

INTRODUCTION TO BIG DATA

ECAP456

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Learning Outcomes



After this lecture, you will be able to

- learn basic commands in HDFS

Commands in hdfs

- `jps`
- This command is a part of Java since v1.5.0.
`jps` stands for Java Virtual Machine Process Status Tool.
- In our practice, when we start the single node cluster following processes are must be up and running:
 - Name Node
 - Data Node
 - Resource Manager
 - Node Manager

Commands in hdfs

- `jps` is a tool to check, whether expected Hadoop processes are up and in running state or not.

Commands in hdfs

- The syntax is

jps

Commands in hdfs

- `ls`
- Using the `ls` command, we can check for the directories in HDFS.
- List the HDFS contents

Hadoop Prefix

Every command in Hadoop have prefix:

`hadoop fs`

Or

`hdfs dfs`

Basic Commands

List the contents that are in Hadoop

```
hadoop fs -ls
```


Commands in hdfs

- Display the contents of directory
- Syntax

```
$hadoop fs -ls directoryname
```

Commands in hdfs

- Create a directory in hdfs
- Syntax

```
hadoop fs -mkdir abc
```

Commands in hdfs

- Verify a directory in hdfs
- Syntax

```
hadoop fs -ls
```

Commands in hdfs

- Every command start with (-)hyphen in hdfs.
- Syntax to create a file

```
$hadoop fs -touchz file1.txt
```

This command will create an empty file in home location.

Create a file of zero length.

Commands in hdfs

- Copy from local file system into hdfs directory
- Firstly create a simple file.

```
gedit f1.txt
```

```
$hadoop fs -copyFromLocal f1.txt file1
```

Or

```
put(Copy single src, or multiple srcs from local file  
system to the destination file system).
```

Verify
\$hadoop fs -ls

Commands in hdfs

- Create a file
- To check either f1.txt is available or not. To check the contents of the file.

```
$hadoop fs -cat abc/f1.txt
```

Commands in hdfs

- Sending a file from hdfs to local file system
- Syntax

```
Hadoop fs -copyToLocal abc/f1.txt ~/desktop/
```

Verify either it is available in desktop location or not:

```
cd Desktop/
```

```
ls
```


Commands in hdfs

Verify either it's the same file

```
cat f1.txt
```

Commands in hdfs

- Copy Command
- Sending file from hdfs to hdfs directory
- Syntax is

```
hadoop fs -mkdir abc1
```

```
Hadoop fs -cp abc/f1.txt abc1/
```

-cp abc/f1.txt - Source

abc1/ - Destination

Commands in hdfs

Verify

```
$hadoop -fs -cat abc1/f1.txt
```

Commands in hdfs

- Move the directory from one hdfs to other hdfs
- Firstly create another directory with abc2

```
hadoop fs -mkdir abc2
```

```
Hadoop fs -mv abc/f1.txt abc2/
```

Commands in hdfs

Check the content with cat command

```
hadoop fs -cat abc2/f1.txt
```

Commands in hdfs

Which directory is taking more space?

```
hadoop fs -du abc1
```

-du	-dus
Display size of each and every file	Display total size



That's all for now...