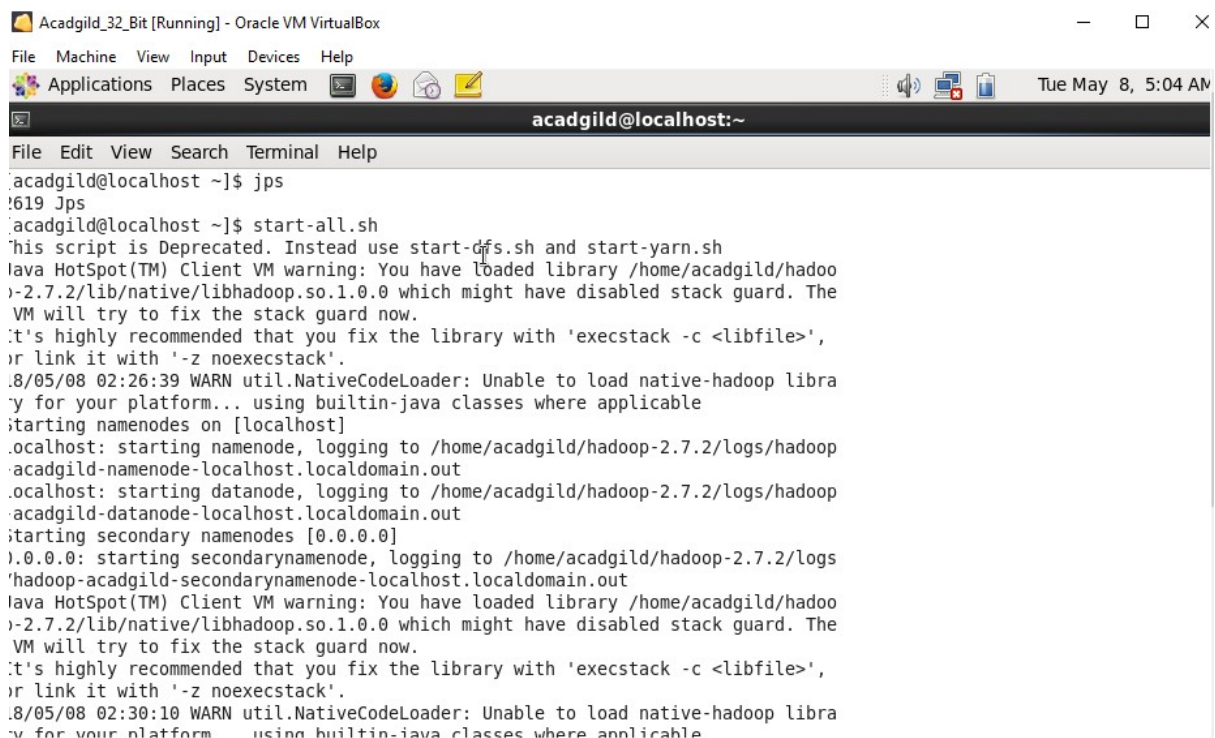


# Session 1: BIG DATA & HADOOP – INTRODUCTION & CASE STUDIES

## Assignment 1

1. Start Hadoop single node on AcadGild VM. The command is start-all.sh.: Below is the screenshot of the output



```
Acadgild_32_Bit [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
Applications Places System
acadgild@localhost:~
File Edit View Search Terminal Help
acadgild@localhost ~]$ jps
619 Jps
acadgild@localhost ~]$ start-all.sh
This script is deprecated. Instead use start-dfs.sh and start-yarn.sh
java HotSpot(TM) Client VM warning: You have loaded library /home/acadgild/hadoop
-2.7.2/lib/native/libhadoop.so.1.0.0 which might have disabled stack guard. The
VM will try to fix the stack guard now.
It's highly recommended that you fix the library with 'execstack -c <libfile>',
or link it with '-z noexecstack'.
.8/05/08 02:26:39 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
Starting namenodes on [localhost]
localhost: starting namenode, logging to /home/acadgild/hadoop-2.7.2/logs/hadoop
-acadgild-namenode-localhost.localdomain.out
localhost: starting datanode, logging to /home/acadgild/hadoop-2.7.2/logs/hadoop
-acadgild-datanode-localhost.localdomain.out
Starting secondary namenodes [0.0.0.0]
0.0.0.0: starting secondarynamenode, logging to /home/acadgild/hadoop-2.7.2/logs
-hadoop-acadgild-secondarynamenode-localhost.localdomain.out
java HotSpot(TM) Client VM warning: You have loaded library /home/acadgild/hadoop
-2.7.2/lib/native/libhadoop.so.1.0.0 which might have disabled stack guard. The
VM will try to fix the stack guard now.
It's highly recommended that you fix the library with 'execstack -c <libfile>',
or link it with '-z noexecstack'.
.8/05/08 02:30:10 WARN util.NativeCodeLoader: Unable to load native-hadoop libra
ry for your platform... using builtin-java classes where applicable
```

2. Run a JPS command to see if all Hadoop daemons are running. Below is the screenshot of the output

```
[acadgild@localhost ~]$ jps
5504 NodeManager
5378 ResourceManager
5012 DataNode
6341 Jps
5206 SecondaryNameNode
4903 NameNode
[acadgild@localhost ~]$
```

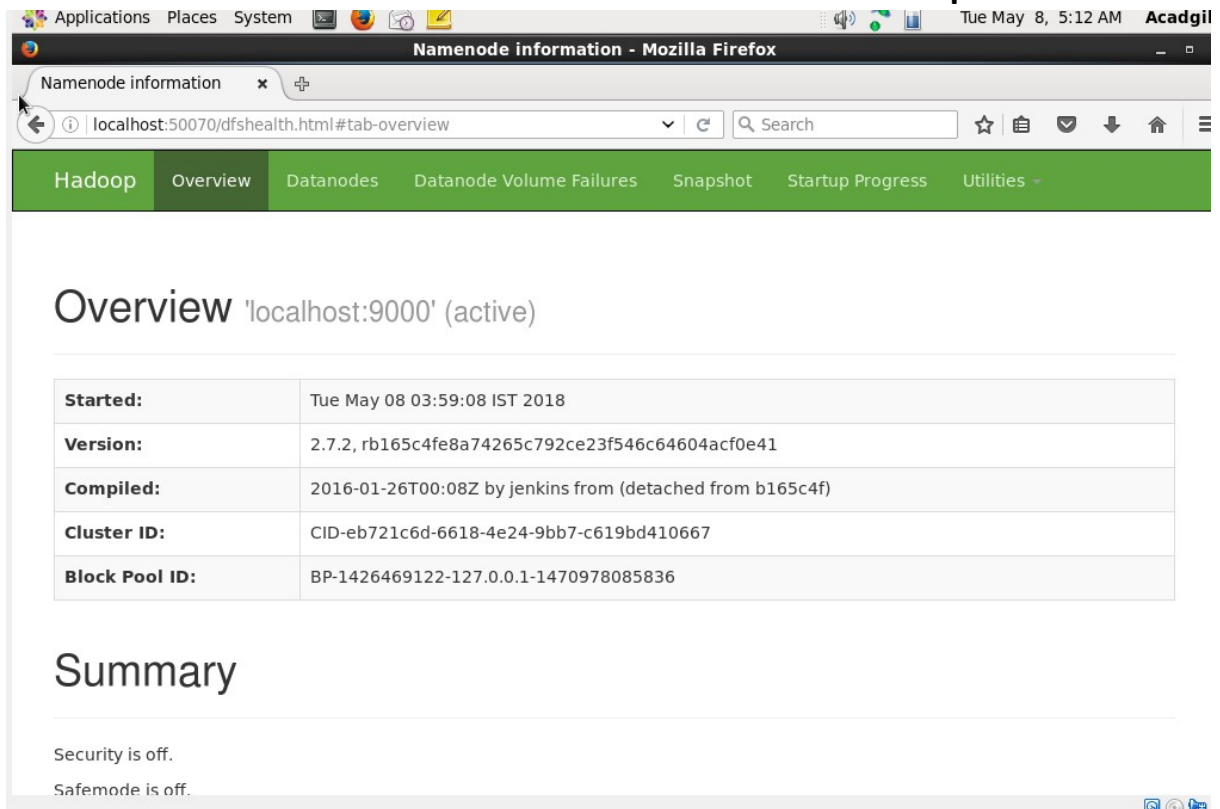
### 3. Run few Unix commands like pwd, ls -ls, etc. Below is the screen shot of the output

```
[acadgild@localhost ~]$ pwd
/home/acadgild
[acadgild@localhost ~]$ ls
apache-flume-1.6.0-bin          hadoop-2.7.2                pig-0.16.0.tar.gz
apache-flume-1.6.0-bin.tar.gz  hadoop-2.7.2.tar.gz        pig_1470979104717.log
apache-hive-2.1.0-bin          hbase-1.0.3                 pig_1471462105724.log
apache-hive-2.1.0-bin.tar.gz   hbase-1.0.3-bin.tar.gz     Public
derby.log                      jdk1.8.0_101                Softwares
Desktop                        jdk-8u101-linux-i586.tar.gz sqoop-1.4.6.bin__hadoop-2.0.4-alpha
Documents                     metastore_db                 sqoop-1.4.6.bin__hadoop-2.0.4-alpha.tar.gz
Downloads                     metastore_db.tmp             Templates
eclipse                       Music                        test.txt
employee.java                 Pictures                     Videos
hadoop                        pig-0.16.0                  workspace
[acadgild@localhost ~]$
```

### 4. Create a file from the terminal using nano editor (example: nano test.txt), and add some content in it. Cat it to see if the content is saved.: Below is the screenshot of the output

```
[acadgild@localhost ~]$ nano test.txt
[acadgild@localhost ~]$ cat test.txt
Assignment have been completed. start-all.sh executed to start services.
jps has been executed to see all Hadoop daemons are running.
test.txt has been created using nano editor.
```

5) Open the hdfs web page by typing localhost:50070 in the browser. Check all the details of the HDFS. Below is the screenshot of the output



The screenshot shows a Mozilla Firefox browser window titled "Namenode information - Mozilla Firefox". The address bar displays "localhost:50070/dfshealth.html#tab-overview". The browser's navigation bar includes a green menu bar with the following items: Hadoop, Overview (selected), Datanodes, Datanode Volume Failures, Snapshot, Startup Progress, and Utilities. Below the menu bar, the page title is "Overview 'localhost:9000' (active)". A table displays the following information:

<b>Started:</b>	Tue May 08 03:59:08 IST 2018
<b>Version:</b>	2.7.2, rb165c4fe8a74265c792ce23f546c64604acf0e41
<b>Compiled:</b>	2016-01-26T00:08Z by jenkins from (detached from b165c4f)
<b>Cluster ID:</b>	CID-eb721c6d-6618-4e24-9bb7-c619bd410667
<b>Block Pool ID:</b>	BP-1426469122-127.0.0.1-1470978085836

Below the table, the section "Summary" is displayed. It contains the following text:

Security is off.  
Safemode is off.