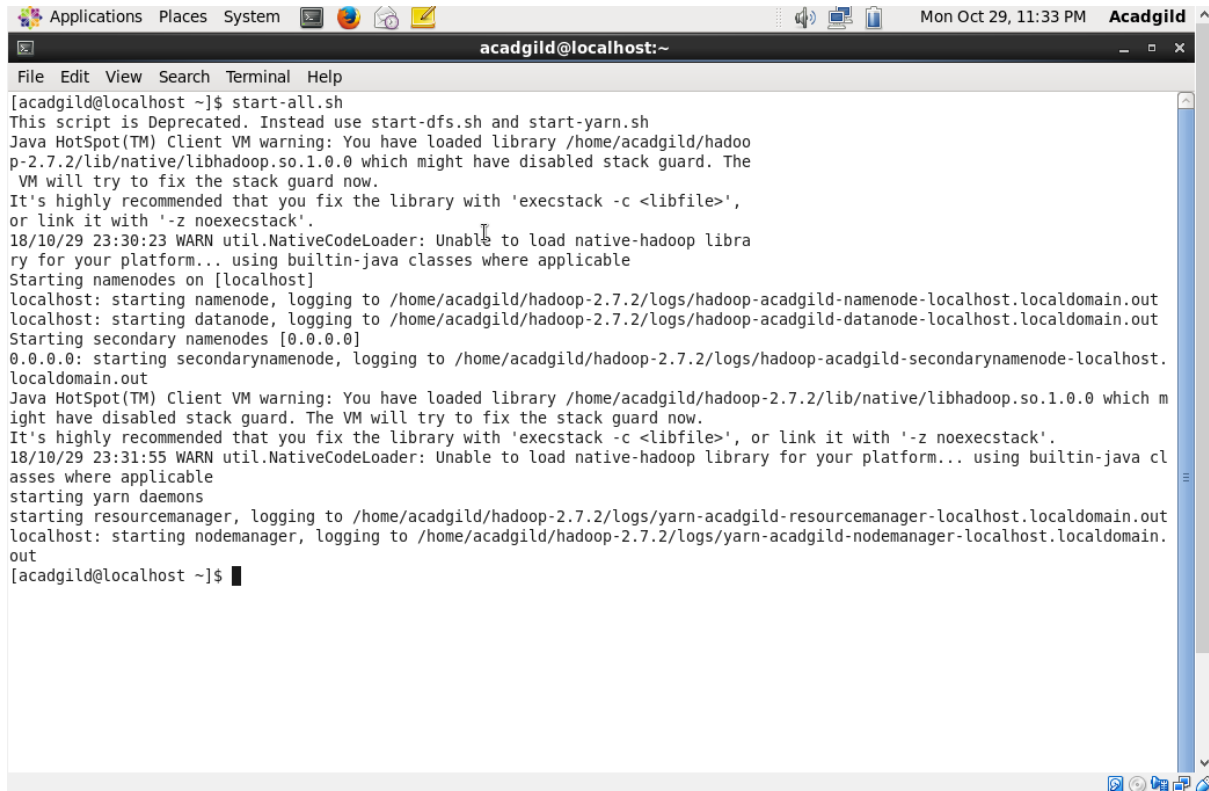


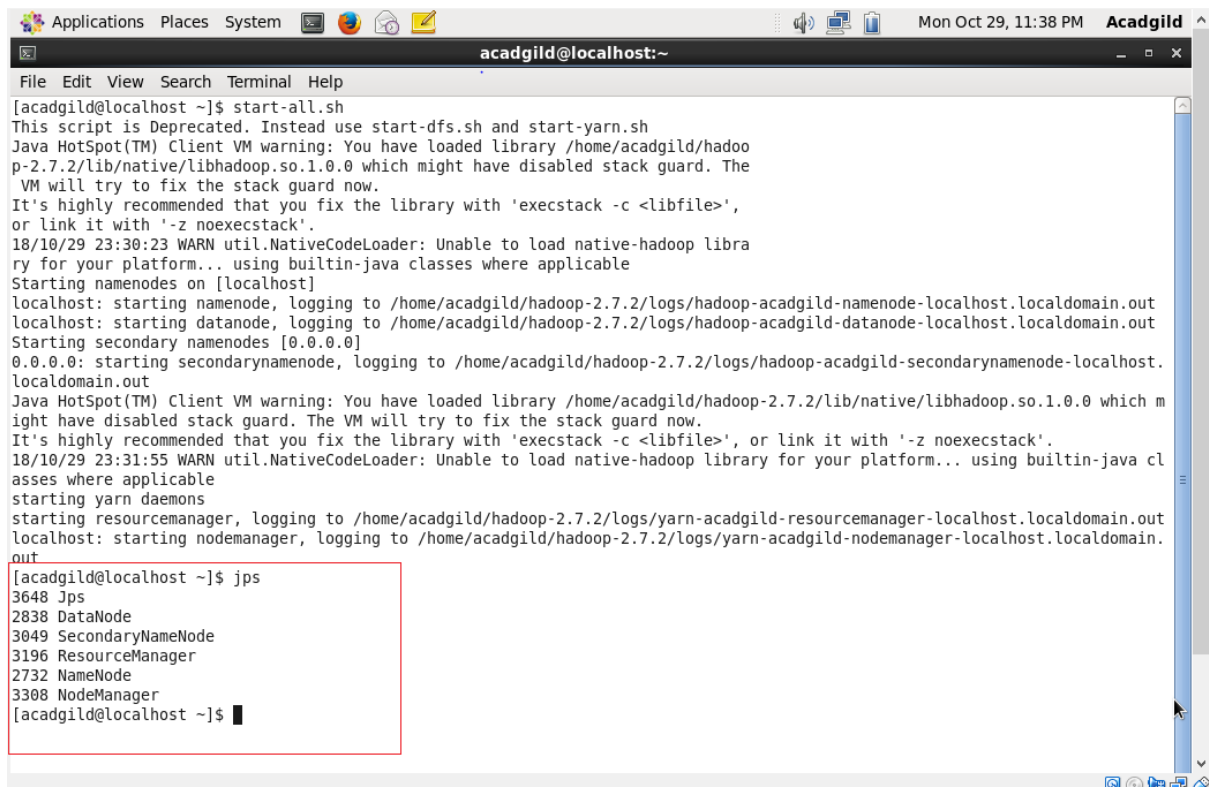
1) Start Hadoop single node on AcadGild VM. The command is start-all.sh .



A terminal window titled 'acadgild@localhost:~' showing the execution of the 'start-all.sh' script. The script outputs several warnings and status messages, including '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.', and 'It's highly recommended that you fix the library with 'execstack -c <libfile>', or link it with '-z noexecstack'.'. The script then starts the namenode, datanode, and secondary namenodes, followed by the yarn daemons (resource manager and node manager). The terminal shows the following output:

```
[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'.
18/10/29 23:30:23 WARN util.NativeCodeLoader: Unable to load native-hadoop library 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'.
18/10/29 23:31:55 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java classes where applicable
starting yarn daemons
starting resourcemanager, logging to /home/acadgild/hadoop-2.7.2/logs/yarn-acadgild-resourcemanager-localhost.localdomain.out
localhost: starting nodemanager, logging to /home/acadgild/hadoop-2.7.2/logs/yarn-acadgild-nodemanager-localhost.localdomain.out
[acadgild@localhost ~]$
```

2) Run a JPS command to see if all Hadoop daemons are running.



A terminal window titled 'acadgild@localhost:~' showing the execution of the 'jps' command. The command outputs the following list of processes:

```
[acadgild@localhost ~]$ jps
3648 Jps
2838 DataNode
3049 SecondaryNameNode
3196 ResourceManager
2732 NameNode
3308 NodeManager
[acadgild@localhost ~]$
```

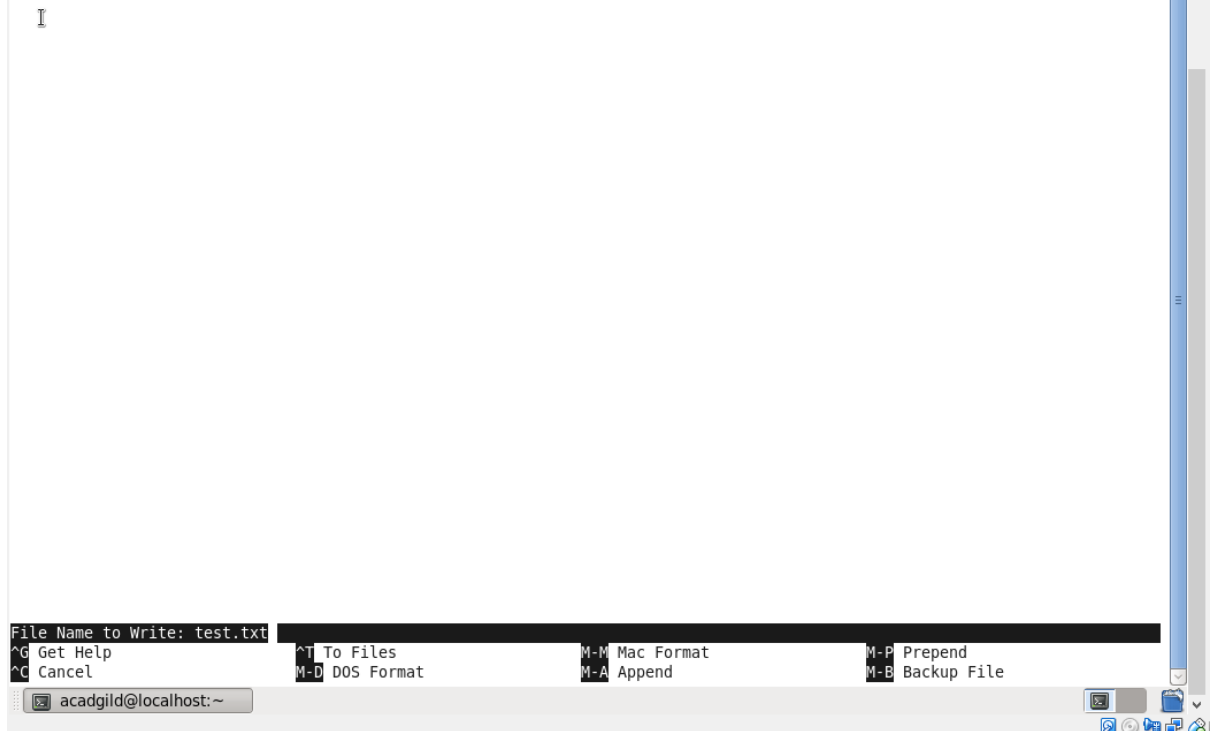
3) Run few Unix commands like pwd, ls -ls, etc.

```
Java HotSpot(TM) Client VM warning: You have loaded library /home/acadgild/hadoop
p-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'.
18/10/29 23:30:23 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 m
ight 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'.
18/10/29 23:31:55 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using builtin-java cl
asses where applicable
starting yarn daemons
localhost: starting resourcemanager, logging to /home/acadgild/hadoop-2.7.2/logs/yarn-acadgild-resourcemanager-localhost.localdomain.out
localhost: starting nodemanager, logging to /home/acadgild/hadoop-2.7.2/logs/yarn-acadgild-nodemanager-localhost.localdomain.
out
[acadgild@localhost ~]$ jps
3648 Jps
2838 DataNode
3049 SecondaryNameNode
3196 ResourceManager
2732 NameNode
3308 NodeManager
[acadgild@localhost ~]$ pwd
/home/acadgild
[acadgild@localhost ~]$
```

```
/home/acadgild
[acadgild@localhost ~]$ ls -ls
total 874804
  4 drwxrwxr-x.  7 acadgild acadgild    4096 Aug 18  2016 apache-flume-1.6.0-bin
51320 -rw-rw-r--.  1 acadgild acadgild 52550402 Aug 12  2016 apache-flume-1.6.0-bin.tar.gz
  4 drwxrwxr-x.  9 acadgild acadgild    4096 Aug 12  2016 apache-hive-2.1.0-bin
146100 -rw-rw-r--.  1 acadgild acadgild 149599799 Aug 12  2016 apache-hive-2.1.0-bin.tar.gz
  4 -rw-rw-r--.  1 acadgild acadgild    653 Oct 27 00:26 derby.log
  4 drwxr-xr-x.  2 acadgild acadgild    4096 Aug 18  2016 Desktop
  4 drwxr-xr-x.  2 acadgild acadgild    4096 Aug 11  2016 Documents
  4 drwxr-xr-x.  4 acadgild acadgild    4096 Aug 18  2016 Downloads
  4 drwxrwxr-x.  3 acadgild acadgild    4096 Aug 18  2016 eclipse
 16 -rw-rw-r--.  1 acadgild acadgild   12939 Aug 18  2016 employee.java
  4 drwxrwxr-x.  4 acadgild acadgild    4096 Aug 11  2016 hadoop
  4 drwxr-xr-x. 10 acadgild acadgild    4096 Aug 12  2016 hadoop-2.7.2
207084 -rw-rw-r--.  1 acadgild acadgild 212046774 Aug 11  2016 hadoop-2.7.2.tar.gz
  4 drwxrwxr-x.  8 acadgild acadgild    4096 Aug 16  2016 hbase-1.0.3
101416 -rw-rw-r--.  1 acadgild acadgild 103847513 Aug 12  2016 hbase-1.0.3-bin.tar.gz
  4 drwxrwxr-x.  3 acadgild acadgild    4096 Oct 27 00:27 hdfs:
  4 drwxr-xr-x.  8 acadgild acadgild    4096 Jun 22  2016 jdk1.8.0_101
179160 -rw-rw-r--.  1 acadgild acadgild 183456778 Aug 11  2016 jdk-8u101-linux-i586.tar.gz
  4 drwxrwxr-x.  5 acadgild acadgild    4096 Oct 27 00:26 metastore_db
  4 drwxrwxr-x.  5 acadgild acadgild    4096 Aug 12  2016 metastore_db.tmp
  4 drwxr-xr-x.  2 acadgild acadgild    4096 Aug 11  2016 Music
  4 drwxr-xr-x.  2 acadgild acadgild    4096 Aug 11  2016 Pictures
  4 drwxr-xr-x. 16 acadgild acadgild    4096 Jun  2  2016 pig-0.16.0
173128 -rw-rw-r--.  1 acadgild acadgild 177279333 Aug 12  2016 pig-0.16.0.tar.gz
  4 -rw-rw-r--.  1 acadgild acadgild    2615 Aug 12  2016 pig_1470979104717.log
  4 -rw-rw-r--.  1 acadgild acadgild    2560 Aug 18  2016 pig_1471462105724.log
  4 drwxr-xr-x.  2 acadgild acadgild    4096 Aug 11  2016 Public
  4 -rw-rw-r--.  1 acadgild acadgild    52 Oct 29 10:43 sample.txt
  4 drwxrwxr-x.  4 acadgild acadgild    4096 Aug 11  2016 Softwares
  4 drwxr-xr-x.  9 acadgild acadgild    4096 Apr 27  2015 sqoop-1.4.6.bin_hadoop-2.0.4-alpha
16476 -rw-rw-r--.  1 acadgild acadgild 16870735 Aug 18  2016 sqoop-1.4.6.bin_hadoop-2.0.4-alpha.tar.gz
  4 drwxr-xr-x.  2 acadgild acadgild    4096 Aug 11  2016 Templates
  4 drwxr-xr-x.  2 acadgild acadgild    4096 Aug 11  2016 Videos
  4 drwxrwxr-x.  5 acadgild acadgild    4096 Aug 18  2016 workspace
[acadgild@localhost ~]$
```

acadgild@localhost:~

This is nano test file.
Created this file using nano editor.



```
[acacgild@localhost ~]$ jps
4212 Jps
2838 DataNode
3049 SecondaryNameNode
3196 ResourceManager
2732 NameNode
3308 NodeManager
[acacgild@localhost ~]$ nano test.txt
[acacgild@localhost ~]$ ls
apache-flume-1.6.0-bin          hadoop-2.7.2.tar.gz          pig_1470979104717.log
apache-flume-1.6.0-bin.tar.gz  hbase-1.0.3                 pig_1471462105724.log
apache-hive-2.1.0-bin          hbase-1.0.3-bin.tar.gz      Public
apache-hive-2.1.0-bin.tar.gz   hdfs:                        sample.txt
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
hadoop-2.7.2                  pig-0.16.0.tar.gz
[acacgild@localhost ~]$ cat test.txt
This is nano test file.
Created this file using nano editor.
[acacgild@localhost ~]$
```

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

The screenshot shows the 'Overview' tab of the Hadoop NameNode web interface. The browser address bar shows 'localhost:50070/dfshealth.html#tab-overview'. The page has a green navigation bar with links: Hadoop, Overview, Datanodes, Datanode Volume Failures, Snapshot, Startup Progress, and Utilities. The main content area is titled 'Overview 'localhost:9000' (active)'. Below the title is a table with the following information:

Started:	Mon Oct 29 23:30:56 IST 2018
Version:	2.7.2, rb165c4fe8a74265c792ce23f546c64604acf0e41
Compiled:	2016-01-26T00:08Z by jenkins from (detached from b165c4f)
Cluster ID:	CID-eb721c6d-6618-4e24-9bb7-c619bd410667
Block Pool ID:	BP-1426469122-127.0.0.1-1470978085836

Below the table is a section titled 'Summary'. It contains the following text:

Security is off.
Safemode is off.

The screenshot shows the 'Summary' tab of the Hadoop NameNode web interface. The browser address bar shows 'localhost:50070/dfshealth.html#tab-overview'. The page has a green navigation bar with links: Hadoop, Overview, Datanodes, Datanode Volume Failures, Snapshot, Startup Progress, and Utilities. The main content area is titled 'Summary'. It contains the following text:

Security is off.
Safemode is off.
122 files and directories, 32 blocks = 154 total filesystem object(s).
Heap Memory used 55.26 MB of 86.2 MB Heap Memory. Max Heap Memory is 966.69 MB.
Non Heap Memory used 21.47 MB of 21.74 MB Committed Non Heap Memory. Max Non Heap Memory is -1 B.

Below the text is a table with the following information:

Configured Capacity:	17.11 GB
DFS Used:	304 KB (0%)
Non DFS Used:	8.04 GB
DFS Remaining:	9.07 GB (53.02%)
Block Pool Used:	304 KB (0%)
DataNodes usages% (Min/Median/Max/stdDev):	0.00% / 0.00% / 0.00% / 0.00%
Live Nodes	1 (Decommissioned: 0)
Dead Nodes	0 (Decommissioned: 0)

NameNode information - Mozilla Firefox

Namenode information x

localhost:50070/dfshealth.html#tab-overview

Number of Under-Replicated Blocks	0
Number of Blocks Pending Deletion	0
Block Deletion Start Time	10/29/2018, 11:30:56 PM

NameNode Journal Status

Current transaction ID: 1784

Journal Manager	State
FileJournalManager(root=/home/acadgild/hadoop/namenode)	EditLogFileOutputStream(/home/acadgild/hadoop/namenode/current/edits_inprogress_0000000000000001772)

NameNode Storage

Storage Directory	Type	State
/home/acadgild/hadoop/namenode	IMAGE_AND_EDITS	Active