Pseudo Node Hadoop Setup

Login 1st with u r id & password on VMCare.

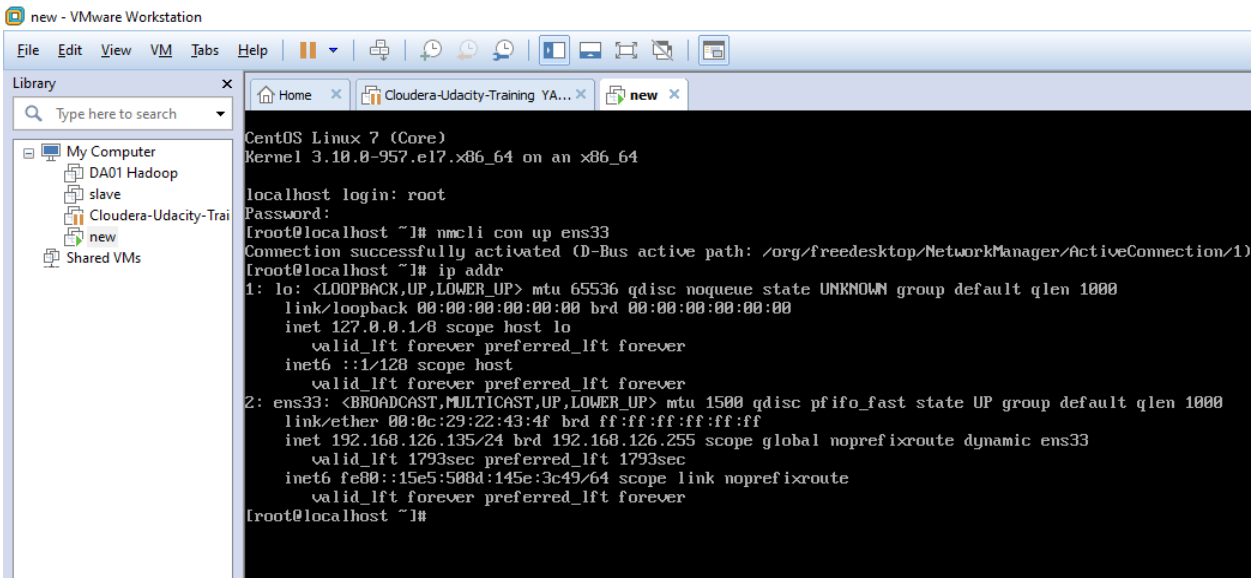
Step 1: check your ip address

[root@localhost ~]# nmcli con up ens 33

Connenction activated successfully.

[root@localhost ~]# ip addr

Activate your ip address



Step 1: Download latest jdk from Hadoop setup file

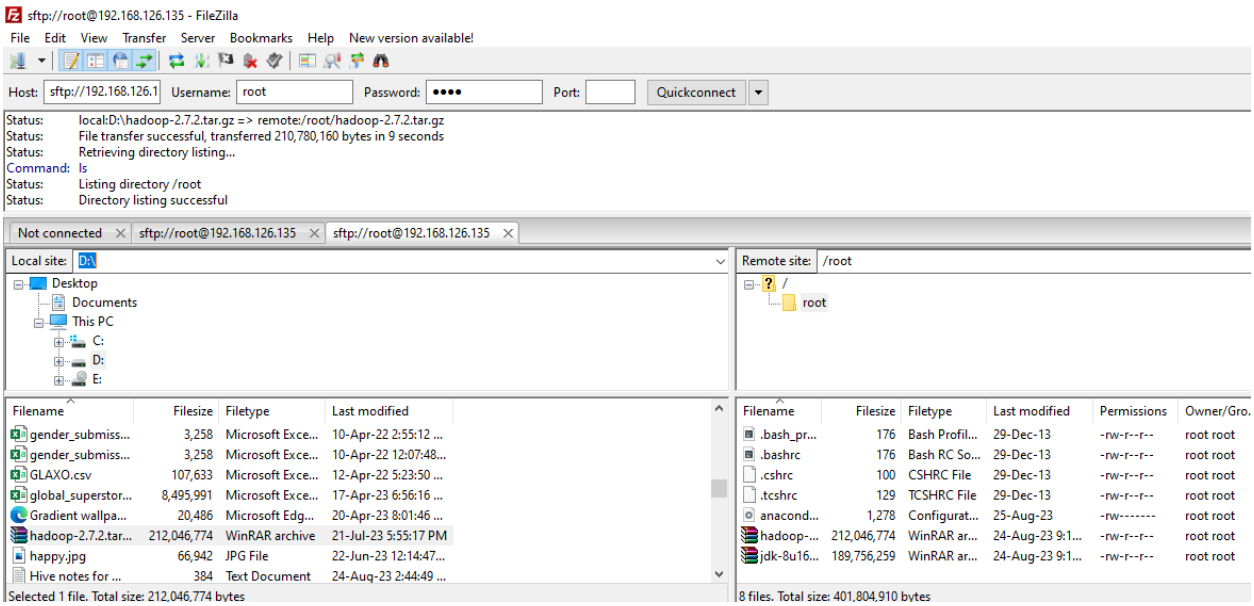
Files name :

jdk-8u161-linux-x64.tar

hadoop-2.7.2.tar

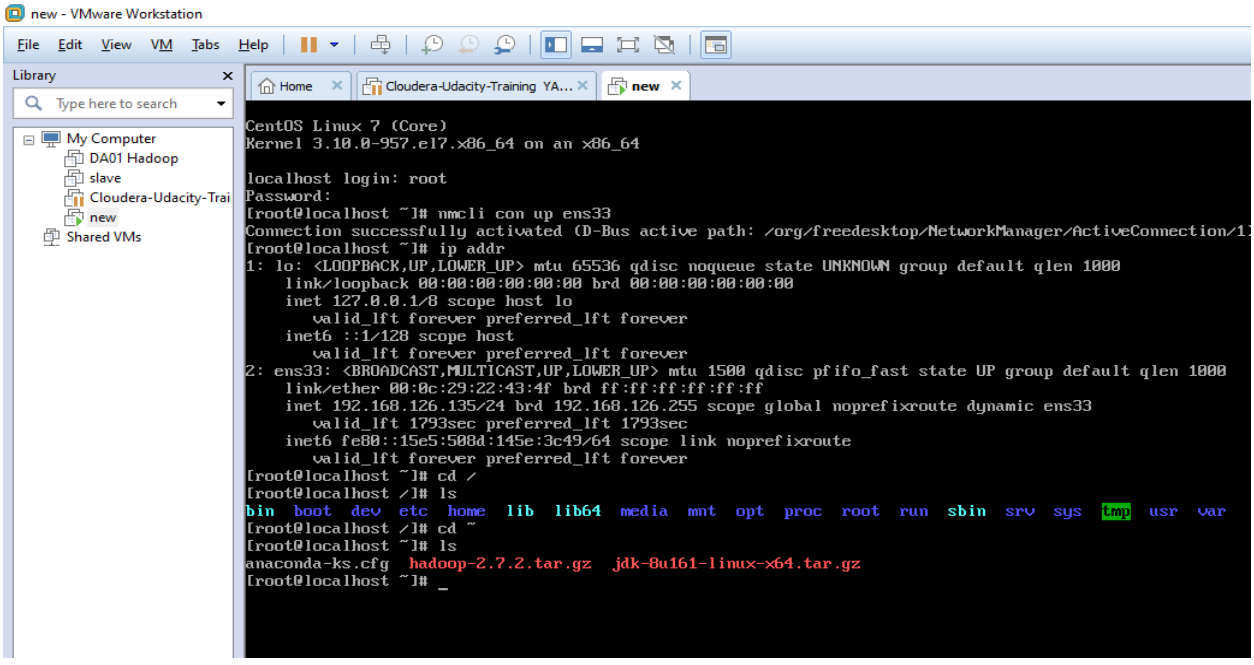
Using filezilla transfer the file from your pc to vmcare workstation

Just drag & drop file from local size pc to root.



[root@localhost~]# ls

Shows all files



Installation of JDK

2: Extract the tar file

Extract JDK file: tar -xvf jdk..tar.gz

After Extracted file showing in blue colour & zip file showing in red colour.

Step 3: Move jdk extracted file dir to /usr/local/java

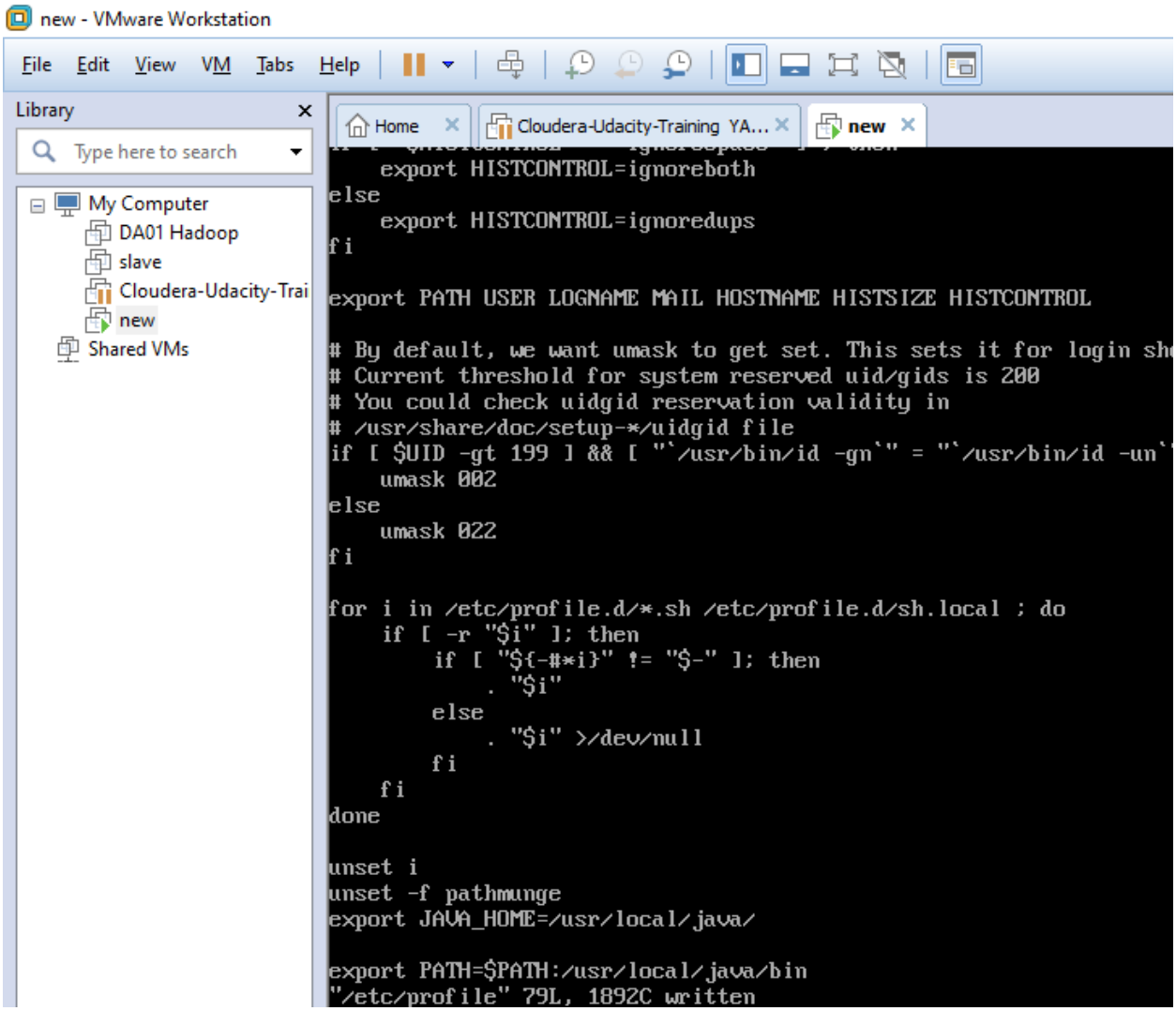
mv jdk1.6… /usr/local/java

Step 4: Set the environment variables

vi /etc/profile

inserts this path in the file:

export JAVA_HOME=/usr/local/java/
export PATH=$PATH:/usr/local/java/bin



Step 5: Check if jps (java process) is running

source
[Source is like refresh command in windows]
Jps

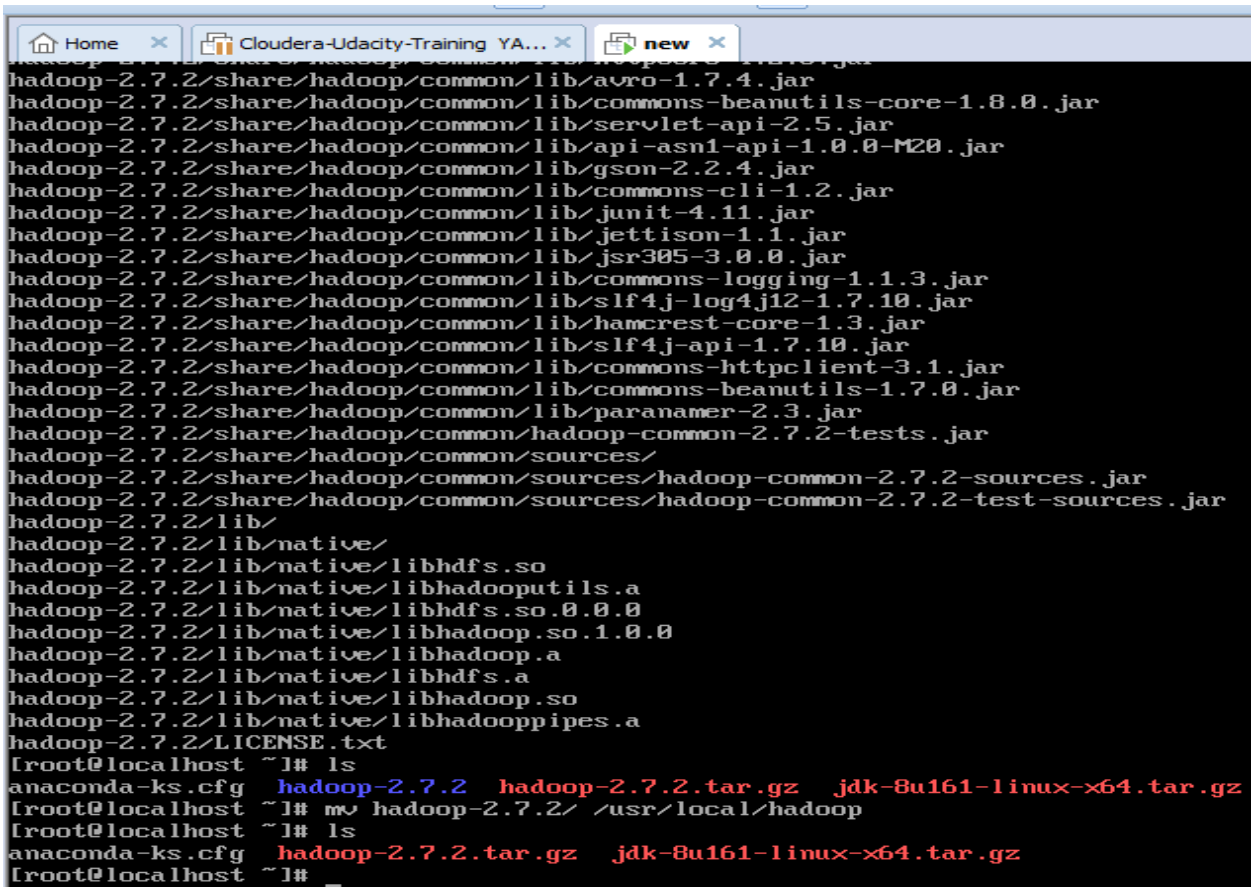
```
unset -f pathmunge
export JAVA_HOME=/usr/local/java/

export PATH=$PATH:/usr/local/java/bin
"/etc/profile" 79L, 1892C written
[root@localhost ~]# source /etc/profile
[root@localhost ~]# jps
7567 Jps
```

Install Apache Hadoop

Step 1: Unpack the Apache Hadoop

tar -xvf hadoop-2.6.0.tar.gz

Step 2: Move hadoop extracted file dir to /usr/local/hadoop

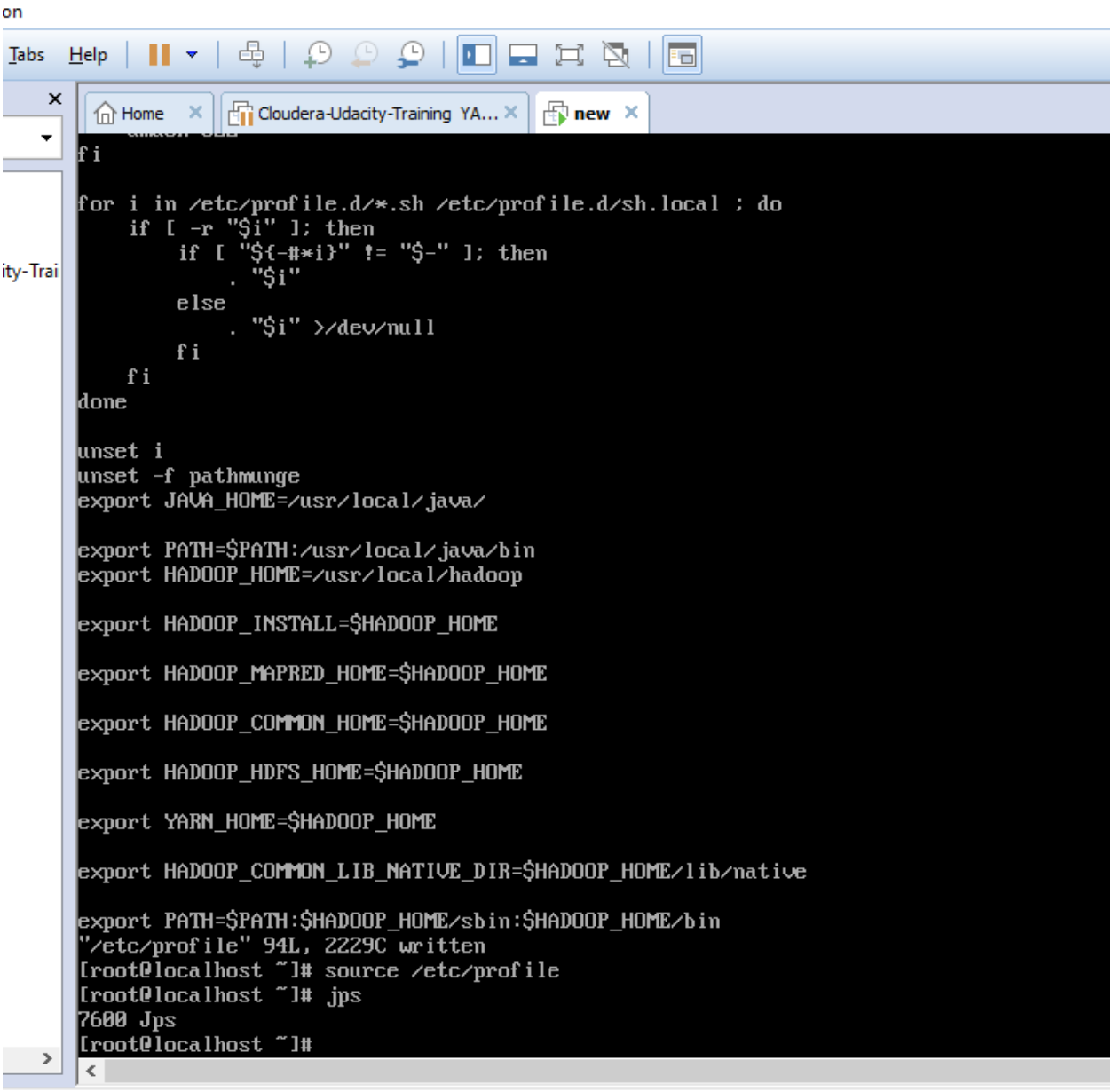


Step 4: Set the environment Variables

- **vi /etc/profile** [we are using this file]

Inserts this path in the file:

export HADOOP_HOME=/usr/local/hadoop
export HADOOP_INSTALL=$HADOOP_HOME
export HADOOP_MAPRED_HOME=$HADOOP_HOME
export HADOOP_COMMON_HOME=$HADOOP_HOME
export HADOOP_HDFS_HOME=$HADOOP_HOME
export YARN_HOME=$HADOOP_HOME
export HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_HOME/lib/native
export PATH=$PATH:$HADOOP_HOME/sbin:$HADOOP_HOME/bin



Step 5: Set JAVA path in hadoop-env.sh

cd /usr/local/hadoop/etc/Hadoop

vi hadoop-env.sh

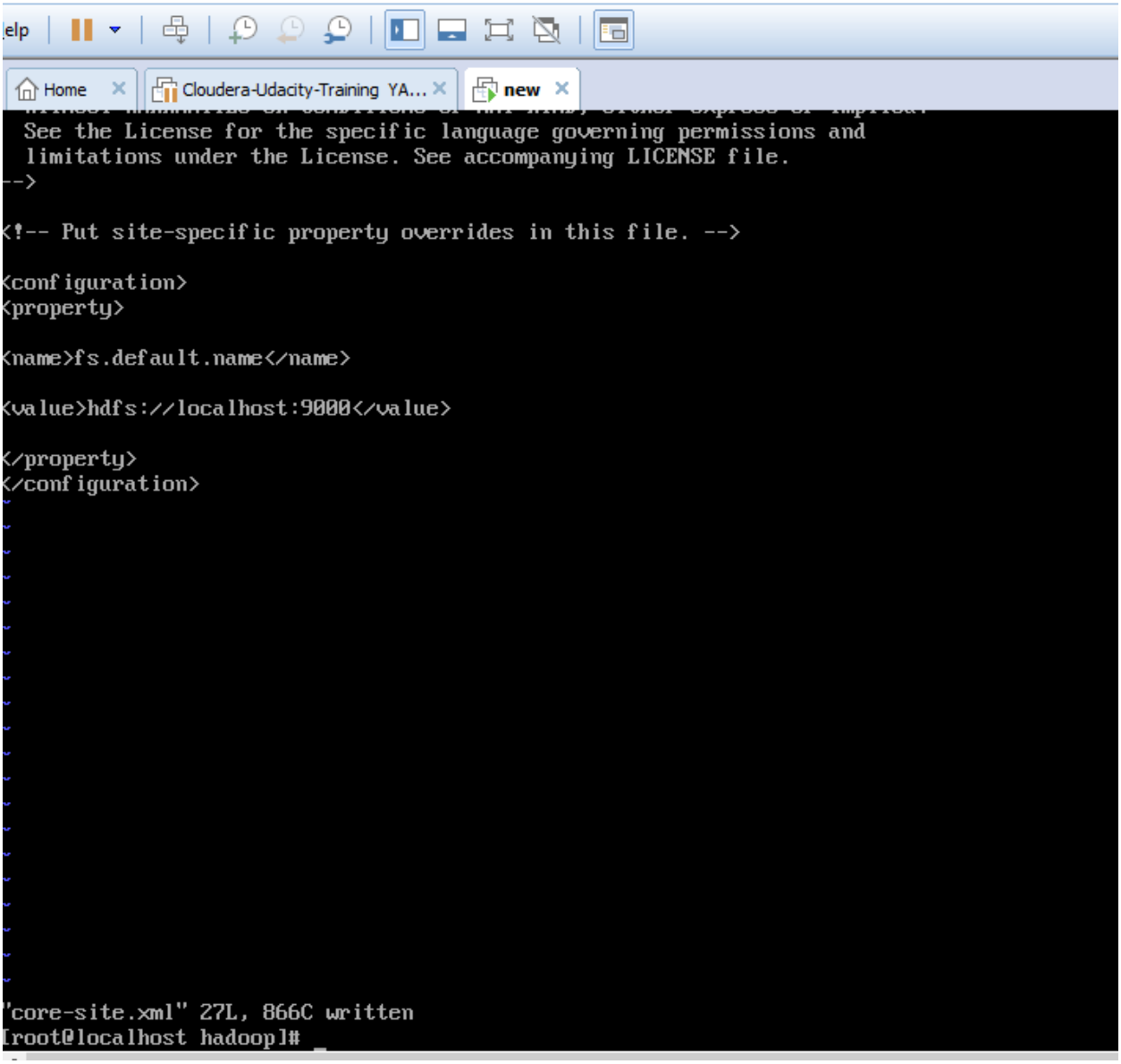
insert the path in the file:

export JAVA_HOME=/usr/local/java

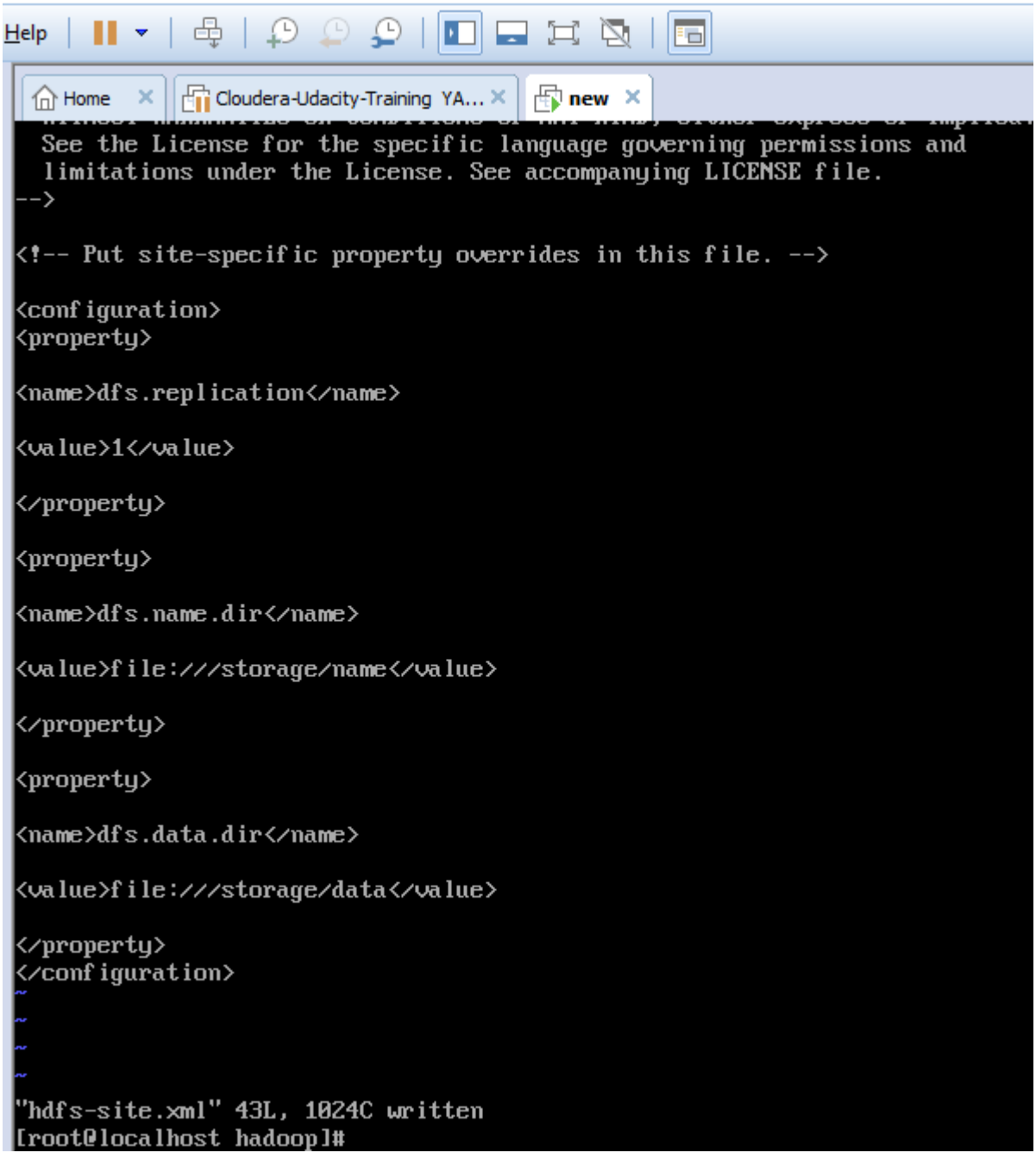
Step 6: Configure the xml files –

The properties need to be copied between <configuration> and </configuration> tag.

core-site.xml

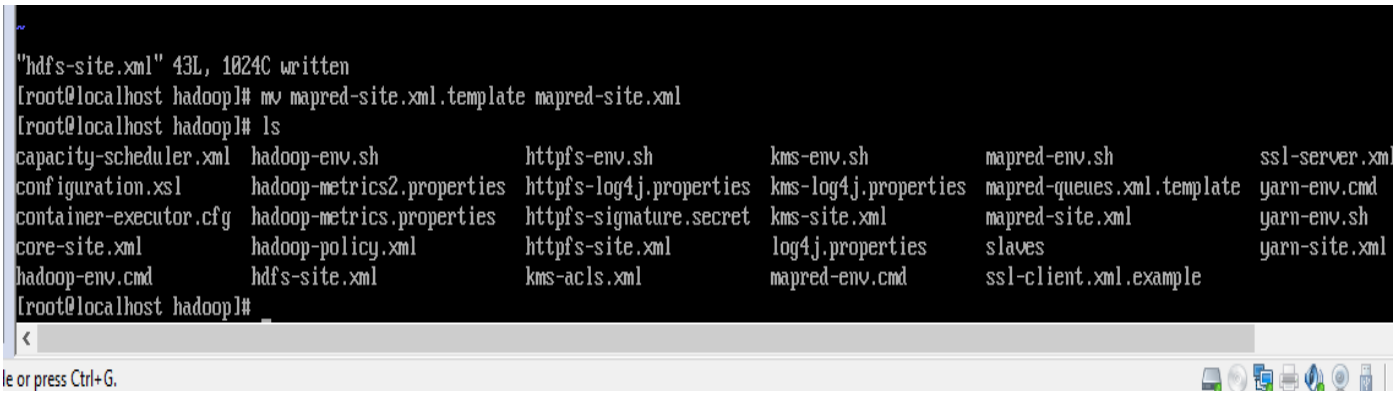


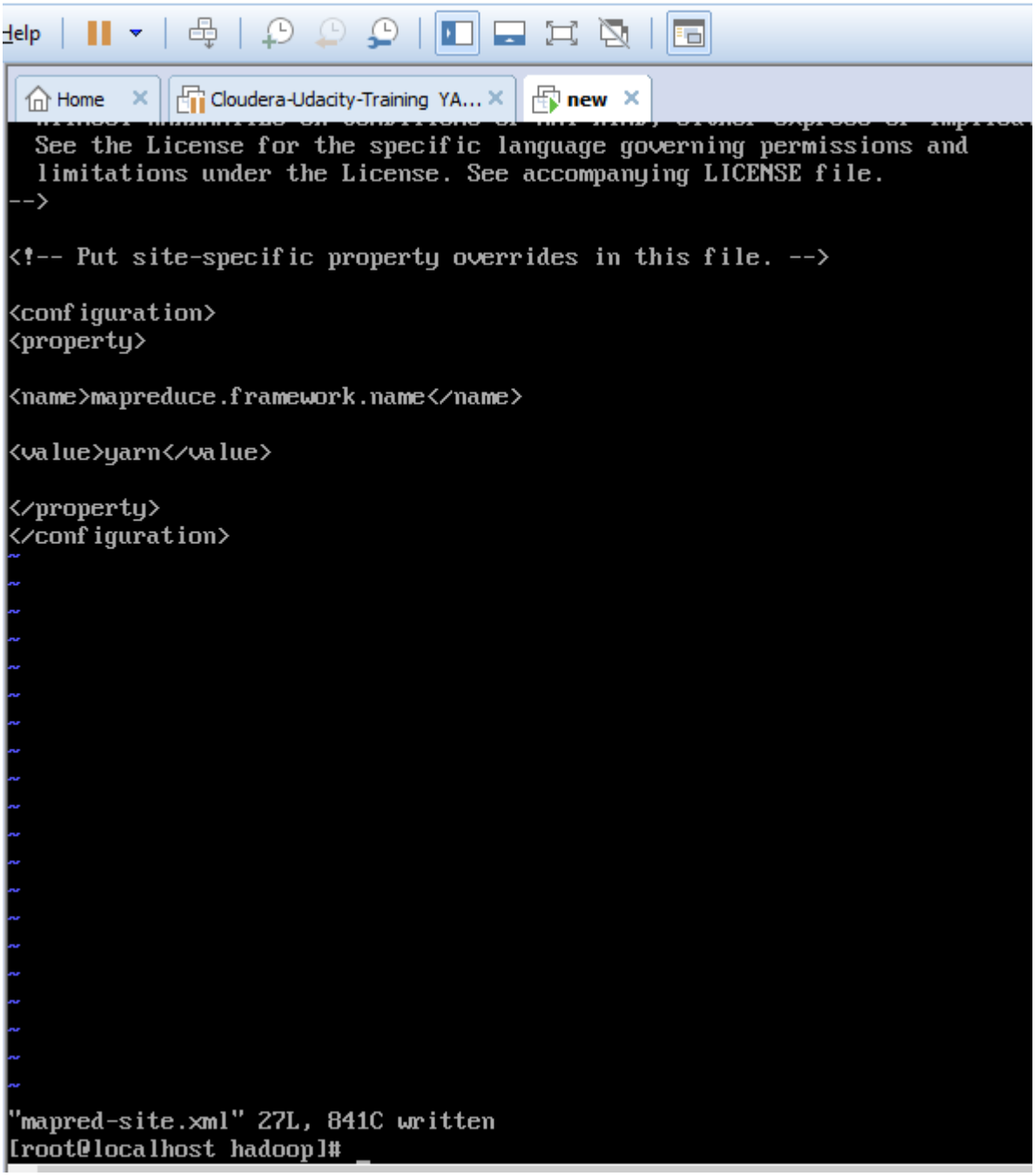
hdfs-site.xml



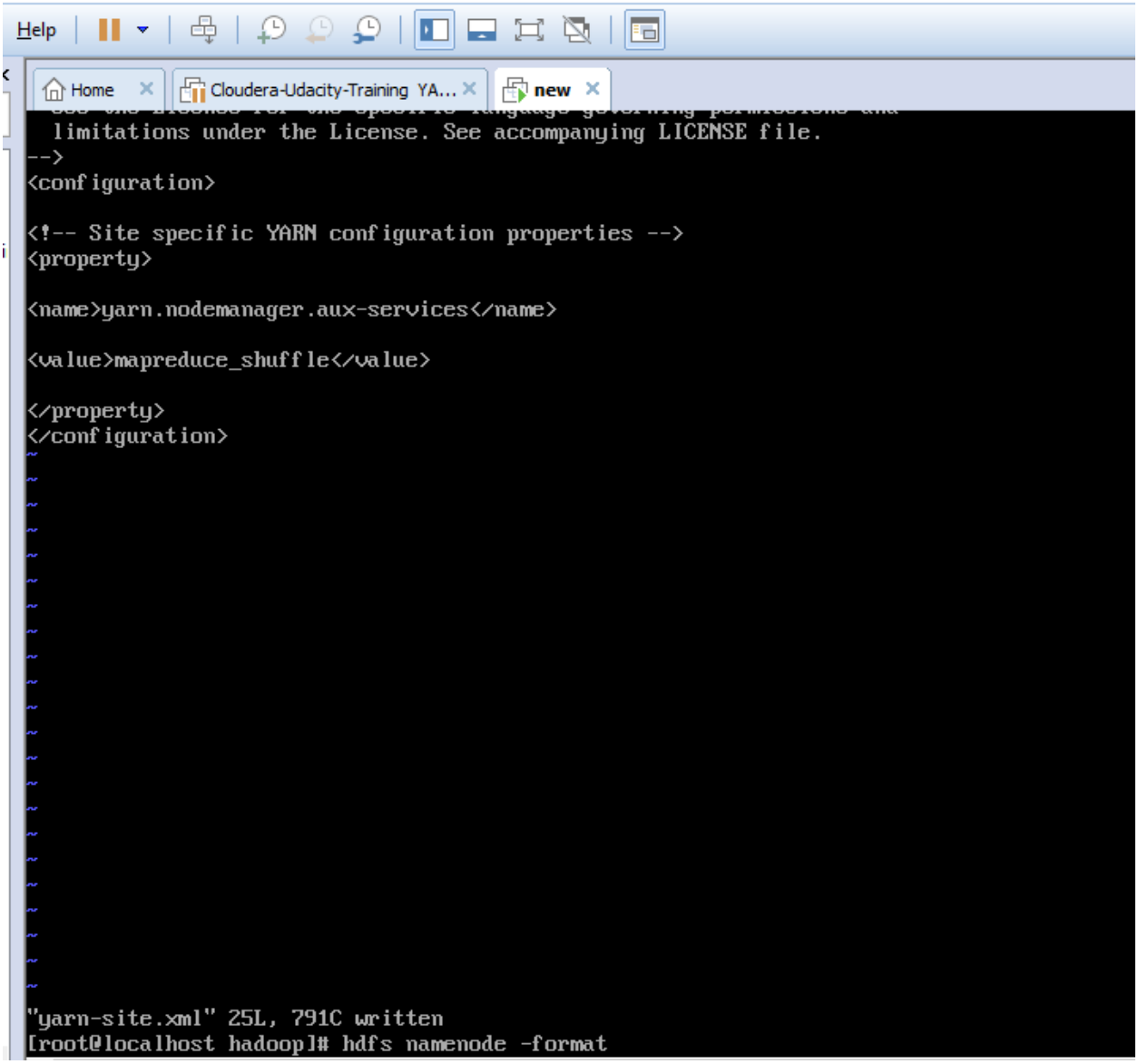
mapred-site.xml

[if that file is not present, rename the file mapred-site.xml.template to mapred-site.xml]


~
"hdfs-site.xml" 43L, 1024C written
[root@localhost hadoop]# mv mapred-site.xml.template mapred-site.xml
[root@localhost hadoop]# ls
capacity-scheduler.xml hadoop-env.sh   httpfs-env.sh   kms-env.sh   mapred-env.sh   ssl-server.xml
configuration.xsl   hadoop-metrics2.properties httpfs-log4j.properties kms-log4j.properties mapred-queues.xml.template yarn-env.cmd
container-executor.cfg hadoop-metrics.properties   httpfs-signature.secret kms-site.xml   mapred-site.xml   yarn-env.sh
core-site.xml   hadoop-policy.xml   httpfs-site.xml   log4j.properties   slaves   yarn-site.xml
hadoop-env.cmd   hdfs-site.xml   kms-acls.xml   mapred-env.cmd   ssl-client.xml.example
[root@localhost hadoop]#
le or press Ctrl+G.

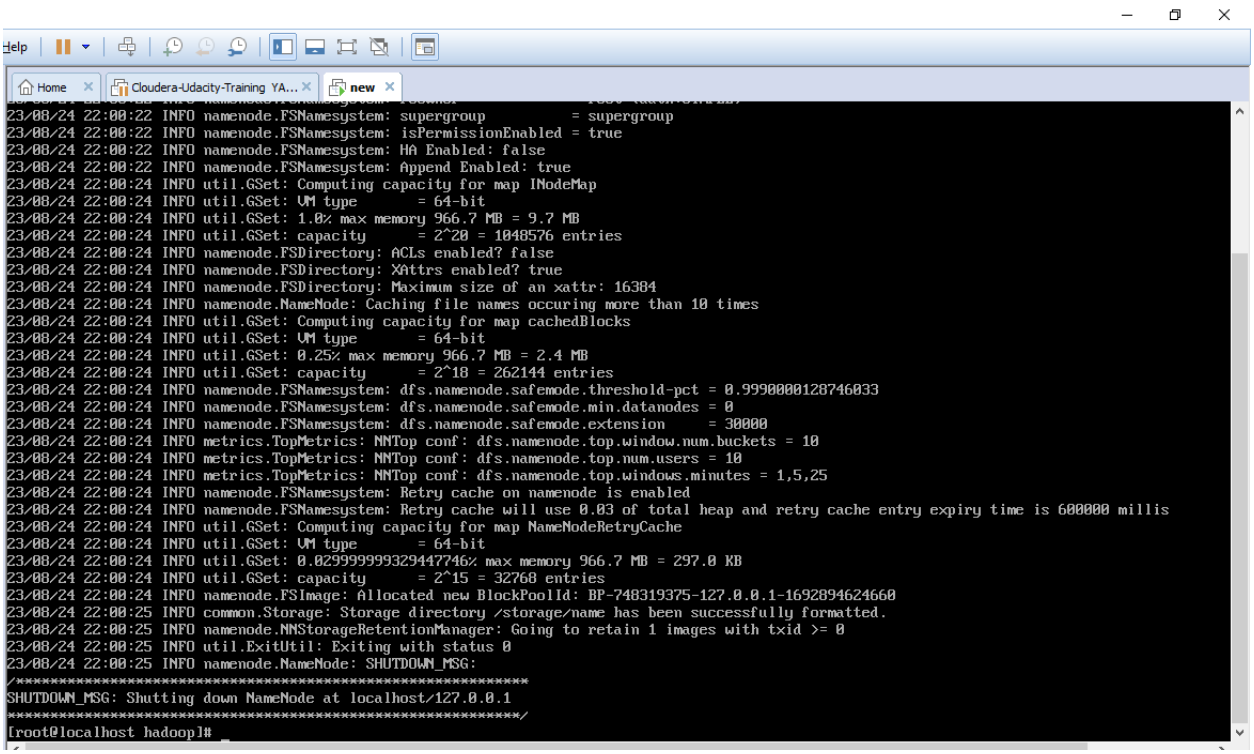


yarn-site.xml



Step 7: Format the Namenode

hdfs namenode -format



Step 8: Go to sbin

We need to start the services now

cd /usr/local/hadoop/sbin

Step 9: Start dfs components

sh start-dfs.sh

HDFS Services/Processes:
Name node
Secondary name node
Data node

```
[root@localhost hadoop]# cd /usr/local/hadoop/sbin
[root@localhost sbin]# sh start-dfs.sh
23/08/24 22:05:44 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applic
Starting namenodes on [localhost]
The authenticity of host 'localhost (::1)' can't be established.
ECDSA key fingerprint is SHA256:J175ha6A23teAB/S0Oq2M/xdLrGBJ1o9DUT2ECHnQ+0.
ECDSA key fingerprint is MD5:c4:12:3b:a4:26:e4:4f:60:5e:e1:07:8e:45:e6:09:5e.
Are you sure you want to continue connecting (yes/no)? yes
localhost: Warning: Permanently added 'localhost' (ECDSA) to the list of known hosts.
root@localhost's password:
localhost: starting namenode, logging to /usr/local/hadoop/logs/hadoop-root-namenode-localhost.localdomain.out
root@localhost's password:
localhost: starting datanode, logging to /usr/local/hadoop/logs/hadoop-root-datanode-localhost.localdomain.out
Starting secondary namenodes [0.0.0.0]
The authenticity of host '0.0.0.0 (0.0.0.0)' can't be established.
ECDSA key fingerprint is SHA256:J175ha6A23teAB/S0Oq2M/xdLrGBJ1o9DUT2ECHnQ+0.
ECDSA key fingerprint is MD5:c4:12:3b:a4:26:e4:4f:60:5e:e1:07:8e:45:e6:09:5e.
Are you sure you want to continue connecting (yes/no)? yes
0.0.0.0: Warning: Permanently added '0.0.0.0' (ECDSA) to the list of known hosts.
root@0.0.0.0's password:
0.0.0.0: starting secondarynamenode, logging to /usr/local/hadoop/logs/hadoop-root-secondarynamenode-localhost.localdomain.out
23/08/24 22:07:00 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applic
[root@localhost sbin]# jps
7860 DataNode
8148 Jps
8039 SecondaryNameNode
7770 NameNode
[root@localhost sbin]#
```

Step 10: Start YARN components

sh start-yarn.sh

YARN Services/Processes:
resource manager
node manager

```
[root@localhost sbin]# sh start-yarn.sh
starting yarn daemons
starting resourcemanager, logging to /usr/local/hadoop/logs/yarn-root-resourcemanager-localhost.localdomain.out
root@localhost's password:
localhost: starting nodemanager, logging to /usr/local/hadoop/logs/yarn-root-nodemanager-localhost.localdomain.out
[root@localhost sbin]# jps
7860 DataNode
8500 Jps
8197 ResourceManager
8293 NodeManager
8039 SecondaryNameNode
7770 NameNode
[root@localhost sbin]#
```