

一、环境

xmjmaster: 192.168.238.160

xmjslave1: 192.168.238.161

xmjslave2: 192.168.238.162

二、zookeeper集群安装部署

1. 下载zookeeper

```
https://zookeeper.apache.org/releases.html  
zookeeper-3.4.14.tar.gz
```

2. 上传到linux并解压缩

```
tar -zxvf zookeeper-3.4.14.tar.gz -C /usr/local/
```

3. 进入zookeeper目录，创建data和logs目录

```
cd /usr/local/zookeeper-3.4.14  
mkdir data  
cd data  
mkdir logs
```

4. 修改配置文件zoo.cfg

```
cd /usr/local/zookeeper-3.4.14/conf  
mv zoo_sample.cfg zoo.cfg  
  
vim zoo.cfg  
  
dataDir=/usr/local/zookeeper-3.4.14/data  
dataLogDir=/usr/local/zookeeper-3.4.14/data/logs
```

5. 集群配置：myid

```
cd /usr/local/zookeeper-3.4.14/data  
touch myid  
vim myid ##记录每个服务器的id,内容分别为1、2、3  
1
```

6. 集群配置：修改配置文件zoo.cfg

```
cd /usr/local/zookeeper-3.4.14/conf  
vim zoo.cfg  
server.1=192.168.238.160:2881:3881  
server.2=192.168.238.161:2881:3881  
server.3=192.168.238.162:2881:3881
```

7. 分发zookeeper目录到其他节点(注意修改对应的myid)

```
cd /usr/local/  
scp -r zookeeper-3.4.14 192.168.238.161:/usr/local/  
scp -r zookeeper-3.4.14 192.168.238.162:/usr/local/
```

8.启动

```
cd /usr/local/zookeeper-3.4.14/bin  
./zkServer.sh start
```

三、hbase集群安装部署

1.下载hbase

```
http://archive.apache.org/dist/  
hbase-1.3.1-bin.tar.gz
```

2.上传到linux并解压缩

```
tar -zxvf hbase-1.3.1-bin.tar.gz -C /usr/local/
```

3.修改配置文件

1) 把hadoop中的配置core-site.xml、hdfs-site.xml拷贝到hbase安装目录下的conf文件夹中

```
cd /usr/local/hadoop-2.7.2/etc/hadoop/  
cp core-site.xml hdfs-site.xml /usr/local/hbase-1.3.1/conf/
```

2)修改 hbase-env.sh

```
cd /usr/local/hbase-1.3.1/conf/  
vim hbase-env.sh  
  
#添加java环境变量  
export JAVA_HOME=/usr/java/jdk1.8.0_251-amd64  
#指定使用外部的zk集群  
export HBASE_MANAGES_ZK=FALSE
```

3)修改 hbase-site.xml

```
<!-- 指定hbase在HDFS上存储的路径 -->  
<property>  
  <name>hbase.rootdir</name>  
  <value>hdfs://xmjmaster:9000/hbase</value>  
</property>  
<!-- 指定hbase是分布式的 -->  
<property>  
  <name>hbase.cluster.distributed</name>  
  <value>true</value>  
</property>  
<!-- 指定zk的地址，多个用“,”分割 -->  
<property>  
  <name>hbase.zookeeper.quorum</name>  
  <value>xmjmaster:2181,xmjslave1:2181,xmjslave2:2181</value>  
</property>
```

4)修改regionserver

```
vim regionserver
```

```
xmjmaster  
xmjslave1  
xmjslave2
```

5)hbase的conf目录下创建文件backup-masters

```
vim backup-masters  
xmjslave1
```

4.配置hbase环境变量

```
vim /etc/profile  
  
export HBASE_HOME=/usr/local/hbase-1.3.1  
export PATH=$PATH:$HBASE_HOME/bin  
  
source /etc/profile
```

5. 分发hbase目录和环境变量到其他节点

```
cd /usr/local/  
scp -r hbase-1.3.1 192.168.238.161:/usr/local/  
scp -r hbase-1.3.1 192.168.238.162:/usr/local/
```

四、hbase集群的启动和停止

```
##前提条件：先启动hadoop和zk集群  
cd /usr/local/hbase-1.3.1/bin/  
./start-hbase.sh
```

访问hbase集群的web管理界面：HMaster的主机名:16010
<http://xmjmaster:16010>



Master xmjmaster

Region Servers

Base Stats

Memory

Requests

Storefiles

Compactions

ServerName	Start time	Version	Requests Per Second	Num. Regions
xmjmaster,16020,1595385694385	Wed Jul 22 10:41:34 CST 2020	1.3.1	0	1
xmjslave1,16020,1595385709407	Wed Jul 22 10:41:49 CST 2020	1.3.1	0	1
xmjslave2,16020,1595385703950	Wed Jul 22 10:41:43 CST 2020	1.3.1	0	0
Total:3			0	2

Backup Masters

ServerName	Port	Start Time
xmjslave1	16000	Wed Jul 22 10:41:49 CST 2020