

# Set Up Lab Environment

## Definition

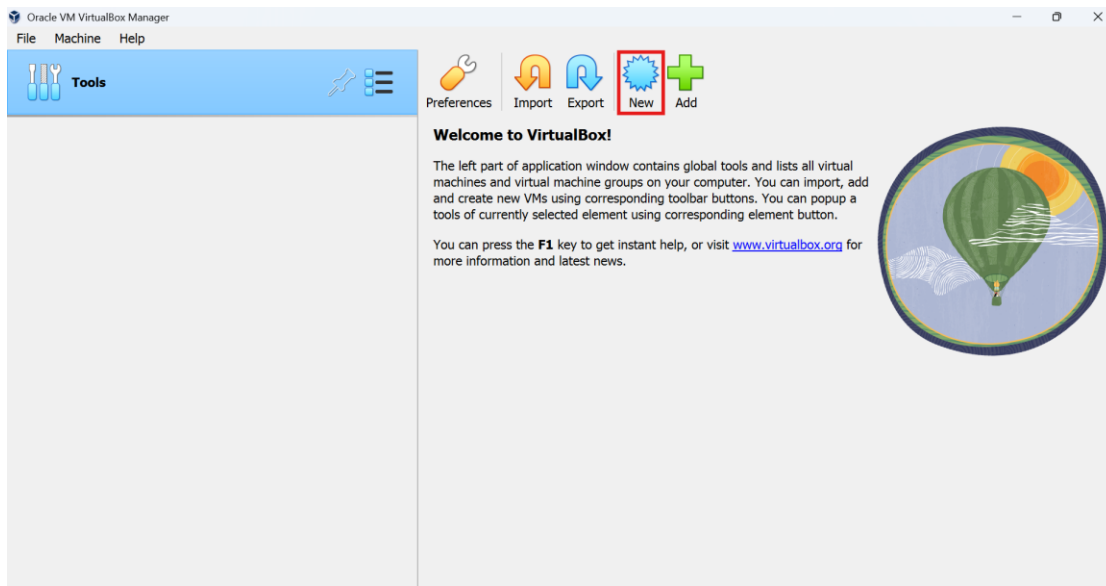
A Virtual Machine (VM) is a computer resource that uses software instead of a physical computer to run programs and deploy apps. One or more virtual “guest” machines run on a physical “host” machine. Each virtual machine runs its own operating system and functions separately from the other VMs, even when they are all running on the same host. This means that, for example, a virtual MacOS virtual machine can run on a physical PC.

Virtual machine technology is used for many use cases across on-premises and cloud environments. More recently, public cloud services are using virtual machines to provide virtual application resources to multiple users at once, for even more cost efficient and flexible compute.

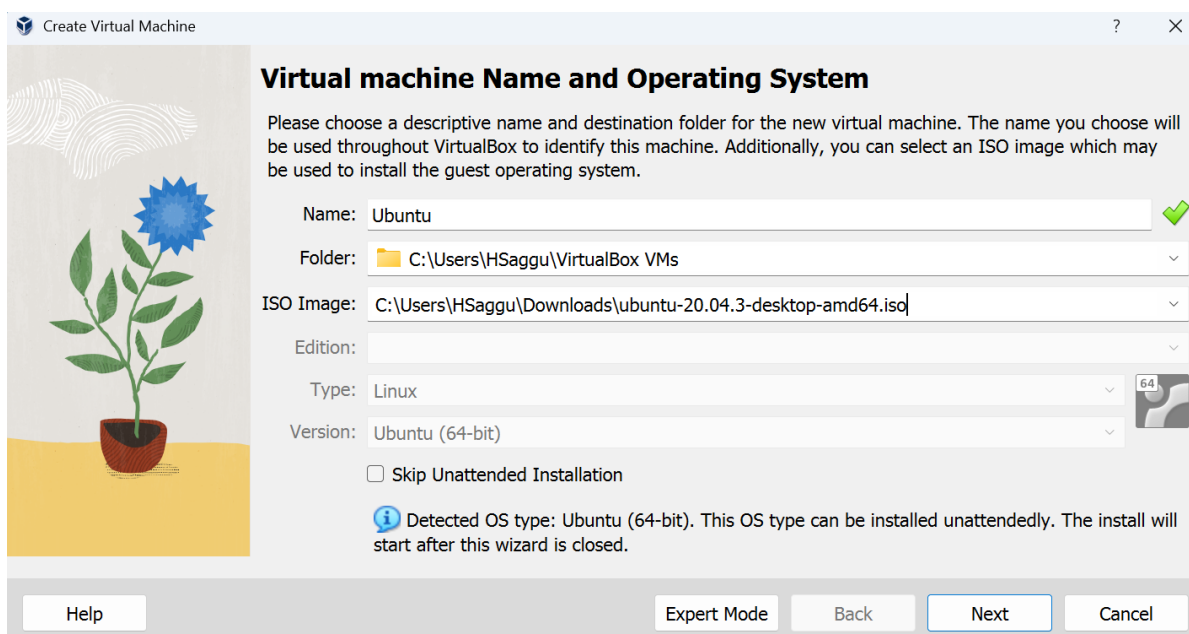
## Setting Virtual Environment of Ubuntu OS

Ubuntu is a free, open source operating system (OS) based on Debian Linux. It was first released in 2004 when Mark Shuttleworth and a small team of Debian developers founded Canonical and then launched the Ubuntu project.

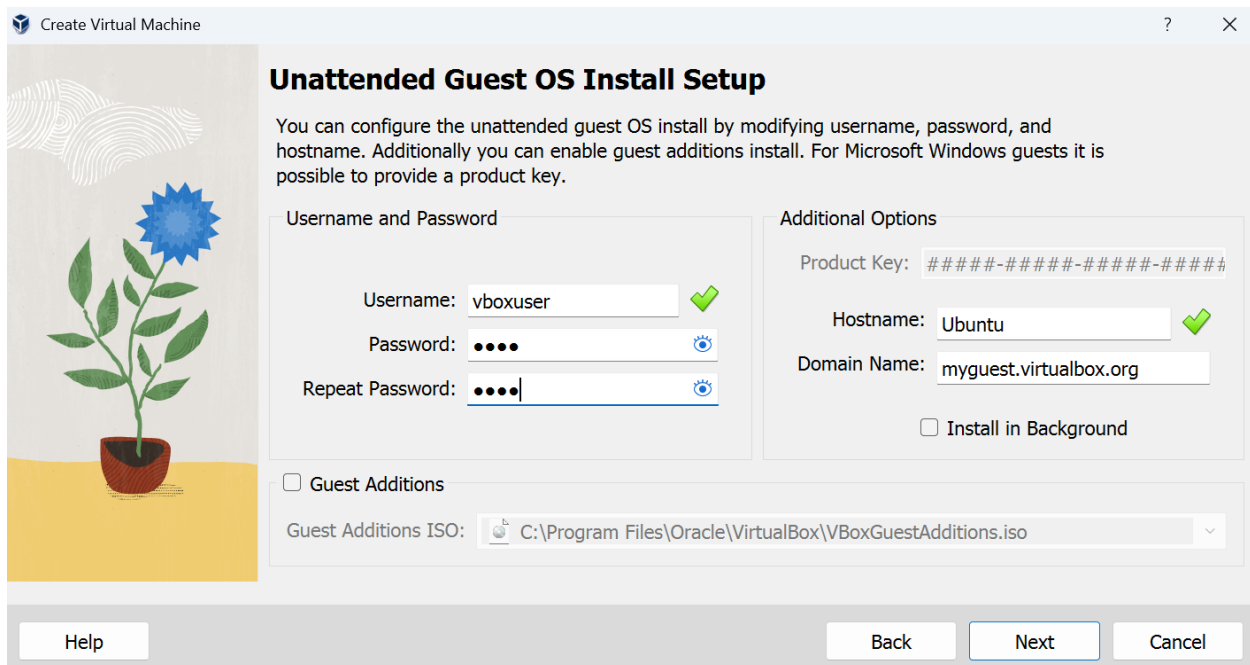
1. Download Oracle VirtualBox and install it onto your host machine. It is a virtualization tool that is used to create virtual machines over a host machine.



2. After installing it you must click on “**New**” to create a new virtual machine. After this give a name to your machine and select the image file from the location where you have downloaded the iso file.



3. Now give a username and password to your guest OS.



Create Virtual Machine

### Unattended Guest OS Install Setup

You can configure the unattended guest OS install by modifying username, password, and hostname. Additionally you can enable guest additions install. For Microsoft Windows guests it is possible to provide a product key.

**Username and Password**

Username:  ✓

Password:  ✓

Repeat Password:  ✓

**Additional Options**

Product Key:

Hostname:  ✓

Domain Name:

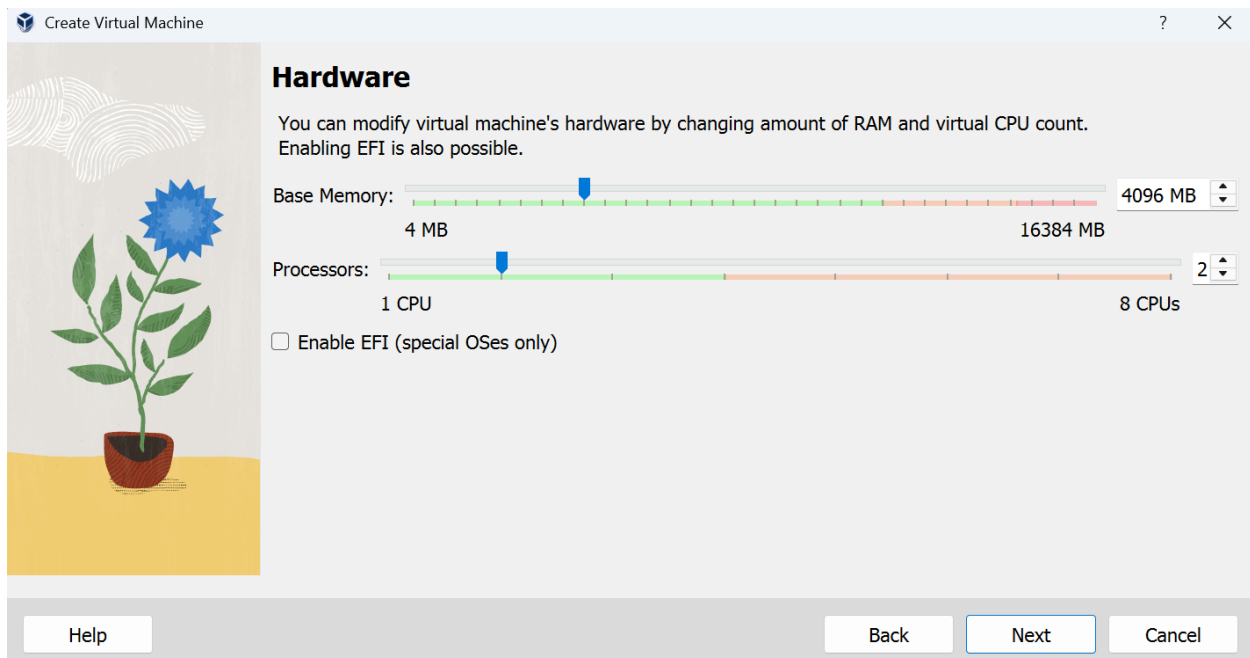
☐ Install in Background

☐ Guest Additions

Guest Additions ISO:

Help Back Next Cancel

4. Now we have to define the Hardware specifications. Here we give 4096 MB as RAM and 2 Core Processors. You can change it according to your own use.



Create Virtual Machine

### Hardware

You can modify virtual machine's hardware by changing amount of RAM and virtual CPU count. Enabling EFI is also possible.

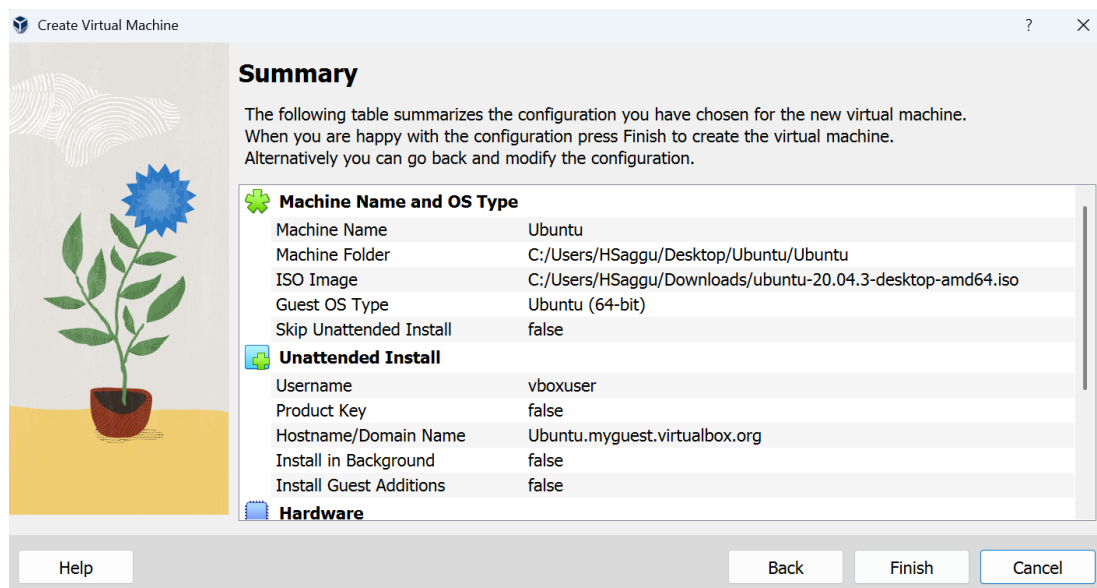
Base Memory:  4096 MB

Processors:  2

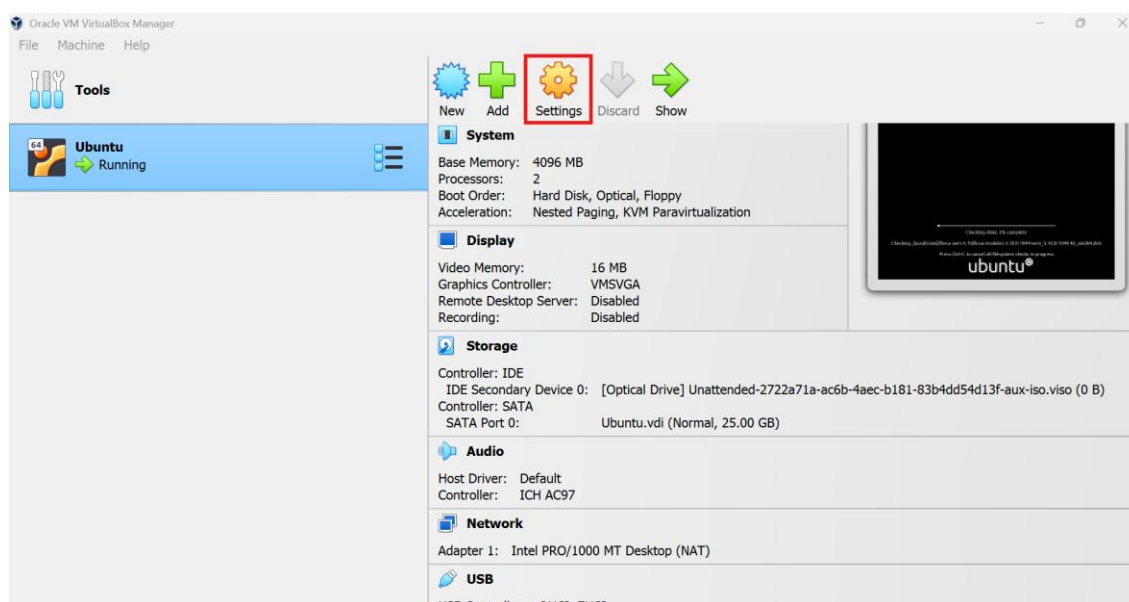
☐ Enable EFI (special OSes only)

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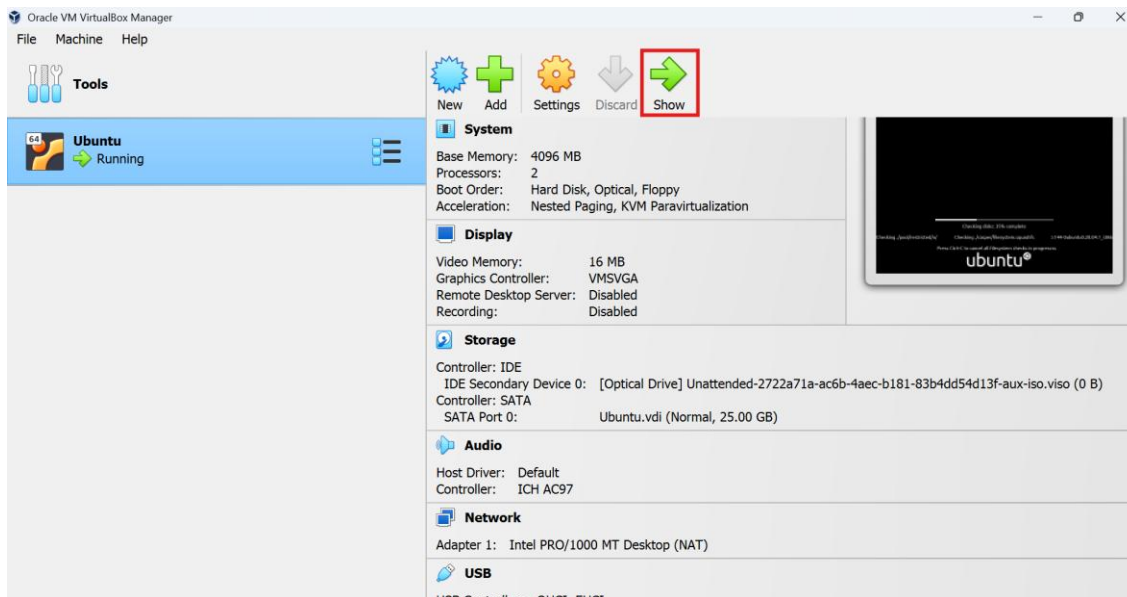
5. Now you can have a quick summary of your guest OS after reviewing it. You can finish the setup after clicking over **“Finish”** button.



6. After Finishing all the configuration, On the left side of the the window you can see your guest OS. And from the top right menu bar you can change the configuration of the machine anytime by using the **“Setting”** Button.



7. Now to start your Guest OS click over “**Show**” button.



8. After booting the Guest OS for First time it will goes under automatic installation and after it is ready to use.

