

1) Command for Uploading a file in HDFS

Hadoop fs -put

This command is used to upload a file from the local file system to HDFS. Multiple files can be uploaded using this command by separating the filenames with a space.

```
[root@sandbox-hdp ml-1m]# hadoop fs -put movies.dat Testing
[root@sandbox-hdp ml-1m]# hadoop fs -put ratings.dat Testing
[root@sandbox-hdp ml-1m]# hadoop fs -put users.dat Testing
[root@sandbox-hdp ml-1m]#
```

2) Command for Downloading a file in HDFS

Hadoop fs -get

This command is used to download a file from the local file system to HDFS. Multiple files can be downloaded using this command by separating the filenames with a space.

```
[root@sandbox-hdp Playground]# hadoop fs -get Testing/occupation.dat
[root@sandbox-hdp Playground]# ls
occupation.dat
```

3) Command for Viewing the Contents of a file

Hadoop fs -cat

```
[root@sandbox-hdp ml-1m]# hadoop fs -cat Testing/occupation.dat
0#other/not specified
1#academic/educator
2#artist
3#clerical/admin
4#college/grad student
5#customer service
6#doctor/health care
7#executive/managerial
8#farmer
9#homemaker
10#K-12 student
11#lawyer
12#programmer
13#retired
14#sales/marketing
15#scientist
16#self-employed
17#technician/engineer
18#tradesman/craftsman
19#unemployed
20#writer
```

4) Command for Moving Files from Source to Destination

Hadoop fs -mv

```
[root@sandbox-hdp ~]# hadoop fs -mv Trash Testing
[root@sandbox-hdp ~]# hadoop fs -ls Testing
Found 5 items
drwxr-xr-x - root hdfs          0 2022-04-07 04:43 Testing/Trash
```

5) Command for Removing a Directory or File in HDFS

Hadoop fs -rm

Note- To remove a directory, the directory should be empty before using the rm command.

```
[root@sandbox-hdp ~]# rm -R ml-1m
rm: descend into directory 'ml-1m'? y
rm: remove regular file 'ml-1m/users.dat'? y
rm: remove regular file 'ml-1m/movies.dat'? y
rm: remove regular file 'ml-1m/occupation.dat'? y
rm: remove regular file 'ml-1m/README'? y
rm: remove regular file 'ml-1m/ratings.dat'? y
rm: remove directory 'ml-1m'? y
```

6) Command for Copying files from local file system to HDFS

Hadoop fs -copyFromLocal

```
[root@sandbox-hdp Playground]# hadoop fs -copyFromLocal -f occupation.dat Testing
[root@sandbox-hdp Playground]# hadoop fs -ls Testing
Found 5 items
drwxr-xr-x  - root hdfs      0 2022-04-07 04:43 Testing/Trash
-rw-r--r--  1 root hdfs    171308 2022-04-07 03:37 Testing/movies.dat
-rw-r--r--  1 root hdfs      345 2022-04-07 05:56 Testing/occupation.dat
-rw-r--r--  1 root hdfs  24594131 2022-04-07 03:38 Testing/ratings.dat
-rw-r--r--  1 root hdfs   134368 2022-04-07 03:38 Testing/users.dat
```

7) Command to display the length of a file

Hadoop fs -du

```
[root@sandbox-hdp ~]# hadoop fs -du Testing/movies.dat
171308 171308 Testing/movies.dat
```

8) Command to view the content of a directory

Hadoop fs -ls

```
[root@sandbox-hdp ~]# hadoop fs -ls
Found 3 items
drwxr-xr-x  - root hdfs      0 2022-04-07 03:38 Testing
drwxr-xr-x  - root hdfs      0 2022-04-07 04:43 Trash
drwxr-xr-x  - root hdfs      0 2022-04-05 20:43 bdp
[root@sandbox-hdp ~]#
```

9) Command to create a Directory in HDFS

Hadoop fs -mkdir

```
[root@sandbox-hdp ~]# hadoop fs -mkdir Trash
[root@sandbox-hdp ~]# hadoop fs -ls
Found 3 items
drwxr-xr-x   - root hdfs          0 2022-04-07 03:38 Testing
drwxr-xr-x   - root hdfs          0 2022-04-07 04:43 Trash
drwxr-xr-x   - root hdfs          0 2022-04-05 20:43 bdp
[root@sandbox-hdp ~]#
```

10) Command to display the first few lines of a file

Hadoop fs -head

```
[root@sandbox-hdp ~]# hadoop fs -head Testing/movies.dat
1::Toy Story (1995)::Animation|Children's|Comedy
2::Jumanji (1995)::Adventure|Children's|Fantasy
3::Grumpier Old Men (1995)::Comedy|Romance
4::Waiting to Exhale (1995)::Comedy|Drama
5::Father of the Bride Part II (1995)::Comedy
6::Heat (1995)::Action|Crime|Thriller
7::Sabrina (1995)::Comedy|Romance
8::Tom and Huck (1995)::Adventure|Children's
9::Sudden Death (1995)::Action
10::GoldenEye (1995)::Action|Adventure|Thriller
```

1. Create a directory in HDFS at given path(s).

Usage: hadoop fs -mkdir <paths>

Example: hadoop fs -mkdir /user/kumar/dir1 /user/kumar/dir2

```
[root@sandbox-hdp ~]# hadoop fs -mkdir Testing/deletethis
[root@sandbox-hdp ~]# hadoop fs -ls Testing
Found 6 items
drwxr-xr-x   - root hdfs          0 2022-04-07 04:43 Testing/Trash
drwxr-xr-x   - root hdfs          0 2022-04-08 03:12 Testing/deletethis
-rw-r--r--   1 root hdfs    171308 2022-04-07 03:37 Testing/movies.dat
-rw-r--r--   1 root hdfs       345 2022-04-07 05:56 Testing/occupation.dat
-rw-r--r--   1 root hdfs  24594131 2022-04-07 03:38 Testing/ratings.dat
-rw-r--r--   1 root hdfs   134368 2022-04-07 03:38 Testing/users.dat
```

2. List the contents of a directory.

Usage : hadoop fs -ls <args>

Example: hadoop fs -ls /user/kumar


```
[root@sandbox-hdp ~]# hadoop fs -mkdir Testing/deletethis
[root@sandbox-hdp ~]# hadoop fs -ls Testing
Found 6 items
drwxr-xr-x   - root hdfs          0 2022-04-07 04:43 Testing/Trash
drwxr-xr-x   - root hdfs          0 2022-04-08 03:12 Testing/deletethis
-rw-r--r--   1 root hdfs    171308 2022-04-07 03:37 Testing/movies.dat
-rw-r--r--   1 root hdfs     345 2022-04-07 05:56 Testing/occupation.dat
-rw-r--r--   1 root hdfs  24594131 2022-04-07 03:38 Testing/ratings.dat
-rw-r--r--   1 root hdfs   134368 2022-04-07 03:38 Testing/users.dat
```

3. Upload and download a file in HDFS.

Upload: `hadoop fs -put`:

Copy single src file, or multiple src files from local file system to the Hadoop data file system

1Usage:

2`hadoop fs -put <localsrc> ... <HDFS_dest_Path>`

3Example:

4`hadoop fs -put /home/saurzcode/Samplefile.txt /user/saurzcode/dir3/`

```
[root@sandbox-hdp ml-1m]# hadoop fs -put movies.dat Testing
[root@sandbox-hdp ml-1m]# hadoop fs -put ratings.dat Testing
[root@sandbox-hdp ml-1m]# hadoop fs -put users.dat Testing
[root@sandbox-hdp ml-1m]#
```

`hadoop fs -get`:

Copies/Downloads files to the local file system

1Usage:

2`hadoop fs -get <hdfs_src> <localdst>`

3Example:

4`hadoop fs -get /user/saurzcode/dir3/Samplefile.txt /home/`

```
[root@sandbox-hdp Playground]# hadoop fs -get Testing/occupation.dat
[root@sandbox-hdp Playground]# ls
occupation.dat
```

4. See contents of a file

Same as unix `cat` command:

1Usage:

2`hadoop fs -cat <path[filename]>`

3Example:

4hadoop fs -cat /user/saurzcode/dir1/abc.txt

```
[root@sandbox-hdp ml-1m]# hadoop fs -cat Testing/occupation.dat
0#other/not specified
1#academic/educator
2#artist
3#clerical/admin
4#college/grad student
5#customer service
6#doctor/health care
7#executive/managerial
8#farmer
9#homemaker
10#K-12 student
11#lawyer
12#programmer
13#retired
14#sales/marketing
15#scientist
16#self-employed
17#technician/engineer
18#tradesman/craftsman
19#unemployed
20#writer
```

5. Copy a file from source to destination (entirely with hadoop)

This command allows multiple sources as well in which case the destination must be a directory.

1Usage:

2hadoop fs -cp <source> <dest>

3Example:

4hadoop fs -cp /user/saurzcode/dir1/abc.txt /user/saurzcode/dir2

```
[root@sandbox-hdp ~]# hadoop fs -cp Testing/users.dat bdp
[root@sandbox-hdp ~]# hadoop fs -ls bdp
Found 1 items
-rw-r--r--  1 root hdfs      134368 2022-04-08 06:09 bdp/users.dat
[root@sandbox-hdp ~]#
```

6. Copy a file from/To Local file system to HDFS

copyFromLocal

1Usage:

2hadoop fs -copyFromLocal <localsrc> URI

3Example:

4hadoop fs -copyFromLocal /home/saurzcode/abc.txt /user/saurzcode/abc.txt

Similar to put command, except that the source is restricted to a local file reference.

```
[root@sandbox-hdp Playground]# hadoop fs -copyFromLocal -f occupation.dat Testing
[root@sandbox-hdp Playground]# hadoop fs -ls Testing
Found 5 items
drwxr-xr-x - root hdfs      0 2022-04-07 04:43 Testing/Trash
-rw-r--r-- 1 root hdfs    171308 2022-04-07 03:37 Testing/movies.dat
-rw-r--r-- 1 root hdfs      345 2022-04-07 05:56 Testing/occupation.dat
-rw-r--r-- 1 root hdfs  24594131 2022-04-07 03:38 Testing/ratings.dat
-rw-r--r-- 1 root hdfs   134368 2022-04-07 03:38 Testing/users.dat
```

7. Move file from source to destination.

Note:- Moving files across filesystem is not permitted.

1Usage :

2hadoop fs -mv <src> <dest>

3Example:

4hadoop fs -mv /user/saurzcode/dir1/abc.txt /user/saurzcode/dir2

```
[root@sandbox-hdp ~]# hadoop fs -mv Testing/Trash bdp
[root@sandbox-hdp ~]# hadoop fs -ls bdp
Found 2 items
drwxr-xr-x - root hdfs      0 2022-04-07 04:43 bdp/Trash
-rw-r--r-- 1 root hdfs   134368 2022-04-08 06:09 bdp/users.dat
```

8. Remove a file or directory in HDFS.

Remove files specified as argument. Deletes directory only when it is empty

1 Usage :

2hadoop fs -rm <arg>

3Example:

4hadoop fs -rm /user/saurzcode/dir1/abc.txt

Recursive version of delete.---

1Usage :

2hadoop fs -rmr <arg>

3Example:

4hadoop fs -rmr /user/saurzcode/

```
[root@sandbox-hdp ~]# hadoop fs -rmdir Testing/deletethis
[root@sandbox-hdp ~]# hadoop fs -ls Testing
Found 5 items
drwxr-xr-x   - root hdfs          0 2022-04-07 04:43 Testing/Trash
-rw-r--r--   1 root hdfs    171308 2022-04-07 03:37 Testing/movies.dat
-rw-r--r--   1 root hdfs     345 2022-04-07 05:56 Testing/occupation.dat
-rw-r--r--   1 root hdfs  24594131 2022-04-07 03:38 Testing/ratings.dat
-rw-r--r--   1 root hdfs   134368 2022-04-07 03:38 Testing/users.dat
[root@sandbox-hdp ~]#
```

9. Display last few lines of a file.

Similar to tail command in Unix.

1Usage :

2hadoop fs -tail <path[filename]>

3Example:

4hadoop fs -tail /user/saurzcode/dir1/abc.txt

```
[root@sandbox-hdp ml-25m]# hadoop fs -tail Testing/users.dat
5::F::35::1::14618
5996::F::25::0::87114
5997::F::25::7::10016
5998::M::18::4::61820
5999::F::25::1::55455
6000::M::45::17::30075
6001::F::25::7::94117
6002::M::50::0::43231
6003::F::45::17::78722
6004::F::25::15::28401
6005::F::25::5::28401
6006::F::1::0::01036
6007::M::35::17::80537
6008::M::18::4::78705
6009::F::25::12::60540
6010::M::35::0::79606
6011::M::35::15::80538
6012::M::35::15::02871
6013::F::25::20::32301
6014::M::45::1::80634
6015::F::25::9::80013
```


10. Display the aggregate length of a file.

1Usage :

2hadoop fs -du <path>

3Example:

4hadoop fs -du /user/saurzcode/dir1/abc.txt

```
[root@sandbox-hdp ~]# hadoop fs -du Testing/users.dat
134368 134368 Testing/users.dat
[root@sandbox-hdp ~]#
```

Please comment which of these commands you found most useful while dealing with Hadoop /HDFS.

LS command is hard to compete with, since it allows you visibility into any directory to ascertain what other commands need to be executed.