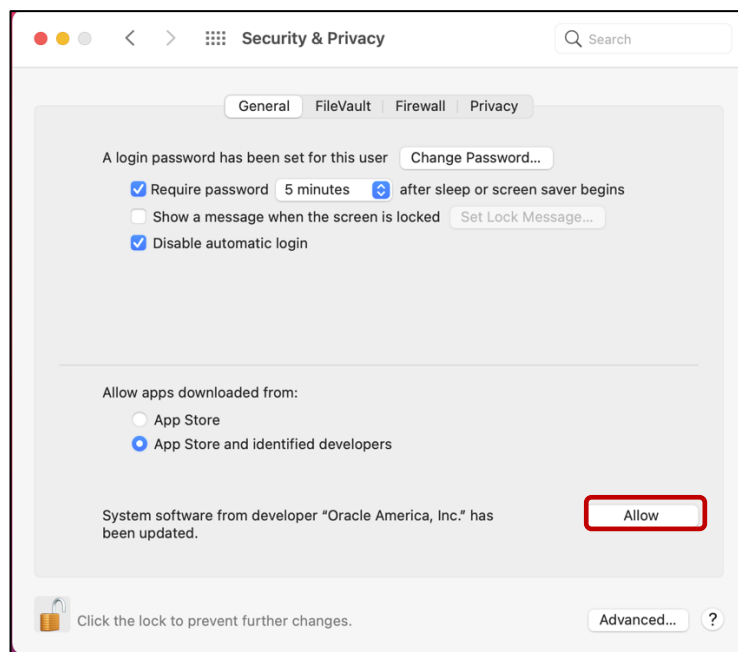


Please select the appropriate version based on your operating system and install it.

Normally the following steps are not required on other operating systems, but please note that if you are running **MacOS** then you may need to turn on Security permissions as some kernel modules of VirtualBox are blocked in the newer versions of the MacOS. You may see a warning:



In this case, please go to **System Preferences --> Security and Privacy --> General** and then allow the permissions as shown in the following figure:



After that, please follow the normal steps as guided by the VirtualBox installer for completing the installation.

## The “KaliLinux” Virtual Machine

The virtual machine is available as a [resource](#) for this lecture and can be downloaded from there.

### Credentials:

- User: [kali](#) Password: [kali](#)
- Super user password: [kali](#)

## Installation and Settings of the Kali Linux VM

**Disclaimer:** The VM machine and any software contained within is merely to be used in a sandboxed environment as it has several vulnerabilities. It has been configured to be used for educational and demonstration purposes only and Logix Academy does not accept any responsibility for any loss resulting from the use of this machine.

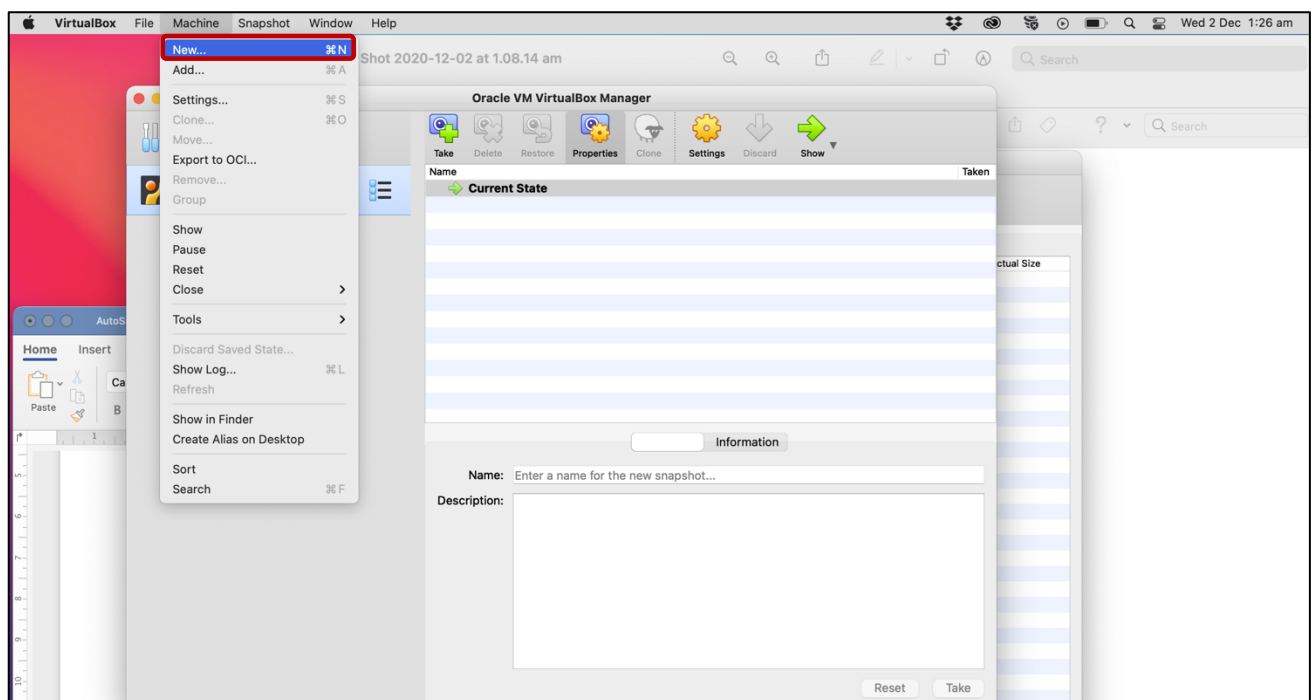
### Safety Tips:

- Do not put this VM on a public facing machine
- Do not put any sensitive document or information on the VM

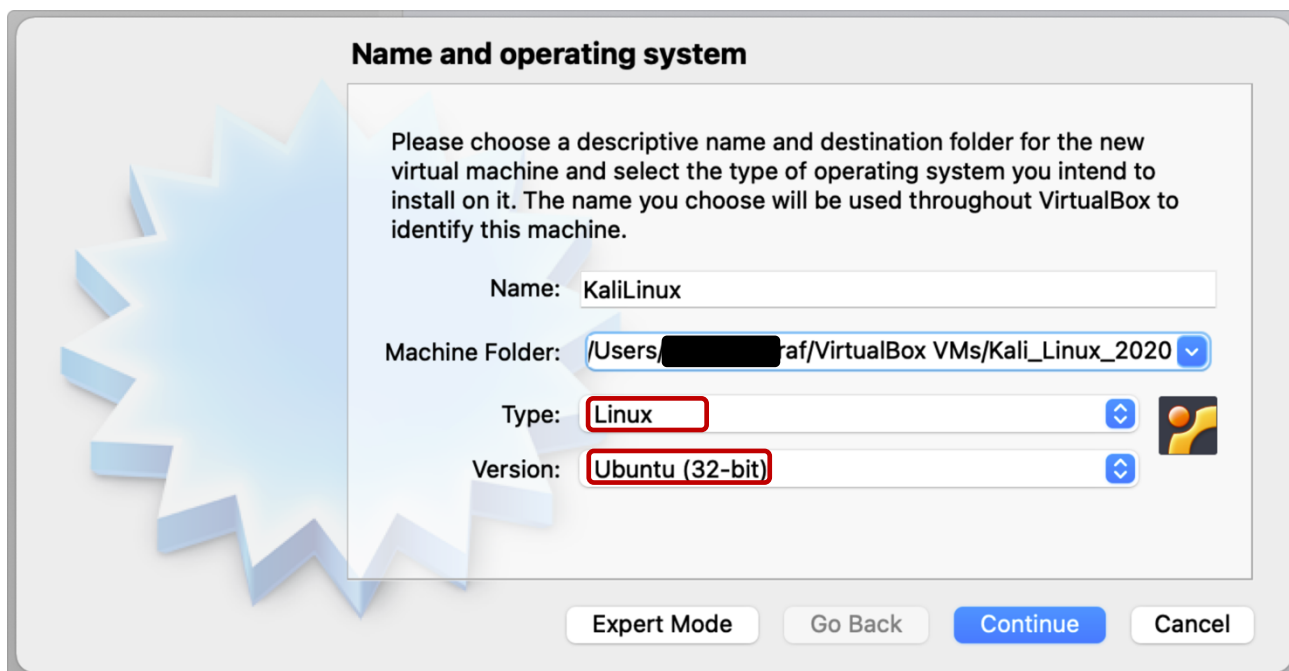
### Steps:

1. Download and install Virtual Box as described previously
2. Download the Kali Linux Virtual Machine from <https://www.dropbox.com/s/y71nhxheuffirpc/Kali-Linux-VM-VirtualBox.zip?dl=0>
3. Unzip the virtual machine folder

Open VirtualBox then go to **Machine --> New**



Please select a name of the machine, for **Type -> Linux** and for **Version -> 32-bit**



**Name and operating system**

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.

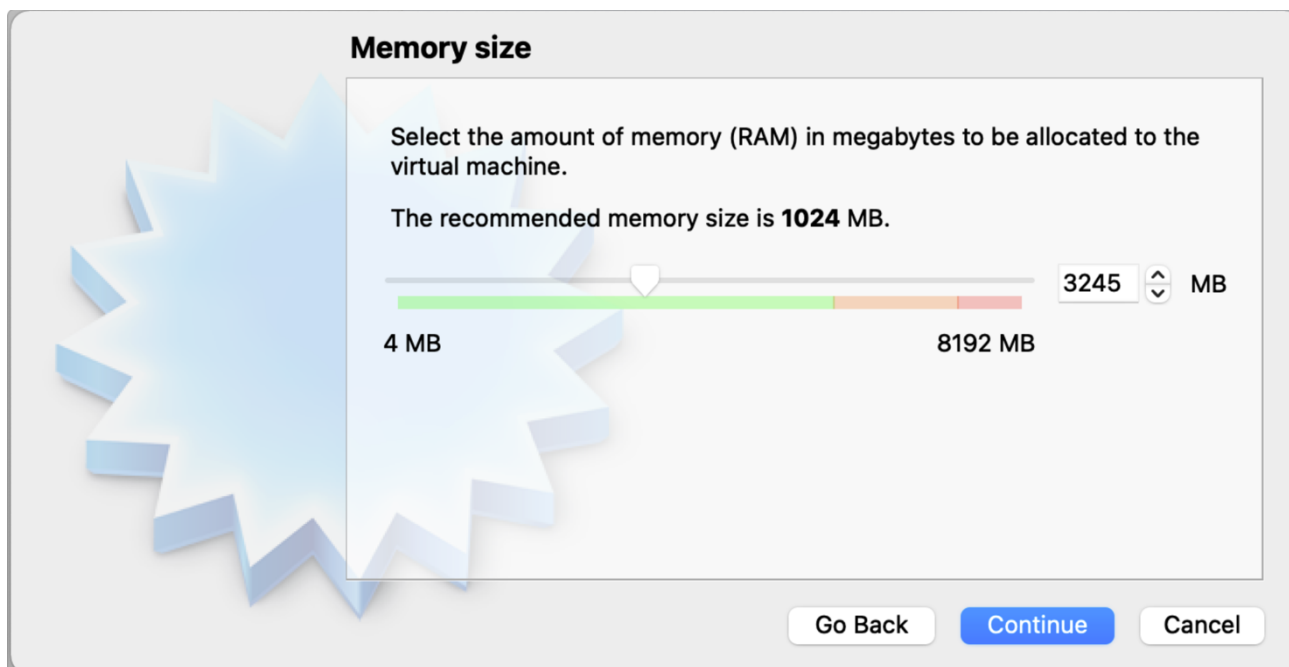
Name:

Machine Folder:

Type:

Version:

Please select appropriate RAM for the machine, we recommend using at least 2 or 3 GB.



**Memory size**

Select the amount of memory (RAM) in megabytes to be allocated to the virtual machine.

The recommended memory size is **1024 MB**.

4 MB 8192 MB

MB

Please select **Use an existing hard disk file**

### 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 **10.00 GB**.

☐ Do not add a virtual hard disk


☐ Create a virtual hard disk now


☒ Use an existing virtual hard disk file

Empty ⌵ 

Go Back Create Cancel



The next screen asks you to add an existing disk, so click **Add**

  
**Add**

  
**Refresh**

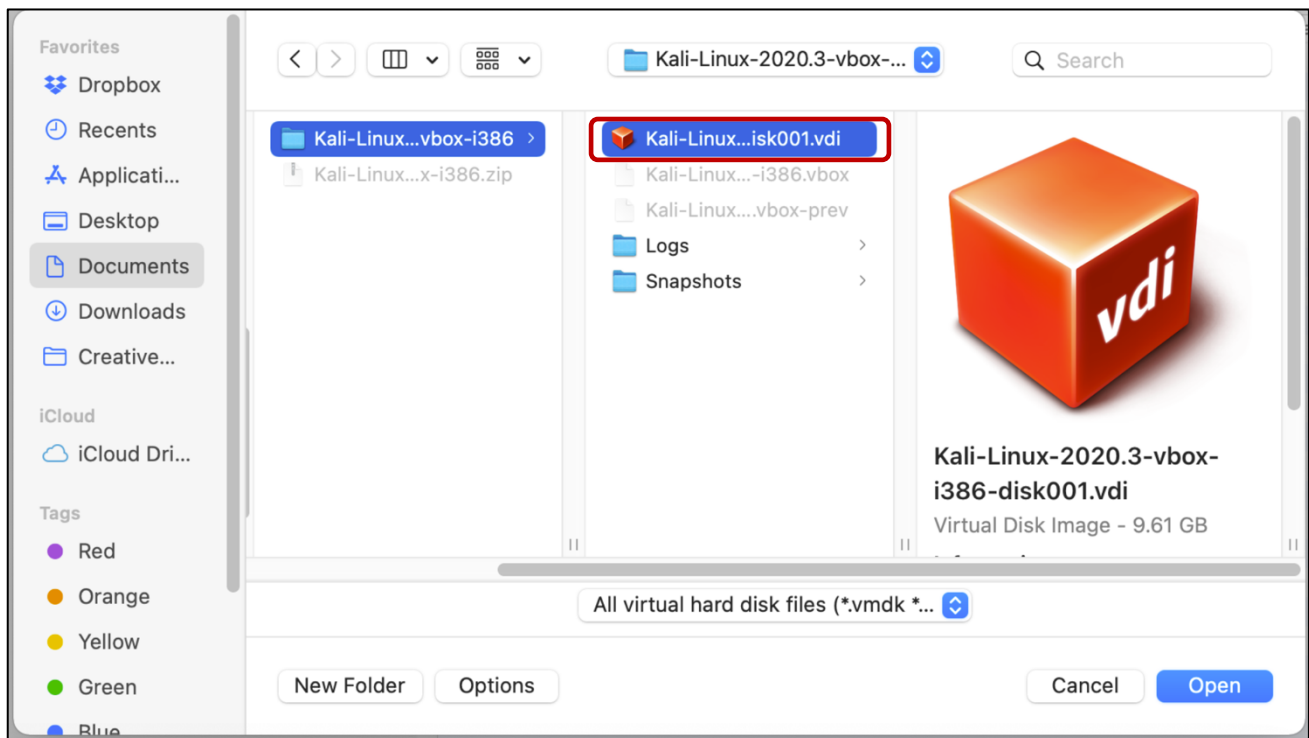
Na ▲	Virtual Size	Actual Size

Search By Name ⌵

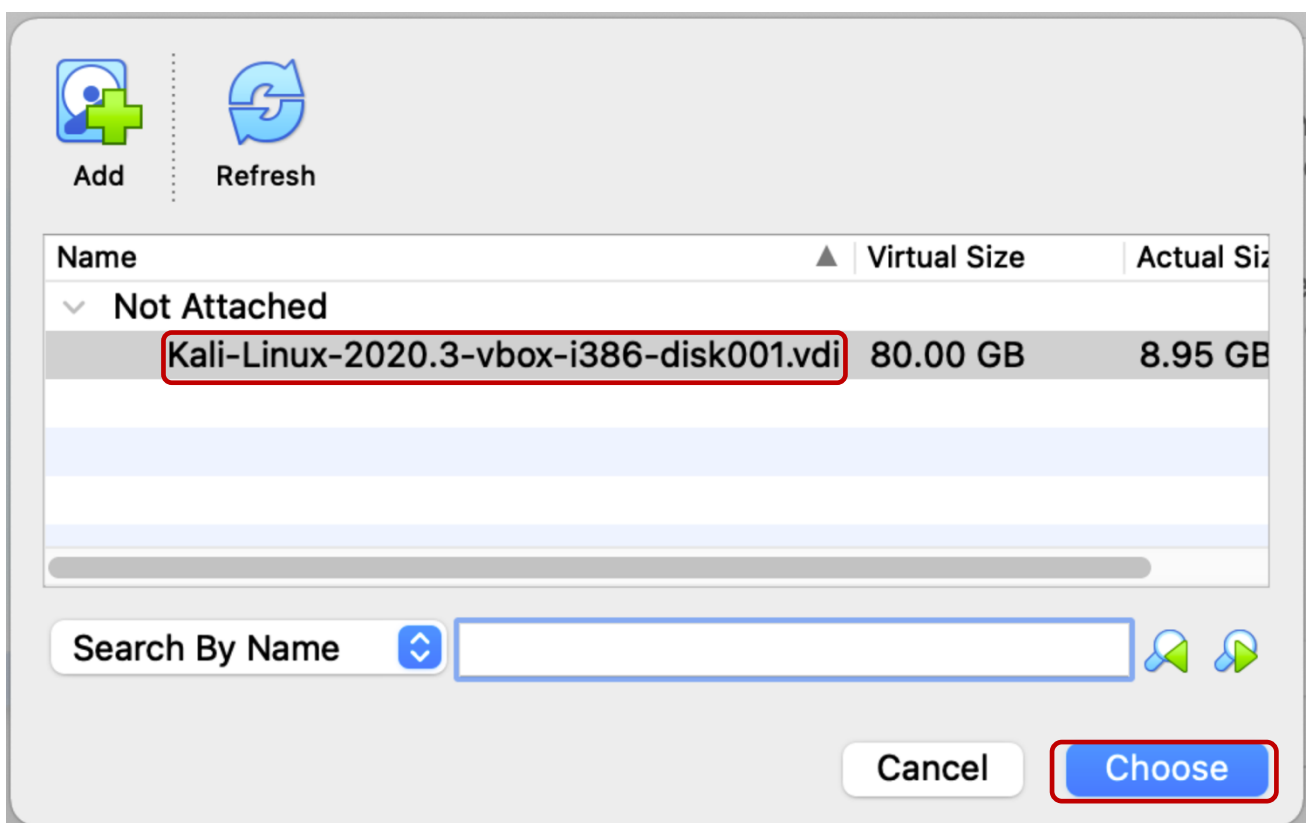
 

Cancel Choose

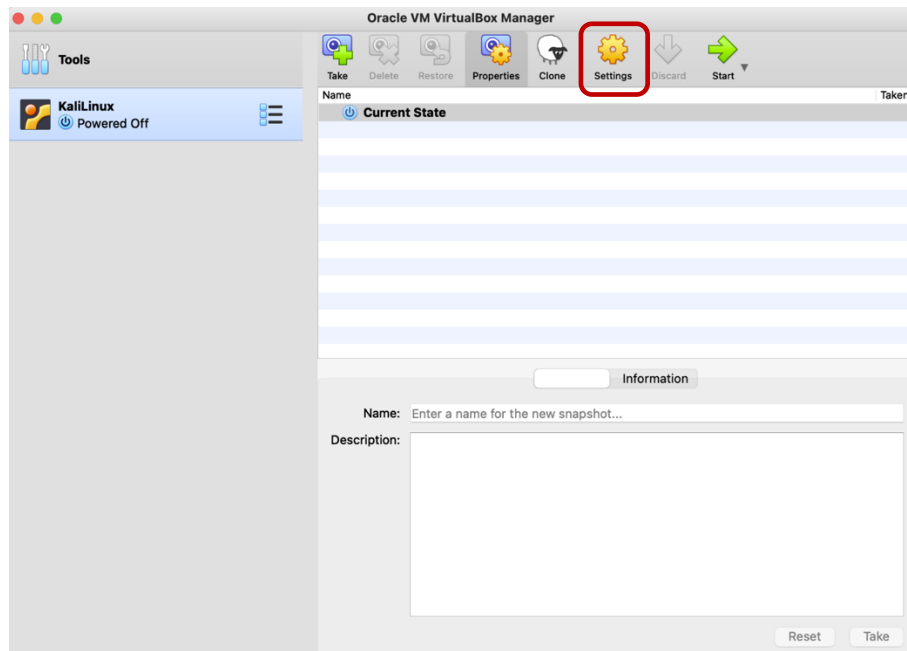
Please select the **.vdi** file



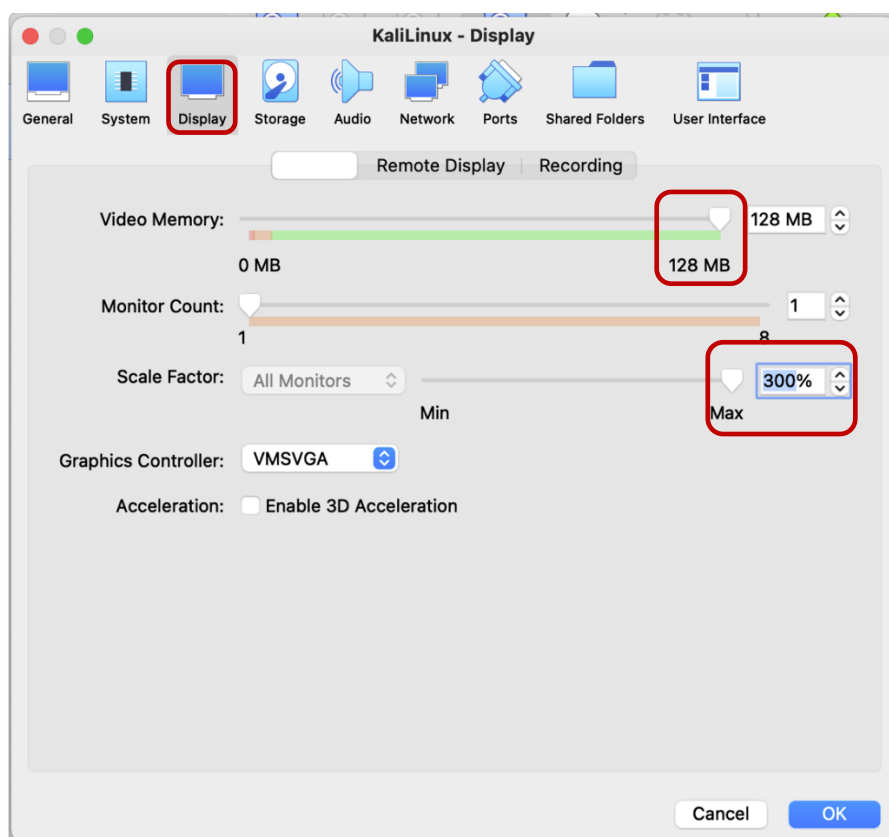
Please select the **.vdi** file that you have just added and click **Choose**



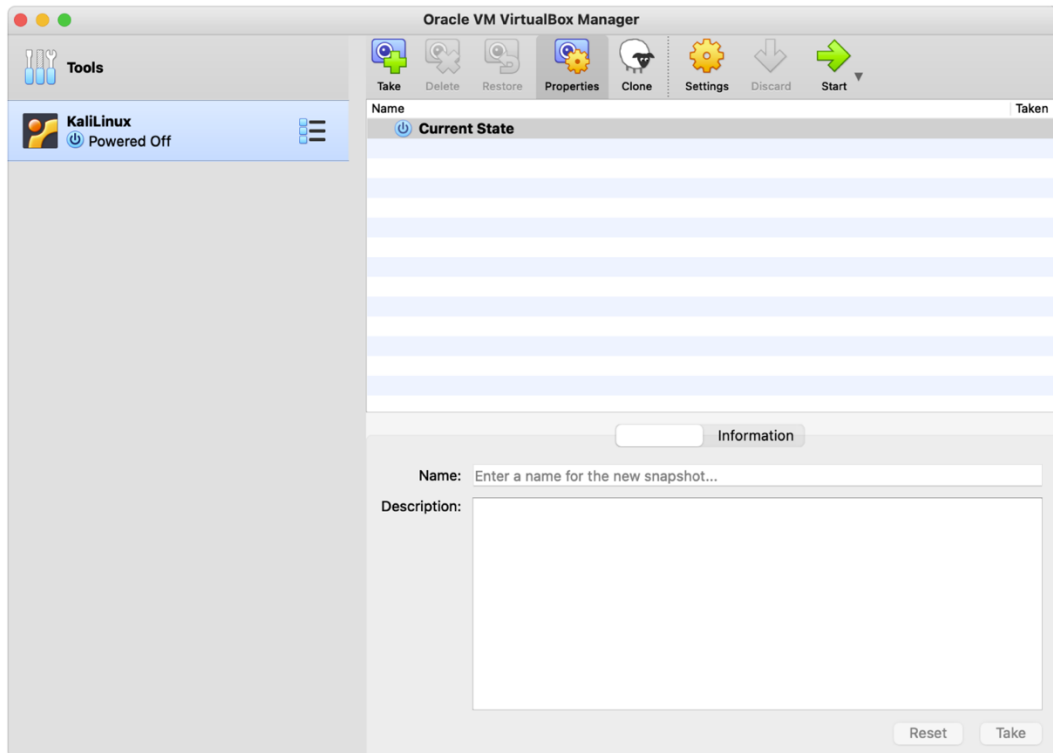
The machine is ready, but we need to tweak a few more settings. Please select **Settings**



Please select the following settings for **Video Memory** and **Scale Factor**



Congratulations! Your machine is ready, you can launch it by double clicking the virtual machine and login using **kali** as username and password.



**Important:**

In some cases, you may see some error logs or a blank shell asking for login. Please just wait for a little longer and the Virtual Machine would take you to the GUI based login screen as shown below:





### Troubleshooting Tips

1. If you get a kernel module load problem when running the virtual machine, please make sure that you have turned on access for VirtualBox in the Security and Privacy settings as described in the initial installation steps
2. In some cases, users have reported a flickering problem with the virtual machine. Please try turning the scaling mode on or off from the **View -> Scaled Mode**
3. You can also try using the VMware image that we have shared.

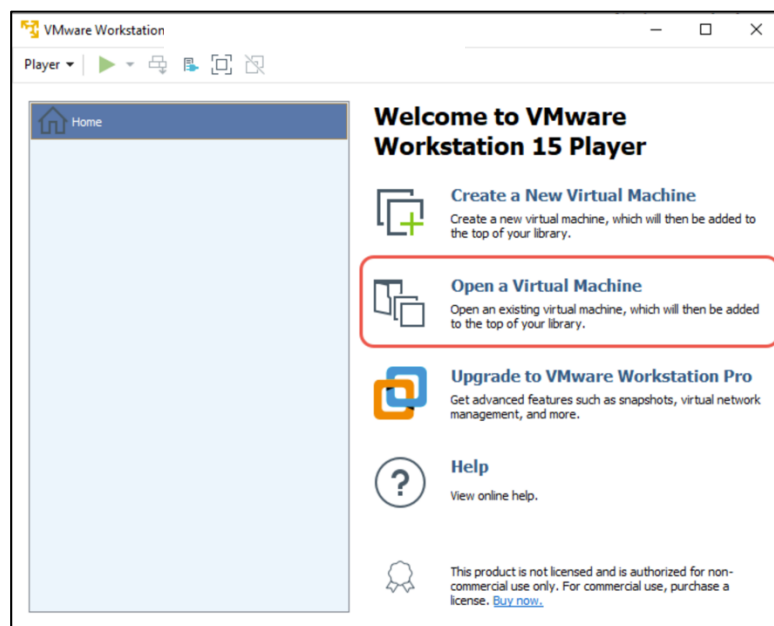
## The VMware Route

We highly recommend using VirtualBox for hosting the virtual machine as the VMware image has not been thoroughly tested. We have exported the VM as a Virtual Appliance in the **.ova** format. Note that the free version of VMware, VMware Player is only available for Windows and Linux.

1. Please download the **VMware Player** from:

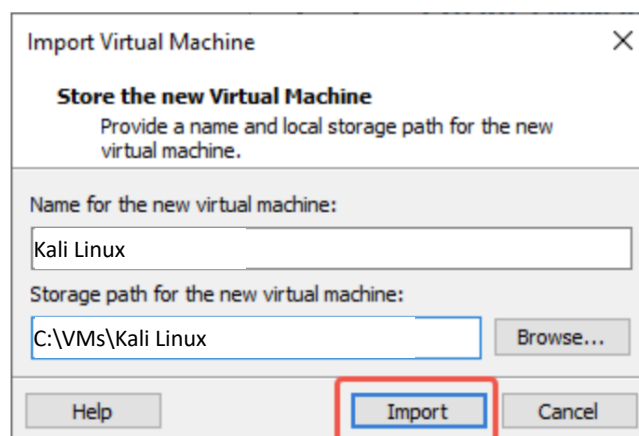
<https://www.vmware.com/au/products/workstation-player.html>

2. Once VMware player has been installed, launch it and select “**Open a Virtual Machine**”



3. Now Browse and select the **.ova** file and click **Open**

4. Name the virtual machine, browse to the directory for the virtual machine files, and click **Import**



The VMware player will perform some tests and if successful, will import the machine. Once the import has been completed, you can launch the VM using the following credentials:

**Username:** kali **Password:** kali