



HADOOP HDFS COMMANDS

CHEATSHEET



LIST FILES	
hdfs dfs -ls /	List all the files/directories for the given hdfs destination path
hdfs dfs -ls -d /hadoop	Directories are listed as plain files. In this case, this command will list the details of hadoop folder
hdfs dfs -ls -h /data hdfs dfs -ls -R /hadoop	Format file sizes in a human-readable fashion (eg 64.0m instead of 67108864) Recursively list all files in hadoop directory and all subdirectories in hadoop directory
hdfs dfs -ls /hadoop/dat*	List all the files matching the pattern. In this case, it will list all the files inside hadoop directory which starts with 'dat'

READ/WRITE FILES	
hdfs dfs -text /hadoop/derby.log	HDFS Command that takes a source file and outputs the file in text format on the terminal. The allowed formats are zip and TextRecordInputStream
hdfs dfs -cat /hadoop/test	This command will display the content of the HDFS file test on your stdout
hdfs dfs -appendToFile /home/ubuntu/test1/hadoop/text2	Appends the content of a local file test1 to a hdfs file test2

UPLOAD/DOWNLOAD FILES	
hdfs dfs -put /home/ubuntu/sample /hadoop	Copies the file from local file system to HDFS
hdfs dfs -put -f /home/ubuntu/sample /hadoop	Copies the file from local file system to HDFS, and in case the local already exists in the given destination path, using -f option with put command will overwrite it
hdfs dfs -put -l /home/ubuntu/sample /hadoop	Copies the file from local file system to HDFS. Allow DataNode to lazily persist the file to disk. Forces replication factor of 1
hdfs dfs -put -p /home/ubuntu/sample /hadoop	Copies the file from local file system to HDFS. Passing -p preserves access and modification times, ownership and the mode
hdfs dfs -get /newfile /home/ubuntu/ hdfs dfs -get -p /newfile /home/ubuntu/	Copies the file from HDFS to local file system Copies the file from HDFS to local file system. Passing -p preserves access and modification times, ownership and the mode
hdfs dfs -get /hadoop/*.txt /home/ubuntu/	Copies all the files matching the pattern from local file system to HDFS
hdfs dfs -copyFromLocal /home/ubuntu/sample /hadoop	Works similarly to the put command, except that the source is restricted to a local file reference
hdfs dfs -copyToLocal /newfile /home/ubuntu/	Works similarly to the put command, except that the destination is restricted to a local file reference
hdfs dfs -moveFromLocal /home/ubuntu/sample /hadoop	Works similarly to the put command, except that the source is deleted after it's copied

FILE MANAGEMENT	
hdfs dfs -cp /hadoop/file1 /hadoop1	Copies file from source to destination on HDFS. In this case, copying file1 from hadoop directory to hadoop1 directory
hdfs dfs -cp -p /hadoop/file1 /hadoop1	Copies file from source to destination on HDFS. Passing -p preserves access and modification times, ownership and the mode

hdfs dfs -cp -f /hadoop/file1 /hadoop1	Copies file from source to destination onHDFS. Passing -f overwrites the destination when if it already exists
hdfs dfs -mv /hadoop/file1 /hadoop1	Move files that match the specified file pattern <src> to a destination <dst>. When moving multiple files, the destination must be a directory
hdfs dfs -rm /hadoop/file1	Deletes the file (sends it to the trash)
hdfs dfs -rm -r /hadoop hdfs dfs -rm -R /hadoop hdfs dfs -rmr /hadoop	Deletes the directory and any content under it recursively
hdfs dfs -rm -skipTrash /hadoop	The -skipTrash option will bypass trash, if enabled, and delete the specified file(s) immediately
hdfs dfs -rm -f /hadoop	If the file does not exist, do not display a diagnostic message or modify the exit status to reflect an error
hdfs dfs -rmdir /hadoop1 hdfs dfs -mkdir /hadoop2	Delete a directory Create a directory in specified HDFS location
hdfs dfs -mkdir -f /hadoop2	Create a directory in specified HDFS location. This command does not fail even if the directory already exists
hdfs dfs -touchz /hadoop3	Creates a file of zero length at <path> with current time as the timestamp of that <path>

OWNERSHIP AND VALIDATION	
hdfs dfs -checksum /hadoop/file1 hdfs dfs -chmod 755 /hadoop/file1 hdfs dfs -chmod -R 755 /hadoop hdfs dfs -chown ubuntu:ubuntu /hadoop	Dump checksum information for files that match the file pattern <src> to stdout Changes permissions of the file Changes permissions of the files recursively Changes owner of the file. 1st ubuntu in the command is owner and 2nd one is group
hdfs dfs -chown -R ubuntu:ubuntu /hadoop hdfs dfs -chgrp ubuntu /hadoop hdfs dfs -chgrp -R ubuntu /hadoop	Changes owner of the files recursively Changes group association of the file Changes group association of the files recursively

FILESYSTEM	
hdfs dfs -df /hadoop hdfs dfs -df -h /hadoop	Shows the capacity, free and used space of the filesystem Shows the capacity, free and used space of the filesystem. -h parameter Formats the sizes of files in a human-readable fashion
hdfs dfs -du /hadoop/file hdfs dfs -du -s /hadoop/file	Show the amount of space, in bytes, used by the files that match the specified file pattern Rather than showing the size of each individual file that matches the pattern, shows the total (summary) size
hdfs dfs -du -h /hadoop/file	Show the amount of space, in bytes, used by the files that match the specified file pattern. Formats the sizes of files in a human-readable fashion

ADMINISTRATION	
hdfs balancer -threshold 30	Runs a cluster balancing utility. Percentage of disk capacity. This overwrites the default threshold
hadoop version hdfs fsck / hdfs dfsadmin -safemode leave hdfs dfsadmin -refreshNodes	To check the version of Hadoop It checks the health of the Hadoop file system The command to turn off the safemode of NameNode Re-read the hosts and exclude files to update the set of Datanodes that are allowed to connect to the Namenode and those that should be decommissioned or recommissioned
	Formats the NameNode

hdfs namenode -format



