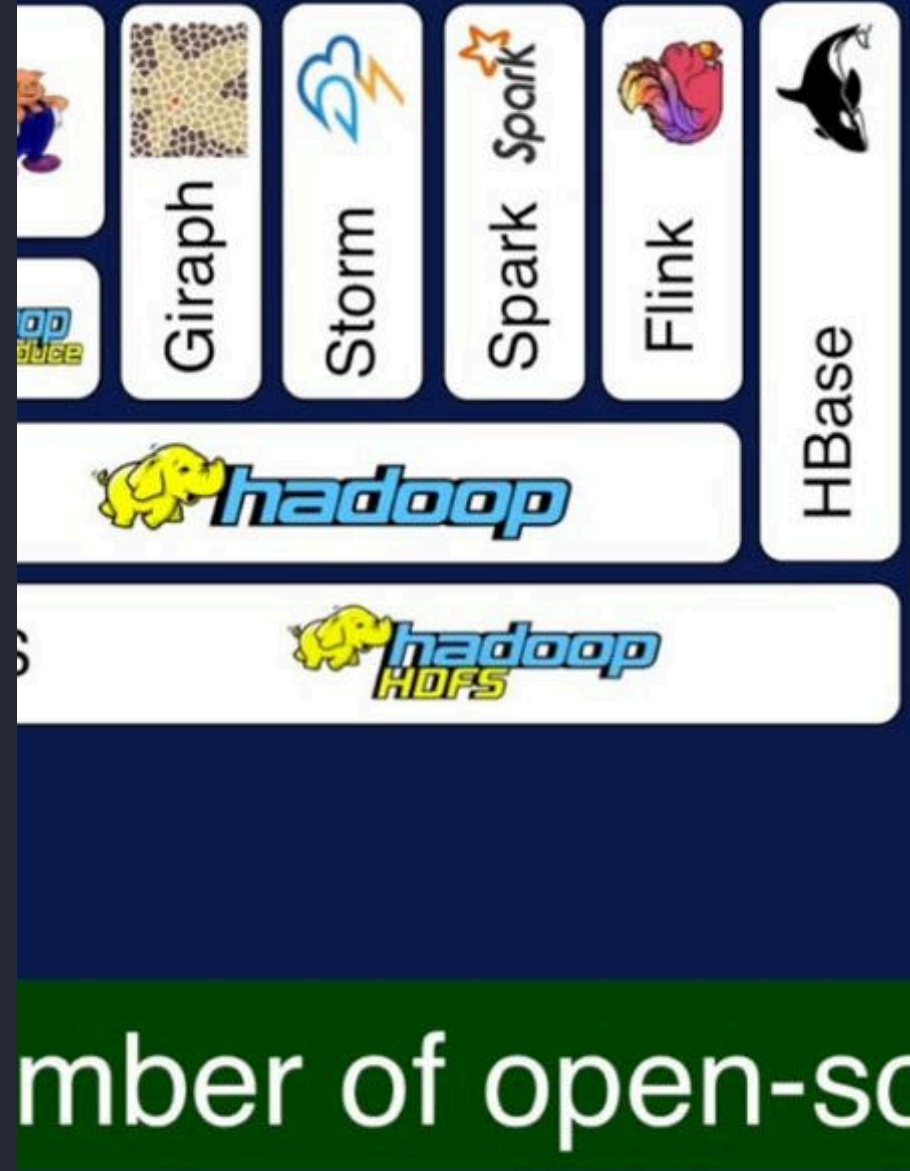


Managing Files and Directories in HDFS

In Hadoop Distributed File System (HDFS), managing files and directories efficiently is crucial for data processing and storage. Below are essential commands and procedures for executing these tasks.

 by **Hima Sameera**



Creating Directory Structure in HDFS

Command

```
hadoop fs -mkdir -p /path/to/directory
```

Description

hadoop fs invokes the Hadoop File System CLI. -

mkdir -p creates the specified directory and any parent directories that do not exist.

/path/to/directory is the desired path for creating the directory structure in HDFS.

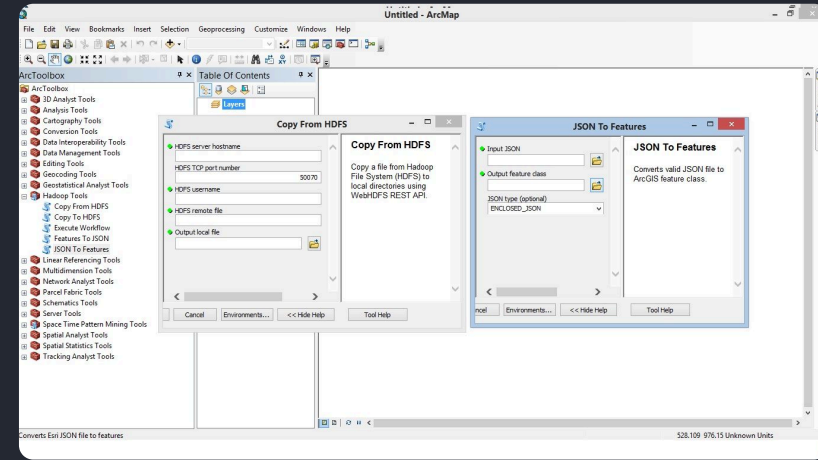
Moving Files to HDFS

Command

```
hadoop fs -put /path/to/local/file  
/path/in/hdfs
```

Description

hadoop fs -put copies files from the local file system to HDFS. **/path/to/local/file** is the local file's path, and **/path/in/hdfs** is the destination path in HDFS.



Viewing Data Contents in HDFS

1 Command to See File Contents

```
hadoop fs -cat /path/to/file
```

2 Command to See Directory Contents

```
hadoop fs -ls /path/to/directory
```

Copying Files from HDFS to Local Disk

1

Command

```
hadoop fs -copyToLocal /path/in/hdfs /path/to/local/file
```

2

Description

hadoop fs -copyToLocal copies files from HDFS to the local file system.

/path/in/hdfs is the HDFS file path, and **/path/to/local/file** is the destination path on the local Unix/Linux machine.

Managing Files in HDFS

Versatile

HDFS allows for various file management operations, such as deletion, moving, and renaming, providing flexibility in data handling.

Optimizing Storage

By implementing strategies like file compression and partitioning, HDFS enables efficient and optimized data storage.

Data Security in HDFS

1

Data Encryption

HDFS supports data encryption to ensure the security and privacy of sensitive information stored in the file system.

2

Access Control

Granular user access controls and authentication mechanisms in HDFS offer robust protection against unauthorized access.