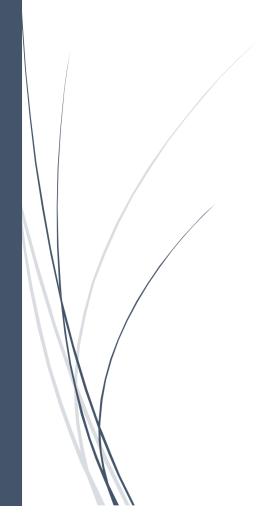
HBase Installation



1. HBase Installation

1. From Source:-

- Open terminal and make sure you are inside the home directory.
- Download HBase source code tarball using the following command in the terminal.

wget https://dlcdn.apache.org/hbase/2.4.9/hbase-2.4.9-bin.tar.gz

- Unzip the file

tar -xvf hbase-2.4.9-bin.tar.gz

Note: Make sure Hadoop is installed already. It can be found by using the following commands.

cd~

hadoop version

Note:

- 1. Follow the Hadoop installation ppt to set paths in the "bashre" file.
- 2. Copy the output of echo \$JAVA HOME
- Set HBase paths in bashrc file

sudo nano .bashrc

- Paste these lines at the end of the file

```
#HBASE_SETUP settings

#"/home/hdoop" can be different, so,

#1- cd ~

#2- pwd

#3- copy the output and replace the "/home/hdoop" with the output.

export HBASE_HOME=/home/hdoop/hbase-2.4.9

export PATH=$PATH:$HBASE_HOME/bin

#JAVA_HOME settings

# paste the output of "echo $JAVA_HOME"

export JAVA_HOME=/usr/lib/jvm/java-1.8.0-openjdk-amd64

export PATH=$PATH:/usr/lib/jvm/java-1.8.0-openjdk-amd64/bin
```

- Check to confirm all of the below are present

```
#HADOOP_SETUP settings

#use the output of "echo $HADOOP_HOME"

export HADOOP_HOME=/home/hdoop/hadoop-3.2.2

export HADOOP_INSTALL=$HADOOP_HOME

export HADOOP_MAPRED_HOME=$HADOOP_HOME

export HADOOP_COMMON_HOME=$HADOOP_HOME

export HADOOP_HDFS_HOME=$HADOOP_HOME

export YARN_HOME=$HADOOP_HOME

export

HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_HOME/lib/native

export PATH=$PATH:$HADOOP_HOME/sbin:$HADOOP_HOME/bin

export HADOOP_OPTS="-
Djava.library.path=$HADOOP_HOME/lib/native"
```

- Apply the changes in "bashrc" file

source ~/.bashrc

- create a folder named "zookeeper" in the home folder.

cd ~
mkdir zookeeper

- Making changes in the HBase configuration files

sudo nano hbase-site.xml

cd conf

cd hbase-2.4.9/

- In hbase-site.xml; between <configuration></configuration>, paste the following code and make sure to replace /home/hdoop with the output of the path of home directory where Hbase-2.4.9 is extracted.

 $cd \sim$

pwd

hdoop@abhishek-ubuntu:~\$ cd ~ hdoop@abhishek-ubuntu:~\$ pwd /home/hdoop hdoop@abhishek-ubuntu:~\$

- Copy the output and replace /home/hdoop with the output in the "hbase-site.xml"

```
property>
  <name>hbase.cluster.distributed</name>
  <value>true</value>
 </property>
 <!--"/home/hdoop" can be different, so,
               1- cd ~
               2- pwd
               3- copy the output and replace the "/home/hdoop" with the output.
 -->
 property>
   <name>hbase.rootdir</name>
   <value>/home/hdoop/hbase-2.4.9/hbasestorage</value>
 </property>
 property>
   <name>hbase.zookeeper.property.dataDir</name>
   <value>/home/hdoop/zookeeper</value>
 </property>
 property>
  <name>hbase.zookeeper.property.clientPort</name>
  <value>2181</value>
 </property>
 property>
 <name>hbase.unsafe.stream.capability.enforce</name>
 <value>false</value>
 </property>
```

- Now, we need to make changes to "hbase-env.sh" file

sudo nano hbase-env.sh

- Paste the following at the end of the file

paste the output of "echo \$JAVA_HOME" and \$JAVA_PATH

export JAVA_HOME=/usr/lib/jvm/java-1.8.0-openjdk-amd64

export PATH=\$PATH:/usr/lib/jvm/java-1.8.0-openjdk-amd64/bin

- Uncomment the following code (line)

export HBASE DISABLE HADOOP CLASSPATH LOOKUP="true"

- Start the services

sudo hdfs namenode -format start-dfs.sh start-yearn.sh

- Check the running services

jps

hdoop@abhishek-ubuntu:~\$ jps

7137 HQuorumPeer

9617 JarBootstrapMain

13730 SecondaryNameNode

7250 HMaster

13571 DataNode

7894 HRegionServer

13463 NameNode

14247 Jps

- Start HBase

cd ~/hbase-2.4.9/bin

./start-hbase.sh

hdoop@abhishek-ubuntu:~/hbase-2.4.9/bin\$./start-hbase.sh
127.0.0.1: running zookeeper, logging to /home/hdoop/hbase-2.4.9/bin/../logs/hbase-hdoop-zookeeper-abhishek-ubuntu.out
running master, logging to /home/hdoop/hbase-2.4.9/logs/hbase-hdoop-master-abhishek-ubuntu.out
: running regionserver, logging to /home/hdoop/hbase-2.4.9/logs/hbase-hdoop-regionserver-abhishek-ubuntu.out

hbase shell

```
hdoop@abhishek-ubuntu:~/hbase-2.4.9/bin$ hbase shell
2022-01-06 14:43:04,845 WARN [main] util.NativeCodeLoader: Unable to load native-hado
op library for your platform... using builtin-java classes where applicable
HBase Shell
Use "help" to get list of supported commands.
Use "exit" to quit this interactive shell.
For Reference, please visit: http://hbase.apache.org/2.0/book.html#shell
Version 2.4.9, rc49f7f63fca144765bf7c2da41791769286dfccc, Fri Dec 17 19:02:09 PST 2021
Took 0.0023 seconds
hbase:001:0>
```