2014.11.16

1. Spin up Ubuntu server VM

I called it TachyonCluster\_Master

2. Install AWS EC2 CLI tools

Had to install Java

sudo apt-get install openjdk-7-jre

I had to create an IAM user and add the Administrator User Policy;

the user's name is nieltown

saved the credential in credential.csv

I added ec2-api-tools.sh to set up environment variables:

put it in /etc/profile.d/ec2-api-tools.sh

^^^ you don't have to make these executable; they'll

just run every time you start a bash session

had to set up 4 different environment variables for the keys

3. Setup Tachyon on EC2

Following this guide:

https://github.com/amplab/tachyon/wiki/Running-Tachyon-on-EC2

I did all of this from TachyonCluster\_Master, specifying

-a ami-5bb18832

^^^ (as per

https://github.com/mesos/spark-ec2/blob/v4/ami-list/us-east-1/pvm)

-k DriveStoredKey

-i ~/keys/DriveStoredKey.pem

-s 3

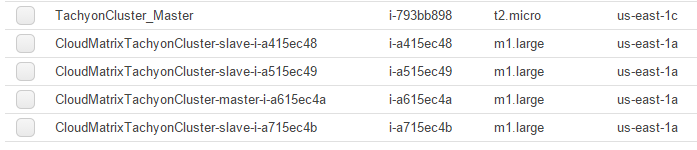
^^^ that's three (3) slaves

-w 600

^^^ wait 600 seconds

read that somewhere in a forum post; not sure if it's actually doing anything for me

it in turn created 4 EC2 instances:



Took a long time (I did say to wait 600 seconds after all), but it did a lot of setup on the servers it created (software installation, etc)

I noticed installing these things:

Scala

Spark/Shark

Hadoop (1.0.4)

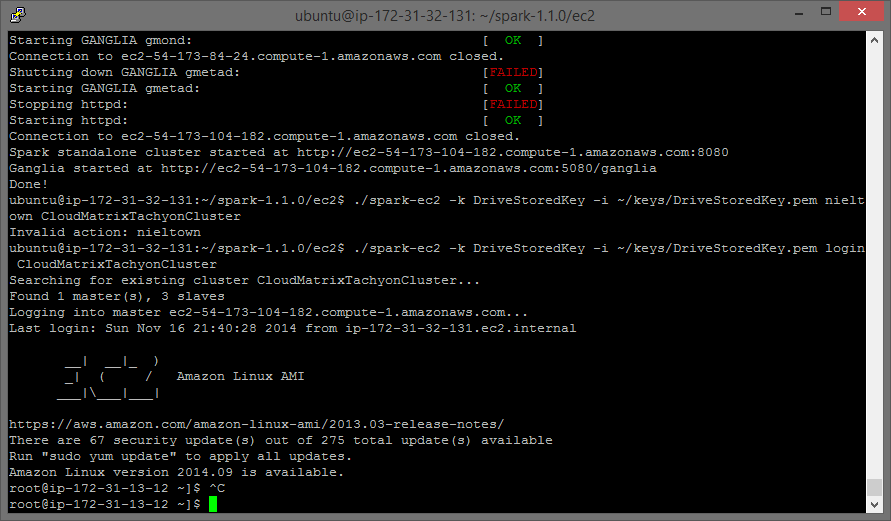
Tachyon (0.4.1)

Ganglia

After it finished, I ran this command:

./spark-ec2 -k DriveStoredKey -i ~/keys/DriveStoredKey.pem login CloudMatrixTachyonCluster

And it logged me into the Cluster



I ran ‘sudo yum update’ and updated all my shit (446 M)

4. Setting up Git on my local VM

This is the local VM on my own desktop. I set up Git on it in the same directory as the Eclipse project, i.e. /home/nieltown/cloudmatrix

This is what I did to do that:

cd cloudmatrix/

touch README.md

git init

git add README.md

git commit -m "first commit"

git remote add origin [git@github.com:nieltown/CloudMatrix.git](mailto:git@github.com:nieltown/CloudMatrix.git)

git push -u origin master

But then there was an error! I had to fix my public key. So to do that, I took the following steps:

ssh-keygen -t rsa -C [mr.john.nielson@gmail.com](mailto:mr.john.nielson@gmail.com)

ssh-agent –s

eval $(ssh-agent)

ssh-add ~/.ssh/id\_rsa

Then I copied the key to my clipboard and added it to GitHub via the web interface:

ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQC0CADpzpmdt1tdiQUk/777sNpT9gBDoBjtbtDoMOdSDpbLThvBEMBi8PKRcKljUlFbuh3E4AiuMeXEL3Tl0nxCo0CrJULXoE9LCZk4V6ro4nOgvUGsOiUvfv4PBI0Mj8VhKkSTSNzDEMGWq4LzfqdZJwuAq/A4P+6xYvfz9cfEWYykryYVFdl8ajxo9nP25WURQcx2J/U90+ygErVJV5h4984swS4cE3H4R0zKNGVw/FWDNxMiRIBrSj0C+uVmLXULoIi69c7OZf2r8BlwecNvd9TGQmuxo9QzVkS1zm9Mv87LTiUX2DmziCDZ3kMl2SYMRfdR5XoKjfZl0VqtzEi5 mr.john.nielson@gmail.com

So then I went back to try to push to GitHub again:

cd ~/cloudmatrix

git push -u origin master

And everything worked fine.

Next I added the contents of the project to GitHub:

git add \*

git commit -m "initial load of project files and flask app"

git push –u origin master