

# Hive安装部署



東北大學  
Northeastern University



HORIZON  
昊宸科技



## 离线安装mysql

执行命令：

```
rpm -ivh --nodeps mysql-5.1.73-5.el6_6.x86_64.rpm  
rpm -ivh --nodeps mysql-server-5.1.73-5.el6_6.x86_64.rpm  
rpm -ivh --nodeps mysql-devel-5.1.73-5.el6_6.x86_64.rpm
```

## 在线安装mysql

执行命令：

```
yum -y install mysql mysql-server mysql-devel
```

# MySQL安装



**开机启动:** `chkconfig mysqld on`

**启动mysqld服务:** `service mysqld start`

**登陆mysql:** `mysql -u root`

**初始化密码:**

```
use mysql;
update user set password=password('root') where user='root';
exit;
service mysqld restart
```

**开启远程连接:** `grant all PRIVILEGES on *.* to root@'%' identified by 'root';`

```
service mysqld restart
```

**登录mysql:** `mysql -u root -p`

## ➤ 创建数据库

```
mysql -u root -p112233
```

```
CREATE DATABASE hive;
```

## ➤ 创建用户并授权

### 创建Linux用户

```
useradd hive passwd hive
```

### 在 mysql 界面输入以下命令：

```
CREATE USER 'hive' IDENTIFIED BY 'hive';
```

```
grant all privileges on *.* to 'hive' identified by 'hive';
```

```
flush privileges;
```

## 先决条件

已经安装好hadoop（这里我们使用的是2.7.3）

## 下载Hive安装包

当前Hive可到apache官网下载，选择的是hive-1.2.1。运行：

```
wget http://www-us.apache.org/dist/hive/hive-1.2.1/apache-hive-1.2.1-bin.tar.gz
```

然后将其解压到Hadoop所在的目录：/usr/local/下。

```
解压：tar -vxf apache-hive-1.2.1-bin.tar.gz
```

```
重命名：mv apache-hive-1.2.1-bin hive
```

上传mysql驱动jar包至/usr/local/hive/lib目录下

## ➤ 配置环境变量

```
export HADOOP_HOME=/usr/local/hadoop
export HADOOP_CONF_HOME=$HADOOP_HOME/etc/hadoop/
export HIVE_HOME=/usr/local/hive
export HIVE_CONF_DIR=/usr/local/hive/conf
export PATH=$PATH:$HIVE_HOME/bin:$HADOOP_HOME/bin
source /etc/profile 使刚刚的配置生效
```

## ➤ 配置文件重命名

在运行 Hive 之前需要使用以下命令修改配置文件：

```
[root@master conf]# cd /usr/local/hive/conf/
[root@master conf]# cp hive-env.sh.template hive-env.sh
[root@master conf]# cp hive-default.xml.template hive-site.xml
[root@master conf]# cp hive-log4j.properties.template hive-log4j.properties
[root@master conf]# cp hive-exec-log4j.properties.template hive-exec-log4j.properties
```

### 修改 hive-env.sh

```
export HADOOP_HOME=/usr/local/hadoop
export HIVE_CONF_DIR=/usr/local/hive/conf
```

## ➤ 创建临时目录

```
cd /usr/local/hive/  
mkdir -p tmp/resources
```

## ➤ 创建hdfs目录

```
hadoop fs -mkdir -p /tmp/hive  
hadoop fs -mkdir -p /user/hive/warehouse
```

新建用户组并将hdfs下的/user/hive/目录的权限、所属主与所属组分别赋权

```
groupadd hadoop  
usermod -G hadoop hive  
hadoop fs -chown -R hive:hadoop /user/hive/warehouse  
hadoop fs -chown -R hive:hadoop /tmp/hive/  
hadoop fs -chmod 755 /user/hive/warehouse  
hadoop fs -chmod 777 /tmp/hive/
```

## 修改 hive-site.xml

```
vim hive-site.xml # 编辑配置文件
```

```
<property>
  <name>javax.jdo.option.ConnectionURL</name>
  <value>jdbc:mysql://mysqlIP地址:3306/hive?createDatabaseIfNotExist=true</value>
  <description>JDBC connect string for a JDBC metastore</description>
</property>

<property>
  <name>javax.jdo.option.ConnectionDriverName</name>
  <value>com.mysql.jdbc.Driver</value>
  <description>Driver class name for a JDBC metastore</description>
</property>

<property>
  <name>javax.jdo.option.ConnectionUserName</name>
  <value>root</value>
  <description>Username to use against metastore database</description>
</property>

<property>
  <name>javax.jdo.option.ConnectionPassword</name>
  <value>112233</value>
  <description>password to use against metastore database</description>
</property>
```



# Hive安装



```
<property>  
  <name>hive.exec.local.scratchdir</name>  
  <value>/usr/local/hive/tmp</value>  
  <description>Local scratch space for Hive jobs</description>  
</property>
```

```
<property>  
  <name>hive.downloaded.resources.dir</name>  
  <value>/usr/local/hive/tmp/resources</value>  
  <description>Temporary local directory for added resources in the remote file system.</description>  
</property>
```

```
<property>  
  <name>hive.metastore.warehouse.dir</name>  
  <value>/user/hive/warehouse</value>  
  <description>location of default database for the warehouse</description>  
</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.</description>  
</property>
```

# Hive安装



```
<property>
  <name>hive.hbase.snapshot.restore.dir</name>
  <value>/tmp</value>
  <description>The directory in which to restore the HBase table snapshot.</description>
</property>

<property>
  <name>hive.scratch.dir.permission</name>
  <value>700</value>
  <description>The permission for the user specific scratch directories that get created.</description>
</property>
```

# Hive安装



## 测试hive是否可用

输入hive命令

show databases;

```
Logging initialized using configuration in jar:file:/usr/loc
hive> show databases;
OK
default
Time taken: 1.173 seconds, Fetched: 1 row(s)
```

进入mysql查看hive库。

mysql -u root -proot

use hive

show tables;

```
Database changed
mysql> show tables;
+-----+
| Tables_in_hive |
+-----+
| BUCKETING_COLS |
| CDS             |
| COLUMNS_V2     |
| DATABASE_PARAMS |
| DBS             |
| FUNCS          |
| FUNC_RU        |
| GLOBAL_PRIVS   |
| PARTITIONS     |
| PARTITION_KEYS |
| PARTITION_KEY_VALS |
| PARTITION_PARAMS |
| PART_COL_STATS |
| ROLES          |
| SDS            |
| SD_PARAMS      |
| SEQUENCE_TABLE |
| SERDES         |
| SERDE_PARAMS   |
| SKEWED_COL_NAMES |
| SKEWED_COL_VALUE_LOC_MAP |
| SKEWED_STRING_LIST |
| SKEWED_STRING_LIST_VALUES |
| SKEWED_VALUES  |
| SORT_COLS     |
| TABLE_PARAMS  |
| TAB_COL_STATS |
| TBLS          |
| VERSION       |
+-----+
29 rows in set (0.00 sec)
```

# Hive的访问方式



## ➤ Hive-cli

## ➤ 2.JDBC

启动hiveserver2:hive --service hiveserver2 --hiveconf hive.server2.thrift.port=10000

```
[root@hadoop conf]# beeline
Beeline version 1.2.1 by Apache Hive
beeline> !connect jdbc:hive2://hadoop:10000/default
```

## 4.Web接口

- ✓ HWI (hive web interface) :参照: <http://www.cnblogs.com/xing901022/p/5827165.html>
- ✓ HUE

# THANKS

