**3 node Cluster (nn,dn,jt)**

**Local download]$ scp –i alam.pem alam.pem Ubuntu@pub ip:/home/Ubuntu/.ssh**

**nn]$cd .ssh (now key is available in .ssh)**

**nn/.ssh]$scp –i alam.pem alam.pem Ubuntu@jt pri ip:/home/Ubuntu/.ssh**

**nn/.ssh]$scp –i alam.pem alam.pem Ubuntu@dn pri ip:/home/Ubuntu/.ssh**

**nn/.ssh]$ssh –i alam.pem Ubuntu@dn pri (u can chk pem key in .ssh)**

**nn/.ssh]$ssh –i alam.pem Ubuntu@jt pri (u can chk pem key in .ssh)**

**change the hostname:-**

**nn]$sudo hostname nn (for one session only)**

**nn]$bash**

**nn]$sudo nano /etc/hosts (configure FQDN on all nodes)**

**nn]$ nano .profile (when we login, profile run )**

eval `ssh-agent` ssh-add /home/ubuntu/.ssh/alam.pem

**nn]$**source .profile (for refresh)

**nn]$ssh dn/jt (now u can connect without -i)**

**nn]$scp .profile jt:/home/Ubuntu (move .profile file on all nodes)**

**or**

**nn]$scp .profile dn:~**

**nn]$sudo nano /etc/ssh/ssh\_config (yes/No avoid only )**

strictHostKeychecking no

**nn]$ssh dn & ssh nn (just check-vice versa can do)**

**nn]$ssh jt & ssh nn (just check-vice versa can do)**

Networking and security part done

nn]$sudo apt-get install dsh –y

nn]$sudo nano /etc/dsh/machines.list

#localhost

nn

dn

jt

nn]$dsh –a uptime (for chk)

nn]$dsh –a sudo apt-get update

-----------------------------\*\*downloading hadoop\*\*------------------------(make sure u are on nn)

dsh -a wget http://apache.mirror.gtcomm.net/hadoop/common/hadoop-1.2.1/hadoop-1.2.1.tar.gz

dsh -a tar -xzvf hadoop-1.2.1.tar.gz

dsh -a sudo mv hadoop-1.2.1 /usr/local/hadoop

----------\*\*downloading and installing java (Hadoop requires a working Java 1.6+)\*\*--------(make sure u are on nn)

dsh -a sudo apt-get update

dsh -a sudo apt-get install openjdk-7-jdk -y

---------------------------\*\*configuring bashrc linux env setup\*\*---------------(make sure u are on nn)

nano ~/.bashrc

export HADOOP\_PREFIX=/usr/local/hadoop/

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

export JAVA\_HOME=/usr/lib/jvm/java-7-openjdk-amd64

export PATH=$PATH:$JAVA\_HOME

**nn]$exec bash**

**nn]$scp .bashrc dn/jt:/home/Ubuntu or scp .bashrc dn:~**

**nn]$dsh –a exec bash**

------\*\*setting **hadoop env**\*\*------(make sure u are on nn)

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

export JAVA\_HOME=/usr/lib/jvm/java-7-openjdk-amd64

export HADOOP\_OPTS=-Djava.net.preferIPV4Stack=true

-------\*\*configuring xml's\*\*------ (make sure u are on nn)

nano /usr/local/hadoop/conf/**core-site.xml**

<property>

<name>fs.default.name</name>

<value>hdfs://nn:9000</value>

</property>

<property>

<name>hadoop.tmp.dir</name>

<value>/usr/local/hadoop/tmp</value>

</property>

nano /usr/local/hadoop/conf/**hdfs-site.xml**

<property>

<name>dfs.replication</name>

<value>1</value>

</property>

<property>

<name>dfs.permissions</name>

<value>false</value>

</property>

nano /usr/local/hadoop/conf**/mapred-site.xml**

<property>

<name>mapred.job.tracker</name>

<value>hdfs://jt:9001</value>

</property>

---------------\*\*configuring **masters and slaves**\*\*-------------(make sure u are on nn)

ssh nn

nano /usr/local/hadoop/conf/masters

#localhost

nn

ssh jt

nano /usr/local/hadoop/conf/masters

#localhost

jt

ssh nn

nano /usr/local/hadoop/conf/slaves

#localhost

dn

nano .bashrc

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

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

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

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

nano /usr/local/hadoop/conf/masters

nano /usr/local/hadoop/conf/slaves

nano /etc/hosts

nano /etc/hostname

eval `ssh-agent` ssh-add /home/ubuntu/.ssh/alam.pem

dsh -a source .profile