

WORKING WITH VAGRANT

1 Install a Virtual Box

- **VirtualBox 6.0.12** (released September 03 2019)
 - [Windows hosts](#)
 - [OS X hosts](#)
 - [Solaris hosts](#)
 - Linux Hosts:
 - [Oracle Linux 7 / Red Hat Enterprise Linux 7 / CentOS 7](#)
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 - [Ubuntu 18.04 / 18.10 / 19.04](#)
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2 Install Vagrant

The screenshot shows the Vagrant website's download page. At the top, there's a navigation bar with links for 'Intro', 'Docs', 'VMware', and 'Community'. To the right of these links are a GitHub icon, a star icon with '20.9k', and a blue 'Download' button. Below the navigation bar, the main heading is 'Download Vagrant'. Underneath this heading, a paragraph states: 'These are the available downloads for the latest version of Vagrant (2.2.11). Please download the proper package for your operating system and architecture.' Below this paragraph, there's a link: '» Download VMware Utility'. Further down, another paragraph says: 'Continue learning with step by step tutorials at HashiCorp Learn.' Below this, it says 'Current Version: 2.2.11' and 'Download Older Versions of Vagrant'. On the right side of the page, there's a section for downloading Vagrant for different operating systems. It has tabs for 'MAC OS X', 'WINDOWS', 'LINUX', 'DEBIAN', and 'CENTOS'. The 'WINDOWS' tab is selected. Below the tabs, there's a large box with the Windows logo, the text 'Windows 64-bit', and a blue 'Download' button.

- 3 Open command prompt and make a folder “VM_Lab”. Change into that folder and execute a command “vagrant init”
- 4 A “Vagrantfile” will be created and make the following change

```

Vagrantfile - Notepad
File Edit Format View Help
# -*- mode: ruby -*-
# vi: set ft=ruby :

# All Vagrant configuration is done below. The "2" in Vagrant.configure
# configures the configuration version (we support older styles for
# backwards compatibility). Please don't change it unless you know what
# 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://vagrantcloud.com/search.
  config.vm.box = "ubuntu/xenial64" ←

  # Disable automatic box update checking. If you disable this, then
  # boxes will only be checked for updates when the user runs
  # `vagrant box outdated`. This is not recommended.
  config.vm.box_check_update = false

  # Create a forwarded port mapping which allows access to a specific port
  # within the machine from a port on the host machine. In the example below,
  # accessing "localhost:8080" will access port 80 on the guest machine.
  # NOTE: This will enable public access to the opened port
  # config.vm.network "forwarded_port", guest: 80, host: 8080

  # Create a forwarded port mapping which allows access to a specific port
  # within the machine from a port on the host machine and only allow access
  # via 127.0.0.1 to disable public access
  # config.vm.network "forwarded_port", guest: 80, host: 8080, host_ip: "127.0.0.1"

  # Create a private network, which allows host-only access to the machine
  # using a specific IP.
  # config.vm.network "private_network", ip: "192.168.33.10"

```

5 Now run a command “vagrant up” to execute the changes made in vagrantfile

```

Command Prompt - vagrant up
Microsoft Windows [Version 10.0.19041.572]
(c) 2020 Microsoft Corporation. All rights reserved.

C:\Users\HP>cd VM_Lab

C:\Users\HP\VM_Lab>vagrant up
Bringing machine 'default' up with 'virtualbox' provider...
==> default: Box 'ubuntu/xenial64' could not be found. Attempting to find and install...
    default: Box Provider: virtualbox
    default: Box Version: >= 0
==> default: Loading metadata for box 'ubuntu/xenial64'
    default: URL: https://vagrantcloud.com/ubuntu/xenial64
==> default: Adding box 'ubuntu/xenial64' (v20201104.0.0) for provider: virtualbox
    default: Downloading: https://vagrantcloud.com/ubuntu/boxes/xenial64/versions/20201104.0.0/providers/virtualbox.box
Download redirected to host: cloud-images.ubuntu.com
Progress: 18% (Rate: 3590k/s, Estimated time remaining: 0:01:18)

```

```

==> default: Running 'pre-boot' VM customizations...
==> default: Booting VM...
==> default: Waiting for machine to boot. This may take a few minutes...
default: SSH address: 127.0.0.1:2222
default: SSH username: vagrant
default: SSH auth method: private key
default: Warning: Connection reset. Retrying...
default: Warning: Connection aborted. Retrying...
default:
default: Vagrant insecure key detected. Vagrant will automatically replace
default: this with a newly generated keypair for better security.
default:
default: Inserting generated public key within guest...
default: Removing insecure key from the guest if it's present...
default: Key inserted! Disconnecting and reconnecting using new SSH key...
==> default: Machine booted and ready!
==> default: Checking for guest additions in VM...
default: The guest additions on this VM do not match the installed version of
default: VirtualBox! In most cases this is fine, but in rare cases it can
default: prevent things such as shared folders from working properly. If you see
default: shared folder errors, please make sure the guest additions within the
default: virtual machine match the version of VirtualBox you have installed on
default: your host and reload your VM.
default:
default: Guest Additions Version: 5.1.38
default: VirtualBox Version: 6.0
==> default: Mounting shared folders...
default: /vagrant => C:/Users/HP/VM_Lab
C:\Users\HP\VM_Lab>

```

- 6 Now execute another command “vagrant ssh” to go into that Ubuntu machine

```

C:\Users\HP\VM_Lab>vagrant ssh
Welcome to Ubuntu 16.04.7 LTS (GNU/Linux 4.4.0-193-generic x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/advantage

0 packages can be updated.
0 updates are security updates.

New release '18.04.5 LTS' available.
Run 'do-release-upgrade' to upgrade to it.

vagrant@ubuntu-xenial:~$

```