

about云分析discuz论坛apache日志hadoop大数据项目: hive与hbase是如何整合使用的

此篇需要具有hive、hbase整合基础,可以参考:

hive与hbase整合原理介绍

hbase0.96与hive0.12整合高可靠文档及问题总结

这里说一下项目实现的思路,此篇属于项目需求文档:数据的清洗以及导入hbase、hive 准备工作

一、准备工作

首先我们启动hadoop、hbase、hive 如下图所示:

1.启动hadoop

1. start-dfs.sh

aboutyun@master:~\$ start-dfs.sh
Starting namenodes on [master]
master: starting namenode, logging to /usr/hadoop/logs/hadoop-aboutyun-nam
master.out
slave2: starting datanode, logging to /usr/hadoop/logs/hadoop-aboutyun-dat
slave2.out
slave1: starting datanode, logging to /usr/hadoop/logs/hadoop-aboutyun-dat
slave1: starting secondary namenodes [slave1]
slave1: starting secondarynamenode, logging to /usr/hadoop/logs/hadoop-abo
secondarynamenode-slave1.out

```
aboutyun@master:~$ start-yarn.sh
starting yarn daemons
starting resourcemanager, logging to /usr/hadoop/logs/yarn-aboutyun-resour
ger-master.out
slave1: starting nodemanager, logging to /usr/hadoop/logs/yarn-aboutyun-no
ger-slave1.out
slave2: starting nodemanager, logging to /usr/hadoop/logs/yarn-aboutyun-no
qer-slave2.out
```

2.启动hbase

start-hbase.sh

```
aboutyun@master:~$ start-hbase.sh slave2: starting zookeeper, logging to /usr/hbase/bin/../logs/hbase-aboutyun-keeper-slave2.out master: starting zookeeper, logging to /usr/hbase/bin/../logs/hbase-aboutyun-keeper-master.out slave1: starting zookeeper, logging to /usr/hbase/bin/../logs/hbase-aboutyun-keeper-slave1.out starting master, logging to /usr/hbase/bin/../logs/hbase-aboutyun-master-mast out slave2: starting regionserver, logging to /usr/hbase/bin/../logs/hbase-abouty regionserver-slave2.out slave1: starting regionserver, logging to /usr/hbase/bin/../logs/hbase-abouty regionserver-slave2.out
```

hbase shell

```
aboutyun@master:~$ hbase shell
14/08/01 23:07:59 INFO Configuration.deprecation: hadoop.native.lib is dep
d. Instead, use io.native.lib.available
HBase Shell; enter 'help<RETURN>' for list of supported commands.
Type "exit<RETURN>" to leave the HBase Shell
Version 0.96.0-hadoop2, r1531434, Fri Oct 11 15:28:08 PDT 2013
hbase(main):001:0>
```

3.启动hive

启动服务端

1. hive --service metastore

aboutyun@master:~\$ hive --service metastore Starting Hive Metastore Server

启动客户端

1. hive

aboutyun@master:~\$ hive

上面准备工作完毕,下面我们开始创建表,其实也比较简单。

我们这个项目主要是对日志进行清洗,并且导入hbase、与hive中,为了避免重复导入,因此我们采用了hbase与hive整合,这样在导入hbase的同时,hive同时也导入了,避免了重复工作。那么这里的建表工作就显的比较重要。

CREATE TABLE

LogTable(Key string, IpAddress string, Url string, UserBrowser string, OSstring, AccressTime string) STORED BY 'org.apache.hadoop.hive.hbase.HBaseStorageHandler' WITH SERDEPROPERTIES ("hbase.columns.mapping" =

":key,Info:IpAddress,Info:Url,Info:UserBrowser,Info:OS,Info:AccressTime")
TBLPROPERTIES ("hbase.table.name" = "LogTable");

上面分别创建了hive以及hbase对应的表LogTable

1.查看hive表

show tables;

我们看到创建hive表

2. 查看hbase表

1. list

```
hbase(main):008:0> list
TABLE
LogTable
1 row(s) in 0.1240 seconds
=> ["LogTable"]
```



上图我们已经我们就实现了在插入hbase的同时hive同样能够查询得到。

这里我们小小的展示一下:

```
    hbase(main):010:0> put 'LogTable','192.168.1.10
        http://www.aboutyun.com/thread-8472-1-1.html
        123','Info:IpAddress','192.168.1.10'
        0 row(s) in 0.6850 seconds

    3.
```

hbase(main):010:0> put 'LogTable','192.168.1.10 http://www.aboutyun.com/t| 472-1-1.html 123','Info:IpAddress','192.168.1.10' 0 row(s) in 0.6850 seconds



验证结果:

hbase验证

```
ROW COLUMN+CELL

192.168.1.10 http:// column=Info:IpAddress, timestamp=1406908690106, value=192.

www.aboutyun.com/thr 168.1.10

ead-8472-1-1.html 12

3

1 row(s) in 0.1050 seconds
```

```
hbase(main):012:0> scan 'LogTable'
ROW COLUMN+CELL
192.168.1.10 http://www.abouty column=Info:IpAddress, timestamp=1406908690106, value=192.168.1.10
un.com/thread-8472-1-1.html 12
3
1 row(s) in 0.1650 seconds
```

上图红字部分为RowKey

hive验证:

hive> select * from logtable; OK 192.168.1.10 http://www.aboutyun.com/thread-8472-1-1.html 123 192.168.1.10

NULL NULL NULL NULL

Time taken: 3.024 seconds, Fetched: 1 row(s)

这个成功之后,我们剩下的工作就是清洗插入,然后hive只写简单的sql就能统计了

本文链接:

http://www.aboutyun.com/thread-8597-1-1.html



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