COURSE

CREATE YOUR FIRST VIRTUAL MACHINE

R4IM4NN

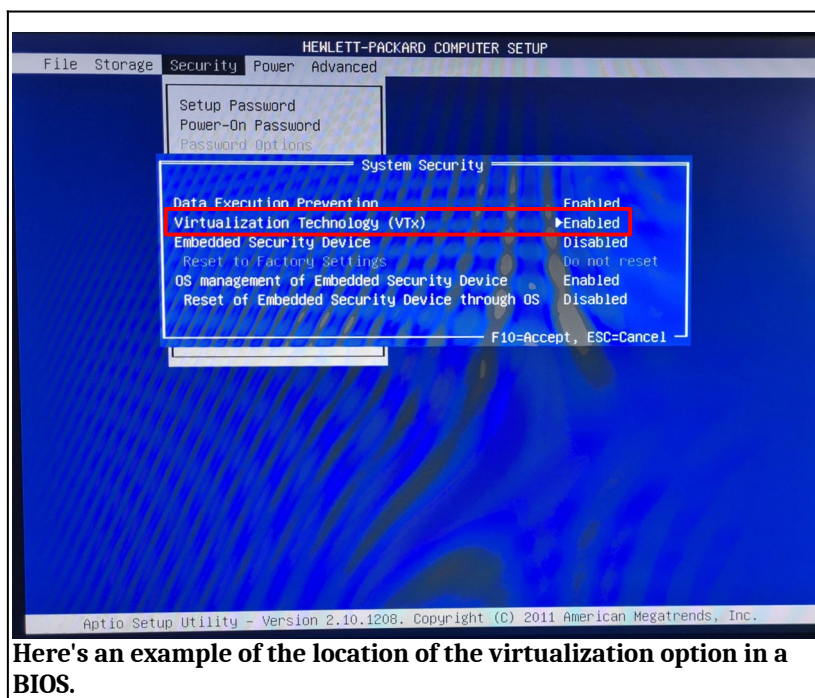## Table of Contents

I. [Course aim]

Create your first virtual machine with VirtualBox.

II. [Course Prerequisites]

- Computer with at least 8GB RAM
- Enable virtualization on your computer to create virtual machines

III. [Enable virtualization]

To activate virtualization, you need to go to your computer's BIOS, to go to the BIOS you need to switch off your computer, then you need to press a specific key on your keyboard, which is different depending on your computer model. The most common keys are F2, F10, F12, DEL, ESC or F1 and F9. This key is often indicated when you switch on your computer. When you're in the BIOS, you need to find the virtualization option and enable it.

Here's an example of the location of the virtualization option in a BIOS.

IV. [Hypervisor type 2(Hosted hypervisor)]

The type 2 **hypervisor** runs as an application on our host machine, interacting with your hardware. In our case, the type 2 hypervisor we'll be using is **VIRTUALBOX.** Why Virtualbox ? Because it's available on several operating systems (*Windows, MacOS, Linux*).

You can download virtualbox directly from their official website, for installation just follow the basic steps (step by step).

Download VirtualBox

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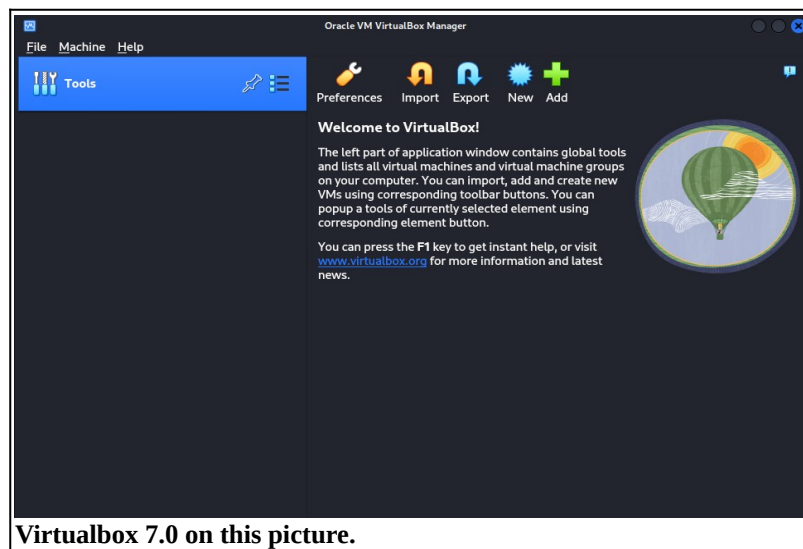
VirtualBox binaries

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

VirtualBox 7.0.14 platform packages
- ⇨Windows hosts
- ⇨macOS / Intel hosts
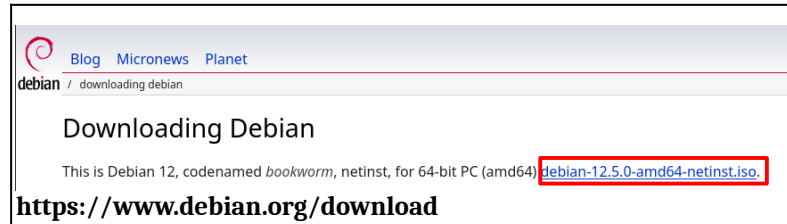- Linux distributions
- ⇨Solaris hosts
- ⇨Solaris 11 IPS hosts

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

This is what virtualbox(version 7.0) looks like.

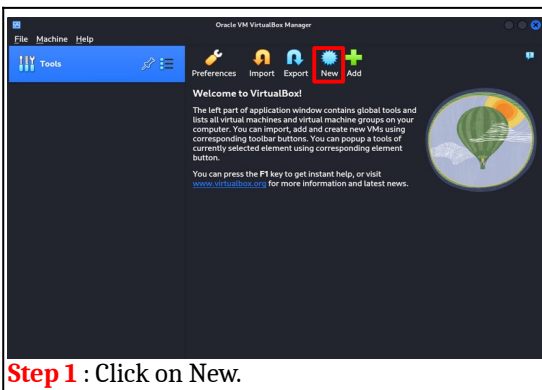
Virtualbox 7.0 on this picture.
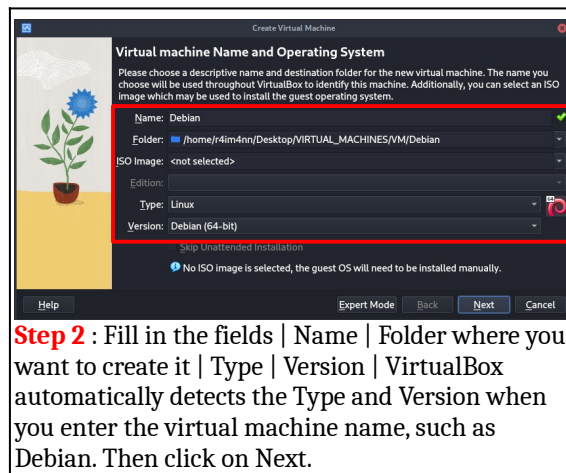
V. [Setting up our first virtual machine]

We have installed our type 2 hypervisor (VirtualBox). Now we're going to set up our first virtual machine. The operating system we're going to virtualize is **DEBIAN** is a Linux distribution. To begin with, you need to download the optical disk image (ISO) of the operating system, in our case Debian.
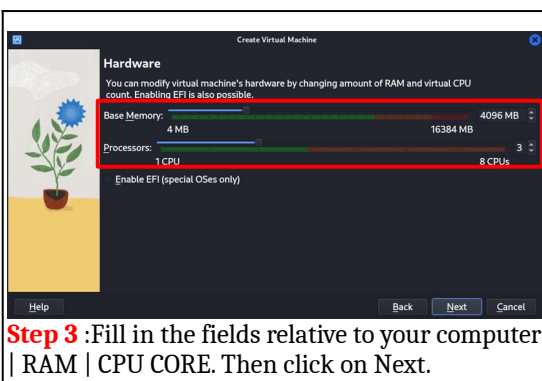

Save the file where you want, then open virtualbox. We can now start creating our Debian virtual machine. I'll explain it step by step.
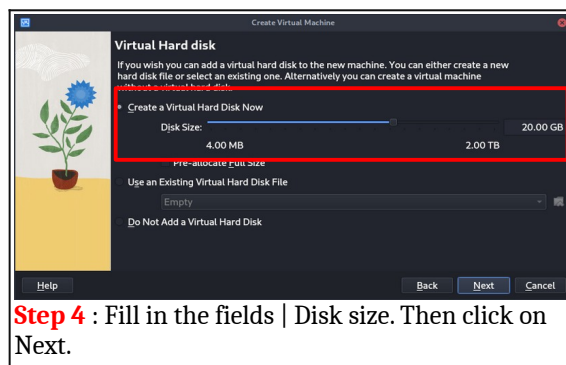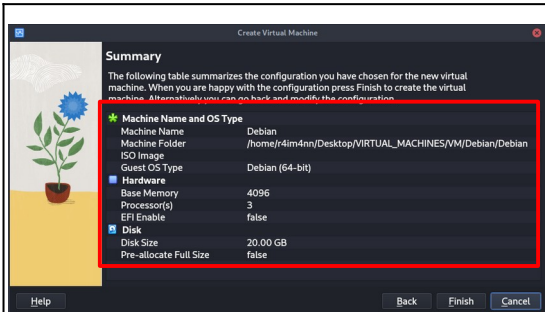

Step 1 : Click on New.

Step 2 : Fill in the fields | Name | Folder where you want to create it | Type | Version | VirtualBox automatically detects the Type and Version when you enter the virtual machine name, such as Debian. Then click on Next.
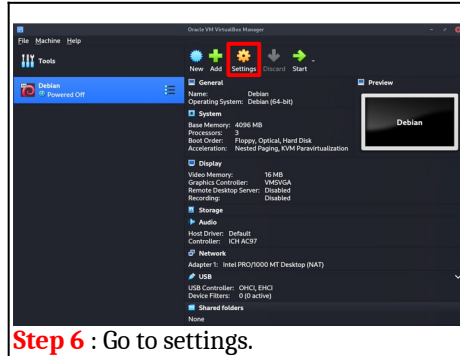

Step 3 :Fill in the fields relative to your computer | RAM | CPU CORE. Then click on Next.
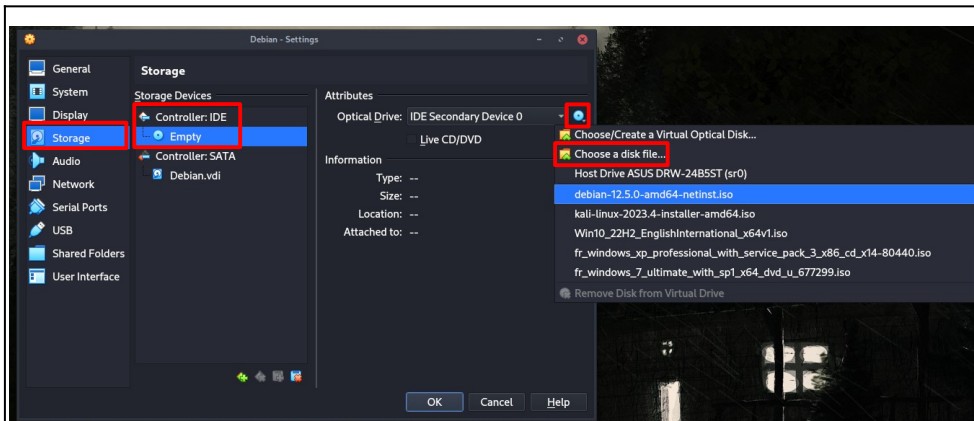

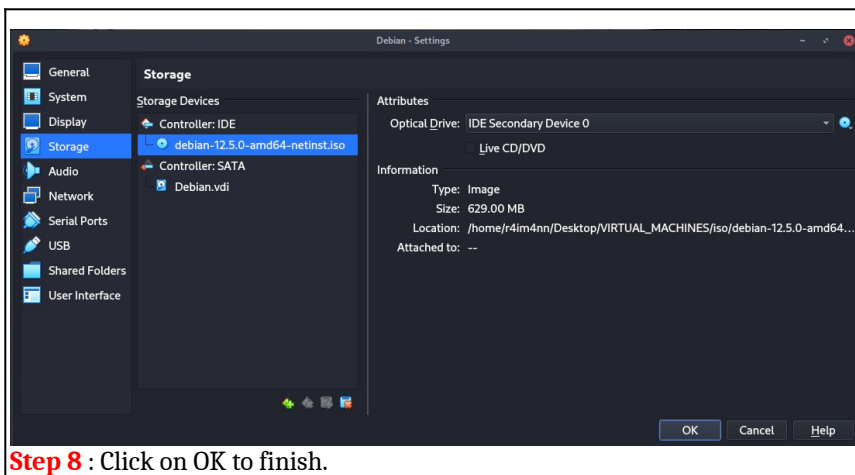**Step 4** : Fill in the fields | Disk size. Then click on Next.

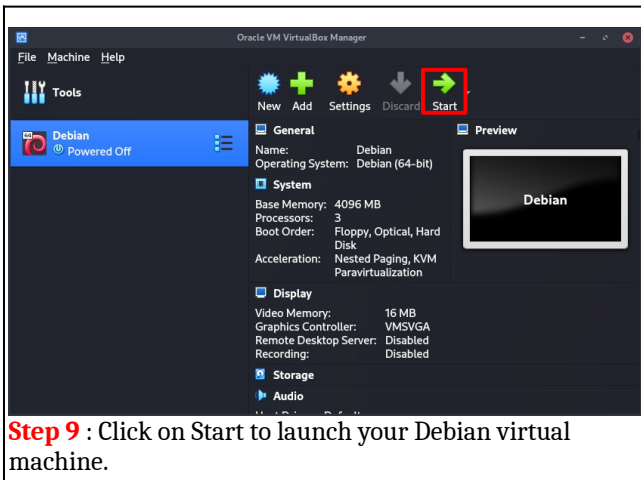**Step 5** : Summary, click on finish to finalise the creation of our virtual machine. Then click on Finish.

Step 6 : Go to settings.

Step 7 : Go to the storage settings then click on "Empty" then click on the blue CD to choose the disk file of your Debian operating system that you downloaded before.

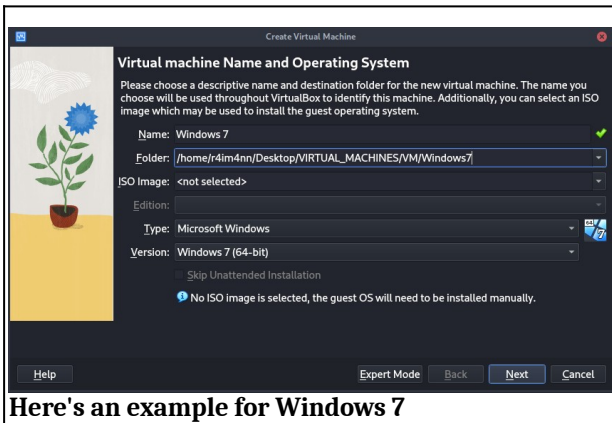

Step 8 : Click on OK to finish.

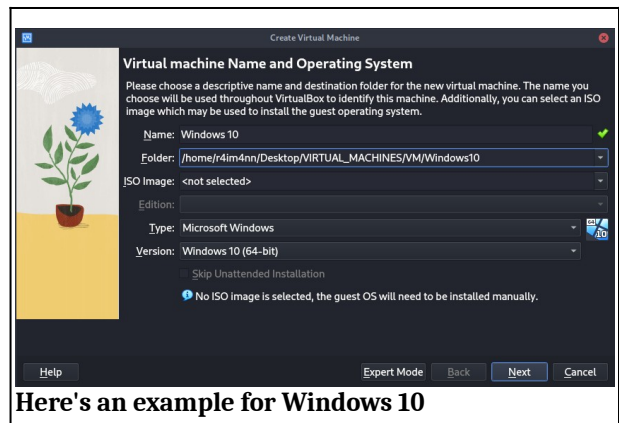**Step 9** : Click on Start to launch your Debian virtual machine.

Step 10 : Choose the graphical installation to make it easier to install, then follow the standard installation steps.

VOILA ! You've successfully created your first virtual machine. In this course we've installed a Linux operating system, specifically the Debian distribution, but if you want to install another operating system, such as Windows, it's exactly the same procedure.

Here's an example for Windows 7

Here's an example for Windows 10

VI. [Thanks]

This course is over, I hope I was clear and that this course was not difficult to understand. Thank you for reading this course and there are many more coming soon.

See you soon.

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