

Exp. No : 5**HIVE Installation**

1. Download and Extract apache hive 3.1.2

```
helen@fedora:~$ ls
apache-hive-3.1.2-bin.tar.gz  exp3          pig
Desktop                      hadoop        pig-0.16.0.tar.gz
Documents                    hadoop-3.3.6.tar.gz  pig_1728730208055.log
Downloads                    hive          Public
exp1                         Music         Templates
exp2                         Pictures      Videos
helen@fedora:~$ cd hive
helen@fedora:~/hive$ ls
bin          examples  lib          RELEASE_NOTES.txt
binary-package-licenses  hcatalog  LICENSE      scripts
conf         jdbc      NOTICE
```

2. Update HIVE Configurations in .bashrc

```
export HADOOP_COMMON_LIB_NATIVE_DIR=$HADOOP_HOME/lib/native
export HADOOP_OPTS="-Djava.library.path=$HADOOP_HOME/lib/native"
export HADOOP_STREAMING=$HADOOP_HOME/share/hadoop/tools/lib/hadoop-streaming-3.3.6.jar
export HADOOP_LOG_DIR=$HADOOP_HOME/logs
export PDSH_RCMD_TYPE=ssh

#PIG settings
export PIG_HOME=/home/helen/pig
export PATH=$PATH:$PIG_HOME/bin
export PIG_CLASSPATH=$PIG_HOME/conf:$HADOOP_INSTALL/etc/hadoop/
export PIG_CONF_DIR=$PIG_HOME/conf
export JAVA_HOME=/usr/lib/jvm/java-11-openjdk
export PIG_CLASSPATH=$PIG_CONF_DIR:$PATH
#PIG setting ends

export HIVE_HOME=/home/helen/hive
export PATH=$PATH:$HIVE_HOME/bin
export HADOOPUSERCLASSPATHFIRST=true
```

3. Change directory to apache-hive-3.1.2-bin/conf

```
helen@fedora:~/hive$ cd conf
helen@fedora:~/hive/conf$ ls
beeline-log4j2.properties.template  hive-site.xml
hive-default.xml.template            ivysettings.xml
hive-env.sh                          llap-cli-log4j2.properties.template
hive-env.sh.template                 llap-daemon-log4j2.properties.template
hive-exec-log4j2.properties.template  parquet-logging.properties
hive-log4j2.properties.template
```

4. Create hive-env.sh

```

GNU nano 7.2                                                                    hi
# if [ -z "$DEBUG" ]; then
#     export HADOOP_OPTS="$HADOOP_OPTS -XX:NewRatio=12 -Xms10m -XX:MaxHeapFreeRati
# else
#     export HADOOP_OPTS="$HADOOP_OPTS -XX:NewRatio=12 -Xms10m -XX:MaxHeapFreeRati
# fi
# fi

# The heap size of the jvm started by hive shell script can be controlled via:
#
# export HADOOP_HEAPSIZE=1024
#
# Larger heap size may be required when running queries over large number of files
# By default hive shell scripts use a heap size of 256 (MB). Larger heap size wou
# appropriate for hive server.

# Set HADOOP_HOME to point to a specific hadoop install directory
# HADOOP_HOME=${bin}/../..../hadoop

# Hive Configuration Directory can be controlled by:
# export HIVE_CONF_DIR=

# Folder containing extra libraries required for hive compilation/execution can be
# export HIVE_AUX_JARS_PATH=

```

5. Install and Change mysql root password

```

Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.39 Source distribution

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> SELECT user, host, plugin FROM mysql.user WHERE user = 'root';
+-----+-----+-----+
| user | host      | plugin                |
+-----+-----+-----+
| root | localhost | mysql_native_password |
+-----+-----+-----+
1 row in set (0.00 sec)

```

6. Create and configure hive-site.xml

```
<!-- WARNING!!! Any changes you make to this file will be ignored by Hive. -->
<!-- WARNING!!! You must make your changes in hive-site.xml instead. -->
<!-- Hive Execution Parameters -->
<property>
  <name>hive.exec.script.wrapper</name>
  <value/>
  <description/>
</property>
<property>
  <name>hive.exec.plan</name>
  <value/>
  <description/>
</property>
<property>
  <name>hive.exec.stagingdir</name>
  <value>.hive-staging</value>
  <description>Directory name that will be created inside table locations in order to support HDFS en
</property>
<property>
  <name>hive.exec.scratchdir</name>
  <value>/tmp/hive</value>
  <description>HDFS root scratch dir for Hive jobs which gets created with write all (733) permission
</property>
<property>
  <name>hive.repl.rootdir</name>
  <value>/user/hive/repl</value>
  <description>HDFS root dir for all replication dumps.</description>
</property>
```

7. Download and Move mysql java connector to apache-hive-3.1.2-bin/lib

```

helen@fedora:~$ cd hive
helen@fedora:~/hive$ cd lib
helen@fedora:~/hive/lib$ ls
accumulo-core-1.7.3.jar
accumulo-fate-1.7.3.jar
accumulo-start-1.7.3.jar
accumulo-trace-1.7.3.jar
aircompressor-0.10.jar
ant-1.9.1.jar
ant-launcher-1.9.1.jar
antlr4-runtime-4.5.jar
antlr-runtime-3.5.2.jar
aopalliance-repackaged-2.5.0-b32.jar
apache-curator-2.12.0.pom
apache-jsp-9.3.20.v20170531.jar
apache-jstl-9.3.20.v20170531.jar
arrow-format-0.8.0.jar
arrow-memory-0.8.0.jar
arrow-vector-0.8.0.jar
asm-5.0.1.jar
asm-commons-5.0.1.jar
asm-tree-5.0.1.jar
audience-annotations-0.5.0.jar
avatica-1.11.0.jar

```

8. Execute schematool -initSchema -dbType mysql

```

log4j-reload4j-1.7.36.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
SLF4J: Actual binding is of type [org.apache.logging.slf4j.Log4jLoggerFactory]
Metastore connection URL:      jdbc:mysql://localhost/metastore?createDatabaseIfNo
tExist=true
Metastore Connection Driver :   com.mysql.cj.jdbc.Driver
Metastore connection User:     root
Starting metastore schema initialization to 3.1.0
Initialization script hive-schema-3.1.0.mysql.sql

```

9. Start hive

```
harithaah@fedora:~/hive/lib$ hive
which: no hbase in (/home/harithaah/.local/bin:/home/harithaah/bin:/usr/lo
ome/harish/pig/bin:/usr/lib/jvm/jdk1.8.0_202/bin:/home/harish/hive/bin:/ho
8.0_202/bin:/home/harithaah/hive/bin)
Hive Session ID = 96e0b2f2-a9ba-4037-9616-5a99c12eb17a

Logging initialized using configuration in jar:file:/home/harithaah/hive/T
Hive-on-MR is deprecated in Hive 2 and may not be available in the future
ases.
Hive Session ID = adda9396-6722-4b3f-aa65-e22b4a70ea2b
hive> █
```