

# 1.Hive安装 [www.linuxidc.com](http://www.linuxidc.com)

## 1. 需要环境:

Jdk 1.6

Hadoop 0.20.X

## 2. 安装步骤:

```
tar zxvf hive-0.8.1-bin.tar.gz
```

```
sudo mkdir /home/hive
```

```
cd /home/hive
```

```
sudo mv /mnt/hgfs/sharedir/hive-0.8.1-bin ./
```

## 3. 配置环境变量

执行: vi ~/.bashrc, 在结尾处添加:

```
export HIVE_HOME=hive 的安装目录
```

```
export PATH=${HIVE_HOME}/bin:${PATH}
```

应用设置执行: source ~/.bashrc

执行 hive 进入 hive shell 界面, 如下图所示:

```
bruce@BruceWangUbuntu:/home/hive$ hive
Logging initialized using configuration in jar:file:/home/hive/lib/hive-common-0.8.1.jar!/hive-log4j.properties
Hive history file=/tmp/bruce/hive_job_log_bruce_201202140633_378825873.txt
hive>
```

## 2.测试

Linux公社 ([LinuxIDC.com](http://LinuxIDC.com)) 于 2006 年 9 月 25 日注册并开通网站, Linux现在已经成为一种广受关注和支持的一种操作系统, IDC是互联网数据中心, LinuxIDC就是关于Linux的数据中心。

[LinuxIDC.com](http://LinuxIDC.com)提供包括Ubuntu, Fedora, SUSE技术, 以及最新IT资讯等Linux专业类网站。

## 1. 创建表 studyinfo 和 score, 如下所示:

```

hive> create table studyinfo(id int,age int)
> row format delimited
> fields terminated by ','
> stored as textfile;
OK
Time taken: 19.029 seconds
hive>
> create table scores(id int, score int)
> row format delimited
> fields terminated by ','
> stored as textfile;
OK
Time taken: 0.108 seconds

```

2. 用 perl 创建测试数据，如下所示：

```

bruce@BruceWangUbuntu: ~/study/perl
1 #!perl -w
2 use strict;
3 my $i = 1;
4 my $count = 10000;
5 while($i<$count)
6 {
7     my $age = int(rand(5)) + 20;
8     my $score = int(rand(40)) + 60;
9     `echo "$i,$age">>studyinfo.txt`;
10    `echo "$i,$score">>score.txt`;
11    $i++;
12 }
13
14
15

```

3. 将数据导入到 hive 中

```

hive> load data local inpath '/home/bruce/study/perl/score.txt' overwrite into
table scores;
Copying data from file:/home/bruce/study/perl/score.txt
Copying file: file:/home/bruce/study/perl/score.txt
Loading data to table default.scores
Deleted hdfs://BruceWangUbuntu:9000/user/hive/warehouse/scores
OK
Time taken: 2.447 seconds
hive> load data local inpath '/home/bruce/study/perl/studyinfo.txt' overwrite i
nto table studyinfo;
Copying data from file:/home/bruce/study/perl/studyinfo.txt
Copying file: file:/home/bruce/study/perl/studyinfo.txt
Loading data to table default.studyinfo
Deleted hdfs://BruceWangUbuntu:9000/user/hive/warehouse/studyinfo
OK
Time taken: 0.472 seconds

```

4. 查看文件存储  
在hdfs空间中查看 [www.linuxidc.com](http://www.linuxidc.com)

```

bruce@BruceWangUbuntu:/home/hadoop$ bin/hadoop dfs -lsr /user/
drwxr-xr-x - bruce supergroup 0 2012-02-11 09:17 /user/bruce
drwxr-xr-x - bruce supergroup 0 2012-02-11 09:17 /user/bruce/input
-rw-r--r-- 3 bruce supergroup 12 2012-02-11 09:17 /user/bruce/input/Name.txt
drwxr-xr-x - bruce supergroup 0 2012-02-11 09:08 /user/bruce/input22
drwxr-xr-x - bruce supergroup 0 2012-02-14 07:00 /user/hive
drwxr-xr-x - bruce supergroup 0 2012-02-14 07:00 /user/hive/warehouse
drwxr-xr-x - bruce supergroup 0 2012-02-14 07:00 /user/hive/warehouse/scores
-rw-r--r-- 1 bruce supergroup 78885 2012-02-14 07:00 /user/hive/warehouse/scores/score.txt
drwxr-xr-x - bruce supergroup 0 2012-02-14 07:00 /user/hive/warehouse/studyinfo
-rw-r--r-- 1 bruce supergroup 78885 2012-02-14 07:00 /user/hive/warehouse/studyinfo/studyinfo.txt

```

## 5. 查询

出错 “FAILED: Hive Internal Error: java.lang.RuntimeException(Error while making MR sc  
ratch directory - check filesystem config (null))”

解决方法:

把 hadoop 中的 core-site 中的 ip 换成 master 的 hostname 即可, 保证每台机器的/etc/hosts  
一样, 其他配置文件中可以用 ip, 重启 hadoop。

hadoop dfsadmin -safemode leave

```

hive> select count(*) from studyinfo;
Total MapReduce jobs = 1
Launching Job 1 out of 1
Number of reduce tasks determined at compile time: 1
In order to change the average load for a reducer (in bytes):
  set hive.exec.reducers.bytes.per.reducer=<number>
In order to limit the maximum number of reducers:
  set hive.exec.reducers.max=<number>
In order to set a constant number of reducers:
  set mapred.reduce.tasks=<number>
Starting Job = job_201202140733_0001, Tracking URL = http://BruceWangUbuntu:5003
0/jobdetails.jsp?jobid=job_201202140733_0001
Kill Command = /home/hadoop/bin/./bin/hadoop job -Dmapred.job.tracker=BruceWan
gUbuntu:9001 -kill job_201202140733_0001
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 1
2012-02-14 07:43:26,652 Stage-1 map = 0%, reduce = 0%
2012-02-14 07:43:38,599 Stage-1 map = 100%, reduce = 0%
2012-02-14 07:43:51,727 Stage-1 map = 100%, reduce = 100%
Ended Job = job_201202140733_0001
MapReduce Jobs Launched:
Job 0: Map: 1 Reduce: 1 HDFS Read: 78885 HDFS Write: 5 SUCCESS
Total MapReduce CPU Time Spent: 0 msec
OK
9999
Time taken: 40.508 seconds

```

```

hive> select *from studyinfo where id<4;
Total MapReduce jobs = 1
Launching Job 1 out of 1
Number of reduce tasks is set to 0 since there's no reduce operator
Starting Job = job_201202140733_0002, Tracking URL = http://BruceWangUbuntu:5003
0/jobdetails.jsp?jobid=job_201202140733_0002
Kill Command = /home/hadoop/bin/./bin/hadoop job -Dmapred.job.tracker=BruceWan
gUbuntu:9001 -kill job_201202140733_0002
Hadoop job information for Stage-1: number of mappers: 1; number of reducers: 0
2012-02-14 07:44:45,820 Stage-1 map = 0%, reduce = 0%
2012-02-14 07:44:48,851 Stage-1 map = 100%, reduce = 0%
2012-02-14 07:44:51,876 Stage-1 map = 100%, reduce = 100%
Ended Job = job_201202140733_0002
MapReduce Jobs Launched:
Job 0: Map: 1 HDFS Read: 78885 HDFS Write: 15 SUCCESS
Total MapReduce CPU Time Spent: 0 msec
OK
1      21
2      21
3      22
Time taken: 14.309 seconds
hive>

```