



链滴

# CDH Hadoop 安装 step by step

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原文链接: <https://ld246.com/article/1501408838578>

来源网站: [链滴](#)

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<p>  
1. 选用了CDH版本  
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<p>  
参考: <a href="http://blog.csdn.net/duyuanhai/article/details/54908298" target="\_blank">hadoop CDH</a>  
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<p>  
2. 选用了CDH最新版本 5.12  
</p>  
<p>  
参考: <a href="https://www.cloudera.com/downloads/cdh/5-12-0.html" target="\_blank">ownload CDH 5.12.0</a>  
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<p>  
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<p>  
3. MRv1和YARN的选择: 选用YARN  
</p>  
<p>  
参考: <a href="http://www.cnblogs.com/BYRans/p/5509403.html" target="\_blank">YAR  
与MRv1的对比</a>  
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<p>  
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</p>  
<p>  
4. 最后选用了<a href="https://www.cloudera.com/documentation/enterprise/release-notes/topics/cm\_vd\_cdh\_package\_tarball\_512.html#cm\_vd\_cdh\_package\_tarball\_512" target="\_blank">tarball版本</a>, 单机测试  
</p>  
<p>  
参考:  
</p>  
<p>  
1)&nbsp;<a href="http://blog.csdn.net/u011414200/article/details/49245579" target="\_bl  
nk">Hadoop-2.5.0-cdh5.3.2 搭建单机伪分布</a>  
</p>  
<p>  
2)&nbsp;<a href="http://blog.csdn.net/zwf1732289600/article/details/44515229">hadoop  
dh5单机安装</a>  
</p>  
<p>  
<br />  
</p>  
<p>  
5. hbase, 同样选用了tarball版本  
</p>  
<p>  
参考: <a href="http://lib.csdn.net/article/hbase/49908" target="\_blank">CDH5 hadoop-hi

e-habse单机版配置

6. hive

参考:

1) Hive 1.1.0  
集群安装配置

2) hadoop  
门第七步---hive部署安装 (apache-hive-1.1.0)

3) CDH5.4.5手动安装hive-1.1.0-cdh5.4.5

无水版本

1. 安装java 8

2. 设置单机ssh免密登录

3. 下载 CDH tarball版本的安装包

4. 安装单机版本的Hadoop

1) 设置环境变量

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<p>

```
vim ~/.bashrc
```

</p>

<p>

```
<br />
```

</p>

<pre class="prettyprint lang-bsh">新增内容如下: </pre>

```
<pre class="prettyprint lang-bsh">export HADOOP_BASE_HOME=/home/hadoop/share/hadoop
export HADOOP_HOME=${HADOOP_BASE_HOME}/hadoop-2.6.0-cdh5.12.0
export HBASE_HOME=${HADOOP_BASE_HOME}/hbase-1.2.0-cdh5.12.0
export HIVE_HOME=${HADOOP_BASE_HOME}/hive-1.1.0-cdh5.12.0
```

```
export PATH=PATH:{HADOOP_HOME}/bin:{HADOOP_HOME}/sbin{HBASE_HOME}/bin:{HIVE_HOME}/bin</pre>
```

<p>

```
<br />
```

</p>

<p>

2) 编辑 <span style="color:#444444;font-family:Tahoma, Helvetica, Arial, 宋体, sans-serif;font-size:14px;background-color:#F7FCFF;">\${HADOOP\_HOME}/etc/hadoop/hadoop-env.h</span>

</p>

<p>

<span style="color:#444444;font-family:Tahoma, Helvetica, Arial, 宋体, sans-serif;font-size:14px;background-color:#F7FCFF;"><br />

</span>

</p>

<p>

修改对应的行:

</p>

<p>

```
<br />
```

</p>

```
<pre class="prettyprint lang-bsh">export JAVA_HOME=/usr/local/java/
```

</pre>

3) 编辑 <span style="color:#444444;font-family:Tahoma, Helvetica, Arial, 宋体, sans-serif;font-size:14px;background-color:#F7FCFF;">\${HADOOP\_HOME}/etc/hadoop/core-site.xml</span>

<p>

```
<br />
```

</p>

<p>

```
<br />
```

</p>

<p>

```
<br />
```

</p>

```
<pre class="prettyprint lang-js">&lt;configuration&gt;
&lt;property&gt;
```

```

    <name>hadoop.tmp.dir</name>
    <value>/home/abeffect/data/hadoop</value>
  </property>
  <property>
    <name>fs.default.name</name>
    <value>hdfs://localhost:9000</value>
  </property>
</configuration></pre>

```

4) 编辑 `${HADOOP_HOME}/etc/hadoop/hdfs-site.xml`

```

<p>
  <br />
</p>
<p>
  <br />
</p>
<pre class="prettyprint lang-js">
  <configuration>
    <property>
      <name>dfs.namenode.name.dir</name>
      <value>file:/home/abeffect/data/nameNode</value>
      <final>true</final>
    </property>
    <property>
      <name>dfs.datanode.data.dir</name>
      <value>file:/home/abeffect/data/dataNode</value>
    </property>
    <property>
      <name>dfs.replication</name>
      <value>1</value>
    </property>
    <property>
      <name>dfs.permissions</name>
      <value>>false</value>
    </property>
    <property>
      <name>dfs.permissions</name>
      <value>>false</value>
    </property>
  </configuration>
</pre>

```

5) cp `${HADOOP_HOME}/etc/hadoop/mapred-site.xml.template` `${HADOOP_HOME}/etc/hadoop/mapred-site.xml`

```

<p>
  <br />
</p>
<p>
  编辑 ${HADOOP_HOME}/etc/hadoop/mapred-site.xml
</p>
<p>
  <span> </span>
</p>
<pre class="prettyprint lang-js">
  <configuration>
    <property>
      <name>mapreduce.framework.name</name>

```

```

        <value>yarn</value>
    </property>
    <property>
        <name>mapreduce.job.tracker</name>
        <value>localhost:90010</value>
    </property>
    <property>
        <name>yarn.resourcemanager.hostname</name>
        <value>loclhost</value>
        <description>hostanem of RM</description>
    </property>
    <property>
        <name>yarn.nodemanager.aux-services</name>
        <value>mapreduce.shuffle</value>
        <description>shuffle service that needs to be set for Map Reduce to run </
description>
    </property>
    <property>
        <name>yarn.nodemanager.aux-services.mapreduce.shuffle.class</name>
        <value>org.apache.hadoop.mapred.ShuffleHandler</value>
    </property>
</configuration></pre>

```

6) 格式化namenode

```

<p>
  <br />
</p>
<p>
  <span>hdfs namenode -format</span>
</p>
<p>
  <span><br />
</span>
</p>
<p>
  <span>正常会有提示: common.Storage: Storage directory /home/abeffect/data/nameNode
has been successfully formatted.</span>
</p>
<p>
  <span><br />
</span>
</p>
<p>
  <span>7) 启动集群 start-all.sh</span>
</p>
<p>
  <span><br />
</span>
</p>
<p>
  <span>8) 访问: http://localhost:50070 来查看web页面</span>
</p>
<p>
  <span><br />
</span>
</p>

```

```
</p>
<p>
  <span>5. 安装单机版本的hbase</span>
</p>
<p>
  1) 下载 tar
</p>
<p>
  2) 编辑 vim ${HBASE_HOME}/conf/hbase-env.sh
</p>
<p>
  修改对应的行
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <span style="font-family:&quot;font-size:12px;"> export JAVA_HOME=/usr/local/java/</sp
n>
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <span style="font-family:&quot;font-size:12px;"> export HBASE_MANAGES_ZK=true<br />
</span>
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <br />
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <span style="font-family:&quot;font-size:12px;"> 3) 编辑 vim ${HBASE_HOME}/conf/hbase-
ite.xml</span>
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <span style="font-family:&quot;font-size:12px;"> 修改对应的行</span>
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <span style="font-family:&quot;font-size:12px;"> </span>
</p>
<pre class="prettyprint lang-js">&lt;configuration&gt;
  &lt;property&gt;
    &lt;name&gt;hbase.rootdir&lt;/name&gt;
    &lt;value&gt;hdfs://localhost:9000/hbase&lt;/value&gt;
  &lt;/property&gt;
&lt;/configuration&gt;</pre>
<p>
  <br />
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  4) 启动
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  start-hbase.sh
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <br />
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  5) 检测状态:
```

```
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  hbase hbck
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <br />
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  结果有:
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  Status: OK
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <br />
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  6) 启动web页面
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  hbase rest start
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <br />
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <span>6. 安装单机版本的hive</span>
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  1) 下载tarball文件
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  2) 编辑 ${HIVE_HOME}/bin/hive-config.sh 文件
</p>
<p style="color:#333333;font-size:14px;background-color:#FFFFFF;font-family:微软雅黑;">
  <br />
</p>
<pre class="prettyprint lang-js">export JAVA_HOME=/usr/local/java
export HADOOP_BASE_HOME=/home/abeffect/share/hadoop
export HADOOP_HOME=${HADOOP_BASE_HOME}/hadoop-2.6.0-cdh5.12.0
export HBASE_HOME=${HADOOP_BASE_HOME}/hbase-1.2.0-cdh5.12.0
export HIVE_HOME=${HADOOP_BASE_HOME}/hive-1.1.0-cdh5.12.0
```

```
export PATH=PATH:{HADOOP_HOME}/bin:{HADOOP_HOME}/sbin:{HBASE_HOME}/bin:${HIVE_HOME}/bin
```

```
export CLASSPATH=.:JAVA_HOME/lib/dt.jar:JAVA_HOME/lib/tools.jar:HIVE_HOME/lib:{HBASE_HOME}/lib</pre>
```

3)&nbsp;hive使用什么样的元数据库，一处是如果要想启动hive的web管理页面，需要配置hive的eb端war包。

```
<p>
  <br />
</p>
```



hive的元数据库可以用自身的derby, 也可以用mysql

<br />

4) 重命名

```
mv ${HIVE_HOME}/conf/hive-env.sh.template ${HIVE_HOME}/conf/hive-env.sh
```

<br />

编辑 \${HIVE\_HOME}/conf/hive-env.sh

<br />

末尾增加

```
export HADOOP_BASE_HOME=/home/abeffect/share/hadoop
export HADOOP_HOME=${HADOOP_BASE_HOME}/hadoop-2.6.0-cdh5.12.0
export HIVE_HOME=${HADOOP_BASE_HOME}/hive-1.1.0-cdh5.12.0
export HIVE_CONF_DIR=${HIVE_HOME}/conf
export HIVE_AUX_JARS_PATH=${HIVE_HOME}/lib
```

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```
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</p>
```