Ubuntu 12.04上安装HBase并运行

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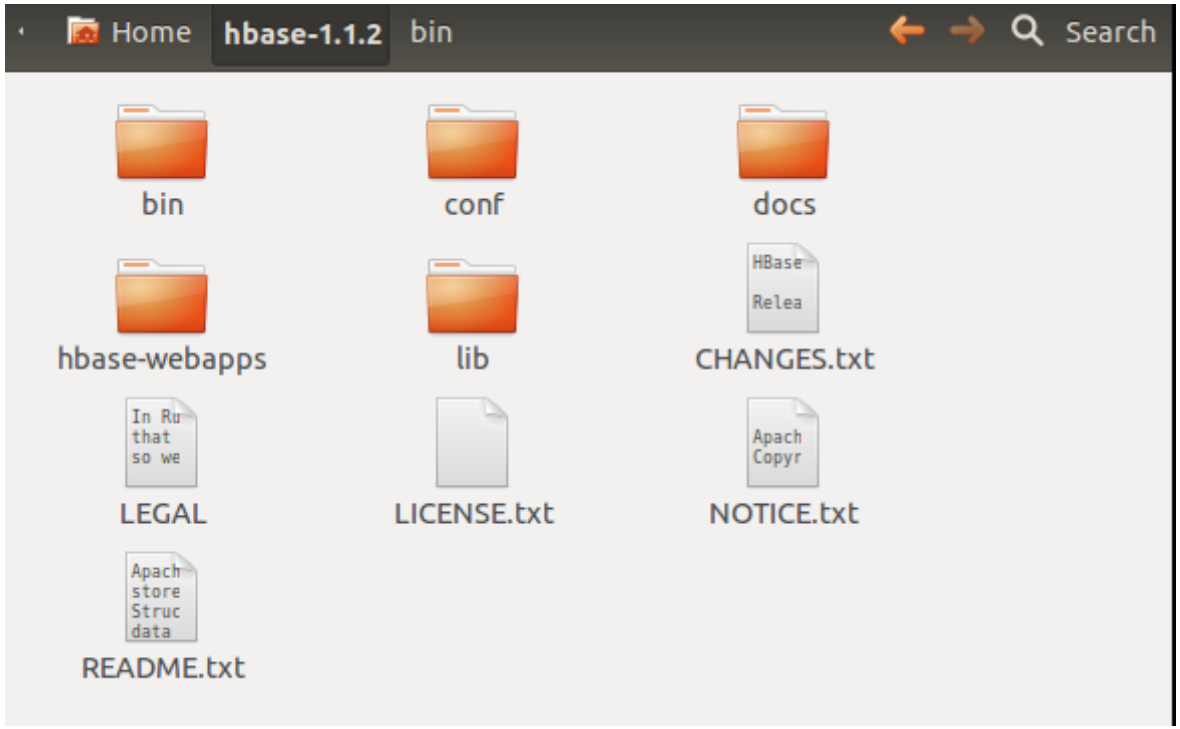
一、HBase的安装

在官网上下载HBase-1.1.2，将其解压到/home/wrr文件夹下



配置环境变量

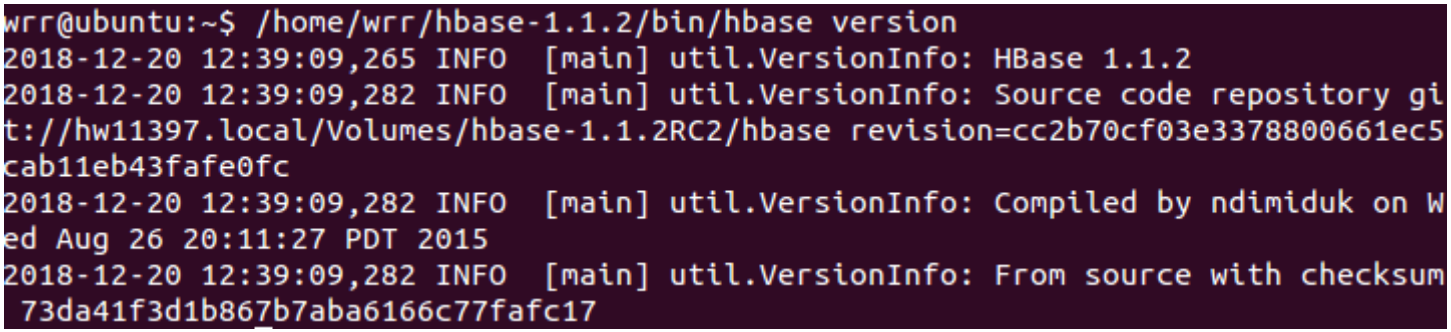
```
wrr@ubuntu:~$ sudo gedit ~/.bashrc
[sudo] password for wrr:
wrr@ubuntu:~$ source ~/.bashrc
```

在.bashrc文件最后添加

```
export PATH=$PATH:/home/wrr/hbase-1.1.2/bin
```

查看HBase版本

```
wrr@ubuntu:~$ /home/wrr/hbase-1.1.2/bin/hbase version
```



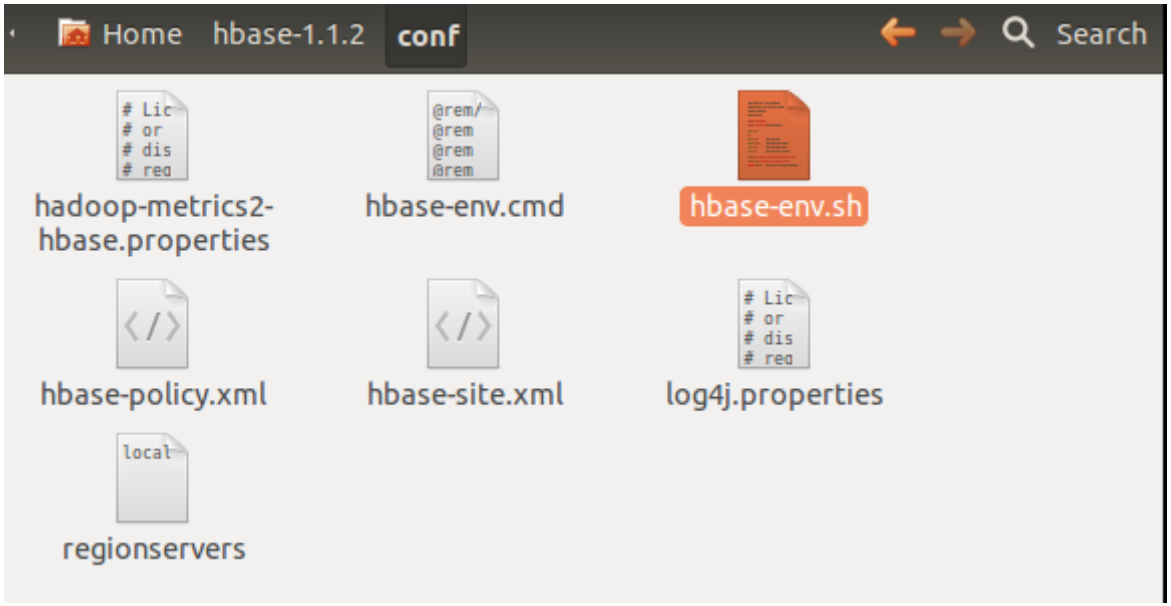
HBase安装成功。

二、单机模式配置

1.配置/home/wrr/hbase-1.1.2/conf/下的hbase-env.sh

在文件末尾添加

```
export JAVA_HOME=/home/wrr/java/jdk1.8.0_191
export HBASE_MANAGES_ZK=true
```



2.配置/home/wrr/hbase-1.1.2/conf/下的hbase-site.xml

新建一个文件夹hbase-tmp

在hbase-site.xml中添加

```
<configuration>
        <property>
                <name>hbase.rootdir</name>
                <value>file:///home/wrr/hbase-1.1.2/hbase-tmp</value>
        </property>
</configuration>
```

3.启动HBase

```
wrr@ubuntu:~$ cd /home/wrr/hbase-1.1.2
wrr@ubuntu:~/hbase-1.1.2$ bin/start-hbase.sh
wrr@ubuntu:~/hbase-1.1.2$ bin/hbase shell
```

```
wrr@ubuntu:~$ cd /home/wrr/hbase-1.1.2
wrr@ubuntu:~/hbase-1.1.2$ bin/start-hbase.sh
starting master, logging to /home/wrr/hbase-1.1.2/bin/../logs/hbase-wrr-master-u
buntu.out
Java HotSpot(TM) Client VM warning: ignoring option PermSize=128m; support was r
emoved in 8.0
Java HotSpot(TM) Client VM warning: ignoring option MaxPermSize=128m; support wa
s removed in 8.0
wrr@ubuntu:~/hbase-1.1.2$ bin/hbase shell
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/home/wrr/hbase-1.1.2/lib/slf4j-log4j12-1.7.5.
jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/home/wrr/java/hadoop-2.7.6/share/hadoop/commo
n/lib/slf4j-log4j12-1.7.10.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.slf4j.impl.Log4jLoggerFactory]
2018-12-20 12:59:56,075 WARN  [main] util.NativeCodeLoader: Unable to load nativ
e-hadoop library for your platform... using builtin-java classes where applicabl
e
HBase Shell; enter 'help<RETURN>' for list of supported commands.
Type "exit<RETURN>" to leave the HBase Shell
Version 1.1.2, rcc2b70cf03e3378800661ec5cab11eb43fafe0fc, Wed Aug 26 20:11:27 PD
T 2015

hbase(main):001:0>
```

三、HBase简单操作

1.新建表

```
create 'student','Sname','Ssex','Sage','Sdept','course'
```

```
hbase(main):001:0> create 'student','Sname','Ssex','Sage','Sdept','course'
0 row(s) in 1.6120 seconds

=> Hbase::Table - student
hbase(main):002:0> describe 'student'
Table student is ENABLED
student
COLUMN FAMILIES DESCRIPTION
{NAME => 'Sage', BLOOMFILTER => 'ROW', VERSIONS => '1', IN_MEMORY => 'false', KEE
P_DELETED_CELLS => 'FALSE', DATA_BLOCK_ENCODING => 'NONE', TTL => 'FOREVER', COMP
RESSION => 'NONE', MIN_VERSIONS => '0', BLOCKCACHE => 'true', BLOCKSIZE => '65536
', REPLICATION_SCOPE => '0'}
{NAME => 'Sdept', BLOOMFILTER => 'ROW', VERSIONS => '1', IN_MEMORY => 'false', KE
EP_DELETED_CELLS => 'FALSE', DATA_BLOCK_ENCODING => 'NONE', TTL => 'FOREVER', COM
PRESSION => 'NONE', MIN_VERSIONS => '0', BLOCKCACHE => 'true', BLOCKSIZE => '6553
6', REPLICATION_SCOPE => '0'}
{NAME => 'Sname', BLOOMFILTER => 'ROW', VERSIONS => '1', IN_MEMORY => 'false', KE
EP_DELETED_CELLS => 'FALSE', DATA_BLOCK_ENCODING => 'NONE', TTL => 'FOREVER', COM
PRESSION => 'NONE', MIN_VERSIONS => '0', BLOCKCACHE => 'true', BLOCKSIZE => '6553
6', REPLICATION_SCOPE => '0'}
{NAME => 'Ssex', BLOOMFILTER => 'ROW', VERSIONS => '1', IN_MEMORY => 'false', KEE
P_DELETED_CELLS => 'FALSE', DATA_BLOCK_ENCODING => 'NONE', TTL => 'FOREVER', COMP
RESSION => 'NONE', MIN_VERSIONS => '0', BLOCKCACHE => 'true', BLOCKSIZE => '65536
', REPLICATION_SCOPE => '0'}
{NAME => 'course', BLOOMFILTER => 'ROW', VERSIONS => '1', IN_MEMORY => 'false', K
EEP_DELETED_CELLS => 'FALSE', DATA_BLOCK_ENCODING => 'NONE', TTL => 'FOREVER', CO
MPRESSION => 'NONE', MIN_VERSIONS => '0', BLOCKCACHE => 'true', BLOCKSIZE => '655
36', REPLICATION_SCOPE => '0'}
5 row(s) in 0.2580 seconds

hbase(main):003:0>
```

2.添加数据

```
hbase(main):003:0> put 'student','95001','Sname','LiYing'
hbase(main):004:0> put 'student','95001','course:math','80'
```

```
hbase(main):003:0> put 'student','95001','Sname','LiYing'
0 row(s) in 0.2120 seconds

hbase(main):004:0> put 'student','95001','course:math','80'
0 row(s) in 0.0980 seconds
```

3.删除数据

delete 'student','95001','Ssex'

```
hbase(main):005:0> delete 'student','95001','Ssex'
0 row(s) in 0.3640 seconds

hbase(main):006:0> get 'student', '95001'
COLUMN                CELL
 Sname:               timestamp=1545340137987, value=LiYing
 course:math          timestamp=1545340149189, value=80
2 row(s) in 0.0850 seconds
```

hbase(main):007:0> deleteall 'student','95001'

```
hbase(main):007:0> deleteall 'student','95001'
0 row(s) in 0.0250 seconds

hbase(main):008:0> scan 'student'
ROW                   COLUMN+CELL
0 row(s) in 0.0390 seconds
```

4.删除表

disable 'student'
drop 'student'

```
hbase(main):009:0> disable 'student'
0 row(s) in 2.3460 seconds

hbase(main):010:0> drop 'student'
0 row(s) in 1.3410 seconds

hbase(main):011:0> list
TABLE
0 row(s) in 0.0080 seconds

=> []
hbase(main):012:0>
```

5.退出HBase数据库表

```
hbase(main):012:0> exit
wrr@ubuntu:~/hbase-1.1.2$
```

6.停止HBase运行

```
hbase(main):012:0> exit
wrr@ubuntu:~/hbase-1.1.2$ bin/stop-hbase.sh
```

```
wrr@ubuntu:~/hbase-1.1.2$ bin/stop-hbase.sh
stopping hbase.....................
wrr@ubuntu:~/hbase-1.1.2$
```

如果想了解更多内容，请看[大数据原理与应用 第四章 分布式数据库HBase 学习指南_厦大数据库实验室博客]