

Execution of HDFS Commands for interaction with Hadoop Environment.

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.

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.

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`

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.

Display the contents of the file WC2.txt `hdfs dfs -cat /abc/WC2.txt`

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` 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`

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/`

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.

7. cat

Hadoop HDFS cat Command Usage cat Hadoop HDFS cat Command Example

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

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.

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.

```
// start hadoop (must be in hduser)
```

```
$ start-all.sh
```

```
// creating a directory inside hadoop -mkdir
```

```
$ hdfs dfs -mkdir /bda_hadoop
```

```
// listing all content inside hadoop - ls
```

```
$ hadoop fs -ls /
```

```
// copyig files from desktop using put command - put
```

```
$ hdfs dfs -put /home/hduser/Desktop/bda_local.txt /bda_hadoop/file.txt
```

```
// cat command(listing the content of file in hadoop) -cat
```

```
$ hdfs dfs -cat /bda_hadoop/file.txt
```

```
// copying files from local reference using copyFromLocal cmd.
```

```
$ hdfs dfs -copyFromLocal /home/hduser/Desktop/bda_local.txt /bda_hadoop/file_cp_local.txt
```

```
$ hdfs dfs -cat /bda_hadoop/file_cp_local.txt
```

```
// get command
```

```
$ hdfs dfs -get /bda_hadoop/file.txt /home/hduser/Downloads/downloaded_file.txt
```

```
$ hdfs dfs -getmerge /bda_hadoop/file.txt /bda_hadoop/file_cp_local.txt  
/home/hduser/Downloads/downloaded_file.txt
```

```
$ hadoop fs -getfacl /bda_hadoop/  
# file: /bda_hadoop  
# owner: hduser  
# group: supergroup  
user::rwx  
group::r-x  
other::r-x
```

```
// copyToLocal
```

```
$ hdfs dfs -copyToLocal /bda_hadoop/file.txt /home/hduser/Desktop
```

```
// mv
```

```
$ hadoop fs -mv /bda_hadoop /abc
```

```
$ hadoop fs -ls /abc
```

```
Found 1 items
```

```
drwxr-xr-x - hduser supergroup 0 2022-06-06 11:52 /abc/bda_hadoop
```

```
// copy
```

```
$ hadoop fs -cp /hello/ /hadoop_lab
```