

ASSIGNEMENT HDFS

Task 1:

EXPLANATION: TO START HDFS SERVICES WE USE THE BELOW COMMAND WHICH START ALL THE HDFS DEMONS.

COMMAND: start-all.sh

SOLUTION REPORT:

```
[acadgild@localhost ~]$ start-all.sh
This script is Deprecated. Instead use start-dfs.sh and start-yarn.sh
19/01/13 18:54:11 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: starting secondarynamenode, logging to
/home/acadgild/install/hadoop/hadoop-2.6.5/logs/hadoop-acadgild-
secondarynamenode-localhost.localdomain.out
19/01/13 18:54:47 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
3940 NodeManager
3399 NameNode
3498 DataNode
3677 SecondaryNameNode
3837 ResourceManager
3967 Jps
You have new mail in /var/spool/mail/acadgild
```

TASK 1:

COMMAND: `hadoop fs -test -d /user/acagild`

EXPLANATION: THE '-test -d' KEYWORD IS USED TO CHECK THE REQUIRED DIRECTORY "-d" REPRESENTS THE DIRECTORY FLAG. THE ABOVE COMMAND WILL RETURN 0 IF THE DIRECTORY EXISTS OR ELSE 1 IF NOT.

SOLUTION REPORT:

```
[acadgild@localhost ~]$ hadoop fs -test -d /user/acagild
19/01/13 18:58:13 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
```

```
[acadgild@localhost ~]$ echo $?
0
```

COMMAND: `hadoop fs -mkdir /user/acadgild/hadoop`

EXPLANATION: HERE CREATED A DIRECTORY 'hadoop' INSIDE THE HDFS USING 'mkdir' KEYWORD. LATER USED '-ls' KEYWORD TO CHECK WHETHER THE 'hadoop' IS CREATED OR NOT.

SOLUTION REPORT:

```
[acadgild@localhost ~]$ hadoop fs -mkdir /user/acadgild/hadoop
```

```

19/01/13 19:05:51 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild
19/01/13 19:06:18 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
Found 13 items
drwxr-xr-x  - acadgild supergroup          0 2018-12-11 16:34
/user/acadgild/Television.txt
drwxr-xr-x  - acadgild supergroup          0 2018-12-27 18:42
/user/acadgild/csv_file
drwxr-xr-x  - acadgild supergroup          0 2018-12-13 00:46
/user/acadgild/data
drwxr-xr-x  - acadgild supergroup          0 2019-01-07 17:09
/user/acadgild/file
drwxr-xr-x  - acadgild supergroup          0 2019-01-07 20:17
/user/acadgild/filemq
drwxr-xr-x  - acadgild supergroup          0 2019-01-13 19:05
/user/acadgild/hadoop
drwxr-xr-x  - acadgild supergroup          0 2019-01-07 16:46
/user/acadgild/myfile
drwxr-xr-x  - acadgild supergroup          0 2019-01-07 16:49
/user/acadgild/myfilenew
drwxr-xr-x  - acadgild supergroup          0 2019-01-07 16:14
/user/acadgild/mysqldat
drwxr-xr-x  - acadgild supergroup          0 2019-01-07 15:49
/user/acadgild/mysqldata
drwxr-xr-x  - acadgild supergroup          0 2019-01-07 16:42
/user/acadgild/mysqldt
drwxr-xr-x  - acadgild supergroup          0 2019-01-07 19:50
/user/acadgild/mysqlfile
drwxr-xr-x  - acadgild supergroup          0 2018-12-11 16:27
/user/acadgild/television.txt

```

TASK 2:

EXPLANATION: CREATED A TEXT FILE AND ENTERED SOME DATA INSIDE IT. SO THIS FILE WILL BE SAVED IN LOCAL DIRECTORY. THEN WE USED THE "APPEND" KEYOWRD TO APPEND THE DATA PRESENT INSIDE THE FILE "testsfile.txt" INTO A FILE INSIDE HDFS "word-count.txt". LATER USED THE 'CAT' KEYWORD TO SEE THE DATA HAS BEEN APPENDED INTO HDFS FILE OR NOT.

COMMAND: nano testsfile.txt

SOLUTION REPORT:

```

[acadgild@localhost ~]$ nano testsfile.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ cat /home/acadgild/testsfile.txt
JAVA AS A PROGRAMMING PLATFORM

```

As a computer language, JAVA's hype is overdone: Java is certainly a good programming langauge. There is no doubt that it is one of the better langauges available to serioous programmers. As a programmer, you will want a langauge with a pleasant syntax and comprehensible semantics. Java fits the bill, as do dozens of the other fine langauges. Some lanaguages give you portability, garbage collection, and the like, but they dont have much of a library, forcing you to roll your own if you if you want fancy graphics or networking or database access.

COMMAND: hadoop fs -appendToFile testsfile.txt /user/acadgild/hadoop/word-count.txt

COMMAND: hadoop fs -cat /user/acadgild/hadoop/word-count.txt

SOLUTION REPORT:

```
[acadgild@localhost ~]$ hadoop fs -appendToFile testsfile.txt
/user/acadgild/hadoop/word-count.txt
19/01/13 19:35:07 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
[acadgild@localhost ~]$ hadoop fs -cat /user/acadgild/hadoop/word-count.txt
19/01/13 19:36:05 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
JAVA AS A PROGRAMMING PLATFORM
```

As a computer language, JAVA's hype is overdone: Java is certainly a good programming language. There is no doubt that it is one of the better languages available to serious programmers. As a programmer, you will want a language with a pleasant syntax and comprehensible semantics. Java fits the bill, as do dozens of the other fine languages. Some languages give you portability, garbage collection, and the like, but they don't have much of a library, forcing you to roll your own if you want fancy graphics or networking or database access.

You have new mail in /var/spool/mail/acadgild

OUTPUT: REFER SCREENSHOT HDFS1.png

TASK 3:

EXPLANATION: THEN USING THE SAME COMMAND USED TO CREATE A FILE SAME AS IN TASK 2, HERE CREATED A FILE "max-temp.txt" AND ENTERED SOME RANDOM DATES WITH TEMPERATURE DATASETS. THEN WE USED THE "PUT" KEYWORD TO MOVE THE DATA INSIDE THIS FILE INTO THE HDFS AND STORED IT IN THE DIRECTORY "/user/acadgild/hadoop" AND THEN USED "-CAT" COMMAND TO CHECK THE DATA INSIDE THE HDFS PATH.

COMMAND: nano max-temp.txt

COMMAND: cat /home/acadgild/max-temp.txt

SOLUTION:

```
[acadgild@localhost ~]$ nano max-temp.txt
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ cat /home/acadgild/max-temp.txt
10-01-1990,10
12-02-1991,21
13-03-1991,20
02-05-1992,15
12-03-1993,40
13-06-1994,30
14-04-1992,23
15-07-1995,20
17-02-1996,26
18-03-1995,43
20-05-1998,24
21-02-1999,25
12-08-1999,30
25-10-2000,22
12-11-2000,12
26-12-2001,13
```

COMMAND: hadoop fs -put max-temp.txt /user/acadgild/hadoop

SOLUTION REPORT:

```
[acadgild@localhost ~]$ hadoop fs -put max-temp.txt /user/acadgild/hadoop
19/01/13 19:52:38 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
19/01/13 19:53:03 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
```

```

Found 2 items
-rw-r--r--  1 acadgild supergroup          224 2019-01-13 19:52
/user/acadgild/hadoop/max-temp.txt
-rw-r--r--  1 acadgild supergroup          584 2019-01-13 19:35
/user/acadgild/hadoop/word-count.txt
[acadgild@localhost ~]$ hadoop fs -cat /user/acadgild/hadoop/max-temp.txt
19/01/13 19:54:05 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
10-01-1990,10
12-02-1991,21
13-03-1991,20
02-05-1992,15
12-03-1993,40
13-06-1994,30
14-04-1992,23
15-07-1995,20
17-02-1996,26
18-03-1995,43
20-05-1998,24
21-02-1999,25
12-08-1999,30
25-10-2000,22
12-11-2000,12
26-12-2001,13

```

OUTPUT: REFER SCREENSHOT HDFS2.png

TASK 4:

EXPLANATION: HERE WE USED THE COMMANDS "CHMOD" ,"CHOWN", "CHGRP" TO GIVE PERMISSIONS TO THE FILE IN HDFS "max-temp.txt". AS "CHMOD" WILL GIVE THE READ AND WRITE PERMISSION TO THE FILE, "CHOWN" WILL ALLOW ACCESS TO PARTICULAR OWNER "oracle", "CHGRP" WILL ALLOW ACCESS ONLY TO GROUP MEMBERS "hadoop".

```

COMMAND: hadoop fs -chmod -R 224 /user/acadgild/hadoop/max-temp.txt
COMMAND: hadoop fs -chown oracle:oracle /user/acadgild/hadoop/max-temp.txt
COMMAND: hadoop fs -chgrp hadoop /user/acadgild/hadoop/max-temp.txt

```

SOLUTION REPORT:

```

[acadgild@localhost ~]$ hadoop fs -chmod -R 224 /user/acadgild/hadoop/max-
temp.txt
19/01/13 20:02:06 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable

```

```

[acadgild@localhost ~]$ hadoop fs -chown oracle:oracle
/user/acadgild/hadoop/max-temp.txt
19/01/13 20:03:44 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable

```

```

[acadgild@localhost ~]$ hadoop fs -chgrp hadoop /user/acadgild/hadoop/max-
temp.txt
19/01/13 20:04:27 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable

```

EXPLANATION: WE CAN CHECK THE ABOVE COMMANDS HAD WORKED OR NOT BY GIVING "-LS" COMMAND.

SOLUTION REPORT:

```

[acadgild@localhost ~]$ hadoop fs -ls /user/acadgild/hadoop
19/01/13 20:04:47 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
Found 2 items

```

```
--w--w-r-- 1 oracle  hadoop          224 2019-01-13 19:52
/user/acadgild/hadoop/max-temp.txt
-rw-r--r-- 1 acadgild supergroup      584 2019-01-13 19:35
/user/acadgild/hadoop/testsfle.txt
You have new mail in /var/spool/mail/acadgild
```

OUTPUT: REFER SCREENSHOT HDFS3.png