FBDP实验三

standalone版本安装

1. 首先在apache官网查看Hadoop版本与hbase对照表，下载对应合适版本

	HBase-1.4.x	HBase-1.6.x	HBase-2.2.x	HBase-2.3.x
Hadoop-2.7.0	❌	❌	❌	❌
Hadoop-2.7.1+	✅	❌	❌	❌
Hadoop-2.8.[0-2]	❌	❌	❌	❌
Hadoop-2.8.[3-4]	⚠️	❌	❌	❌
Hadoop-2.8.5+	⚠️	✅	✅	❌
Hadoop-2.9.[0-1]	❌	❌	❌	❌
Hadoop-2.9.2+	⚠️	✅	✅	❌
Hadoop-2.10.0	⚠️	✅	⚠️	✅
Hadoop-3.1.0	❌	❌	❌	❌
Hadoop-3.1.1+	❌	❌	✅	✅
Hadoop-3.2.x	❌	❌	✅	✅

```
-machine.out
opt/hbase/bin/hbase-daemon.sh: 行 195: /opt/hbase/logs/hbase-yuanshan-master-yu
nshan-virtual-machine.out: 没有那个文件或目录
ead: 无法打开'/opt/hbase/logs/hbase-yuanshan-master-yuanshan-virtual-machine.ou
' 读取数据: 没有那个文件或目录
yuanshan@yuanshan-virtual-machine:/opt/hbase$ hbase version
usr/local/hadoop/bin/../libexec/hadoop-functions.sh: 行 2366: HADOOP_ORG.APACHE
HADOOP.HBASE.UTIL.GETJAVAPROPERTY_USER: 无效的变量名
usr/local/hadoop/bin/../libexec/hadoop-functions.sh: 行 2461: HADOOP_ORG.APACHE
HADOOP.HBASE.UTIL.GETJAVAPROPERTY_OPTS: 无效的变量名
LF4J: Class path contains multiple SLF4J bindings.
LF4J: Found binding in [jar:file:/usr/local/hadoop/share/hadoop/common/lib/slf4
-log4j12-1.7.25.jar!/org/slf4j/impl/StaticLoggerBinder.class]
LF4J: Found binding in [jar:file:/opt/hbase/lib/client-facing-thirdparty/slf4j-
og4j12-1.7.30.jar!/org/slf4j/impl/StaticLoggerBinder.class]
LF4J: See http://www.slf4j.org/codes.html#multiple_bindings for an explanation.
LF4J: Actual binding is of type [org.slf4j.impl.Log4jLoggerFactory]
Base 2.3.2
ource code repository git://fb6e52cd778c/home/vjasani/hbase-rm/output/hbase rev
sion=8dc7de1c75ab615b8992b928150e8b476cb053e3
ompiled by vjasani on Sun Sep 20 13:28:26 UTC 2020
rom source with checksum 0f276c1c4db750330be5a0597258c4ceab710813110e0926be2f7b
64a76c61caea7524f0ef2ce3939bc5c035641e0995b1e33b911e066a5a982605312d0540f
yuanshan@yuanshan-virtual-machine:/opt/hbase$
```
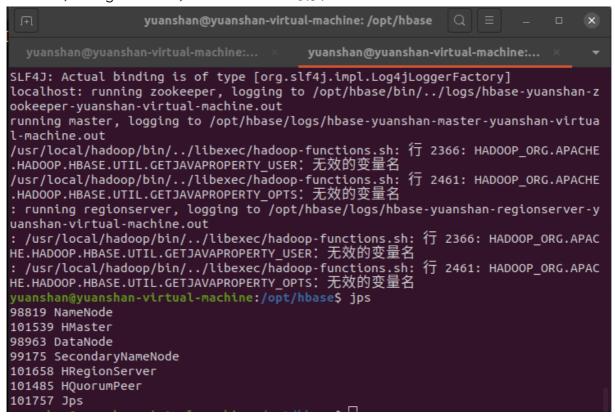
出现问题：启动报错，启动shell后无法连接hmaster

2. 在apache官网选择镜像中的stable版本重新下载（2.2.5），并解压，发现同样问题，但是启动hbase后检查jps，正常。构建测试表，正常。虽然运行重复报错相同内容，但是不影响实际操作。


```
yuanshan@yuanshan-virtual-machine:/opt/hbase$ jps
98819 NameNode
98963 DataNode
99175 SecondaryNameNode
99656 Jps
99566 HMaster
```

伪分布版本安装

1. 修改配置文件，并重新启动hbase，仍然出现报错，但是不影响jps运行与建立。检查 HMaster，HRegionServer，HQuorumPeer均存在。

想重新启动hbase，提示regionserver仍在运行，无法重启。

解决：`bin/hbase-daemon.sh stop regionserver RegionServer`

编写Java程序实现表格创建

详见github仓库：https://github.com/L-cys/FBDPfile/tree/main/HbaseTest

shell实现表格创建

```
hbase(main):034:0> put 'students','1','Courses:English','95'
Took 0.0281 seconds
hbase(main):035:0> put 'students','2','Courses:English','85'
Took 0.0076 seconds
hbase(main):036:0> put 'students','3','Courses:English','98'
Took 0.0085 seconds
hbase(main):037:0> disable 'students'
Took 2.4212 seconds
hbase(main):038:0> alter 'students','Contact'
Updating all regions with the new schema...
All regions updated.
Done.
Took 2.3412 seconds
hbase(main):039:0> enable 'students'
Took 1.3438 seconds
hbase(main):040:0> put 'students','1','Contact:Email','lilei@qq.com'
Took 0.0195 seconds
hbase(main):041:0> put 'students','2','Contact:Email','hanmeimei@qq.com'
Took 0.0098 seconds
hbase(main):042:0> put 'students','3','Contact:Email','xiaoming@qq.com'
Took 0.0130 seconds
hbase(main):043:0> scan 'students'
ROW                     COLUMN+CELL
```



```
 2                      column=Description:Name, timestamp=1605940147715, value=Ha
                        n Meimei
 2                      column=Home:Province, timestamp=1605940230064, value=Beiji
                        ng
 3                      column=Contact:Email, timestamp=1605941408254, value=xiaom
                        ing@qq.com
 3                      column=Courses:Chinese, timestamp=1605940277684, value=90
 3                      column=Courses:English, timestamp=1605941047045, value=98
 3                      column=Courses:Math, timestamp=1605940294705, value=90
 3                      column=Courses:Physics, timestamp=1605940307024, value=90
 3                      column=Description:Height, timestamp=1605940264810, value=
                        162
 3                      column=Description:Name, timestamp=1605940251063, value=Xi
                        ao Ming
 3                      column=Home:Province, timestamp=1605940326673, value=Shang
                        hai
3 row(s)
Took 0.1832 seconds
hbase(main):044:0> disable 'students'
Took 1.3149 seconds
hbase(main):045:0> drop 'students'
Took 0.4723 seconds
hbase(main):046:0>
```

完整操作语句

```
create 'students','Description','Courses','Home'

put 'students','1','Description:Name','Li Lei'

put 'students','1','Description:Height','176'
```

```
...
scan 'students'
get 'students','1',{COLUMN=>'Home:Province'}
put 'students','1','Courses:English','95'
...
disable 'students'
alter 'students','Contact'
enable 'students'
put 'students','1','Contact:Email','lilei@qq.com'
scan 'students'
disable 'students'
drop 'students'
```