

HDFS Commands

This document will help you understand the basic Hadoop commands, using which you can perform different operations on hdfs.

Note: Please do not copy paste the commands, instead type them manually on the terminal.

Command to find the Version of Hadoop:

Command: `hadoop version`

```
[edureka@localhost ~]$ hadoop version
Hadoop 2.2.0
Subversion https://svn.apache.org/repos/asf/hadoop/common -r 1529768
Compiled by hortonmu on 2013-10-07T06:28Z
Compiled with protoc 2.5.0
From source with checksum 79e53ce7994d1628b240f09af91e1af4
This command was run using /usr/lib/hadoop-2.2.0/share/hadoop/common/hadoop-
common-2.2.0.jar
```

LS command:

Displays List of Files and Directories in HDFS file Path

Command: `hadoop dfs -ls /`

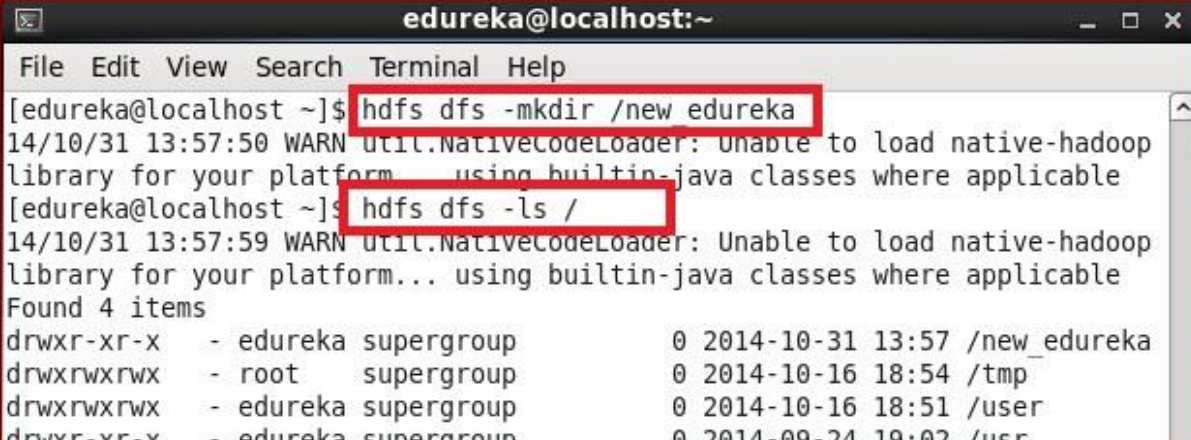
```
edureka@localhost:~
File Edit View Search Terminal Help
[edureka@localhost ~]$ hdfs dfs -ls /
14/10/31 13:49:24 WARN util.NativeCodeLoader: Unable to load native-hadoop
library for your platform... using builtin-java classes where applicable
Found 3 items
drwxrwxrwx - root supergroup 0 2014-10-16 18:54 /tmp
drwxrwxrwx - edureka supergroup 0 2014-10-16 18:51 /user
drwxr-xr-x - edureka supergroup 0 2014-09-24 19:02 /usr
[edureka@localhost ~]$
```

MKDIR command:

It creates the directory in HDFS

Syntax: `hdfs dfs -mkdir /directory_name`

E.g: `hdfs dfs -mkdir /new_edureka`

A terminal window titled 'edureka@localhost:~' showing two commands and their outputs. The first command is 'hdfs dfs -mkdir /new_edureka' and the second is 'hdfs dfs -ls /'. Both commands are highlighted with red boxes. The output for the first command is a warning message. The output for the second command is a table of files in the root directory.

```
edureka@localhost:~  
File Edit View Search Terminal Help  
[edureka@localhost ~]$ hdfs dfs -mkdir /new_edureka  
14/10/31 13:57:50 WARN util.NativeCodeLoader: Unable to load native-hadoop  
library for your platform... using builtin-java classes where applicable  
[edureka@localhost ~]$ hdfs dfs -ls /  
14/10/31 13:57:59 WARN util.NativeCodeLoader: Unable to load native-hadoop  
library for your platform... using builtin-java classes where applicable  
Found 4 items  
drwxr-xr-x - edureka supergroup 0 2014-10-31 13:57 /new_edureka  
drwxrwxrwx - root supergroup 0 2014-10-16 18:54 /tmp  
drwxrwxrwx - edureka supergroup 0 2014-10-16 18:51 /user  
drwxr-xr-x - edureka supergroup 0 2014-09-24 19:02 /usr
```

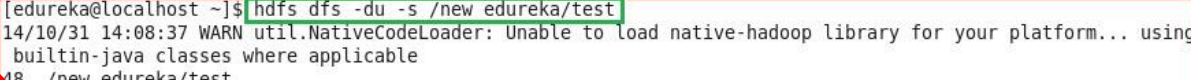
DU command:

Displays the summary of file lengths.

Syntax: `hdfs dfs -du -s /path/to/file_in_hdfs`

Command: `hdfs dfs -du -s /new_edureka/test`

Note: Here test is a file that exists in HDFS in the directory new_edureka

A terminal window showing the command 'hdfs dfs -du -s /new_edureka/test' and its output. The command is highlighted with a green box. The output is '48 /new_edureka/test'. A red arrow points to the output line.

```
[edureka@localhost ~]$ hdfs dfs -du -s /new_edureka/test  
14/10/31 14:08:37 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
48 /new_edureka/test
```

TOUCHZ command:

Create a file in HDFS with file size 0 bytes

Syntax: `hdfs dfs -touchz /directory/filename`

E.g: `hdfs dfs -touchz /newedureka/sample.`

Note: Here we are trying to create a file named "sample" in the directory 'new_edureka' of hdfs with file size 0 bytes.

Use the du command to check the file size

Command: `hdfs dfs -du -s /new_edureka/sample`

```
edureka@localhost:~  
File Edit View Search Terminal Help  
[edureka@localhost ~]$ hdfs dfs -touchz /new edureka/sample  
14/10/31 14:06:57 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
[edureka@localhost ~]$ hdfs dfs -du -s /new edureka/sample  
14/10/31 14:07:05 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
0 /new edureka/sample
```

CAT command:

Copies source paths to stdout.

Syntax: `hdfs dfs -cat /path/to/file_in_hdfs`

Command: `hdfs dfs -cat /new_edureka/test`

Note: Here test is a file that exists in HDFS in the directory new_edureka

```
edureka@localhost:~  
File Edit View Search Terminal Help  
[edureka@localhost ~]$ hdfs dfs -cat /new edureka/test  
14/10/31 14:11:06 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
This is edureka VM
```

TEXT command:

Takes a source file and outputs the file in text format.(Same as Cat command)

Syntax: `hdfs dfs -text /path/to/file_in_hdfs`

Command: `hdfs dfs -text /new_edureka/test`

Note: Here test is a file that exists in HDFS in the directory new_edureka

```
edureka@localhost:~  
File Edit View Search Terminal Help  
[edureka@localhost ~]$ hdfs dfs -text /new edureka/test  
14/10/31 14:20:04 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
This is edureka VM
```

copyFromLocal command :

Copy the file from Local file system to HDFS.

Syntax: `hdfs fs -copyFromLocal <localsrc> URI`

E.g: `hdfs dfs -copyFromLocal /home/edureka/Desktop/test /new_edureka`

Note: Here test is the file present in the local directory - /home/edureka/Desktop

```
edureka@localhost:~  
File Edit View Search Terminal Help  
[edureka@localhost ~]$ hdfs dfs -copyFromLocal /home/edureka/Desktop/test /new_edureka  
14/10/31 14:00:50 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
[edureka@localhost ~]$ hdfs dfs -ls /new edureka  
14/10/31 14:01:03 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
Found 1 items  
-rw-r--r--  1 edureka supergroup          48 2014-10-31 14:00 /new edureka/test  
[edureka@localhost ~]$
```

copyToLocal command :

Copy the file from HDFS to Local File System.

Syntax: `hdfs fs -copyToLocal URI <localdst>`

Command: `hdfs dfs -copyToLocal /new_edureka/test /home/edureka`

Note: Here test is a file present in new_edureka directory of HDFS

```
edureka@localhost:~  
File Edit View Search Terminal Help  
[edureka@localhost ~]$ hdfs dfs -copyToLocal /new edureka/test /home/edureka  
14/10/31 14:02:44 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
[edureka@localhost ~]$ ls /home/edureka/te*  
/home/edureka/test  
[edureka@localhost ~]$
```

PUT command:

Copy single source, or multiple srcs from local file system to the destination file system.

Syntax: `hdfs fs -put <localsrc> ... <dst>`

Command: `hdfs dfs -put /home/edureka/Desktop/test /user`

```
edureka@localhost:~  
File Edit View Search Terminal Help  
[edureka@localhost ~]$ hdfs dfs -put /home/edureka/Desktop/test /user  
14/10/31 14:30:59 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
[edureka@localhost ~]$ hdfs dfs -ls /user  
14/10/31 14:31:25 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
Found 5 items  
drwxrwxrwx  - edureka supergroup          0 2014-09-30 19:37 /user/edureka  
drwxrwxrwx  - edureka supergroup          0 2014-09-24 18:27 /user/flume  
drwxr-xr-x   - edureka supergroup          0 2014-10-16 18:51 /user/hive  
-rw-r--r--   1 edureka supergroup          0 2014-10-31 14:06 /user/sample  
-rw-r--r--   1 edureka supergroup        21 2014-10-31 14:30 /user/test
```

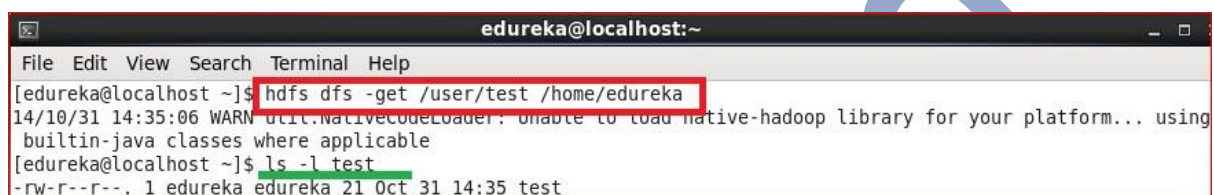
Note: copyFromLocal is similar to put command, except that the source is restricted to a local file reference

GET command:

Copy files from hdfs to the local file system.

Syntax: `hadoop fs -get [-ignorecrc] [-crc] <src> <localdst>`

E.g: `hdfs dfs -get /user/test /home/edureka`



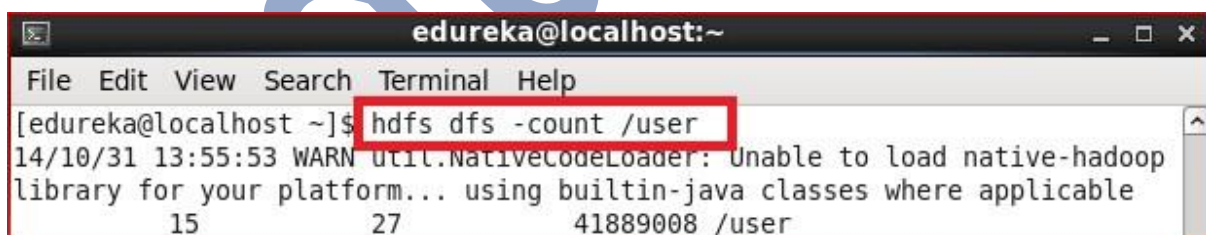
```
edureka@localhost:~  
File Edit View Search Terminal Help  
[edureka@localhost ~]$ hdfs dfs -get /user/test /home/edureka  
14/10/31 14:35:06 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using  
builtin-java classes where applicable  
[edureka@localhost ~]$ ls -l test  
-rw-r--r--. 1 edureka edureka 21 Oct 31 14:35 test
```

Note: copyToLocal is similar to get command, except that the destination is restricted to a local file reference.

COUNT command:

Count the number of directories, files and bytes under the paths that match the specified file pattern.

Command: `hdfs dfs -count /user`



```
edureka@localhost:~  
File Edit View Search Terminal Help  
[edureka@localhost ~]$ hdfs dfs -count /user  
14/10/31 13:55:53 WARN util.NativeCodeLoader: Unable to load native-hadoop  
library for your platform... using builtin-java classes where applicable  
15          27          41889008 /user
```

RM command:

Remove the file from HDFS.

Syntax: `hdfs dfs -rm /path/to/file_in_hdfs`

Command: `hdfs dfs -rm /new_edureka/test`


```
[edureka@localhost ~]$ hdfs dfs -rm /new_edureka/test
14/10/31 14:22:31 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using
builtin-java classes where applicable
14/10/31 14:22:31 INFO fs.TrashPolicyDefault: Namenode trash configuration: Deletion interval = 0 minutes, Em
ptier interval = 0 minutes.
Deleted /new_edureka/test
[edureka@localhost ~]$ hdfs dfs -ls /new_edureka/
14/10/31 14:23:12 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using
builtin-java classes where applicable
```

RMR command:

Remove the directory to HDFS

Syntax: `hdfs dfs -rmr /path/to/directory_in_hdfs`

Command: `hdfs dfs -rmr /new_edureka/`

```
[edureka@localhost ~]$ hdfs dfs -rmr /new_edureka/
rmr: DEPRECATED: Please use 'rm -r' instead.
14/10/31 14:25:16 WARN util.NativeCodeLoader: Unable to load native-hadoop library for your platform... using
builtin-java classes where applicable
14/10/31 14:25:17 INFO fs.TrashPolicyDefault: Namenode trash configuration: Deletion interval = 0 minutes, Em
ptier interval = 0 minutes.
Deleted /new_edureka
```