

Vagrant - A tool for building and managing virtual machine environments with ease.
It uses a hypervisor software.

Hypervisor - It is a software that creates and runs virtual m/c by separating a system's OS and resources from the hardware to allocate to VM's. Ex: VirtualBox, VMWare etc.

Download vagrant from the official site.

Go to powershell:

```
# mkdir vagrant_workspace
```

```
# cd vagrant_workspace
```

```
# vagrant init centos/7
```

```
[ Discover vagrant boxes to use:
```

```
https://app.vagrantup.com/boxes/search?provider=vmware&q=centos&sort=downloads&utf8=%E2%9C%93
```

```
]
```

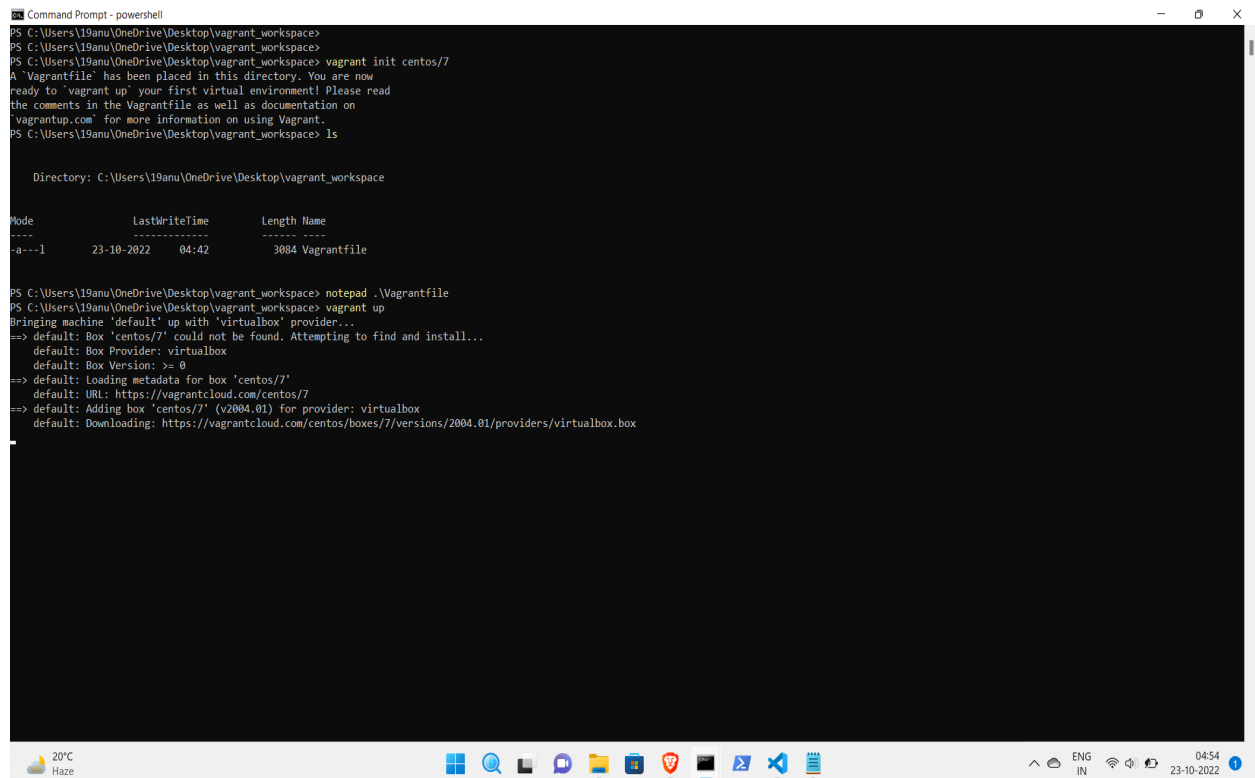
```
# ls
```

(there must be a vagrant file created for the vagrant box initialized.)

```
# notepad ./VagrantFile
```

(edit configs inside this file)

```
# vagrant up
```



```
Command Prompt - powershell
PS C:\Users\19anu\OneDrive\Desktop\vagrant_workspace>
PS C:\Users\19anu\OneDrive\Desktop\vagrant_workspace>
PS C:\Users\19anu\OneDrive\Desktop\vagrant_workspace> vagrant init centos/7
A 'Vagrantfile' has been placed in this directory. You are now
ready to 'vagrant up' your first virtual environment! Please read
the comments in the Vagrantfile as well as documentation on
'vagrantup.com' for more information on using Vagrant.
PS C:\Users\19anu\OneDrive\Desktop\vagrant_workspace> ls

Directory: C:\Users\19anu\OneDrive\Desktop\vagrant_workspace

Mode                LastWriteTime         Length Name
----                -
-a---1      23-10-2022    04:42           3084 Vagrantfile

PS C:\Users\19anu\OneDrive\Desktop\vagrant_workspace> notepad ./Vagrantfile
PS C:\Users\19anu\OneDrive\Desktop\vagrant_workspace> vagrant up
Bringing machine 'default' up with 'virtualbox' provider...
==> default: Box 'centos/7' could not be found. Attempting to find and install...
    default: Box Provider: virtualbox
    default: Box Version: >= 0
==> default: Loading metadata for box 'centos/7'
    default: URL: https://vagrantcloud.com/centos/7
==> default: Adding box 'centos/7' (v2004.01) for provider: virtualbox
    default: Downloading: https://vagrantcloud.com/centos/boxes/7/versions/2004.01/providers/virtualbox.box
```

VagrantFile Configuration

```
Vagrant.configure("2") do |config|  
  config.vm.box = "centos/7"  
  config.vm.hostname = "vm1"  
  config.vm.network "public_network", ip: "192.168.1.30"  
end
```

Working inside Vagrant:

After “vagrant up”, ping the vm ip in our case:

```
# ping 192.168.1.30
```

```
# vagrant ssh
```

```
# cd /
```

```
# cd vagrant
```

(This directory will contain the VagrantFile created while building the vagrant box.)

Synced Folders:

https://www.vagrantup.com/docs/synced-folders/basic_usage

You can share files between host and remote VM. By simply adding files to the directory containing VagrantFile in host. After that in host m/c,

```
# vagrant reload
```