

NITISH KUMAR M
1BM19CS107
B4
BDA LAB

```
hduser@bmsce-Precision-T1700:~$ sudo su hduser
[sudo] password for hduser:
hduser@bmsce-Precision-T1700:~$ start -all.sh

Command 'start' not found, did you mean:

  command 'stars' from snap stars (2.7jrc3)
  command 'stat' from deb coreutils (8.30-3ubuntu2)
  command 'startx' from deb xinit (1.4.1-0ubuntu2)
  command 'kstart' from deb kde-runtime (4:17.08.3-0ubuntu2)
  command 'tart' from deb tart (3.10-1build1)
  command 'smart' from deb smartpm-core (1.4-2)
  command 'rstart' from deb x11-session-utils (7.7+4)

See 'snap info <snapname>' for additional versions.

hduser@bmsce-Precision-T1700:~$ start-all.sh
This script is Deprecated. Instead use start-dfs.sh and start-yarn.sh
Starting namenodes on [localhost]
hduser@localhost's password:
localhost: starting namenode, logging to /usr/local/hadoop/logs/hadoop-hduser-namenode-bmsce-Precision-T1700.out
hduser@localhost's password:
localhost: starting datanode, logging to /usr/local/hadoop/logs/hadoop-hduser-datanode-bmsce-Precision-T1700.out
Starting secondary namenodes [0.0.0.0]
hduser@0.0.0.0's password:
0.0.0.0: starting secondarynamenode, logging to /usr/local/hadoop/logs/hadoop-hduser-secondarynamenode-bmsce-Precision-T1700.out
starting yarn daemons
starting resourcemanager, logging to /usr/local/hadoop/logs/yarn-hduser-resourcemanager-bmsce-Precision-T1700.out
hduser@localhost's password:
localhost: starting nodemanager, logging to /usr/local/hadoop/logs/yarn-hduser-nodemanager-bmsce-Precision-T1700.out
hduser@bmsce-Precision-T1700:~$ jps
4480 NameNode
5361 NodeManager
4657 DataNode
4869 SecondaryNameNode
5029 ResourceManager
5484 Jps
```

Hadoop Basic Commands

1. mkdir

Hadoop HDFS mkdir Command Usage

mkdir

Hadoop HDFS mkdir Command Example

hdfs dfs -mkdir /abc

Hadoop HDFS mkdir Command Description

This HDFS command takes path URI's as an argument and creates directories.

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -mkdir /nitish
hduser@bmsce-Precision-T1700:~$ hdfs dfs -ls /
Found 7 items
drwxr-xr-x - hduser supergroup 0 2022-06-01 10:15 /1BM19CS167
drwxr-xr-x - hduser supergroup 0 2022-06-01 10:03 /1bm19cs167
drwxr-xr-x - hduser supergroup 0 2022-05-31 09:58 /abcde
drwxr-xr-x - hduser supergroup 0 2022-05-31 10:04 /abcdef
drwxr-xr-x - hduser supergroup 0 2022-06-01 14:31 /nitish
drwxrwxr-x - hduser supergroup 0 2019-08-01 16:19 /tmp
```

2. ls

Hadoop HDFS ls Command Usage

ls

Hadoop HDFS ls Command Example

`hadoop fs -ls /`

Hadoop HDFS ls Command Description

This Hadoop HDFS ls command displays a list of the contents of a directory specified by path provided by the user, showing the names, permissions, owner, size and modification date for each entry.

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -ls /
Found 7 items
drwxr-xr-x - hduser supergroup 0 2022-06-01 10:15 /IBM19CS167
drwxr-xr-x - hduser supergroup 0 2022-06-01 10:03 /1bm19cs167
drwxr-xr-x - hduser supergroup 0 2022-05-31 09:58 /abcde
drwxr-xr-x - hduser supergroup 0 2022-05-31 10:04 /abcdef
drwxr-xr-x - hduser supergroup 0 2022-06-01 14:35 /nitish
drwxrwxr-x - hduser supergroup 0 2019-08-01 16:19 /tmp
drwxr-xr-x - hduser supergroup 0 2019-08-01 16:03 /user
```

3. put

Hadoop HDFS put Command Usage

`put`

Hadoop HDFS put Command Example

`hdfs dfs -put /home/hduser/Desktop/Welcome.txt /abc/WC.txt`

Hadoop

HDFS put Command Description

This hadoop basic command copies the file or directory from the local file system to the destination within the DFS.

Display the contents of the file WC.txt

`hdfs dfs -cat /abc/WC.txt`

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -put /home/hduser/Desktop/newb4.txt /nitish/niti.txt
hduser@bmsce-Precision-T1700:~$ hdfs dfs -cat /nitish/niti.txt
hello im nitish
```

4. copyFromLocal

Hadoop HDFS copyFromLocal Command Usage

`copyFromLocal`

Hadoop HDFS copyFromLocal Command Example

`hdfs dfs -put /home/hduser/Desktop/Welcome.txt /abc/WC.txt`

Hadoop HDFS copyFromLocal Command Description

This hadoop shell command is similar to put command, but the source is restricted to a local file reference.

Display the contents of the file WC2.txt

`hdfs dfs -cat /abc/WC2.txt`

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -copyFromLocal /home/hduser/Desktop/newb4.txt /nitish/prem.txt
hduser@bmsce-Precision-T1700:~$ hdfs dfs -cat /nitish/prem.txt
hello im nitish
```

5. get

Hadoop HDFS get Command Usage

get [-crc]

i.Hadoop HDFS get Command Example

hdfs dfs -get /abc/WC.txt /home/hduser/Downloads/WWC.txt

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -get /nitish/niti.txt /home/hduser/Desktop/harsha.txt
```

This HDFS fs command copies the file or directory in HDFS identified by the source to the local file system path identified by local destination.

ii.Hadoop HDFS get Command Example

hdfs dfs -getmerge /abc/WC.txt /abc/WC2.txt /home/hduser/Desktop/Merge.txt

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -getmerge /nitish/niti.txt /nitish/niki.txt /home/hduser/Desktop/Merge.txt
```

This HDFS basic command retrieves all files that match to the source path entered by the user in HDFS, and creates a copy of them to one single, merged file in the local file system identified by local destination.

iii. Hadoop HDFS get Command Example

hadoop fs -getfacl /abc/

```
hduser@bmsce-Precision-T1700:~$ hadoop fs -getfacl /nitish/
# file: /nitish
# owner: hduser
# group: supergroup
user::rwx
group::r-x
other::r-x
```

This Apache Hadoop command shows the Access Control Lists (ACLs) of files and directories.

6. copyToLocal

Hadoop HDFS copyToLocal Command Usage

copyToLocal

Hadoop HDFS copyToLocal Command Example

hdfs dfs -copyToLocal /abc/WC.txt /home/hduser/Desktop

Similar to get command, only the difference is that in this the destination is restricted to a local file reference.

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -copyToLocal /nitish/prem.txt /home/hduser/Desktop/rama.txt
hduser@bmsce-Precision-T1700:~$ hdfs dfs -cat /nitish/prem.txt
hello im nitish
```

7. cat

Hadoop HDFS cat Command Usage

cat

Hadoop HDFS cat Command Example

hdfs dfs -cat /abc/WC.txt

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -copyToLocal /nitish/prem.txt /home/hduser/Desktop/rama.txt
hduser@bmsce-Precision-T1700:~$ hdfs dfs -cat /nitish/prem.txt
hello im nitish
```

This Hadoop fs shell command displays the contents of the filename on console or stdout.

8. mv

Hadoop HDFS mv Command Usage

mv

Hadoop HDFS mv Command Example

hadoop fs -mv /abc /FFF

hadoop fs -ls /FFF

This basic HDFS command moves the file or directory indicated by the source to destination, within HDFS.

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -mv /nitish /laxman
hduser@bmsce-Precision-T1700:~$ hdfs dfs -ls /laxman
Found 4 items
drwxr-xr-x  - hduser supergroup          0 2022-06-01 14:46 /laxman/hi.txt
-rw-r--r--  1 hduser supergroup        16 2022-06-01 15:08 /laxman/niki.txt
-rw-r--r--  1 hduser supergroup        16 2022-06-01 14:52 /laxman/niti.txt
-rw-r--r--  1 hduser supergroup        16 2022-06-01 14:55 /laxman/prem.txt
```

9. cp

Hadoop HDFS cp Command Usage

cp

Hadoop HDFS cp Command Example

hadoop fs -cp /CSE/ /LLL

hadoop fs -ls /LLL

The cp command copies a file from one directory to another directory within the HDFS.

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -cp /laxman /seetha
hduser@bmsce-Precision-T1700:~$ hdfs dfs -ls /seetha
Found 4 items
drwxr-xr-x  - hduser supergroup          0 2022-06-01 15:14 /seetha/hi.txt
-rw-r--r--  1 hduser supergroup         16 2022-06-01 15:14 /seetha/niki.txt
-rw-r--r--  1 hduser supergroup         16 2022-06-01 15:14 /seetha/niti.txt
-rw-r--r--  1 hduser supergroup         16 2022-06-01 15:14 /seetha/prem.txt
```