HBase分布式数据库安装

## 1. 对主机、用户、目录、软件的规划

### 1.1. 主机规划

|  |  |  |  |
| --- | --- | --- | --- |
|  | djt11/192.168.137.21 | djt12/192.168.137.22 | djt13/192.168.137.23 |
| HMaster | 是 | 是 | 否 |
| HRegionServer | 是 | 是 | 是 |

### 1.2. 软件规划

|  |  |  |  |
| --- | --- | --- | --- |
| 软件 | 版本 | 位数 | 说明 |
| jdk | java version "1.7.0\_45" | 64-Bit |  |
| centos | centos7 | 64-Bit |  |
| zookeeper | zookeeper-3.4.8 |  | 稳定版 |
| hadoop | hadoop-2.6.5 |  | 稳定版 |
| hbase | hadoop-1.2.6 |  | 稳定版 |

### 1.3. 用户规划

|  |  |  |
| --- | --- | --- |
| 节点名称 | 用户组 | 用户 |
| djt11 | hadoop | hadoop |
| djt12 | hadoop | hadoop |
| djt13 | hadoop | hadoop |

### 1.4. 目录规划

|  |  |
| --- | --- |
| 名称 | 路径 |
| 所有软件目录 | /home/hadoop/app/ |
| 所有数据和日志目录 | /home/hadoop/data/ |

## 2. Ansible 批量搭建 Hbase 环境

1. 在一台机器上指定软件目录

* [root@slave1 tar]# ls  
  apache-hive-1.2.1-bin-spark1.5.tar.gz jdk-7u45-linux-x64.tar.gz  
  bigdata.sh spark-1.5.3-SNAPSHOT-bin-hadoop2-without-hive.tgz  
  hadoop-2.6.5.tar.gz spark-1.6.1-bin-hadoop2.6.tar.gz  
  hadoop-conf zoo.cfg  
  jdk1.7.0\_71.tar zookeeper-3.4.8.tar.gz

1. ansible bigdata 配置文件目录

* [root@slave1 ansible]# tree bigdata/  
  bigdata/  
  ├── bigdata.yml  
  ├── group\_vars  
  │   └── bigdata  
  ├── hosts  
  └── roles  
   ├── bigdata  
   │   ├── handlers  
   │   │   └── main.yml  
   │   └── tasks  
   │   └── main.yml  
   ├── bigdata-conf  
   │   └── tasks  
   │   └── main.yml  
   ├── bigdata-delete  
   │   └── tasks  
   │   └── main.yml  
   └── hbase  
   └── tasks  
   └── main.yml

1. hbase

* ---  
    
  - name: Copy Hbase 包  
   copy:  
   src: '{{ srcdir }}/{{ hbase }}'  
   dest: /tmp/{{ hbase }}  
    
  - unarchive:  
   src: '/tmp/{{ hbase }}'  
   dest: '{{ appdir }}'  
   remote\_src: True  
    
  - file:  
   path: '{{ appdir }}/hbase-1.2.6'  
   state: directory  
   owner: hadoop  
   group: hadoop  
   recurse: yes  
    
  - name: 复制 hbase-conf 文件夹  
   copy:  
   src: '{{ hbaseconf }}/{{ item.src }}'  
   dest: '{{ item.dest }}'  
   with\_items:  
   - { src: 'backup-masters', dest: '{{ hbasehome }}' }  
   - { src: 'hbase-env.sh', dest: '{{ hbasehome }}' }  
   - { src: 'hbase-site.xml', dest: '{{ hbasehome }}' }  
   - { src: 'regionservers', dest: '{{ hbasehome }}' }  
    
  - name: 复制 hadoop 配置文件到 hbase conf文件夹  
   copy:  
   src: '{{ hadoopconf }}/{{ item.src }}'  
   dest: '{{ item.dest }}'  
   with\_items:  
   - { src: 'core-site.xml', dest: '{{ hbasehome }}' }  
   - { src: 'hdfs-site.xml', dest: '{{ hbasehome }}' }  
    
  - name: Copy profile  
   copy:  
   src: '{{ srcdir }}/bigdata.sh'  
   dest: /etc/profile.d/

## 3. 启动 Hadoop/Hbase 环境

1. djt11

* start-hbase.sh  
  [hadoop@djt11 ~]$ jps  
  13369 NameNode  
  13852 DFSZKFailoverController  
  31351 HRegionServer  
  13201 QuorumPeerMain  
  13708 JournalNode  
  31222 HMaster  
  13455 DataNode

1. djt12

* [hadoop@djt12 app]$ jps  
  12541 QuorumPeerMain  
  30451 Jps  
  13105 DFSZKFailoverController  
  12902 JournalNode  
  12689 NameNode  
  29762 HRegionServer  
  12773 DataNode  
  29871 HMaster

1. djt13

* [hadoop@djt13 ~]$ jps  
  25382 HRegionServer  
  25797 Jps  
  12776 JournalNode  
  12423 QuorumPeerMain  
  12648 DataNode

## hbase web ui

