

## Prepear

Hadoop 2.7.3

HBase 1.3.0

Download

```
1. wget https://archive.apache.org/dist/hbase/1.3.0/hbase-1.3.0-bin.tar.gz
```

unzip

```
1. tar -zxvf hbase-1.3.0-bin.tar.gz
```

## Profile ( All Nodes )

vim ~/.bashrc

```
1.  
2. export HADOOP_BASE_PATH=/opt/  
3.  
4. # hadoop env setting  
5.  
6. # append hbase env setting  
7. export HBASE_HOME=$HADOOP_BASE_PATH/hbase-1.3.0  
8. export PATH=$PATH:$HBASE_HOME/bin
```

load profile

```
1. source ~/.bashrc
```

## Deploy

hbase-env.sh ( All Nodes )

```
1. cp $HBASE_HOME/conf/hbase-env.sh $HBASE_HOME/conf/hive-env.sh.bak  
2.  
3. vim $HBASE_HOME/conf/hbase-env.sh
```

```
1. # Java
2. export JAVA_HOME=/usr/lib/jvm/java-8-oracle/
3.
4. # HBase
5. export HBASE_HEAPSIZE=4G
6. # 设置为本机Hadoop安装目录下的conf目录（即{HADOOP_HOME}/conf）
7. export HBASE_CLASSPATH=/opt/hadoop-2.7.3/etc/hadoop/
8. # 使用自带的zookeeper
9. export HBASE_MANAGES_ZK=true
10. # 不用HBase管理Zookeeper集群
11. # export HBASE_MANAGES_ZK=false
```

### hbase-site.xml ( All Nodes )

```
1. # backup
2. cp $HBASE_HOME/conf/hbase-site.xml $HBASE_HOME/conf/hbase-site.xml.bak
3.
4. vim $HBASE_HOME/conf/hbase-site.xml
```

```
1. <configuration>
2.   <property>
3.     <name>hbase.rootdir</name>
4.     <value>hdfs://HBase-HMaster:9000/hbase</value>
5.   </property>
6.   <property>
7.     <name>hbase.cluster.distributed</name>
8.     <value>true</value>
9.   </property>
10.   <!-- HMaster相关参数 -->
11.   <property>
12.     <name>hbase.master.info.bindAddress</name>
13.     <value>0.0.0.0</value>
14.     <description>HBase Master Web UI的绑定地址，默认0.0.0.0</description>
15.   </property>
16.   <property>
17.     <name>hbase.master.info.port</name>
18.     <value>16010</value>
19.     <description>HBase Master Web UI端口，-1表示不运行Web UI</description>
20.   </property>
21.   <property>
22.     <name>hbase.zookeeper.quorum</name>
23.     <value>HBase-HMaster,HBase-HRegion-1,HBase-HRegion-2</value>
24.   </property>
25.   <property>
26.     <name>hbase.zookeeper.property.dataDir</name>
27.     <value>/tmp/hbase/zookeeper</value>
28.   </property>
29. </configuration>
```

## regionservers ( All Nodes )

```
1. # backup
2. cp $HBASE_HOME/conf/regionservers $HBASE_HOME/conf/regionservers
3.
4. vim $HBASE_HOME/conf/regionservers
```

```
1. HBase-HRegion-1
2. HBase-HRegion-2
```

## Start & Shutdown ( HBase-HMaster Node )

```
1. # $HADOOP_HOME/sbin/start-dfs.sh
2. # $HADOOP_HOME/sbin/start-yarn.sh
3. $HBASE_HOME/bin/start-hbase.sh
```

```
1. jps
2. # Master: HMaster, HQuorumPeer
3. # Slave: HRegionServer, HQuorumPeer
```

```
1. $HBASE_HOME/bin/stop-hbase.sh
2. # $HADOOP_HOME/sbin/stop-yarn.sh
3. # $HADOOP_HOME/sbin/stop-dfs.sh
```

## Shell ( Any Node )

```
1. $HBASE_HOME/bin/hbase shell
```

```
1. hbase(main):001:0> create 'member','member_id','address','info'
2. hbase(main):002:0> list
3. hbase(main):003:0> describe 'member'
4. hbase(main):003:0> desc 'member'
5. hbase(main):004:0> exit
```

```
xenron@xenron-XPS-8700-Ubuntu-14: ~/.ssh
xenron@xenron-XPS-8700-Ubuntu-14:~/.ssh$ $HBASE_HOME/bin/hbase shell
SLF4J: Class path contains multiple SLF4J bindings.
SLF4J: Found binding in [jar:file:/opt/soft/hbase-1.2.2/lib/slf4j-log4j12-1.7.5.jar!/org/slf4j/impl/StaticLoggerBinder.class]
SLF4J: Found binding in [jar:file:/opt/soft/hadoop-2.6.4/share/hadoop/common/lib/slf4j-log4j12-1.7.5.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]
HBase Shell; enter 'help<RETURN>' for list of supported commands.
Type "exit<RETURN>" to leave the HBase Shell
Version 1.2.2, r3f671c1ead70d249ea4598f1bbcc5151322b3a13, Fri Jul 1 08:28:55 CDT 2016

hbase(main):001:0> create 'member','member_id','address','info'
0 row(s) in 1.3680 seconds

=> Hbase::Table - member
hbase(main):002:0> list
TABLE
member
1 row(s) in 0.0130 seconds

=> ["member"]
hbase(main):003:0> describe 'member'
```

## HBase Master Web UI

Master: hadoop-ubuntu-01

Region Servers

ServerName	Start time	Version	Requests Per Second	Num. Regions
hadoop-ubuntu-01_16201,1474524398623	Thu Sep 22 15:06:38 JST 2016	1.2.2	4	3
Total:1			4	3

Backup Masters

ServerName	Port	Start Time
Total:0		

Tables

Namespace	Table Name	Online Regions	Offline Regions	Failed Regions	Split Regions	Other Regions	Description
default	member	1	0	0	0	0	'member', (NAME => 'address'), (NAME => 'info'), (NAME => 'member_id')

Tasks

Start Time	Description	State	Status
Thu Sep 22 15:07:24 JST 2016	Doing distributed log split in [hdfs://hadoop-ubuntu-01:9000/hbase/WALS/hadoop-ubuntu-01-16201,1474523754497-edited-for-cs@hadoop-ubuntu-01-16201,1474523754497]	COMPLETE (since 16201,1474523754497)	finished splitting (more than or equal to) 0 bytes in 0 log files in [hdfs://hadoop-ubuntu-01:9000/hbase/WALS/hadoop-ubuntu-01-16201,1474523754497-edited-for-cs@hadoop-ubuntu-01-16201,1474523754497]