



HDFS Commands

After successful installation of Hadoop, we execute different HDFS Commands.

Open a new Windows Command Prompt and run below commands. C:\hadoop-2.9.1\hadoop-2.9.1>cd bin **ls:** This command is used to list all the files. Use **lsr** for recursive approach. It is useful when we want a hierarchy of a folder.

C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -ls /

Found 2 items

```
drwxr-xr-x - LENOVO supergroup      0 2023-02-27 20:06 /sampledir
drwxr-xr-x - LENOVO supergroup      0 2023-02-27 19:57 /test
```

mkdir: To create a directory. In Hadoop *dfs* there is no home directory by default.

C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -mkdir /user C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -mkdir /user/Lenovo

C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -ls / Found

3 items

```
drwxr-xr-x - LENOVO supergroup 0 2023-02-27 20:06 /sampledir
drwxr-xr-x - LENOVO supergroup 0 2023-02-27 19:57 /test
```

```
drwxr-xr-x - LENOVO supergroup      0 2023-02-27 20:23 /user
```

C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -lsr /user lsr:

DEPRECATED: Please use 'ls -R' instead.

```
drwxr-xr-x - LENOVO supergroup      0 2023-02-27 20:23 /user/Lenovo
```

touchz: It creates an empty file.

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -touchz /user/myfile.txt C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -ls -R /user
drwxr-xr-x - LENOVO supergroup      0 2023-02-27 20:23 /user/Lenovo
-rw-r--r-- 1 LENOVO supergroup      0 2023-02-27 20:26 /user/myfile.txt
```

copyFromLocal (or) put: To copy files/folders from local file system to hdfs store. This is the most



important command. Local filesystem means the files present on the OS.

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -put C:\hadoop-2.9.1\hadoop-2.9.1\Sample.txt /user 0
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -ls -R /user drwxr-xr-x - LENOVO supergroup
2023-02-27 20:23 /user/Lenovo -rw-r--r-- 1 LENOVO supergroup 12 2023-02-27 20:30
/user/Sample.txt -rw-r--r-- 1 LENOVO supergroup 0 2023-02-27 20:26 /user/myfile.txt
```

cat: To print file contents.

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -cat /user/Sample.txt Hello Hadoop
```

copyToLocal (or) get: To copy files/folders from hdfs store to local file system.

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -get /user/Sample.txt ../HadoopExamples
```

cp: This command is used to copy files within hdfs.

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -mkdir /user_copied C:\hadoop-2.9.1\hadoop-
2.9.1\bin>hdfs dfs -cp /user /user_copied C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -ls
/user_copied
```

Found 1 items

```
drwxr-xr-x - LENOVO supergroup 0 2023-02-27 20:48 /user_copied/user
```

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -ls /user Found 3 items drwxr-xr-x -
LENOVO supergroup 0 2023-02-27 20:23 /user/Lenovo
```

```
-rw-r--r-- 1 LENOVO supergroup 12 2023-02-27 20:30 /user/Sample.txt
-rw-r--r-- 1 LENOVO supergroup 0 2023-02-27 20:26 /user/myfile.txt
```

mv: This command is used to move files within hdfs.

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -mv /user/myfile.txt /user_copied
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -ls /user Found
2 items
drwxr-xr-x - LENOVO supergroup 0 2023-02-27 20:23 /user/Lenovo
-rw-r--r-- 1 LENOVO supergroup 12 2023-02-27 20:30 /user/Sample.txt
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -ls /user_copied
Found 2 items
-rw-r--r-- 1 LENOVO supergroup 0 2023-02-27 20:26 /user_copied/myfile.txt drwxr-xr-x -
LENOVO supergroup 0 2023-02-27 20:48 /user_copied/user
```

rmr: This command deletes a file from HDFS *recursively*. It is very useful command when you want to delete a *non-empty directory*.



```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -rmr /user_copied
rmr: DEPRECATED: Please use '-rm -r' instead.
```

```
Deleted /user_copied C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs
ls /user_copied ls: `/user_copied': No such file or directory
```

du: It will give the size of each file in directory.

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -du /user 0 /user/Lenovo 12 /user/Sample.txt
```

du: This command will give the total size of directory/file.

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -dus /user dus: DEPRECATED:
```

Please use 'du -s' instead.

```
12 /user
```

stat: It will give the last modified time of directory or path. In short it will give stats of the directory or file.

```
C:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -stat /user 2023-02-27 15:20:27
```

setrep: This command is used to change the replication factor of a file/directory in HDFS. By default it is 3 for anything which is stored in HDFS (as set in *hdfs core-site.xml*).

```
c:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -setrep -R 4 /user Replication
```

```
4 set: /user/Sample.txt
```

```
c:\hadoop-2.9.1\hadoop-2.9.1\bin>hdfs dfs -ls /user Found
```

```
2 items
```

```
drwxr-xr-x - LENOVO supergroup          0 2023-02-27 20:23 /user/Lenovo
```

```
-rw-r--r-- 4 LENOVO supergroup        12 2023-02-27 20:30 /user/Sample.txt
```

CONCLUSION: We have successfully execute different HDFS Commands.