

Setting up a VM using Oracle VirtualBox and Vagrant

Introduction to NoSQL databases

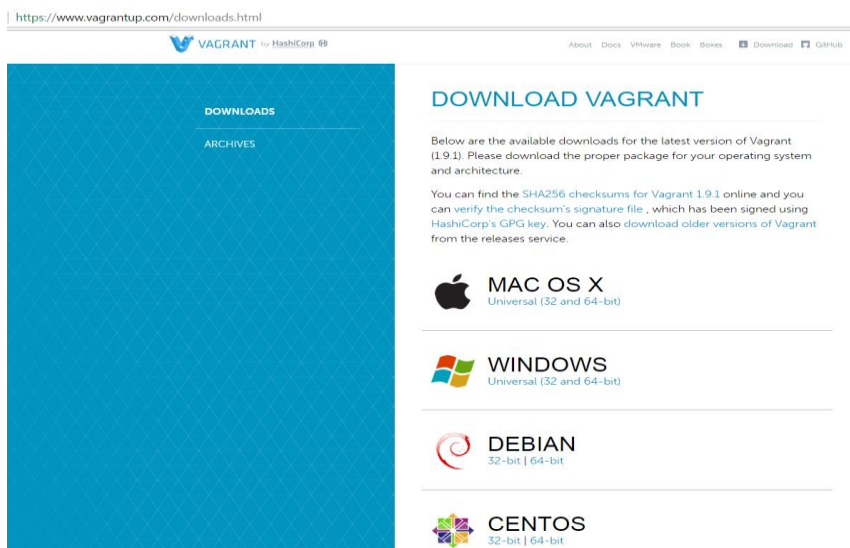
Instructor: Dr. Kim

1. Download and install “Oracle VM VirtualBox” software.

<https://www.virtualbox.org/wiki/Downloads>



2. Download and install “Vagrant” software. <http://www.vagrantup.com/downloads.html>



3. Create a directory and go in there.

```
C:\Windows\System32>cd\  
C:\>mkdir vm  
C:\>cd vm
```

4. Create a file called "Vagrantfile" (that is, no extension) with the following content.

```
C:\vm> notepad Vagrantfile  
  
Vagrant.configure("2") do |config|  
    config.vm.box = "ubuntu/trusty64"  
end
```

5. Run the 'vagrant up' command to create a Ubuntu 14.04 VM.

```
C:\vm> vagrant up  
Bringing machine 'default' up with 'virtualbox' provider...  
==> default: Importing base box 'ubuntu/trusty64'...  
==> default: Matching MAC address for NAT networking...  
==> default: Checking if box 'ubuntu/trusty64' is up to date...  
==> default: Setting the name of the VM: vagrant_default_1462719341949_14417  
==> default: Clearing any previously set forwarded ports...  
==> default: Clearing any previously set network interfaces...  
==> default: Preparing network interfaces based on configuration...  
default: Adapter 1: nat  
==> default: Forwarding ports...  
default: 22 (guest) => 2222 (host) (adapter 1)  
==> 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: Remote connection disconnect. 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: 4.3.36  
default: VirtualBox Version: 5.0  
==> default: Mounting shared folders...  
default: /vagrant => C:/vagrant  
==> default: Running provisioner: shell...  
default: Running: C:/Users/SUNEUY~1/AppData/Local/Temp/vagrant-shell120160508-8612-ewym  
w9.sh
```

6. Check the output to find out what port number to use. (typically, 2222 or 2200)

See the circled part of the output above.

7. You may check the status of the virtual machine using `vagrant status` command.

```
c:\vagrant>vagrant status
Current machine states:

default                running (virtualbox)

The VM is running. To stop this VM, you can run `vagrant halt` to
shut it down forcefully, or you can run `vagrant suspend` to simply
suspend the virtual machine. In either case, to restart it again,
simply run `vagrant up`.

c:\vagrant>_
```

8. Log into the VM as username=vagrant and password=vagrant, using ssh (Putty or MobaXTerm).

```
ssh -p 2222 127.0.0.1
```

```
Username: vagrant
```

```
Password: vagrant
```

Note: Commands to update and upgrade the Ubuntu.

```
sudo apt-get update -y
```

```
sudo apt-get upgrade -y
```

```
sudo reboot
```