

HDFS Related Commands

1. Importing Files to HDFS:
 - **hadoop fs -put <src> <dest>**: Copies a file or a directory from the local file system to HDFS. <src> represents the source file or directory in the local file system, and <dest> specifies the destination path in HDFS.
 - **hadoop fs -copyFromLocal <src> <dest>**: Similar to the **put** command, this copies files or directories from the local file system to HDFS.
2. Exporting Files from HDFS to Local File System:
 - **hadoop fs -get <src> <dest>**: Retrieves a file or a directory from HDFS and saves it to the local file system. <src> is the source file or directory path in HDFS, and <dest> is the destination path in the local file system.
 - **hadoop fs -copyToLocal <src> <dest>**: Performs the same task as **get**, copying files or directories from HDFS to the local file system.
3. Viewing File Contents in HDFS:
 - **hadoop fs -cat <path>**: Displays the contents of a file located at the specified <path> in HDFS.
 - **hadoop fs -head <path>**: Shows the last kilobyte of a file located at the specified <path> in HDFS.
4. Listing Files and Directories in HDFS:
 - **hadoop fs -ls <path>**: Lists the files and directories present at the specified <path> in HDFS.
 - **hadoop fs -du -h <path>**: Provides information about the disk usage of files and directories at the specified <path> in HDFS, displaying the sizes in a human-readable format.
5. Deleting Files and Directories in HDFS:
 - **hadoop fs -rm <path>**: Removes a file located at the specified <path> in HDFS.
 - **hadoop fs -rm -r <dir>**: Deletes a directory and all its contents located at the specified <dir> in HDFS.

These commands will allow you to import files from the local file system to HDFS, export files from HDFS to the local file system, view file contents, list files and directories, and delete files and directories in HDFS. Remember to replace <src> and <dest> with the appropriate source and destination paths.

1. Moving Files within HDFS:
 - **hadoop fs -mv <src> <dest>**: Moves a file or a directory from one location to another within HDFS. <src> represents the source file or directory path, and <dest> specifies the destination path.
 - **hadoop fs -cp <src> <dest>**: Copies a file or a directory from one location to another within HDFS. This command is useful for creating backups or duplicating files/directories.
2. Renaming Files within HDFS:
 - **hadoop fs -mv <src> <dest>**: Renames a file or directory within HDFS. Use this command to change the name of a file or move it to a different directory while keeping it in HDFS.
3. File Permissions and Ownership in HDFS:
 - **hadoop fs -chown <owner>[:<group>] <path>**: Changes the owner and group of the specified <path> in HDFS. Use this command to modify the ownership of a file or directory.
 - **hadoop fs -chgrp <group> <path>**: Changes the group of the specified <path> in HDFS. This command allows you to modify the group ownership of a file or directory.
 - **hadoop fs -chmod <mode> <path>**: Changes the permissions of the specified <path> in HDFS. The <mode> parameter represents the desired permissions (e.g., 777 for read, write, and execute permissions for all users).
4. Checking File Information:
 - **hadoop fs -stat <path>**: Displays detailed information about a file or directory located at the specified <path> in HDFS, including permissions, owner, group, size, and modification timestamp.
 - **hadoop fs -lsr <path>**: Recursively lists files and directories starting from the specified <path> in HDFS, including all subdirectories and their contents.

These additional commands will help you move files within HDFS, rename files, manage file permissions and ownership, and retrieve detailed file information in HDFS.

1. File and Directory Operations:

- **hadoop fs -ls <path>**: Lists the files and directories present at the specified <path> in HDFS.
- **hadoop fs -lsr <path>**: Recursively lists files and directories starting from the specified <path> in HDFS, including all subdirectories and their contents.
- **hadoop fs -mkdir <dir>**: Creates a new directory at the specified <dir> path in HDFS.
- **hadoop fs -rm <path>**: Deletes a file located at the specified <path> in HDFS.
- **hadoop fs -rm -r <dir>**: Deletes a directory and all its contents located at the specified <dir> path in HDFS.
- **hadoop fs -mv <src> <dest>**: Moves a file or a directory from one location to another within HDFS.
- **hadoop fs -cp <src> <dest>**: Copies a file or a directory from one location to another within HDFS.
- **hadoop fs -chown <owner>[:<group>] <path>**: Changes the owner and group of the specified <path> in HDFS.
- **hadoop fs -chgrp <group> <path>**: Changes the group of the specified <path> in HDFS.
- **hadoop fs -chmod <mode> <path>**: Changes the permissions of the specified <path> in HDFS.

2. File Transfer Operations:

- **hadoop fs -put <src> <dest>**: Copies a file or a directory from the local file system to HDFS.
- **hadoop fs -get <src> <dest>**: Retrieves a file or a directory from HDFS and saves it to the local file system.
- **hadoop fs -copyFromLocal <src> <dest>**: Copies files or directories from the local file system to HDFS.
- **hadoop fs -copyToLocal <src> <dest>**: Copies files or directories from HDFS to the local file system.

3. File Inspection and Information:

- **hadoop fs -cat <path>**: Displays the contents of a file located at the specified <path> in HDFS.
- **hadoop fs -tail <path>**: Shows the last kilobyte of a file located at the specified <path> in HDFS.
- **hadoop fs -stat <path>**: Displays detailed information about a file or directory located at the specified <path> in HDFS.
- **hadoop fs -du -h <path>**: Provides information about the disk usage of files and directories at the specified <path> in HDFS, displaying the sizes in a human-readable format.