

## Getting Started with Vagrant and VirtualBox

Install VirtualBox from <https://www.virtualbox.org/>

Install Vagrant from <https://www.vagrantup.com/>

The Vagrant download is often slow so I put the latest installers here for convenience:

Windows: [https://blue.butler.edu/~npartenh/vagrant\\_1.7.4.msi](https://blue.butler.edu/~npartenh/vagrant_1.7.4.msi)

Mac: [https://blue.butler.edu/~npartenh/vagrant\\_1.7.4.dmg](https://blue.butler.edu/~npartenh/vagrant_1.7.4.dmg)

Save <https://blue.butler.edu/~npartenh/Vagrantfile.txt> somewhere on your system and **rename it Vagrantfile**. This is a configuration file for vagrant. It's plain text so, after you save it, inspect it to see what options are set and available to you.

Start a command prompt

- Mac OS: use the Terminal program
- Windows: use powershell or cmd.exe

Change directories to where the vagrant file is saved, then enter the command: `vagrant up`

After the virtual machine is started **ssh** to the virtual machine in one of the following ways:

1. use: `vagrant ssh`
2. use putty to ssh to **localhost:2222**  
Login using:  
**username: vagrant**  
**password: vagrant**
3. `ssh -o Port=2222 vagrant@localhost`  
**password: vagrant**

To halt the machine for later use: `vagrant halt`

To destroy the machine: `vagrant destroy`

### Using [github.butler.edu](https://github.com/bluebutler) with your virtual machine

Github provides an easy mechanism to redeploy code for use on systems. Once your machine is running, you can install git, clone your repository and work.

Install git:

```
sudo apt-get update && apt-get install -y git
```

Clone repository for use (which will prompt for *your* username and password):

```
git clone https://github.butler.edu/username/repo.git
```

Additionally, we may use a set of packages or special configuration for certain exercises. In those cases we can configure the environment with a script using a command like:

```
bash <(curl -s https://blue.butler.edu/~npartenh/cs431.sh)
```