**Environment**

Ubuntu 14.04, Hadoop 2.6.0, OpenJDK 1.7

**I. Installing JAVA JDK**

Login as root

sudo –s

Install Jave Runtime

sudo apt-get install default-jre

Install Java JDK (OpenJDK v 1.7 or newer)

sudo apt-get update

sudo apt-get install default-jdk

                Checking Java verison

Java --version

**II. Install Secure Shell**

Install (SSH and RSYNC)

sudo iptables -L

sudo iptables -A INPUT -p tcp --dport ssh -j ACCEPT

sudo apt-get install ssh

sudo apt-get install rsync

Create and Setup SSH Certificates (Setup passphraseless ssh)

To enable password-less login, generate a new SSH key with an empty passphrase:

Use Hadoop User:

ssh-keygen -t dsa -P '' -f ~/.ssh/id\_dsa

cat ~/.ssh/id\_dsa.pub >> ~/.ssh/authorized\_keys

**III. Fetch and Install Hadoop**

Fetcth Hadoop (Stable Version)

wget http://apache.tradebit.com/pub/hadoop/common/current/hadoop-2.6.0.tar.gz

Extract File

tar xfz hadoop-2.6.0.tar.gz

Move to local (Runing Directory)

mv hadoop-2.6.0 /usr/local/hadoop

**IV. Edit Hadoop Configuration Files**

Get Java Correct Path

update-alternatives --config java

**/usr/lib/jvm/java-7-openjdk-i386** /jre/bin/java

Modifing The following Files

~/.bashrc

/usr/local/hadoop/etc/hadoop/hadoop-env.sh

/usr/local/hadoop/etc/hadoop/core-site.xml

/usr/local/hadoop/etc/hadoop/yarn-site.xml

/usr/local/hadoop/etc/hadoop/mapred-site.xml

/usr/local/hadoop/etc/hadoop/hdfs-site.xml

(1)~/.bashrc

nano ~/.bashrc

Add the following to the end file after modify the java\_home and Hadoop\_install, Change JAVA\_HOME to Correct path you getting above, and HADOOP\_INSTALL to your hadoop folder room

#HADOOP VARIABLES START

export JAVA\_HOME=/usr/lib/jvm/java-7-openjdk-i386

export HADOOP\_INSTALL=/usr/local/hadoop

export PATH=$PATH:$HADOOP\_INSTALL/bin

export PATH=$PATH:$HADOOP\_INSTALL/sbin

export HADOOP\_MAPRED\_HOME=$HADOOP\_INSTALL

export HADOOP\_COMMON\_HOME=$HADOOP\_INSTALL

export HADOOP\_HDFS\_HOME=$HADOOP\_INSTALL

export YARN\_HOME=$HADOOP\_INSTALL

export HADOOP\_COMMON\_LIB\_NATIVE\_DIR=$HADOOP\_INSTALL/lib/native

export HADOOP\_OPTS="-Djava.library.path=$HADOOP\_INSTALL/lib"

#HADOOP VARIABLES END

Save file and close then Refresh Source using the following command

source ~/.bashrc

(2) /usr/local/hadoop/etc/hadoop/hadoop-env.sh

nano /usr/local/hadoop/etc/hadoop/hadoop-env.sh

                Update the JAVA\_HOME

JAVA\_HOME=/usr/lib/jvm/java-7-openjdk-i386

                Save and close the file

(3)/usr/local/hadoop/etc/hadoop/core-site.xml

nano /usr/local/hadoop/etc/hadoop/core-site.xml

Add the following to the configuration Tag

<property>

   <name>fs.default.name</name>

   <value>hdfs://localhost:9000</value>

</property>

                Save and close the file

(4)/usr/local/hadoop/etc/hadoop/yarn-site.xml

nano /usr/local/hadoop/etc/hadoop/yarn-site.xml

Add the following to the configuration Tag

<property>

   <name>yarn.nodemanager.aux-services</name>

   <value>mapreduce\_shuffle</value>

</property>

<property>

   <name>yarn.nodemanager.aux-services.mapreduce.shuffle.class</name>

   <value>org.apache.hadoop.mapred.ShuffleHandler</value>

</property>

                Save and close the file

(5)/usr/local/hadoop/etc/hadoop/mapred-site.xml

                Copy template

cp /usr/local/hadoop/etc/hadoop/mapred-site.xml.template  /usr/local/hadoop/etc/hadoop/mapred-site.xml

                Modify file

nano /usr/local/hadoop/etc/hadoop/mapred-site.xml

Add the following to the configuration Tag

<property>

   <name>mapreduce.framework.name</name>

   <value>yarn</value>

</property>

                Save and close the file

(6)/usr/local/hadoop/etc/hadoop/hdfs-site.xml

                Create two directory for hadoop storage

mkdir -p /usr/local/hadoop\_store/hdfs/namenode

mkdir -p /usr/local/hadoop\_store/hdfs/datanode

                Modify the file

nano /usr/local/hadoop/etc/hadoop/hdfs-site.xml

Add the following to the configuration Tag

<property>

   <name>dfs.replication</name>

   <value>1</value>

 </property>

 <property>

   <name>dfs.namenode.name.dir</name>

   <value>file:/usr/local/hadoop\_store/hdfs/namenode</value>

 </property>

 <property>

   <name>dfs.datanode.data.dir</name>

   <value>file:/usr/local/hadoop\_store/hdfs/datanode</value>

 </property>

                Save and close the file

<?xml version="1.0" encoding="UTF-8"?>

<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>

**V. Change folder permission**

                Replace qursaan: with your hadoop users to be the owner of the folder

sudo chown qursaan:qursaan -R /usr/local/hadoop

sudo chown qursaan:qursaan -R /usr/local/hadoop\_store

                also give the folder the full permission

sudo chmod -R 777 /usr/local/hadoop

sudo chmod -R 777 /usr/local/hadoop\_store

**VI. Format the New Hadoop Filesystem**

Using Hadoop user (not superuser)

hdfs namenode –format

**VII. Start hadoop**

                Using Hadoop user (not superuser)

start-dfs.sh

start-yarn.sh

OR to run all

start-all.sh

**VIII. Web View**

ResourceManager @- <http://localhost:8088/>

NameNode @- <http://localhost:50070/>