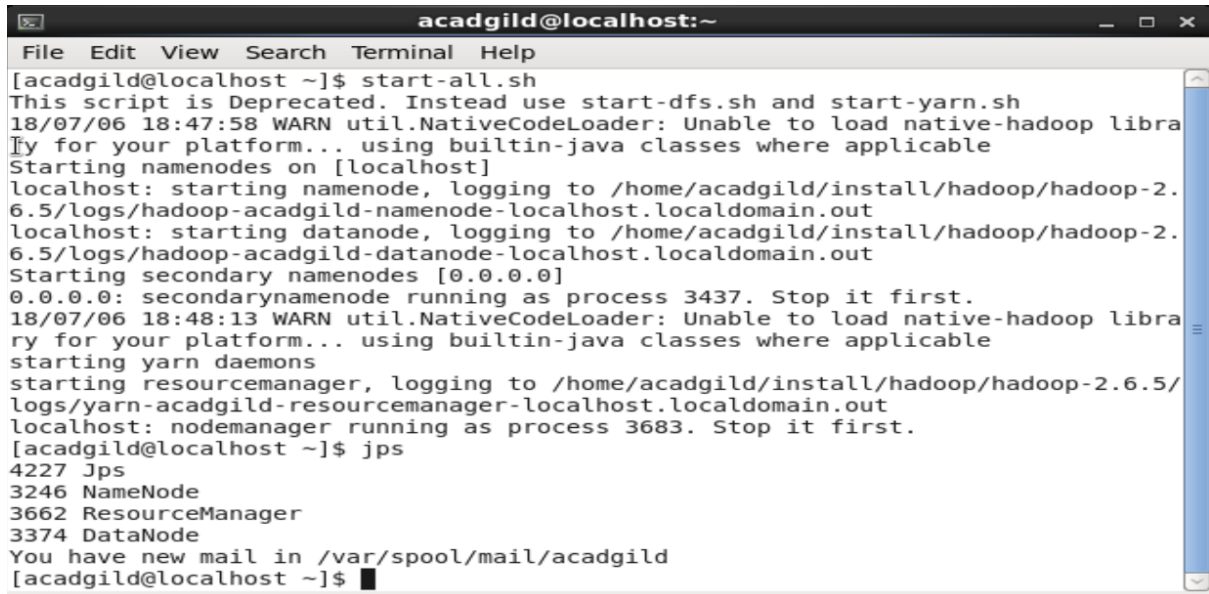


Start Hadoop single node on AcadGild VM. The command is start-all.sh.:

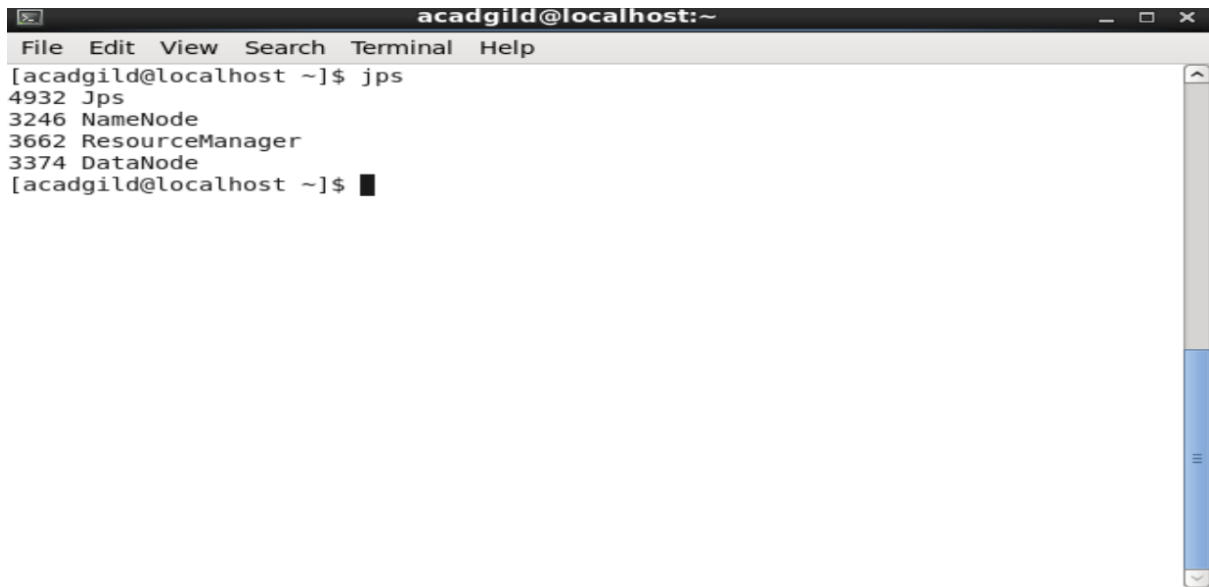
If we run start-all.sh command, the port 50070 will open and able to access browser

A terminal window titled 'acadgild@localhost:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of 'start-all.sh', which starts Hadoop services. It includes warnings about deprecated scripts and native code loading. After running 'jps', it lists the running processes: Jps, NameNode, ResourceManager, and DataNode.

```
acadgild@localhost:~  
File Edit View Search Terminal Help  
[acadgild@localhost ~]$ start-all.sh  
This script is Deprecated. Instead use start-dfs.sh and start-yarn.sh  
18/07/06 18:47:58 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/install/hadoop/hadoop-2.  
6.5/logs/hadoop-acadgild-namenode-localhost.localdomain.out  
localhost: starting datanode, logging to /home/acadgild/install/hadoop/hadoop-2.  
6.5/logs/hadoop-acadgild-datanode-localhost.localdomain.out  
Starting secondary namenodes [0.0.0.0]  
0.0.0.0: secondarynamenode running as process 3437. Stop it first.  
18/07/06 18:48:13 WARN util.NativeCodeLoader: Unable to load native-hadoop libra  
ry for your platform... using builtin-java classes where applicable  
starting yarn daemons  
starting resourcemanager, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/  
logs/yarn-acadgild-resourcemanager-localhost.localdomain.out  
localhost: nodemanager running as process 3683. Stop it first.  
[acadgild@localhost ~]$ jps  
4227 Jps  
3246 NameNode  
3662 ResourceManager  
3374 DataNode  
You have new mail in /var/spool/mail/acadgild  
[acadgild@localhost ~]$
```

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

If we run this command, it will show which are the services are running

A terminal window titled 'acadgild@localhost:~' with a menu bar (File, Edit, View, Search, Terminal, Help). The terminal shows the execution of 'jps', which lists the running Hadoop services: Jps, NameNode, ResourceManager, and DataNode.

```
acadgild@localhost:~  
File Edit View Search Terminal Help  
[acadgild@localhost ~]$ jps  
4932 Jps  
3246 NameNode  
3662 ResourceManager  
3374 DataNode  
[acadgild@localhost ~]$
```

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

```
acadgild@localhost:~  
File Edit View Search Terminal Help  
[acadgild@localhost ~]$ pwd  
/home/acadgild  
[acadgild@localhost ~]$ ls -ls  
total 72  
4 drwxr-xr-x. 4 acadgild acadgild 4096 Jul 6 19:11 Desktop  
4 drwxr-xr-x. 2 acadgild acadgild 4096 Feb 2 12:52 Documents  
4 drwxr-xr-x. 2 acadgild acadgild 4096 Jun 24 11:16 Downloads  
4 drwxrwxr-x. 3 acadgild acadgild 4096 Dec 29 2017 eclipse  
4 drwxrwxr-x. 3 acadgild acadgild 4096 Jan 16 14:02 eclipse-workspace  
4 drwxrwxr-x. 13 acadgild acadgild 4096 Feb 9 18:06 install  
4 drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Music  
4 drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Pictures  
12 -rw-rw-r--. 1 acadgild acadgild 10454 Jun 23 11:36 pig_1529732984479.log  
4 drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Public  
4 drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Templates  
4 -rw-rw-r--. 1 acadgild acadgild 17 Jun 24 11:08 temp.ttxt  
4 -rw-rw-r--. 1 acadgild acadgild 30 Jun 23 11:43 test1.txt  
4 -rw-rw-r--. 1 acadgild acadgild 146 Jul 6 19:16 Test1.txt  
4 -rw-----. 1 acadgild acadgild 136 Jul 6 19:11 Test.txt.save  
4 drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Videos  
[acadgild@localhost ~]$ uptime  
19:19:46 up 43 min, 2 users, load average: 0.00, 0.00, 0.00  
[acadgild@localhost ~]$ date  
Fri Jul 6 19:19:52 IST 2018  
[acadgild@localhost ~]$ time  
  
real 0m0.000s  
user 0m0.000s  
sys 0m0.000s  
[acadgild@localhost ~]$ █
```

Create a file from the terminal using nano editor.

```
[acadgild@localhost ~]$ date  
Fri Jul 6 19:13:54 IST 2018  
[acadgild@localhost ~]$ nano Test1.txt  
You have new mail in /var/spool/mail/acadgild  
[acadgild@localhost ~]$ cat Test1.txt  
ls -l //Listing files  
pwd //present working directory  
du -k //Checking file size  
cd //change directory  
uptime //Server Uptime  
date //display date  
[acadgild@localhost ~]$ █
```

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

In overview tab display complete configuration of the server

<b>Started:</b>	Fri Jul 06 18:48:02 IST 2018
<b>Version:</b>	2.6.5, re8c9fe0b4c252caf2ebf1464220599650f119997
<b>Compiled:</b>	2016-10-02T23:43Z by sjlee from branch-2.6.5
<b>Cluster ID:</b>	CID-7b3f9bd8-f34c-4fb8-87aa-f76b6dfbd809
<b>Block Pool ID:</b>	BP-437583619-127.0.0.1-1517555661954

### Summary

Security is off.  
Safemode is off.  
66 files and directories, 13 blocks = 79 total filesystem object(s).  
Heap Memory used 29.11 MB of 49.85 MB Heap Memory. Max Heap Memory is 966.69 MB.

In Dashboard tab display complete system configuration

Non Heap Memory used 37.03 MB of 38.56 MB Committed Non Heap Memory. Max Non Heap Memory is -1 B.

<b>Configured Capacity:</b>	17.11 GB
<b>DFS Used:</b>	152 KB
<b>Non DFS Used:</b>	11 GB
<b>DFS Remaining:</b>	6.11 GB
<b>DFS Used%:</b>	0%
<b>DFS Remaining%:</b>	35.71%
<b>Block Pool Used:</b>	152 KB
<b>Block Pool Used%:</b>	0%
<b>DataNodes usages% (Min/Median/Max/stdDev):</b>	0.00% / 0.00% / 0.00% / 0.00%
<b>Live Nodes</b>	1 (Decommissioned: 0)
<b>Dead Nodes</b>	0 (Decommissioned: 0)
<b>Decommissioning Nodes</b>	0
<b>Number of Under-Replicated Blocks</b>	0
<b>Number of Blocks Pending Deletion</b>	0
<b>Block Deletion Start Time</b>	7/6/2018, 6:48:02 PM

## NameNode Journal Status

Current transaction ID: 461

### Journal Manager

FileJournalManager(root=/home/acadgild/install/data/dfs/name)

### State

EditLogFileStream(/home/acadgild/install/data/dfs/name/current/edits\_inprogress\_0000000000000000461)

## NameNode Storage

### Storage Directory

/home/acadgild/install/data/dfs/name

### Type

IMAGE\_AND\_EDITS

### State

Active

Hadoop, 2016.

Legacy UI

Namenode information

localhost:50070/dfshealth.html#tab-datanode

Search

## Datanode Information

In operation

Node	Last contact	Admin State	Capacity	Used	Non DFS Used	Remaining	Blocks	Block pool used	Failed Volumes	Version
localhost (127.0.0.1:50010)	0	In Service	17.11 GB	152 KB	11 GB	6.11 GB	11	152 KB (0%)	0	2.6.5

Decomissioning

Node	Last contact	Under replicated blocks	Blocks with no live replicas	Under Replicated Blocks In files under construction
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Hadoop, 2016.

Legacy UI

Namenode information - Mozilla Firefox

Namenode information

localhost:50070/dfshealth.html#tab-snapshot

Search

HadoopOverviewDatanodesSnapshotStartup ProgressUtilities -

## Snapshot Summary

Snapshottable directories: 0

Path	Snapshot Number	Snapshot Quota	Modification Time	Permission	Owner	Group
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Snapshotted directories: 0

Snapshot ID	Snapshot Directory	Modification Time
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Hadoop, 2016.

Legacy UI

Namenode Information

localhost:50070/dfshealth.html#tab-startup-progress

Search

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## Startup Progress

Elapsed Time: 35 sec, Percent Complete: 100%

Phase	Completion	Elapsed Time
<b>Loading fsimage</b> /home/acadgild/install/data/dfs/name/current/fsimage_00000000000000000438 4.93 KB	100%	0 sec
inodes (0/0)	100%	
delegation tokens (0/0)	100%	
cache pools (0/0)	100%	
<b>Loading edits</b>	100%	0 sec
/home/acadgild/install/data/dfs/name/current/edits_00000000000000000439-00000000000000000460 1 MB (22/22)	100%	
<b>Saving checkpoint</b>	100%	0 sec
inodes /home/acadgild/install/data/dfs/name/current/fsimage.ckpt_00000000000000000460 (0/0)	100%	
delegation tokens /home/acadgild/install/data/dfs/name/current/fsimage.ckpt_00000000000000000460 (0/0)	100%	
<b>Saving checkpoint</b>	100%	0 sec
inodes /home/acadgild/install/data/dfs/name/current/fsimage.ckpt_00000000000000000460 (0/0)	100%	
delegation tokens /home/acadgild/install/data/dfs/name/current/fsimage.ckpt_00000000000000000460 (0/0)	100%	
cache pools /home/acadgild/install/data/dfs/name/current/fsimage.ckpt_00000000000000000460 (0/0)	100%	
<b>Safe mode</b>	100%	33 sec
awaiting reported blocks (11/11)	100%	

Hadoop, 2016.

Legacy UI

## Browse Directory

/Go!

Permission	Owner	Group	Size	Replication	Block Size	Name
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	<a href="#">hadoop</a>
-rw-r--r--	acadgild	supergroup	17 B	1	128 MB	<a href="#">hadoop2</a>
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	<a href="#">hbase</a>
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	<a href="#">sqoopout111</a>
drwxrwx---	acadgild	supergroup	0 B	0	0 B	<a href="#">tmp</a>
drwxr-xr-x	acadgild	supergroup	0 B	0	0 B	<a href="#">user</a>

Hadoop, 2016.

Directory: /logs/	
localhost:50070/logs/	
<b>Directory: /logs/</b>	
<a href="#">SecurityAuth-acadgild.audit</a>	0 bytes Feb 2, 2018 12:44:52 PM
<a href="#">hadoop-acadgild-datanode-localhost.localdomain.log</a>	263671 bytes Jul 6, 2018 6:48:13 PM
<a href="#">hadoop-acadgild-datanode-localhost.localdomain.out</a>	719 bytes Jul 6, 2018 6:48:05 PM
<a href="#">hadoop-acadgild-datanode-localhost.localdomain.out.1</a>	3029 bytes Jun 24, 2018 11:15:56 AM
<a href="#">hadoop-acadgild-datanode-localhost.localdomain.out.2</a>	719 bytes Jun 23, 2018 11:16:48 AM
<a href="#">hadoop-acadgild-datanode-localhost.localdomain.out.3</a>	719 bytes Feb 12, 2018 3:07:07 PM
<a href="#">hadoop-acadgild-datanode-localhost.localdomain.out.4</a>	719 bytes Feb 9, 2018 2:45:15 PM
<a href="#">hadoop-acadgild-datanode-localhost.localdomain.out.5</a>	719 bytes Feb 9, 2018 10:52:39 AM
<a href="#">hadoop-acadgild-namenode-localhost.localdomain.log</a>	379930 bytes Jul 6, 2018 6:59:42 PM
<a href="#">hadoop-acadgild-namenode-localhost.localdomain.out</a>	4908 bytes Jul 6, 2018 7:04:42 PM
<a href="#">hadoop-acadgild-namenode-localhost.localdomain.out.1</a>	4913 bytes Jun 24, 2018 11:15:08 AM
<a href="#">hadoop-acadgild-namenode-localhost.localdomain.out.2</a>	719 bytes Jun 23, 2018 11:16:42 AM
<a href="#">hadoop-acadgild-namenode-localhost.localdomain.out.3</a>	719 bytes Feb 12, 2018 3:07:02 PM
<a href="#">hadoop-acadgild-namenode-localhost.localdomain.out.4</a>	719 bytes Feb 9, 2018 2:45:09 PM
<a href="#">hadoop-acadgild-namenode-localhost.localdomain.out.5</a>	719 bytes Feb 9, 2018 10:52:33 AM
<a href="#">hadoop-acadgild-secondarynamenode-localhost.localdomain.log</a>	160780 bytes Jun 24, 2018 11:02:49 AM
<a href="#">hadoop-acadgild-secondarynamenode-localhost.localdomain.out</a>	719 bytes Jun 24, 2018 11:02:45 AM
<a href="#">hadoop-acadgild-secondarynamenode-localhost.localdomain.out.1</a>	719 bytes Jun 23, 2018 11:16:59 AM
<a href="#">hadoop-acadgild-secondarynamenode-localhost.localdomain.out.2</a>	719 bytes Feb 12, 2018 3:07:16 PM
<a href="#">hadoop-acadgild-secondarynamenode-localhost.localdomain.out.3</a>	719 bytes Feb 9, 2018 2:45:23 PM
<a href="#">hadoop-acadgild-secondarynamenode-localhost.localdomain.out.4</a>	719 bytes Feb 9, 2018 10:52:49 AM
<a href="#">hadoop-acadgild-secondarynamenode-localhost.localdomain.out.5</a>	720 bytes Feb 2, 2018 12:45:05 PM
<a href="#">mapred-acadgild-historyserver-localhost.localdomain.log</a>	89477 bytes Jun 23, 2018 11:58:39 AM
<a href="#">mapred-acadgild-historyserver-localhost.localdomain.out</a>	0 bytes Jun 23, 2018 11:19:25 AM