Apache Spark with Vagrant

- 1. Download and Install Vagrant
- 2. Download and Install VirtualBox
- 3. Create a new directory and name it pyspark
- 4. Download Vagrantfile from our googledrive and save it in pyspark directory
- 5. Open up your shell terminal and change the working directory to pyspark

6. Type in,

\$ vagrant up

This command will initiate installation of Anaconda, Java EMR, and Spark. This process will take up to 20 minutes.

7. Once installation finishes, type in \$ vagrant ssh

This command will log you into your virtual VM

8. In the root directory, type in

```
vagrant@precise64:~$ IPYTHON_OPTS="notebook --ip=0.0.0.0
--no-browser" ./spark-1.4.1-bin-hadoop2.6/bin/pyspark
```

This launches ipython notebook with Apache pyspark API

9. Open up your web browser and type in

http://localhost:8888/tree

10. You should see the following in your browser



- 11. Click on New button in the top right corner to start a new notebook
- 12. In the new notebook, run the following python script to verify correct installation of spark

13. You can also upload your own .ipynb file by clicking on <u>Upload</u>



14. When finished, exit out of the VM shell by typing

vagrant@precise64:~\$ exit

and in your local console, type

\$ vagrant halt

this will shut down the VM.