



JAYOTI VIDYAPEETH WOMEN'S UNIVERSITY, JAIPUR
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NAAC Accredited University

Faculty of Education and methodology

Department of Computer Science and Engineering

Faculty Name- Jv'n Narendra Kumar Chahar (Assistant Professor)

Program- B.Tech 6thSemester

Course Name – Web Intelligence, HADOOP and Big Data Analysis

Session no.: 8

Session Name- Verifying Hadoop installation in Pseudo Distributed mode.

Academic Day starts with –

- Greeting with saying '**Namaste**' by joining Hands together following by 2-3 Minutes Happy session, Celebrating birthday of any student of respective class and **National Anthem**.

Lecture starts with- quotations' answer writing

- Review of previous Session- **Hadoop installation in pseudo distributed Modes**

Topic to be discussed today- Today We will discuss about – **Verifying Hadoop installation**

- Lesson deliverance (ICT, Diagrams & Live Example)-
 - Diagrams

Introduction & Brief Discussion about the Topic – **An overview about installation of Hadoop**

Verifying Hadoop Installation

The following steps are used to verify the Hadoop installation.

Step 1 – Name Node Setup

Set up the namenode using the command “hdfs namenode -format” as follows.

```
$ cd ~  
$ hdfs namenode -format
```

The expected result is as follows.

```
05/23/22 10:30:55 INFO namenode.NameNode: STARTUP_MSG:  
/*****  
STARTUP_MSG: Starting NameNode  
STARTUP_MSG:   host = localhost/192.168.1.11  
STARTUP_MSG:   args = [-format]  
STARTUP_MSG:   version = 2.4.1  
...  
...  
05/23/22 10:30:56 INFO common.Storage: Storage directory  
/home/hadoop/hadoopinfra/hdfs/namenode has been successfully  
formatted.  
05/23/22 10:30:56 INFO namenode.NNStorageRetentionManager:  
Going to  
retain 1 images with txid >= 0  
05/23/22 10:30:56 INFO util.ExitUtil: Exiting with status 0  
05/23/22 10:30:56 INFO namenode.NameNode: SHUTDOWN_MSG:  
/*****  
SHUTDOWN_MSG: Shutting down NameNode at localhost/192.168.1.11  
*****/
```

Step 2 – Verifying Hadoop dfs

The following command is used to start dfs. Executing this command will start your Hadoop file system.

```
$ start-dfs.sh
```

The expected output is as follows –

```
05/24/22 10:37:56
Starting namenodes on [localhost]
localhost: starting namenode, logging to /home/hadoop/hadoop
2.4.1/logs/hadoop-hadoop-namenode-localhost.out
localhost: starting datanode, logging to /home/hadoop/hadoop
2.4.1/logs/hadoop-hadoop-datanode-localhost.out
Starting secondary namenodes [0.0.0.0]
```

Step 3 – Verifying Yarn Script

The following command is used to start the yarn script. Executing this command will start your yarn daemons.

```
$ start-yarn.sh
```

The expected output as follows –

```
starting yarn daemons
starting resourcemanager, logging to /home/hadoop/hadoop
2.4.1/logs/yarn-hadoop-resourcemanager-localhost.out
localhost: starting nodemanager, logging to /home/hadoop/hadoop
2.4.1/logs/yarn-hadoop-nodemanager-localhost.out
```

Step 4 – Accessing Hadoop on Browser

The default port number to access Hadoop is 50070. Use the following url to get Hadoop services on browser.

```
http://localhost:50070/
```

Step 5 – Verify All Applications for Cluster

The default port number to access all applications of cluster is 8088. Use the following url to visit this service.

```
http://localhost:8088/
```

References-

1. **Book:** Hadoop: The Definitive Guide by Tom White, 3rd Edition, O'reilly Hadoop in Action by Chuck Lam, MANNING Publications
2. **Online:** <https://www.tutorialspoint.com/>
3. **Online:** <http://www.oracle.com>

QUESTIONS: -

Q1. How to verify whether Hadoop installation is successful or not?

Q2. List the services to turn on in the Hadoop.

Next, we will discuss about Hadoop – Command Reference

- Academic Day ends with-
National song 'Vande Mataram'