**Chronos安装**

说明：

安装Chronos是在centos6.5上安装，并且以root超级用户登录安装，关闭防火墙。在安装时所有系统环境都需要与文档一致，其他版本不保证能安装成功。

环境：

* + Centos 6.5 64
  + JDK1.6
  + Zookeeper-3.4.4
  + Thritf-0.8.0
  + Hadoop-0.20.2
  + Maven

注意：内存需要在6G左右

环境变量

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| vi ~/.bashrc  export JAVA\_HOME=/usr/local/java  export JRE\_HOME=/usr/local/java/jre  export ZOOKEEPER\_HOME=/usr/local/zookeeper  export HBASE\_HOME=/usr/local/hbase  export HADOOP\_HOME=/usr/local/hadoop  export HADOOP\_CONF\_DIR=$HADOOP\_HOME/conf  export CLASSPATH=.:$JAVA\_HOME/lib:$JRE\_HOME/lib:$HBASE\_HOME/lib:$CLASSPATH  export PATH=$JAVA\_HOME/bin:$JRE\_HOME/bin:$HBASE\_HOME/bin:$HADOOP\_HOME/bin:$ZOOKEEPER\_HOME/bin:$PATH  按ESC健，输入:wq保护退出  source ~/.bashrc |

设置无密码登录

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| # ssh-keygen -t rsa（提示时敲3次回车）  # mv /root/.ssh/id\_rsa.pub /root/.ssh/authorized\_keys  # ssh master.chinaj.com uptime 注：测试配置是否正确，建议一定要执行，提示输入密码 |

JDK安装

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| 1）解压JDK  chmod +x jdk-6u45-linux-x64.bin  ./jdk-6u45-linux-x64.bin  mv jdk1.6.0\_45/ /usr/local/java  2）执行以下命令  update-alternatives --install /usr/bin/java java /usr/local/java/bin/java 300  update-alternatives --install /usr/bin/javac javac /usr/local/java/bin/javac 300  测试java  java -version |

Zookeeper安装

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| 下载地址：http://zookeeper.apache.org/releases.html  tar xzvf zookeeper-3.4.4.tar.gz  mv zookeeper-3.4.4 /usr/local/zookeeper  cd /usr/local/zookeeper/conf  cp zoo\_sample.cfg zoo.cfg  修改zoo.cfg文件   |  | | --- | | dataDir=/usr/local/zookeeper/data/zookeeper |   启动Zookeeper  cd /usr/local/zookeeper/bin  ./zkServer.sh start  ps aux显示   |  | | --- | |  |   启动成功  并且查看/usr/local/zookeeper/bin/zookeeper.out是否有报错 |

Thritf安装

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| yum update  yum -y install automake libtool flex bison pkgconfig gcc-c++ boost-devel libevent-devel zlib-devel python-devel ruby-devel crypto-utils openssl openssl-devel  wget http://archive.apache.org/dist/thrift/0.8.0/thrift-0.8.0.tar.gz  tar xzvf thrift-0.8.0.tar.gz  cd thrift-0.8.0/  ./configure  make  make install  安装成功  thrift –help |

Maven安装

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| wget http://repos.fedorapeople.org/repos/dchen/apache-maven/epel-apache-maven.repo -O /etc/yum.repos.d/epel-apache-maven.repo  yum -y install apache-maven |

Hadoop0.20.2安装

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| 下载地址：http://archive.apache.org/dist/hadoop/core/hadoop-0.22.0/  tar xzvf hadoop-0.20.2.tar.gz  mv hadoop-0.20.2 /usr/local/hadoop  cd /usr/local/hadoop/  mkdir logs  cd /usr/local/hadoop/conf/  修改hadoop-env.sh文件，添加JAVA环境并保存退出  vi hadoop-env.sh   |  | | --- | |  |   修改core-site.xml配置并保存退出  vi core-site.xml   |  | | --- | | <configuration>  <property>  <name>fs.default.name</name>  <value>hdfs://localhost:9000</value>  </property>  </configuration> |   修改hdfs-site.xml配置并保存退出  vi hdfs-site.xml   |  | | --- | | <configuration>  <property>  <name>dfs.replication</name>  <value>1</value>  </property>  </configuration> |   修改mapred-site.xml配置并保存退出  vi mapred-site.xml   |  | | --- | | <configuration>  <property>  <name>mapred.job.tracker</name>  <value>localhost:9001</value>  </property>  </configuration> |   初始化数据  /usr/local/hadoop/bin/hadoop namenode -format  启动hadoop  cd /usr/local/hadoop/bin/  ./start-all.sh  启动时显示   |  | | --- | | starting namenode, logging to /usr/local/hadoop/bin/../logs/hadoop-root-namenode-localhost.localdomain.out  localhost: starting datanode, logging to /usr/local/hadoop/bin/../logs/hadoop-root-datanode-localhost.localdomain.out  localhost: starting secondarynamenode, logging to /usr/local/hadoop/bin/../logs/hadoop-root-secondarynamenode-localhost.localdomain.out  starting jobtracker, logging to /usr/local/hadoop/bin/../logs/hadoop-root-jobtracker-localhost.localdomain.out  localhost: starting tasktracker, logging to /usr/local/hadoop/bin/../logs/hadoop-root-tasktracker-localhost.localdomain.out |   查看启动是否成功  ps aux显示结果   |  | | --- | |  |   在查看日志是否有报错  cd /usr/local/hadoop/logs |

Hbase安装

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| wget ftp://ftp.metu.edu.tr/pub/mirrors/ftp.apache.org/hbase/hbase-0.94.3/hbase-0.94.3.tar.gz  tar xzvf hbase-0.94.3-hadoop1-bin.tar.gz  mv hbase-0.94.3-hadoop1 /usr/local/hbase  cd /usr/local/hbase/lib  rm hadoop-core-1.0.4.jar  cp /usr/local/hadoop/hadoop-0.20.2-core.jar /usr/local/hbase/lib  cd /usr/local/hbase/conf/  vi hbase-env.sh  修改 JAVA\_HOME：   |  | | --- | | # export JAVA\_HOME=/usr/java/jdk1.6.0/  export JAVA\_HOME=/usr/local/java  # export HBASE\_MANAGES\_ZK=true  export HBASE\_MANAGES\_ZK=false |   修改HBase 使用zookeeper的方式：  vi hbase-site.xml   |  | | --- | | <configuration>  <property>  <name>hbase.rootdir</name>  <value>hdfs://localhost:9000/hbase</value>  </property>  <property>  <name>hbase.cluster.distributed</name>  <value>true</value>  </property>  <property>  <name>dfs.replication</name>  <value>1</value>  </property>  <property>  <name>hbase.zookeeper.quorum</name>  <value>127.0.0.1</value>  </property>  <property>  <name>hbase.zookeeper.property.dataDir</name>  <value>/usr/local/zookeeper/data/zookeeper</value>  </property>  <property>  <name>hbase.zookeeper.property.clientPort</name>  <value>2181</value>  </property>  <property>  <name>zokkeper.session.timeout</name>  <value>60000</value>  </property>  <property>  <name>hbase.client.keyvalue.maxsize</name>  <value>10487560</value>  </property>  </configuration> |   启动Hbase  cd /usr/local/hbase/bin  ./start-hbase.sh  显示启动   |  | | --- | |  |   ps aux   |  | | --- | |  |   启动成功。  并且查看进入logs目录查看日志是否有报错。  cd /usr/local/hbase/logs |

Chronos服务端

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| wget https://github.com/XiaoMi/chronos/archive/master.zip  unzip master  mv chronos-master /usr/local/chronos  进入chronos-server目录，通过mvn clean package -DskipTests编译源码。  cd /usr/local/chronos/chronos-server  mvn clean package -DskipTests    编译成功  进入target/chronos-server-1.2.0-SNAPSHOT里面的conf目录，编辑chronos.cfg，填写依赖的ZooKeeper配置  zkQuorum=127.0.0.1:2181  启动chronos-server服务  cd /usr/local/chronos/chronos-server/target/chronos-server-1.2.0-SNAPSHOT/bin  chmod +x chronos.sh  ./chronos.sh  显示启动   |  | | --- | |  |   这里，启动另一个SSH窗口进行以下步骤  ps aux   |  | | --- | |  |   启动成功。  注意启动顺序：zookeeper－hadoop－hbase－chronos.sh  停止所有服务   |  | | --- | | Hbase没有停止脚本用kill关闭掉（kill -9 服务号）  /usr/local/zookeeper/bin/zkServer.sh stop  /usr/local/hadoop/bin/stop-all.sh |   为安装chronos客户端下载maven库  cd /usr/local/chronos/chronos-server  mvn install |

Chronos客户端

进入chronos-client目录，修改pom.xml（cd /usr/local/chronos/chronos-client）

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| 第一、修改地方  <groupId>com.xiaomi.infra</groupId>  <artifactId>chronos-client</artifactId>  <version>1.0.1-thrift0.8.0</version>  <packaging>jar</packaging>  <name>chronos-client</name>  第二、修改地方（红色是添加部分）  <dependencies>  <dependency>  <groupId>log4j</groupId>  <artifactId>log4j</artifactId>  <version>1.2.15</version>  <exclusions>  <exclusion>  <groupId>javax.jms</groupId>  <artifactId>jms</artifactId>  </exclusion>  <exclusion>  <groupId>com.sun.jmx</groupId>  <artifactId>jmxri</artifactId>  </exclusion>  <exclusion>  <groupId>com.sun.jdmk</groupId>  <artifactId>jmxtools</artifactId>  </exclusion>  </exclusions>  </dependency>  第三、修改地方  <plugin>  <groupId>org.apache.thrift.tools</groupId>  <artifactId>maven-thrift-plugin</artifactId>  <version>0.1.11</version>  第四、进行编译  mvn clean package -DskipTests  编译后显示   |  | | --- | |  |   第五、测试  执行以下命令测试  mvn exec:java -Dexec.mainClass="com.xiaomi.infra.chronos.client.ChronosClient" -Dexec.args="127.0.0.1:2181 default-cluster" |