



VAGRANT

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Agenda

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- ☞ How to Install Vagrant
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Understanding of Vagrant

- ☞ A CLI-based tool for streamlining the use of VM environments.
- ☞ It is a tool for Dev, Production and Test environments.
- ☞ It is a virtual machine so changes done in it, aren't actually reflected to the host machine.

Why should we use Vagrant ?

- ☞ Quick
- ☞ Easily replicate production on a Dev Box.
- ☞ Easily go production from Dev Box.
- ☞ Mature, stable and proven.
- ☞ Sharing VM environments with other users.
- ☞ Multi-platform (Windows, Linux, OS X).
- ☞ CLI (no GUI).
- ☞ No need to setup environmental things again and again.
- ☞ Lightweight as compared to GUT based VM.

Step 1: Install Vagrant

- ➡ Before installing Vagrant, make sure you have VM installed on your machine (Virtual Box, VM Ware).
- ➡ Go to this URL: <https://www.vagrantup.com/downloads.html>
- ➡ And download & install vagrant version according to your OS.



Step 2: Vagrant Setup

- ☞ Then go to this URL: <http://www.vagrantcloud.com> and download box as per your requirement.
- ☞ For now i'm using [ubuntu/trusty64](#) box.
- ☞ After that follow steps as shown below. (For Linux/Mac OS)

```
$ sudo mkdir vagrant_getting_started  
$ cd vagrant_getting_started  
$ vagrant init ubuntu/trusty64; vagrant up --provider virtualbox
```

Step 3: Vagrant Up

```
$ sudo vagrant up
```

Step 4: Vagrant ssh

```
$ sudo vagrant ssh
```

Success



More Commands

- 👉 **status** : status of the machine
- 👉 **halt** : stop machine
- 👉 **suspend** : suspend machine
- 👉 **reload** : restart machine (load new vagrantfile)
- 👉 **resume** : resume suspended machine
- 👉 **provision** : force provisioning machine
- 👉 **destroy** : stop and delete machine

Clone Vagrant Box

```
$ sudo vagrant package
```

- ☞ This command will take some time and it will generate a file called package.box in the vagrant project folder. Make sure your vagrant machine is up.
- ☞ You need to copy the package.box file to a different location, may be to a different machine. It is a good idea to rename

Clone Vagrant Box : Initial Setup to Install

- ➡ Now to install the cloned .box file, you can create a new folder on your machine or another machine and initiate it.

```
$ sudo vagrant init
```

- ➡ You need to copy the package.box file to a different location, may be to a different machine. It is a good idea to rename. I'm renaming it to **hvvm.box**

Install Cloned Vagrant Box

- 👉 **sudo vagrant init.** This command will generate a Vagrantfile in your project folder.
- 👉 Open the Vagrantfile in your favorite editor and add the following lines in it.

```
1. config.vm.box = "hvm"
```

```
2. # you're doing.
Vagrant.configure(2) do |config|
  # The most common configuration options are documented and commented below.
  # For a complete reference, please see the online documentation at
  # https://docs.vagrantup.com.

  # Every Vagrant development environment requires a box. You can search for
  # boxes at https://atlas.hashicorp.com/search.
  config.vm.box = "hvvm"
  config.vm.box_url = "/Users/my/Vagrant/temp1/hvvm.box"
end
```

Install Cloned Vagrant Box (contd..)

- ➡ It is important that the box name "hvvm" should not be used earlier by another vagrant based virtual machines.
- ➡ Once the location of the box is specified simply do **Vagrant up** and you would have a cloned or duplicate virtual machine.

```
$ sudo vagrant up
```

File sharing from host machine to guest machine

- ☞ Sometimes you will need to share files from host machine to guest machine or vice versa.
- ☞ So to do that open your Vagrantfile in any editor and add below lines in it.

```
config.vm.synced_folder "/Users/my/Vagrant/lamp/sharedata", "/var/www/html/sharedata", type: "rsync",  
rsync__args: ["--verbose", "--rsync-path='sudo rsync'", "--archive", "--delete", "-z"]
```

- ☞ So above lines contains rsync command which will sync lamp/sharedata folder (Host Machine) to html/sharedata (guest Machine)
- ☞ To make your changes reflected in both OS you will need to execute **vagrant reload** command.

Automatically reflect your changes

```
$ sudo vagrant rsync-auto
```

References

 <https://docs.vagrantup.com/v2/synced-folders/rsync.html>

 <https://laracasts.com/discuss/channels/tips/speed-up-vagrant-file-syncing-using-rsync>

 <https://www.vagrantcloud.com>

 <http://www.vagrantup.com>

 <http://code.tutsplus.com/tutorials/vagrant-what-why-and-how--net-26500>





THANK YOU
Very Much!