A report on setting up my virtual lab using virtual box - Track 101

Table of Content

Track 101 Validation - Bruce's version

Objectives

- Set up personal lab using virtual box
- Set up to 2 Virtual machines with varying with network profiles.
- Install Windows and Linux(with LAMP)
- Do all this using virtual box

Given that I have dual booted my machine with Kali Linux and Windows, I installed virtual box and the subsequent set-upsObjectives in my Kali Linux partition.

Installing Virtual box in Kali Linux

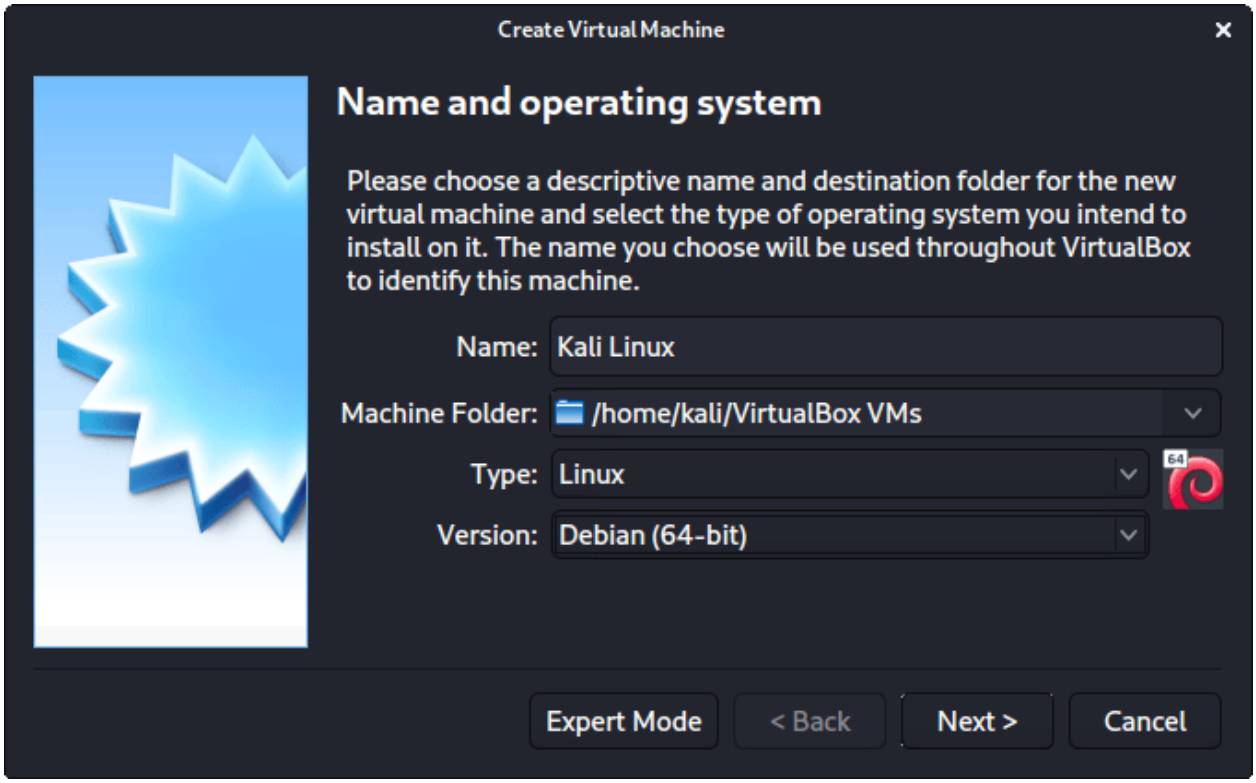
By default, Kali Linux comes with Virtual box pre-installed. But to learn on how to install it, checkout the resources link below.

Installing Kali Linux

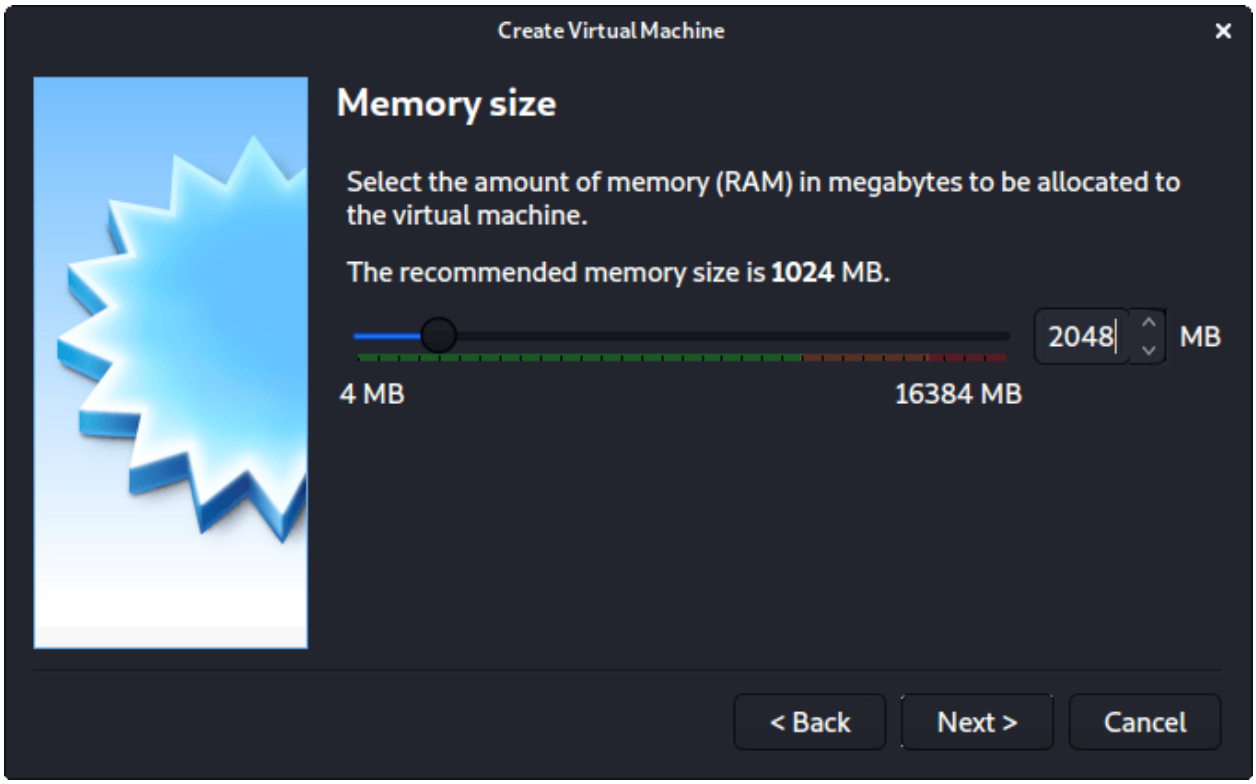
I installed Kali Linux from a pre-made Kali Linux Virtual Box images.

I just had to configure the machine's settings.

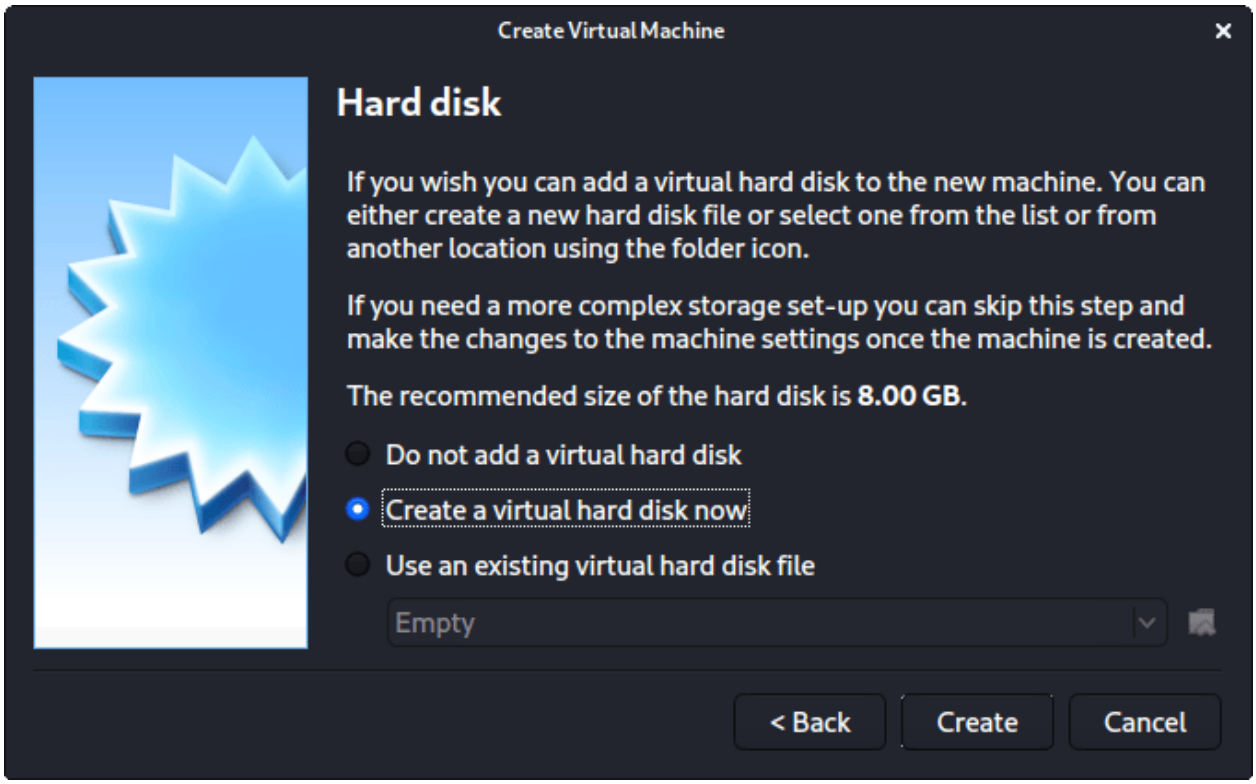
Procedure in setting up the settings: - Click new button and type the name of the Virtual Machine - I gave mine Kali Linux and selected the version as Debian(64-bit)



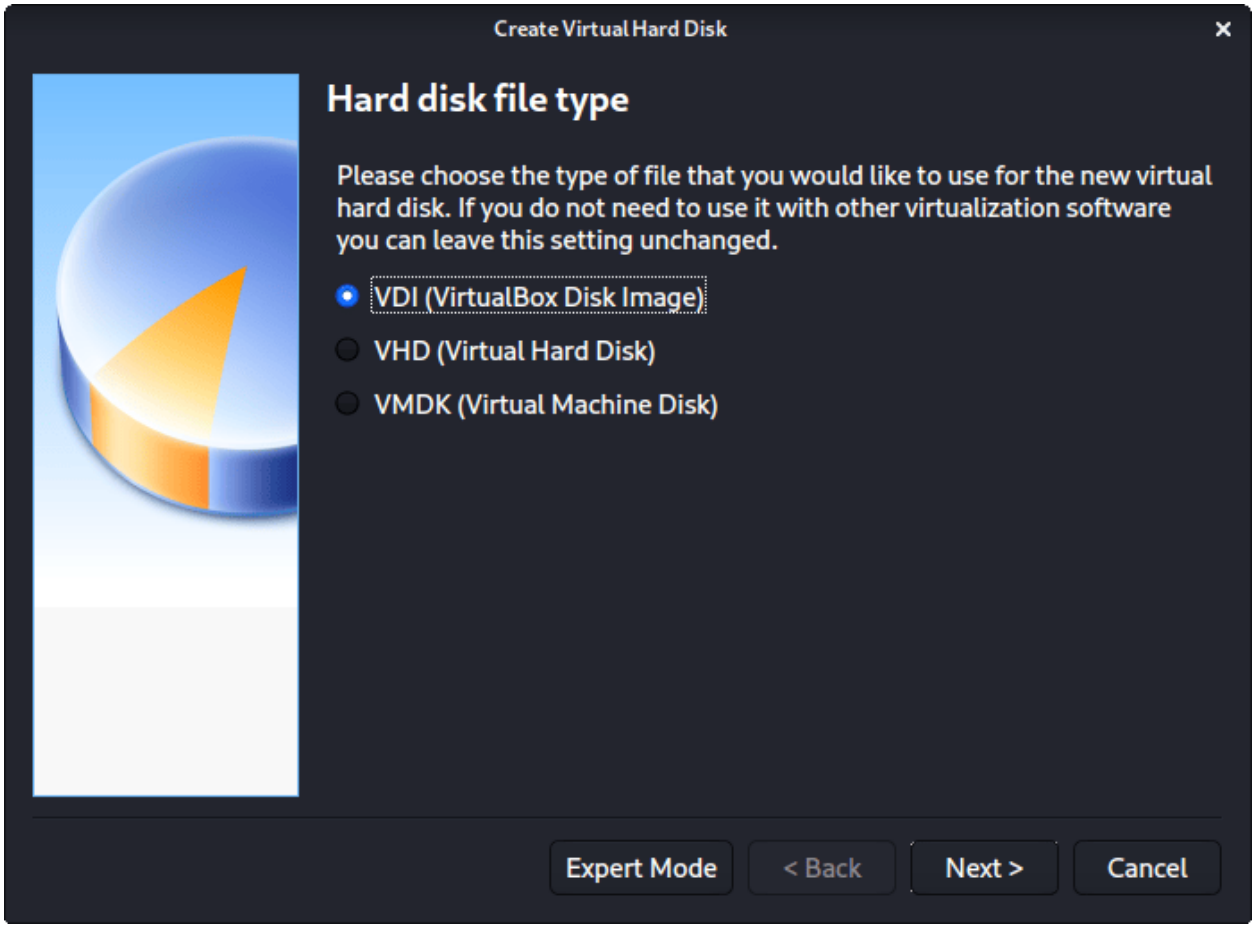
- Selecting RAM - the least is 2GB given some of the tools are resource intensive.



- Creating a new virtual disk, select the default choice.
Then select the `Hard disk file type` to be VDI(VirtualBox Disk Image) still a default option.



- Storage type should be Dynamically allocated.
- Followed with giving the virtual hard disk a designated size. 40 GB or more should work just fine. Then click create to create the environment. All this is done to define the resources the Machine will use.



- A few other settings are set:
  1. Enable bidirectional sharing.
  2. Remove the optical version `Boot order` settings.
  3. Allocate at least 2 CPUs and enable `Enable PAE/NX`
  4. A video memory of 128 MB should do.

When ready, click the Start button and select the downloaded pre-made Kali Linux Virtual Box images and the virtual machine is ready to go.

Installing LAMP in Kali Linux

LAMP is used to create websites and web applications. It is an acronym for:

- Linux operating system.
- Apache HTTP server.
- MySQL relational database management system.
- PHP programming language. Installation procedure:
    i. Update OS.

ii. Install Apache2 - sudo apt-get install apache2
iii. To Start/restart/Stop Apache 2 server - /etc/init.d/apache2 start/stop/restart
iv. Then installing MySQL and starting the services.
    - Sudo /etc/init.d/MySQL start
    - sudo mysql_secure_installation
v. Restart the server, then create a file and try running it.

Installing Windows

1. Download windows from their official website.
2. Configure the required resources for the Windows machine. As done on Kali Linux, with a difference that you select windows instead of Debian.

Resources

1. Installing Virtual box in Kali Linux
2. Installing Kali Linux
3. Installing LAMP in Kali Linux