

Aim:
To learn some of the basic Hadoop Commands and execute them in a single node hadoop cluster.

Procedure:

1. Login With hduser in the ubuntu machine which has the hadoop single node cluster setup.
2. Navigate into the Hadoop Home Directory.
3. Start all the hadoop daemons.
4. Now, start executing the basic hadoop commands.

```
cloudlab@cloudlab...9020:~$su hduser
hduser@cloudlab...9020:~$cd $HADOOP_HOME
hduser@cloudlab...9020:~/usr/local/hadoop$start-dfs.sh
hduser@cloudlab...9020:~/usr/local/hadoop$start-yarn.sh
```

Basic Hadoop Commands:

Command for creating a new directory

```
bin/hadoop fs -mkdir -p /demo/day1
bin/hadoop fs -mkdir -p /demo/day2
```

Command for removing a directory

```
bin/hadoop fs -rm -r /demo/day3
```

Command to Append single src, or multiple srcs from local file system to the destination file system. Also reads input from stdin and appends to destination file system.

```
bin/hdfs dfs -appendToFile localfile /user/hadoop/hadoopfile
bin/hdfs dfs -appendToFile localfile1 localfile2 /user/hadoop/hadoopfile
bin/hdfs dfs -appendToFile localfile hdfs://localhost:9000/user/hadoop/hadoopfile bin/hdfs
dfs -appendToFile /opt/hadoop-2.7.1/README.txt hdfs:///user/hadoop/hadoopfile
```

Reading the input from stdin

#prompt will wait to read the input from stdin. to finish <ctrl+c>

```
hdfs dfs -appendToFile - hdfs:///user/hadoop/hadoopfile
```

cat – Displaying the contents of a file in the hdfs

```
bin/hadoop fs -cat /user/hadoop/hadoopfile
```

put - Moving a file from the local filesystem to hdfs

```
bin/hadoop fs -put ../BX-CSV-Dump/*.csv /demo/day2
```

moveFromLocal – Similar to 'put' command

```
bin/hdfs dfs -moveFromLocal <localsrc> <dst>
```

moveToLocal – Move a file from hdfs to local filesystem

```
bin/hdfs dfs -moveToLocal <src> <localdst>
```

copyFromLocal – Copy a File from the local filesystem to

```
hdfs bin/hdfs dfs -copyFromLocal <localsrc> <dst>
```

copyToLocal – Copy a File from hdfs to local filesystem.

```
bin/hdfs dfs -copyToLocal <src> <localdst>
```

Copy files between directories present in HDFS

```
bin/hdfs dfs -cp /user/hadoopfile /user/hadoop/hadoopfile
```

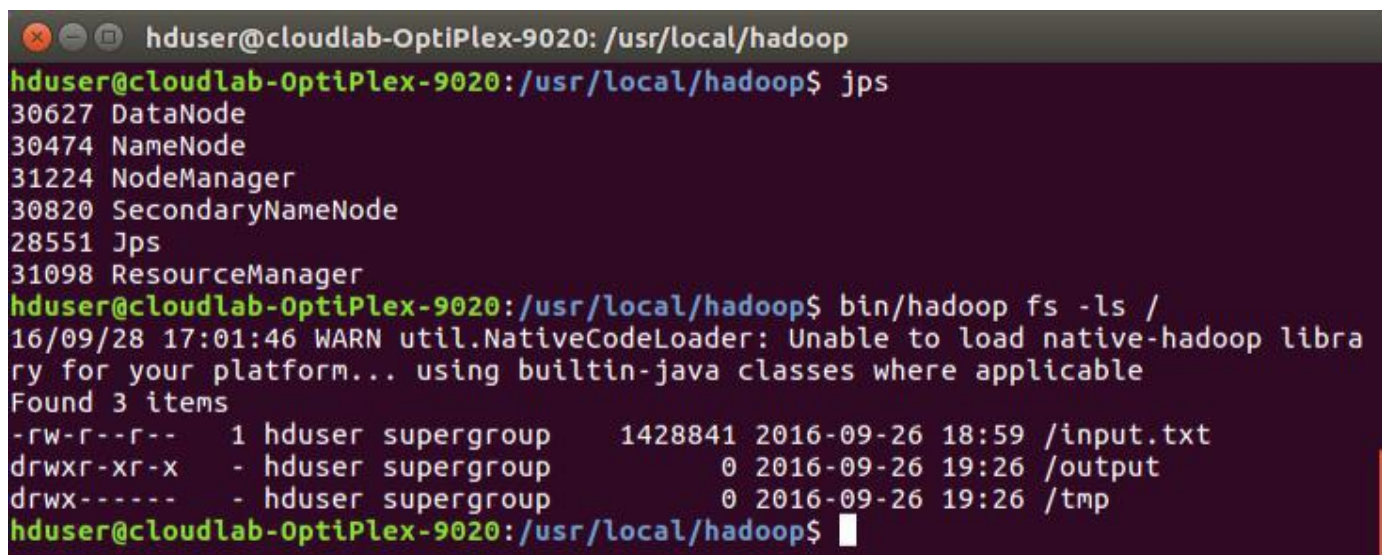
Move the file from one hdfs location to other

```
bin/hdfs dfs -mv /user/hadoopfile /user/hadoop/hadoopfile
```

List the files in hdfs

```
bin/hadoop fs -ls /
```

Output:



```
hduser@cloudlab-OptiPlex-9020: /usr/local/hadoop
hduser@cloudlab-OptiPlex-9020:/usr/local/hadoop$ jps
30627 DataNode
30474 NameNode
31224 NodeManager
30820 SecondaryNameNode
28551 Jps
31098 ResourceManager
hduser@cloudlab-OptiPlex-9020:/usr/local/hadoop$ bin/hadoop fs -ls /
16/09/28 17:01:46 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
Found 3 items
-rw-r--r--  1 hduser supergroup    1428841 2016-09-26 18:59 /input.txt
drwxr-xr-x  - hduser supergroup         0 2016-09-26 19:26 /output
drwx----- - hduser supergroup         0 2016-09-26 19:26 /tmp
hduser@cloudlab-OptiPlex-9020:/usr/local/hadoop$
```

Result:

Thus some of the basic Hadoop Commands have been learned and executed successfully in a single node hadoop cluster.

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