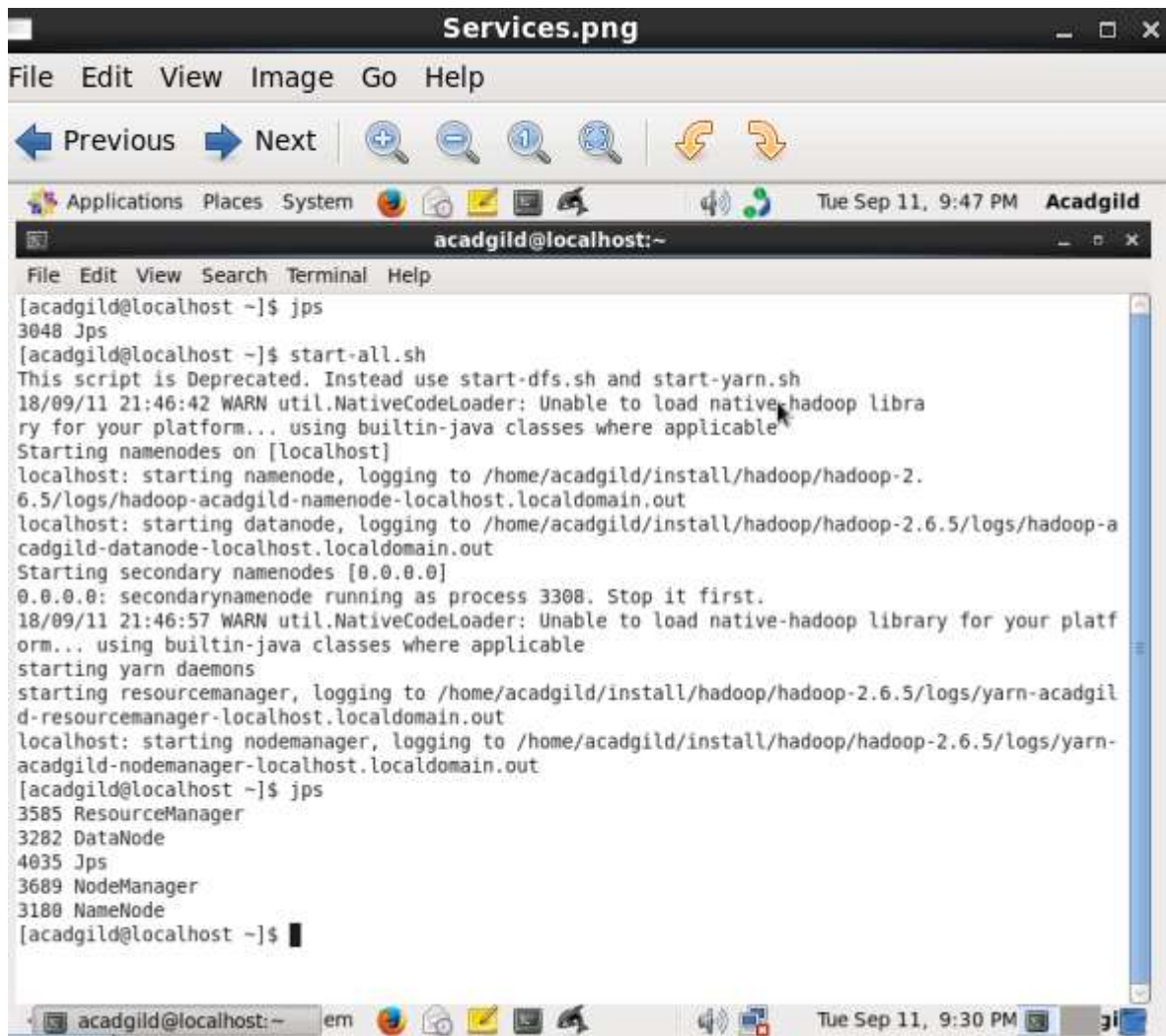


Assignment -1

- 1) Start Hadoop single node on AcadGild VM. The command is start-all.sh.
- 2) Run a JPS command to see if all Hadoop daemons are running.

Launched VM and started services using following command and observed all CORE services has been started.

- Start-all.sh



The screenshot shows a terminal window titled "Services.png" with a menu bar (File, Edit, View, Image, Go, Help) and a toolbar. The terminal prompt is "acadgild@localhost:~". The user enters "jps", which returns "3048 Jps". Then, the user enters "start-all.sh". The script outputs a deprecation warning and logs the startup of Hadoop daemons: namenode, datanode, and secondary namenode. It also shows the startup of Yarn daemons: resourcemanager and nodemanager. Finally, the user enters "jps" again, which returns a list of running processes: "3585 ResourceManager", "3282 DataNode", "4035 Jps", "3689 NodeManager", and "3180 NameNode".

```
[acadgild@localhost ~]$ jps
3048 Jps
[acadgild@localhost ~]$ start-all.sh
This script is Deprecated. Instead use start-dfs.sh and start-yarn.sh
18/09/11 21:46:42 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/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 3308. Stop it first.
18/09/11 21:46:57 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/install/hadoop/hadoop-2.6.5/logs/yarn-acadgild-resourcemanager-localhost.localdomain.out
localhost: starting nodemanager, logging to /home/acadgild/install/hadoop/hadoop-2.6.5/logs/yarn-acadgild-nodemanager-localhost.localdomain.out
[acadgild@localhost ~]$ jps
3585 ResourceManager
3282 DataNode
4035 Jps
3689 NodeManager
3180 NameNode
[acadgild@localhost ~]$
```

And given **jps** command post enabling services and observed all CORE services are enabled with different process id's.

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

```

3585 ResourceManager
3282 DataNode
4035 Jps
3689 NodeManager
3180 NameNode
[acadgild@localhost ~]$ ls
Desktop  Downloads  eclipse-workspace  Music  Public  Videos
Documents  eclipse  install  Pictures  Templates
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ pwd
/home/acadgild
[acadgild@localhost ~]$ ls -lrt
total 44
drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Templates
drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Public
drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Pictures
drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Music
drwxr-xr-x. 2 acadgild acadgild 4096 Dec 27 2017 Videos
drwxrwxr-x. 3 acadgild acadgild 4096 Dec 29 2017 eclipse
drwxrwxr-x. 3 acadgild acadgild 4096 Jan 16 2018 eclipse-workspace
drwxr-xr-x. 2 acadgild acadgild 4096 Feb 2 2018 Documents
drwxrwxr-x. 13 acadgild acadgild 4096 Feb 9 2018 install
drwxr-xr-x. 2 acadgild acadgild 4096 Feb 13 2018 Downloads
drwxr-xr-x. 3 acadgild acadgild 4096 Sep 11 21:47 Desktop
[acadgild@localhost ~]$ vi test.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ cat test.txt
Welcome to Big Data!!
[acadgild@localhost ~]$

```

Have observed current directory using pwd (present working directory) command as

/home/acadgild

And created file test.txt with following content and have printed the output to the console using cat command.

“Welcome to Big Data!!”

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

The screenshot shows a web browser window displaying the Hadoop NameNode Overview page. The browser's address bar shows the URL `localhost:50070/dfshealth.html#tab-overview`. The page has a green header with tabs for 'Hadoop', 'Overview', 'Datanodes', 'Snapshot', 'Startup Progress', and 'Utilities'. The 'Overview' tab is selected, showing the 'Overview' of 'localhost:8020' (active). Below the header, there is a table with the following information:

Started:	Tue Sep 11 21:46:47 IST 2018
Version:	2.6.5, re8c9fe0b4c252caf2ebf1464220599650f119997
Compiled:	2016-10-02T23:43Z by sjlee from branch-2.6.5
Cluster ID:	CID-7b3f9bd8-f34c-4fb8-87aa-f76b6dfbd809
Block Pool ID:	BP-437583619-127.0.0.1-1517555661954

Below the table, there is a 'Summary' section. The browser's taskbar at the bottom shows the file 'Hadoop_version.png' with a size of 80.6 KB and a zoom level of 72%.

6)

The screenshot shows a web browser window displaying the Hadoop NameNode Datanode Information page. The browser's address bar shows the URL `localhost:50070/dfshealth.html#tab-datanode`. The page has a green header with tabs for 'Hadoop', 'Overview', 'Datanodes', 'Snapshot', 'Startup Progress', and 'Utilities'. The 'Datanodes' tab is selected, showing the 'Datanode Information'. Below the header, there is a table with the following information:

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	200 KB	11.61 GB	5.5 GB	3	200 KB (0%)	0	2.6.5

Below the table, there is a 'Decommissioning' section. The browser's taskbar at the bottom shows the file 'Hadoop_version.png' with a size of 68.1 KB and a zoom level of 72%.

Logged into hdfs webpage and observed above information.