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1bBM19CS102

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 /nikhil
```

2. ls
Hadoop HDFS ls Command Usage
ls
Hadoop HDFS ls Command Example
hadoop fs -ls /
Hadoop HDFS ls Commnad 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 /
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
Found 6 items
drwxr-xr-x   - hduser supergroup          0 2022-06-01 10:12 /1bm19cs186
drwxr-xr-x   - hduser supergroup          0 2022-06-01 09:32 /firstlab
drwxr-xr-x   - hduser supergroup          0 2022-06-01 09:32 /lab
drwxr-xr-x   - hduser supergroup          0 2022-06-01 14:30 /nikhil
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

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/nik
bas2.txt /nikhil/nf2.txt
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
hduser@bmsce-Precision-T1700:~$ hdfs dfs -cat /nikhil/nf2.txt
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
This is the second file in nikbas series.
hduser@bmsce-Precision-T1700:~$
```

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.

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -get /nikhil/nf1.txt /home/hduser/Deskt
op/get1.txt
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
hduser@bmsce-Precision-T1700:~$ hdfs dfs -getmerge /nikhil/nf1.txt /nikhil/nf2.t
xt /home/hduser/Desktop/getmerge.txt
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
hduser@bmsce-Precision-T1700:~$ hadoop fs -getfacl /nikhil/
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
# file: /nikhil
# owner: hduser
# group: supergroup
user::rwx
group::r-x
other::r-x
```

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.

```
hduser@bmsce-Precision-T1700:~$ hdfs dfs -mv /nikhil /nothing
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
hduser@bmsce-Precision-T1700:~$ hdfs dfs -ls /nothing
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
Found 2 items
-rw-r--r--   1 hduser supergroup         36 2022-06-01 14:43 /nothing/nf1.txt
-rw-r--r--   1 hduser supergroup         45 2022-06-01 14:59 /nothing/nf2.txt
hduser@bmsce-Precision-T1700:~$
```

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 /nothing/ /something
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
hduser@bmsce-Precision-T1700:~$ hdfs dfs -ls /something
WARNING: An illegal reflective access operation has occurred
WARNING: Illegal reflective access by org.apache.hadoop.security.authentication.
util.KerberosUtil (file:/usr/local/hadoop/share/hadoop/common/lib/hadoop-auth-2.
6.0.jar) to method sun.security.krb5.Config.getInstance()
WARNING: Please consider reporting this to the maintainers of org.apache.hadoop.
security.authentication.util.KerberosUtil
WARNING: Use --illegal-access=warn to enable warnings of further illegal reflect
ive access operations
WARNING: All illegal access operations will be denied in a future release
Found 2 items
-rw-r--r--   1 hduser supergroup         36 2022-06-01 15:27 /something/nf1.txt
-rw-r--r--   1 hduser supergroup         45 2022-06-01 15:27 /something/nf2.txt
hduser@bmsce-Precision-T1700:~$
```