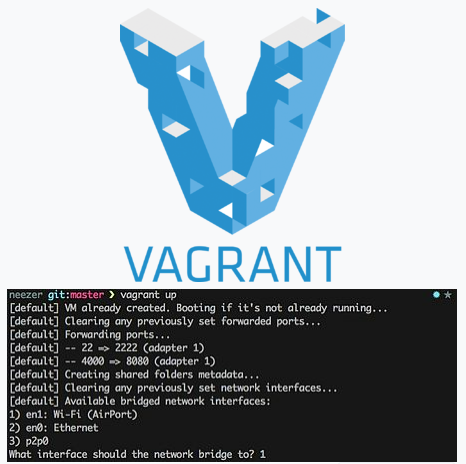
# **Day 3 (15th October) : Getting into DevOps**

# **What is Vagrant?**



Vagrant is a tool for building and maintaining portable virtual software development environments; e.g., for VirtualBox, KVM, Hyper-V, Docker containers, VMware, and AWS. It tries to simplify the software configuration management of virtualization in order to increase development productivity.

Vagrant is open source tool, which means that anyone can download it, modify it, and share it.

Vagrant provides a simple and easy to use command-line client for managing these environments, and an interpreter for the text-based definitions of what each environment looks like, called as Vagrantfiles.

## **What is Vagrantfile?**

A Vagrantfile is a Ruby file that instructs Vagrant to create, depending on how it is executed, new Vagrant machines or boxes.

You can see a box as a compiled Vagrantfile. It describes a type of Vagrant machines. From a box, we can create new Vagrant machines.

# ****Some of the Jargons used in Vagrant****

* ****Box****: A box is a packaged Vagrant environment, typically a virtual machine.
* ****Provider****: A provider is the location in which the virtual environment runs. It can be local (VirtualBox)or remote.
* ****Provisioner****: A provisioner is a tool to set up the virtual environment like Shell script.

# **What is virtual box?**

****VirtualBox**** is open source software for virtualizing the x86 computing architecture. It acts as a hypervisor, creating a VM (virtual machine) where the user can run another OS(operating system).

# **Why to use Vagrant over just virtual box**



## **Set Up Multi-VM Networks with Ease**

Vagrant helps in setting up multiple VMs at the same time. It gives you a single config file to set these up, enabling you to launch all of them with one command.

## **Source Control**

By putting the settings in a text file, it enables the configuration to be put under source control. Reverting back to the previous changes is way more feasible with Vagrantfile instead of doing it with just virtual machine.

# **Steps to install vagrant**

First you need to install virtual box and configure centos7 or any other distribution in it.

Craeate a folder named vagrant on your desired location.

Now go to *[https://www.vagrantup.com/downloads](https://www.vagrantup.com/downloads" \t "https://medium.com/@misalPav/_blank)*and save it in the vagrant folder.

Now open the terminal and put below commands there:

## **#vagrant -v**

This is the command to check the version of the vagrant installed.

Now cd (change dir) to the vagrant folder in terminal and put

## **#vagrant init centos/7**

This command initializes centos/7 in the vagrant

## **#vagrant up**

This command ****creates and configures guest machines according to your Vagrantfile****.

\_ Thank you for reading!

\_Rajani