VIRTUAL MACHINE DOWNLOAD AND SETUP.

Before you start you should check your bios on your computer to make sure that virtualization is turned on. You will need to look up what hotkey brings you to your bios page on computer startup. There are different keys for different computers so you will need to look up how to get to the bios on your computer. My computer had me press the escape key several times to open the bios menu and then press f10 to go into the bios.

I decided to use an old laptop I no longer use. I factory reset the laptop and disabled all updates to stop the laptop from updating to windows 11(laptop isn't compatible). Since I will be using this laptop/virtual machine for malware analysis I also used a separate network using a wireless network box so the computer wont be connected to my home network,

I used virtual box you can download the file to install from Downloads - Oracle VM 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 7.0.18 platform packages

- ➡Windows hosts
- ⇒macOS / Intel hosts
- Linux distributions
- ⇒Solaris hosts
- ➡Solaris 11 IPS hosts

The installation is the same as most other software. You follow the prompts till it is installed. After instillation virtual box told me I was missing some dependencies for the program to work. My missing dependency was visual c++ 2019 redistribution package. I had to download the file before virtual box would work. If you are missing any files you will need to download the files that virtual box says you are missing.

Once you have virtual box downloaded and any dependencies installed you will need to download an iso file to mount on virtual box.

I downloaded both ubuntu and windows 10 so I can have both a linux and windows OS.

I downloaded ubuntu from <u>Download Ubuntu Desktop | Ubuntu</u>

Ubuntu 24 04 ITS

The latest <u>LTS</u> version of Ubuntu, for desktop PCs and laptops. LTS stands for long-term support — which means five years of free security and maintenance updates, extended to 10 years with Ubuntu Pro.

Download 24.04 LTS

6GB



For other versions of Ubuntu Desktop including torrents, the network installer, a list of local mirrors and past releases check out our alternative downloads.

I downloaded windows 10 from Download Windows 10 (microsoft.com)

Create Windows 10 installation media

To get started, you will first need to have a licence to install Windows 10. You can then download and run the media creation tool. For more information on how to use the tool, see the instructions below.

Download tool now

With the iso files on your computer you can open virtual box and mount the image. From this point you are installing an OS onto your virtual computer. You follow the same steps as if you were doing a fresh install of an OS, there will be several options from a manual install to a custom install. You will also be asked to allocated storage and cpu options for your virtual machine during this process. Remember when deciding how much space and speed that your actual computer will need to use these resources as well. You should also prepare incase you want to run more then one virtual machine at once cause they will all use the same resources from your computer.

Once your virtual machine is up and running you can use it like a regular computer. Since my virtual machine is going to be used to malware analysis I downloaded any tools I will need for that task. I will also clone a copy of my virtual machine since its going to be used for malware, by cloning the machine I can delete a copy once its infected and not have to redownload and install anything I already installed saving me time.

Once your machine turned on you can also go through the settings and configure the network from the settings menu for virtual box. I normally keep my network as a nat network so it doesn't directly connect to my host machine. You can bridge the network to your host machine but you run the risk of something escaping the virtual machine. You can also adjust the storage and speed from the settings menu.

As previously mentioned you can delete your virtual machine if you run into any issues this makes it ideal for doing things you don't want to infect your host computer with. You can also use a virtual machine to run another operating system. I have several virtual machines so I can run windows, linux, and macOS. This enables me to use programs my host computer cant use.