Install HBase in Pseudo Distributed mode

**Pseudo- Distributed Installation**

The hbase-0.94.8 installation is done in below versions of Linux, Java and Hadoop respectively.

CentOS 6.5

JAVA 1.7.0\_55

HADOOP 1.2.1

***$ cd Downloads/***

* Unzip the tar file to /usr/local

***$ tar -xvf hbase-0.94.8.tar.gz***

* move  hbase-0.94.8 to /usr/local/

***$ sudo mv hbase-0.94.8 /usr/local***

* ***rename hbase-0.94.8 to hbase***

***sudo mv /usr/local/hbase-0.94.8 /usr/local/hbase***

* ***change the ownership to user training***

$sudo chown –R training:training /usr/local/hbase

* Open your hbase/conf/hbase-env.sh and modify these lines

**export JAVA\_HOME=/usr/jdk1.7.0\_55**

**export HBASE\_REGIONSERVERS=/usr/local/hbase/conf/regionservers**

**export HBASE\_MANAGES\_ZK=true**

* Set the HBASE\_HOME path in .bashrc file

To open bashrc file use this command

**$ gedit ~/.bashrc**

In bashrc file append the below 2 statements

**export HBASE\_HOME=/usr/local/hbase**

**export PATH=$PATH:$HBASE\_HOME/bin**

* Update hbase-site.xml in HBASE\_HOME/conf folder with required properties.

**hbase-site.xml**

<?xml version="1.0"?>

<?xml-stylesheet type="text/xsl" href="configuration.xsl"?>

<configuration>

<property>

<name>hbase.rootdir</name>

<value>hdfs://<host>:54310/hbase</value>

</property>

<property>

<name>hbase.cluster.distributed</name>

<value>true</value>

</property>

<property>

<name>hbase.zookeeper.quorum</name>

<value>localhost</value>

</property>

<property>

<name>dfs.replication</name>

<value>1</value>

</property>

<property>

<name>hbase.zookeeper.property.clientPort</name>

<value>2181</value>

</property>

<property>

<name>hbase.zookeeper.property.dataDir</name>

<value>/home/training/hbase/zookeeper</value>

</property>

</configuration>

* Now check Hadoop version support matrix. If Hadoop is not supported your hbase version then you will get some exception. To fix this simply copy hadoop-core-\*.jar from your HADOOP\_HOME and commons-collections-\*.jar from HADOOP\_HOME/lib folder into your HBASE\_HOME/lib folder.
* Extra steps

In /etc/hosts there are two entries:127.0.0.1 and 127.0.1.1.Change the second entry 127.0.1.1 to 127.0.0.1  otherwise it gives error: org.apache.hadoop.hbase.PleaseHoldException: Master is initializing

* To start Hbase [ First start hadoop ]

***hduser@archana:~$ start-hbase.sh***

*localhost: starting zookeeper, logging to /usr/lib/hbase/hbase-0.94.8/bin/../logs/hbase-hduser-zookeeper-archana.out*

*starting master, logging to /usr/usr/hbase/logs/hbase-hduser-master-archana.out*

*localhost: starting regionserver, logging to /usr/lib/hbase/hbase-0.94.8/bin/../logs/hbase-hduser-regionserver-archana.out*

jps command list down all currently running processes

***hduser@archana:~$ jps***

*4334 HQuorumPeer*

*2882 SecondaryNameNode*

*4867 Jps*

*3207 TaskTracker*

*2460 NameNode*

*4671 HRegionServer*

*4411 HMaster*

*2977 JobTracker*

*2668 DataNode*

Hbase Shell

***hduser@archana:~$ hbase shell***

*HBase Shell; enter 'help<RETURN>' for list of supported commands.*

*Type "exit<RETURN>" to leave the HBase Shell*

*Version 0.94.8, r1485407, Wed May 22 20:53:13 UTC 2013*

*hbase(main):001:0> create 't1','c1'*

* To stop HBase

***HBASE\_PATH$ bin/stop-hbase.sh***

stopping hbase...............

**To use the web interfaces**

[http://localhost:60010](http://localhost:60010/) for master  
[http://localhost:60030](http://localhost:60030/) for region server