**HIVE INSTALLATION ON UBUNTU**

**1. Download 'apache-hive-1.2.1-bin.tar.gz' file from hadoop repository,**

**2.copy 'apache-hive-1.2.1-bin.tar.gz' file into this '/home/msruser1/hadoopcluster'**

**directory and extract the tar file in same directory**

**3. Open the '~/.bashrc' file on all the machines and add the following lines**

**at the end and save:**

**command: gedit ~/.bashrc**

**4. ADD THESE TWO LINES**

**export HIVE\_HOME=/home/msruser1/hadoopcluster/apache-hive-1.2.1-bin**

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

**5. add this command line to /conf/hive-env.sh (hive-env.sh.template by default) and again start hive.**

**export HADOOP\_USER\_CLASSPATH\_FIRST=true**

**export HADOOP\_HOME=/home/user/work1/hadoop-2.6.0**

**export HIVE\_CONF\_DIR=/home/user/work1/apache-hive-1.2.1-bin/conf**

**6. start the hive**

**command : hive**

**7. start hive metastore server**

**hive --service metastore**

**7. Hive successfully installed.**

**IF WE WANT TO CHANGE THE DEFAULT HIVE WAREHOUSE DIRECTORY.**

**( OPTIONAL )**

**Update the '$HIVE\_HOME/conf' folder file “hive-site.xml”. if “ hive-site.xml” is not present them create the file and add this property to it.**

**update or add the following two properties**

**<property>**

**<name>hive.metastore.warehouse.dir</name> (optional )**

**<value>/apps/hive/warehouse</value> ( ANY HDFS LOCATION)**

**<description>**

**Local or HDFS directory where Hive keeps table contents.**

**</description>**

**</property>**

**<property>**

**<name>javax.jdo.option.ConnectionURL</name> ( no need, it is default if u apply this property it may through error)**

**<value>jdbc:derby:;databaseName=/apps/hive/warehouse/metastore\_db;create=true</value> ( default derby database,not recommended )**

**<description>**

**The JDBC connection URL.**

**</description>**

**</property>**

**Note : vvimp ( default database derby allows only one session for a user )**

**hive by default uses derby database as metadata storage. here there is an problem with derby, the derby only allow one hive user at a time. for example, if user1 is using hive then user1 have to work in the same window if he open another hive window then derby does not allow him to use hive until he closes the using hive windows.**

**solution: use mysql database as metadata storage.**

**🡪Changing Hive metadata database.**

**add these options to “ hive-site.xml “ and add mysql jar in hive lib.**

[**https://cwiki.apache.org/confluence/display/Hive/AdminManual+MetastoreAdmin**](https://cwiki.apache.org/confluence/display/Hive/AdminManual+MetastoreAdmin)

*<property>*

*<name>javax.jdo.option.ConnectionURL</name>*

*<value>jdbc:mysql://localhost/metastore\_db?createDatabaseIfNotExist=true</value>* ***( always localhost, don’t change it )***

*</property>*

*<property>*

*<name>javax.jdo.option.ConnectionDriverName</name>*

*<value>com.mysql.jdbc.Driver</value>*

*</property>*

*<property>*

*<name>javax.jdo.option.ConnectionUserName</name>*

*<value>root</value>*

*</property>*

*<property>*

<name>javax.jdo.option.ConnectionPassword</name>

<value>hadoop</value>

</property>

mysql commands: ( if needed )

remove old mysql db:

🡪 sudo apt-get remove mysql-server mysql-client mysql-common

🡪 sudo apt-get autoremove

install new mysql db :

🡪 sudo apt-get update.

🡪 apt-get install mysql-server

mysql> CREATE USER 'root'@'localhost' IDENTIFIED BY 'hadoop';

grant all privileges on \*.\* to ‘root’@’localhost’;

flush privileges;

quit

change password:

set password for 'root'@'localhost=PASSWORD('hadoop');

**Hive thrift server :**

**in hive-site.xml:**

**<property>**

**<name>hive.server2.thrift.port</name>**

**<value>10000</value>**

**</property>**

**🡪 hiveserver2**

**ERROR: 1**

**FAILED: LockException [Error 10280]: Error communicating with the metastore.**

**solution:**

**1) this problem comes if hive is using default derby database ( derby database only allows one hive session at a time, see above how to install new hive metastore in mysql)**

**2) change hive metastore to mysql database which allows multiple user sessions at a time.**

**3) if you are already using mysql as metastore then check your files are correctly configured , if your roor is not solved then add the below property and run it. after the error is gone then remove the property you added in this step (3).done.**

**4 ) If you don't want to change the hive default metastore database ( like derby ) mentioned in above 2 steps then add the below codes in " hive-site.xml " file. if you follow first 2 steps then don’t add below properties.**

**<property>**

**<name>hive.in.test</name>**

**<value>true</value>**

**</property>**

**ERROR: 2**

**hive cannot start showing namenode in safe mode like messages**

**Solution:**

**hadoop dfsadmin -safemode leave**

**Hive-site.xml and hive-default.xml.template difference:**

**hive-default.xml.template file contains the configurations which are predefined and hive does not read this file. if we want to change values in hive-default.xml.template then we have to create a “ hive-site.xml” file and enter the configurations u want to change. then hive will read the new values from this hive-site.xml file.**