

Ex. No. Week-3

Starting Hadoop server

- check which processes are using jps
- Format NameNode
- start Hadoop processes
- use HDFS web interface to monitor Hadoop cluster.

- check which processes are using jps.

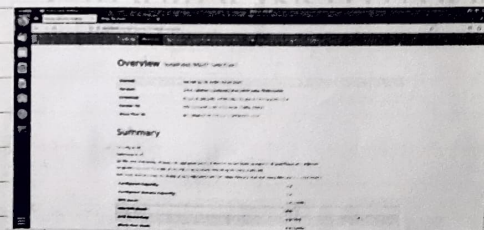
To check the processor, we have direct command "jps" command.

hadoop@cmrct-virtual-machine:~\$ jps

- Format NameNode

To check the namenode, use following command, command.

hadoop@cmrct-virtual-machine:~\$ hdfs namenode-format



1. Then type the localhost:19870/ in browser.

a) output

```
hadoop@cmrct-virtual-machine:~$ jps
3552 SecondaryNameNode
20771 Jps
3175 NameNode
20281 ResourceManager
20427 NodeManager
```

b) output

```
hadoop@cmrct-virtual-machine:~$ hdfs namenode-format
Error: namenode-format is not a command nor fully qualified CLASSNAME.
Usage: hdfs [TOPICS] SUBCOMMAND [SUBCOMMAND OPTIONS]

OPTIONS is none or any of:
  --buildpaths      attempt to add class files from build tree
  --config dir      Hadoop config directory
  --daemon (start|status|stop) operate on a daemon
  --debug           turn on shell script debug mode
  --help           usage information
  --host filename   hosts to use in worker mode
  --hostname [list_of_hosts.names] list of hosts to use in worker mode
  --loglevel level   set the log4j level for this command
  --workers         turn on worker mode

SUBCOMMAND is one of:

Admin Commands:
  cacheadmin        configure the HDFS cache
  crypto            configure HDFS encryption zones
  debug            run a debug admin to execute HDFS debug commands
  dfsrouteradmin    run a DFS router admin
  ec               manage Router-based federation
  fsck             run a DFS filesystem checking utility
  fsckadmin         run a DFS HA admin client
  fsmap            get JMX exposed values from NameNode or DataNode
  mv               apply the offline edits viewer to an edit file
  mv_legacy         apply the offline fsimage viewer to a legacy fsimage
  storagespolicies list/get/set/satisfystoragepolicy block storage policies

Client Commands:
  classpath        prints the class path needed to get the hadoop jar and
                  the required libraries
  dfs              run a filesystem command on the file system
  dfsutils         display computed Hadoop environment variables
  getconf          fetch a delegation token from the NameNode
  groups           get config values from configuration
  ls               list all uncompressible dirs belong to
  lsSnapshot       diff two snapshots of a directory or diff the current
                  directory contents with a snapshot
  print            print the version
```

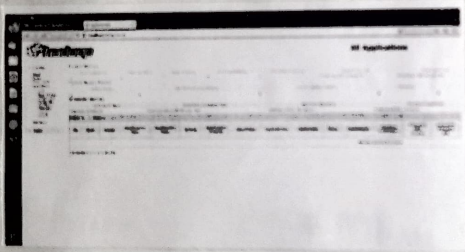
c) start-dfs output

```
hadoop@cmrcet-virtual-machine:~$ start-dfs.sh
Starting namenodes on [localhost]
Starting datanodes
Starting secondary namenodes [cmrcet-virtual-machine]
```

yarn site output

```
hadoop@cmrcet-virtual-machine:~$ start-yarn.sh
Starting resourcemanager
Starting nodemanagers
```

d) output



c) start Hadoop processes.

To start Hadoop process, we need to start yarn and dfs site

Command:

```
hadoop@cmrcet-virtual-machine~$ start-dfs.sh
```

Command:

```
hadoop@cmrcet-virtual-machine~$ start-yarn.sh
```

d) use HDFS web interface to monitor Hadoop cluster

type "localhost:8088/" in browser to monitor Hadoop cluster