

# Homework 1

## Virtualization

Install VirtualBox in your machine.

First, we need to go to the official website where we can find the installer.

- <https://www.virtualbox.org/wiki/Downloads>

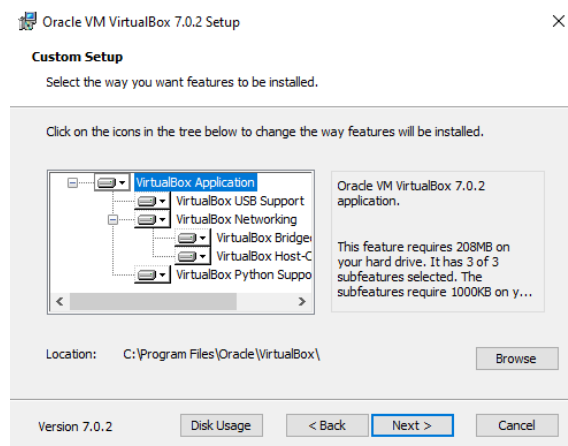


Once downloaded this resource we install it, on our computer.

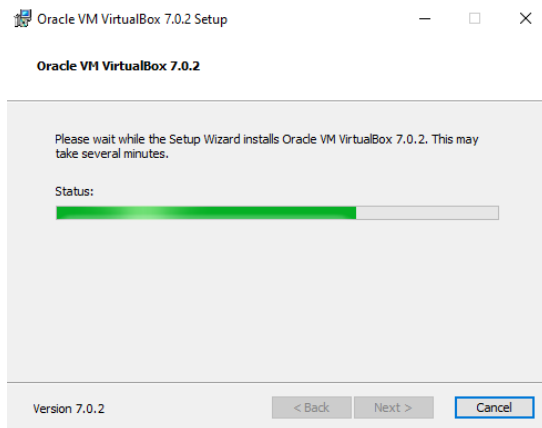
STEP 1.



STEP 2.



### STEP 3.



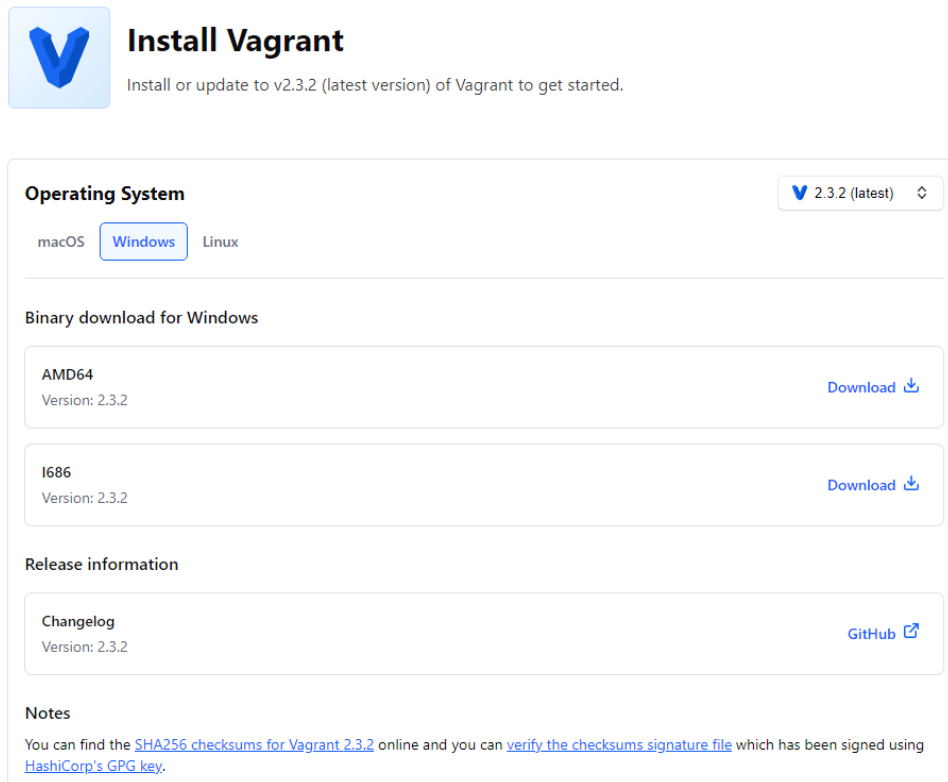
### STEP 4.



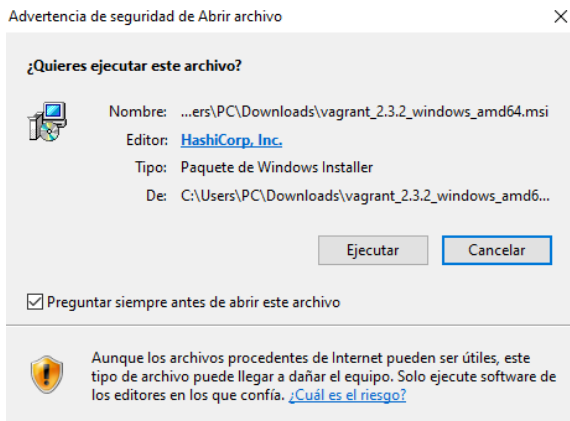
Install Vagrant in your machine.

First, we need to go to the official website where we can find the installer.

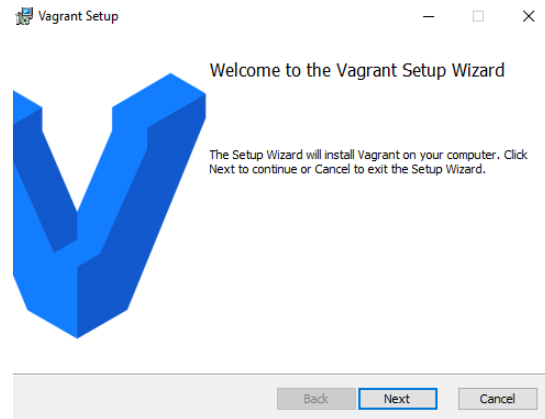
- <https://developer.hashicorp.com/vagrant/downloads>



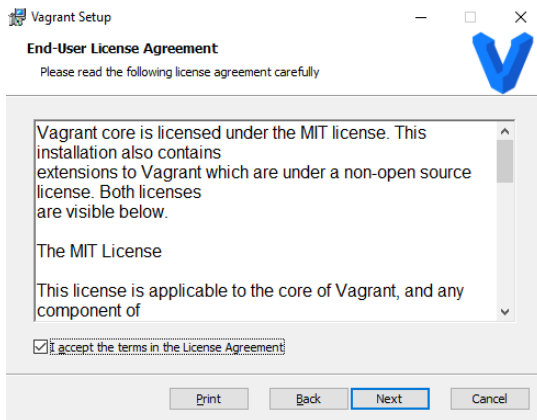
## STEP 1.



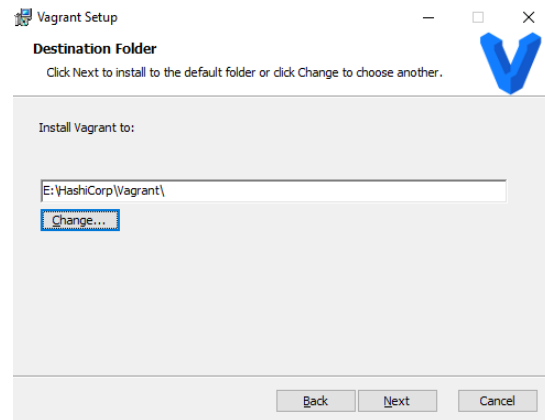
## STEP 2.



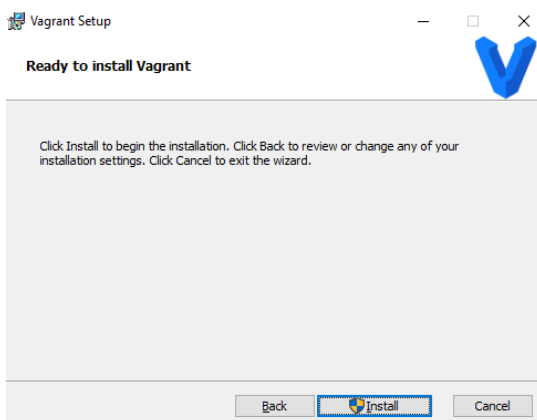
## STEP 3.



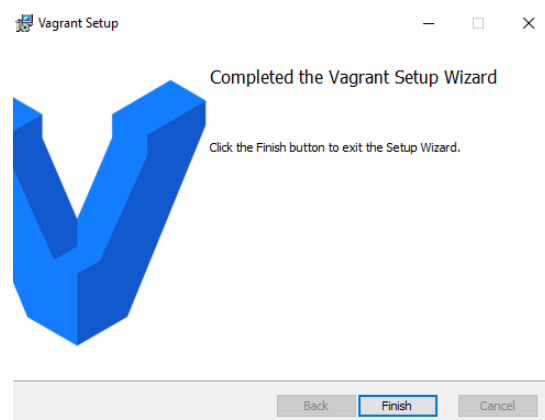
## STEP 4.



## STEP 5.



## STEP 6.



## Stand Up an **Ubuntu** 20.04.x Server LTS VM and **Debian**.

To make this step, we need to find the SO that we are looking for.

- <https://app.vagrantup.com/boxes>

### Discover Vagrant Boxes

Search for boxes by operating system, included software, architecture and more

Provider

any

virtualbox

vmware

libvirt


more

Sort by

Downloads

Recently Created

Recently Updated



ubuntu/trusty64 20190514.0.0

Official Ubuntu Server 14.04 LTS (Trusty Tahr) builds (End of standard support)


virtualbox

Downloads

30,592,541

Released

about 3 years ago



laravel/homestead 12.2.0

Official Laravel local development box.

hyperv

parallels

virtualbox

vmware


and 1 more providers

Downloads

14,487,473

Released

3 months ago



hashicorp/precise64 1.1.0

A standard Ubuntu 12.04 LTS 64-bit box.

hyperv

virtualbox


vmware\_fusion

Downloads

6,797,457

Released

over 8 years ago



centos/7 2004.01

CentOS Linux 7 x86\_64 Vagrant Box

hyperv

libvirt

virtualbox

vmware

and 3 more providers

Downloads

5,459,906

Released

over 2 years ago

Then we chose our SO to vagrant up it.

## ubuntu / **trusty64** Vagrant box

How to use this box with **Vagrant**:

Vagrantfile New

```
vagrant init ubuntu/trusty64
vagrant up
```

# debian / jessie64 Vagrant box

How to use this box with Vagrant:

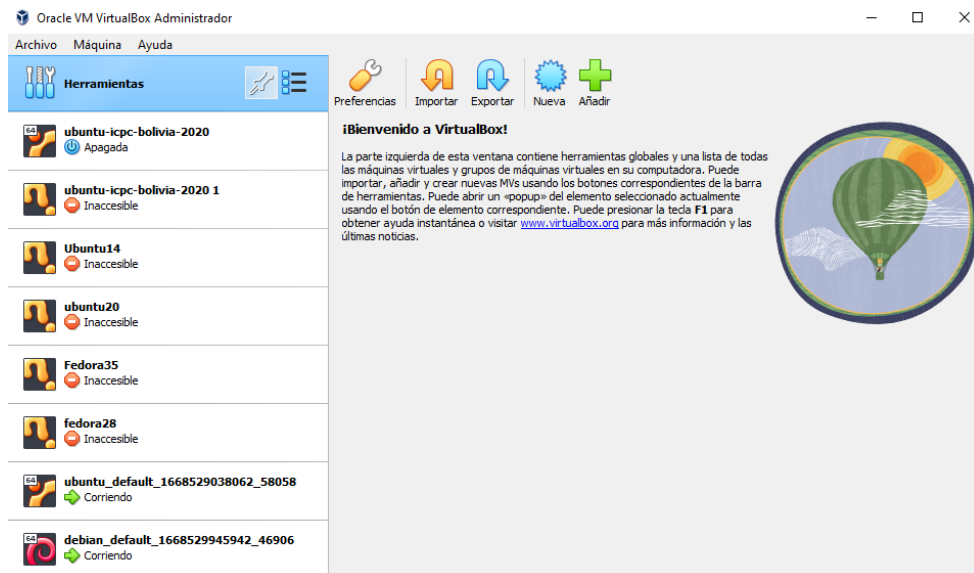
Vagrantfile New

```
vagrant init debian/jessie64
vagrant up
```

We run this commands in our prompt.

```
PS F:\Devops test\ubuntu> vagrant up
Bringing machine 'default' up with 'virtualbox' provider...
==> default: Box 'ubuntu/trusty64' could not be found. Attempting to find and install...
default: Box Provider: virtualbox
default: Box Version: >= 0
==> default: Loading metadata for box 'ubuntu/trusty64'
default: URL: https://vagrantcloud.com/ubuntu/trusty64
==> default: Adding box 'ubuntu/trusty64' (v20190514.0.0) for provider: virtualbox
default: Downloading: https://vagrantcloud.com/ubuntu/boxes/trusty64/versions/20190514.0.0
Download redirected to host: cloud-images.ubuntu.com
```

And then it's all set.



## Concepts

Investigate: What is Software Architecture and how it is related to Enterprise Architecture.

### Enterprise architect

**Enterprise architects** make sure that the **IT strategy** is in line with the **goals of the company**. They are responsible for defining all business demands after doing an analysis of the internal and external environments of the company.

Enterprise architects, out of all IT architects, have the broadest understanding of the **organization** and its **capabilities**.

They are responsible for examining the most recent **developments** in **technological architecture**.

### Software architect

Compared to Enterprise architects, **software architects** have a **considerably** more **detailed** perspective.

They establish **technical leadership** and **technical direction** for development teams as well as **best practice** standards. They oversee the conceptualization and strategic planning of new products, including hardware, software, and design code methodology planning. The main concerns of software architects are deployment, compatibility, tech strategy,