EXPERIMENT NO. 3

Aim : Execution OF HDFS Commands.

Theory: 1. List Big (15) Data tools
2. Big Data Applications (10)

Practical Work

1. Hadoop Version Check

Command 1: hadoop version

[training@localhost ~]$ hadoop version

2. HDFS Commands HDFS commands help manage files and directories in the Hadoop Distributed File System.

- fsck

This Command to check the health of the Hadoop file system.

[training@localhost ~]$ hadoop fsck /

- mkdir

This Command to create the directory in HDFS.

Usage: hdfs dfs –mkdir /directory_name
[training@localhost ~]$ hadoop dfs -mkdir expno3

- ls

HDFS Command to display the list of Files and Directories in HDFS.

Verify that the file has been created
[training@localhost ~]$ hadoop dfs -ls # local directories
[training@localhost ~]$ hadoop dfs -ls / #hdfs directories

- touchz

This Command to create a file in HDFS with file size 0 bytes.

Usage: hadoop dfs –touchz /directory/filename

[training@localhost ~]$ hadoop dfs -touchz /dashrath/bdl/abc.txt

[training@localhost ~]$ hadoop dfs -ls /dashrath/bdl

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

- copyFromLocal

This Command to copy the file from a Local file system to HDFS.

Usage: hadoop dfs -copyFromLocal <localsrc> <hdfs destination>
Command:

1. [training@localhost ~]$ hadoop dfs -copyFromLocal /home/training/wordtext /expno3/

OR

1 .hadoop dfs -copyFromLocal home/training/abc.txt /TYAIDS #(hdfs)

Note: Here we are trying to create a directory named AIDS in HDFS.

- du

This Command to check the file size.

Usage: hadoop dfs -du /directory/filename
Command: hadoop dfs -du /user/training/wordcount.txt

cat

HDFS Command reads a file on HDFS and prints the content of that file to the standard output.

Usage: hadoop dfs –cat /path/to/file_in_hdfs
Command: hadoop dfs –cat /AIDS/test

- text

HDFS Command that takes a source file and outputs the file in text format.

Usage: hadoop dfs –text /directory/filename
Command: hadoop dfs –text /AIDS/test
Note: Here the devl1 is the file present in the local directory /home/anyfolder and after the command gets executed the test file will be copied in /AIDS directory of HDFS.

- copyToLocal

HDFS Command to copy the file from HDFS to Local File System.

Usage: hadoop dfs -copyToLocal <hdfs source> <localdst>
Command: hadoop dfs –copyToLocal /aids/devl *C:/Users/admin/Downloads/ Note: Here devl is a file present in the aids directory of HDFS and after the command gets executed the test file will be copied to local directory C:/Users/admin/Downloads/*

- put

HDFS Command to copy single source or multiple sources from local file system to the destination file system.

Usage: hadoop dfs -put <localsrc> <destination>
Command: hadoop dfs –put abc.txt /TYAIDS

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

- get

HDFS Command to copy files from hdfs to the local file system.

Usage: hadoop dfs -get <src> <localdst>
Command: hadoop dfs –get /TYAIDS/abc.txt Home/Traning/

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

- count

HDFS Command to count the number of directories, files, and bytes under the paths that match the specified file pattern.

Usage: hadoop dfs -count <path>
Command: hadoop dfs –count /user

Conclusion: hence we study all Hadoop commands given in this experiment,