

Linux集群搭建

Linux基础配置

修改主机名

```
1  master:
2  hostnamectl set-hostname master
3  bash
4
5  slave1
6  hostnamectl set-hostname slave1
7  bash
8
9  slave2:
10 hostnamectl set-hostname slave2
11 bash
```

修改IP地址

```
1  在master、slave1、slave2上分别进行
2  vi /etc/sysconfig/network-scripts/ifcfg-ens33
3  将以下内容进行修改
4  BOOTPROTO="static"
5  ONBOOT="yes"
6  添加以下内容
7  IPADDR=192.168.10.138
8  NETMASK=255.255.255.0
9  GATEWAY=192.168.10.2
10 DNS1=198.168.10.2
11 DNS2=114.114.114.114
```

配置hosts域名解析

```
1  vi /etc/hosts
2  192.168.10.138 master
3  192.168.10.139 slave1
4  192.168.10.140 slave2
5
6  scp /etc/hosts slave1:/etc/
7  scp /etc/hosts slave2:/etc/
```

关闭防火墙

```
1  systemctl stop firewalld
2  systemctl disable firewalld
```

重启网络

```
1 service network restart
```

配置SSH

```
1 ssh-keygen -t rsa
2 ssh-copy-id -i master
3 ssh-copy-id -i slave1
4 ssh-copy-id -i slave2
```

Java

卸载openjdk

```
1 rpm -qa |grep openjdk
2 通过rpm -e --nodeps “查询出来的rpm包” 去卸载
```

安装Java

解压并命名

```
1 tar -zxvf /opt/software/jdk-8u162-linux-x64.tar.gz -C /opt/module/
2 mv /opt/module/jdk-8u162-linux-x64 /opt/module/java
```

环境变量

```
1 vi /root/.bash_profile
2 export JAVA_HOME=/opt/module/java
3 export PATH=$PATH:$JAVA_HOME/bin
4
5 source /root/.bash_profile
6 java -version
7
8 scp -r /opt/module/java slave1:/opt/module/
9 scp -r /opt/module/java slave2:/opt/module/
10 scp /root/.bash_profile slave1:/root/
11 scp /root/.bash_profile slave2:/root/
```

Hadoop完全分布式

解压并命名

```
1 tar -zxvf /opt/software/hadoop-2.7.1.tar.gz -C /opt/module
2 mv /opt/module/hadoop-2.7.1 /opt/module/hadoop
```

环境变量

```
1 vi /root/.bash_profile
2 export HADOOP_HOME=/opt/module/hadoop
3 export PATH=$PATH:$HADOOP_HOME/bin:$HADOOP_HOME/sbin
4
5 (3. X版本, 如果是root账号必须加以下内容)
6 export HDFS_NAMENODE_USER=root
7 export HDFS_DATANODE_USER=root
8 export HDFS_SECONDARYNAMENODE_USER=root
9 export YARN_RESOURCEMANAGER_USER=root
10 export YARN_NODEMANAGER_USER=root
11
12 source /root/.bash_profile
```

配置文件

hadoop-env.sh

```
1 vi /opt/module/hadoop/etc/hadoop/hadoop-env.sh
2
3 export JAVA_HOME=/opt/module/java
```

core-site.xml

```
1 vi /opt/module/hadoop/etc/hadoop/core-site.xml
2
3 <property>
4   <!--namenode的URL地址(必须写)-->
5   <name>fs.defaultFS</name>
6   <value>hdfs://master:9000</value>
7 </property>
8 <property>
9   <!--SequenceFiles中使用的读/写缓冲区的大小, 单位为KB, 131072KB默认为64M(该配置可选)-->
10  <name>io.file.buffer.size</name>
11  <value>131072</value>
12 </property>
13 <property>
14   <!--hadoop临时文件路径(可选配置)-->
15   <name>hadoop.tmp.dir</name>
16   <value>/opt/module/hadoop/dfs/tmp</value>
17 </property>
```

hdfs-site.xml

```
1 vi /opt/module/hadoop/etc/hadoop/hdfs-site.xml
2
3 <property>
4   <!--hadoop的副本数量, 默认为3(必须写)-->
5   <name>dfs.replication</name>
6   <value>3</value>
7 </property>
8 <property>
9   <!--在本地文件系统所在的NameNode的存储空间和持续化处理日志(必须写)-->
10  <name>dfs.namenode.name.dir</name>
11  <value>/opt/module/hadoop/dfs/name</value>
```

```

12     </property>
13     <property>
14         <!--在本地文件系统所在的DataNode的存储空间和持续化处理日志(必须写)-->
15         <name>dfs.datanode.data.dir</name>
16         <value>/opt/module/hadoop/dfs/data</value>
17     </property>
18     <property>
19         <!--设置namenode线程，处理datanode发出rpc请求数量（可选配置）-->
20         <name>dfs.namenode.handler.count</name>
21         <value>100</value>
22     </property>

```

mapred-site.xml

```

1  cp /opt/module/hadoop/etc/hadoop/mapred-site.xml.template /opt/module/hadoop/etc/hadoop/mapred-
    site.xml （3.X版本不用）
2  vi /opt/module/hadoop/etc/hadoop/mapred-site.xml
3
4  <property>
5      <name>mapreduce.framework.name</name>
6      <value>yarn</value>
7  </property>

```

yarn-site.xml

```

1  vi /opt/module/hadoop/etc/hadoop/yarn-site.xml
2
3  <property>
4      <name>yarn.nodemanager.aux-services</name>
5      <value>mapreduce_shuffle</value>
6  </property>
7  <property>
8      <name>yarn.resourcemanager.address</name>
9      <value>master:8032</value>
10 </property>
11 <property>
12     <name>yarn.resourcemanager.scheduler.address</name>
13     <value>master:8030</value>
14 </property>
15 <property>
16     <name>yarn.resourcemanager.resource-tracker.address</name>
17     <value>master:8031</value>
18 </property>

```

workers

```

1  （3.X版本配workers）
2  vi /opt/module/hadoop/etc/hadoop/workers
3
4  master
5  slave1
6  slave2

```

slaves

```
1 (2.X版本配slaves)
2 vi /opt/module/hadoop/etc/hadoop/slaves
3
4 master
5 slave1
6 slave2
```

分发文件

```
1 scp -r /opt/module/hadoop slave1:/opt/module/
2 scp -r /opt/module/hadoop slave2:/opt/module/
3 scp /root/.bash_profile slave1:/root
4 scp /root/.bash_profile slave2:/root
```

格式化

```
1 hdfs namenode -format
```

启动集群

```
1 start-all.sh
```

Web端

```
1 2.X版本: master:50070
2 3.x版本: master:9870
```

MySQL数据库

安装MySQL

解压安装包

```
1 mkdir mysql_lib
2 tar -xvf mysql-5.7.28-1.el7.x86_64.rpm-bundle.tar -C mysql_lib/
```

卸载mariadb

```
1 sudo rpm -qa | grep mariadb | xargs sudo rpm -e --nodeps
```

安装Mysql依赖

```
1 cd mysql_lib
2 sudo rpm -ivh mysql-community-common-5.7.28-1.el7.x86_64.rpm
3 sudo rpm -ivh mysql-community-libs-5.7.28-1.el7.x86_64.rpm
4 sudo rpm -ivh mysql-community-libs-compat-5.7.28-1.el7.x86_64.rpm
```

安装mysql-client

```
1 sudo rpm -ivh mysql-community-client-5.7.28-1.el7.x86_64.rpm
```

安装mysql-server

```
1 sudo rpm -ivh mysql-community-server-5.7.28-1.el7.x86_64.rpm
2
3 若出现需要依赖
4 net-tools 被 mysql-community-server-8.0.18-1.el7.x86_64 需要
5 /usr/bin/perl 被 mysql-community-server-8.0.18-1.el7.x86_64 需要
6 perl(Getopt::Long) 被 mysql-community-server-8.0.18-1.el7.x86_64 需要
7 perl(strict) 被 mysql-community-server-8.0.18-1.el7.x86_64 需要
8 则用yum源安装如下依赖包
9
10 yum install -y perl-Module-Install.noarch
11 yum install net-tools
```

启动mysql

```
1 systemctl start mysqld
```

查看mysql密码

```
1 cat /var/log/mysqld.log | grep password
```

配置MySQL

```
1 mysql -uroot -p'password'
2 set password=password("Qs23=zs32");
3 set global validate_password_policy=0;
4 set global validate_password_length=4;
5 set password=password("123456");
6 use mysql;
7 select user, host from user;
8 update user set host="%" where user="root";
9 flush privileges;
10 quit;
```

Hive数仓组件

解压并命名

```
1 tar -zxvf /opt/software/apache-hive-2.0.0-bin.tar.gz -C /opt/module
2 mv /opt/module/apache-hive-2.0.0-bin /opt/module/hive
```

环境变量

```
1 vi /root/.bash_profile
2 export HIVE_HOME=/opt/module/hive
3 export PATH=$PATH:$HIVE_HOME/bin
4
5 source /root/.bash_profile
```

驱动包

```
1 cp mysql-connector-java-5.1.27-bin.jar /opt/module/hive/lib/
```

配置文件

```
1 新建一个hive-site.xml
2 vi /opt/module/hive/conf/hive-site.xml
3
4 <configuration>
5 <property>
6 <!--连接数据库URL(必选参数)-->
7 <name>javax.jdo.option.ConnectionURL</name>
8 <value>jdbc:mysql://master:3306/hive?createDatabaseIfNotExist=true&useSSL=false</value>
9 </property>
10 <property>
11 <!--连接数据驱动(必选参数)-->
12 <name>javax.jdo.option.ConnectionDriverName</name>
13 <value>com.mysql.jdbc.Driver</value>
14 </property>
15 <property>
16 <!--数据库连接用户名(必选参数)-->
17 <name>javax.jdo.option.ConnectionUserName</name>
18 <value>root</value>
19 </property>
20 <property>
21 <!--数据库连接密码(必选参数)-->
22 <name>javax.jdo.option.ConnectionPassword</name>
23 <value>123456</value>
24 </property>
25 <property>
26 <!--验证元数据的一致性，默认为false(可选参数)-->
27 <name>hive.metastore.schema.validation</name>
28 <value>false</value>
29 </property>
30 <property>
31 <!--指定HDFS内hive数据临时文件存放目录,启动hive>, HDFS自动创建(可选参数)-->
32 <name>hive.exec.scratchdir</name>
33 <value>/hive/warehouse/tmp</value>
34 </property>
35 <property>
36 <!--指定HDFS内hive数据的存放目录，HDFS自动创建(可选参数)-->
37 <name>hive.metastore.warehouse.dir</name>
38 <value>/hive/warehouse/home</value>
39 </property>
40 <property>
41 <!--客户端显示当前数据库名称信息(可选参数)-->
42 <name>hive.cli.print.header</name>
```

```
43     <value>true</value>
44   </property>
45 </property>
46   <!--客户端显示当前数据库名称(可选参数)-->
47   <name>hive.cli.print.current.db</name>
48   <value>true</value>
49 </property>
50 <property>
51   <!--支持正则匹配(可选参数)-->
52   <name>hive.support.quoted.identifiers</name>
53   <value>none</value>
54 </property>
55 </configuration>
```

初始化

```
1  schematool -dbType mysql -initSchema
```

日志

```
1  在hive的conf下新建log4j.properties
2
3  log4j.rootLogger=WARN, CA
4  log4j.appender.CA=org.apache.log4j.ConsoleAppender
5  log4j.appender.CA.layout=org.apache.log4j.PatternLayout
6  log4j.appender.CA.layout.ConversionPattern=%-4r [%t] %-5p %c %x - %m%n
```

启动Hive

```
1  nohup hive --service metastore &
```

服务部署

```
1  cd $HADOOP_HOME/etc/hadoop
2  vi core-site.xml
3
4  <property>
5    <name>hadoop.proxyuser.root.hosts</name>
6    <value>*</value>
7  </property>
8  <property>
9    <name>hadoop.proxyuser.root.groups</name>
10   <value>*</value>
11 </property>
```



```
1 vi hive-site.xml
2
3 <!-- 指定hiveserver2连接的host -->
4 <property>
5     <name>hive.server2.thrift.bind.host</name>
6     <value>master</value>
7 </property>
8
9 <!-- 指定hiveserver2连接的端口号 -->
10 <property>
11     <name>hive.server2.thrift.port</name>
12     <value>10000</value>
13 </property>
```

```
1 hive --service hiveserver2 &
```

Zookeeper集群部署

解压并命名

```
1 tar -zxvf /opt/software/zookeeper-3.4.8.tar.gz -C /opt/module/
2 mv /opt/module/zookeeper-3.4.8 /opt/module/zookeeper
```

环境变量

```
1 vi /root/.bash_profile
2 export ZOOKEEPER_HOME=/opt/module/zookeeper
3 export PATH=$PATH:$ZOOKEEPER_HOME/bin
4
5 source /root/.bash_profile
```

配置文件

zoo.cfg

```
1 cp /opt/module/zookeeper/conf/zoo_sample.cfg /opt/module/zookeeper/conf/zoo.cfg
2 vi /opt/module/zookeeper/conf/zoo.cfg
3
4 修改datadir
5 dataDir=/opt/module/zookeeper/data
6 增加以下三列
7 server.1=master:2888:3888
8 server.2=slave1:2888:3888
9 server.3=slave2:2888:3888
```

myid

```
1 mkdir /opt/module/zookeeper/data
2 echo "1" > /opt/module/zookeeper/data/myid
```

分发文件

```
1  scp -r /opt/module/zookeeper slave1:/opt/module/
2  scp -r /opt/module/zookeeper slave2:/opt/module/
3  scp /root/.bash_profile slave1:/root/
4  scp /root/.bash_profile slave2:/root/
5
6  slave1上:
7  echo 2 > /opt/module/zookeeper/data/myid
8  source /root/.bash_profile
9
10 slave2上:
11 echo 3 > /opt/module/zookeeper/data/myid
12 source /root/.bash_profile
```

启动集群

```
1  分别在master、slave1、slave2上开集群
2  zkServer.sh start
```

HBase完全分布式

解压并命名

```
1  tar -zxvf /opt/software/hbase-1.2.1-bin.tar.gz -C /opt/module/
2  mv /opt/module/hbase-1.2.1-bin /opt/module/hbase
```

环境变量

```
1  vi /root/.bash_profile
2  export HBASE_HOME=/opt/module/hbase
3  export PATH=$PATH:$HBASE_HOME/bin
4
5  source /root/.bash_profile
```

配置文件

hbase-site.xml

```
1  vi /opt/module/hbase/conf/hbase-site.xml
2
3  <property>
4    <!--是否分布式部署（必选）-->
5    <name>hbase.cluster.distributed</name>
6    <value>true</value>
7  </property>
8  <property>
9    <!--hbase存放数据目录（必选）-->
10   <name>hbase.rootdir</name>
11   <value>hdfs://master:9000/hbase</value>
12 </property>
```

```
13 <property>
14 <!--zookeeper配置、日志等的存储位置（必选）-->
15 <name>hbase.zookeeper.property.dataDir</name>
16 <value>/opt/module/zookeeper/ZKdata</value>
17 </property>
18 <property>
19 <!--配置zk端口（必选）-->
20 <name>hbase.zookeeper.property.clientPort</name>
21 <value>2181</value>
22 </property>
23 <property>
24 <!--zookeeper地址（必选）-->
25 <name>hbase.zookeeper.quorum</name>
26 <value>master,slave1,slave2</value>
27 </property>
28 <property>
29 <!--设置hbase端口（必选）-->
30 <name>hbase.master.info.port</name>
31 <value>16010</value>
32 </property>
```

hbase-env.sh

```
1 vi /opt/module/hbase/conf/hbase-env.sh
2
3 export JAVA_HOME=/opt/module/java
4 export HBASE_MANAGES_ZK=false
```

regionservers

```
1 vi /opt/module/hbase/conf/regionservers
2
3 master
4 slave1
5 slave2
```

backup-master

```
1 可选
2 vi /opt/module/hbase/conf/backup-masters
3 slave1
```

分发

```
1 scp /root/.bash_profile slave1:/root/
2 scp /root/.bash_profile slave2:/root/
3
4 scp -r /opt/module/hbase slave1:/opt/module/
5 scp -r /opt/module/hbase slave2:/opt/module/
```

启动Hbase

```
1 start-hbase.sh
```

Phoenix部署

解压并命名

```
1 tar -zxvf phoenix-hbase-2.2-5.1.3-bin.tar.gz -C /opt/module
2 mv /opt/module/phoenix-hbase-2.2-5.1.3-bin /opt/module/phoenix
```

拷贝并分发server包

```
1 cp /opt/module/phoenix/phoenix-server-hbase-2.2-5.1.3.jar /opt/module/hbase/lib
2
3 scp /opt/module/hbase/lib/ root@slave1:/opt/module/hbase/lib/
4 scp /opt/module/hbase/lib/ root@slave2:/opt/module/hbase/lib/
```

配置环境变量

```
1 vim /root/.bash_profile
2 export PHOENIX_HOME=/opt/module/phoenix
3 export PHOENIX_CLASSPATH=$PHOENIX_HOME
4 export PATH=$PATH:$PHOENIX_HOME/bin
5
6 source /root/.bash_profile
```

连接Phoenix

```
1 /opt/module/phoenix/bin/sqlline.py master,slave1,slave2:2181
```

Spark集群

Spark完全分布式

解压并命名

```
1 tar -zxvf /opt/software/spark-2.0.0-bin-hadoop2.7.tgz -C /opt/module/
2 mv /opt/module/spark-2.0.0-bin-hadoop2.7 /opt/module/spark
```

配置文件

spark-env.sh

```
1 cp /opt/module/spark/conf/spark-env.sh.template /opt/module/spark/conf/spark-env.sh
2 vi /opt/module/spark/conf/spark-env.sh
3
4 # java位置
5 export JAVA_HOME=/opt/module/java
6 # master节点IP或域名
7 export SPARK_MASTER_IP=master
8 # worker内存大小
9 export SPARK_WORKER_MEMORY=1G
10 # Worker的cpu核数
11 SPARK_WORKER_CORES=1
12 # hadoop配置文件路径
13 export HADOOP_CONF_DIR=/opt/module/hadoop/etc/hadoop
```

slaves

```
1 cp /opt/module/spark/conf/slaves.template /opt/module/spark/conf/slaves
2 vi /opt/module/spark/conf/slaves
3
4 master
5 slave1
6 slave2
```

分发文件

```
1 scp -r /opt/module/spark slave1:/opt/module/
2 scp -r /opt/module/spark slave2:/opt/module/
```

启动集群

```
1 /opt/module/spark/sbin/start-all.sh
```

Spark On Yarn

解压并命名

```
1 tar -zxvf spark-3.0.0-bin-hadoop3.2.tgz -C /opt/module
2 mv spark-3.0.0-bin-hadoop3.2 spark-yarn
```

修改配置文件

yarn-site.xml

```

1 vi /opt/module/hadoop/etc/hadoop/yarn-site.xml
2
3 <!--是否启动一个线程检查每个任务正使用的物理内存量，如果任务超出分配值，则直接将其杀掉，默认是true
  -->
4 <property>
5     <name>yarn.nodemanager.pmem-check-enabled</name>
6     <value>>false</value>
7 </property>
8
9 <!--是否启动一个线程检查每个任务正使用的虚拟内存量，如果任务超出分配值，则直接将其杀掉，默认是true
  -->
10 <property>
11     <name>yarn.nodemanager.vmem-check-enabled</name>
12     <value>>false</value>
13 </property>

```

分发yarn-site.xml!!!!

spark-env.sh

```

1 cd /opt/module/spark-yarn/conf/
2 mv spark-env.sh.template spark-env.sh
3 vi spark-env.sh
4
5 export JAVA_HOME=/opt/module/java
6 YARN_CONF_DIR=/opt/module/hadoop/etc/hadoop

```

提交应用

```

1 bin/spark-submit --class org.apache.spark.examples.SparkPi --master yarn --deploy-mode
  cluster./examples/jars/spark-examples_2.12-3.0.0.jar 10

```

Flink On Yarn

解压并命名

```

1 tar -zxvf /opt/software/flink-1.13.0-bin-scala_2.12.tgz /opt/module
2 mv /opt/module/flink-1.13.0-bin-scala_2.12 /opt/module/flink

```

环境变量

```

1 vi /root/.bash_profile
2
3 export HADOOP_CONF_DIR=${HADOOP_HOME}/etc/hadoop
4 export HADOOP_CLASSPATH=`hadoop classpath`
5
6 source /root/.bash_profile

```

配置文件

```
1 vi /opt/module/flink/conf/flink-conf.yaml
2
3 jobmanager.memory.process.size: 1600m
4 taskmanager.memory.process.size: 1728m
5 taskmanager.numberOfTaskSlots: 8
6 parallelism.default: 1
```

Flume日志传输

解压并命名

```
1 tar -zxvf /opt/software/apache-flume-1.9.0-bin.tar.gz /opt/module
2 mv /opt/module/apache-flume-1.9.0-bin /opt/module/flume
```

配置文件

```
1 cp flume-env.sh.template flume-env.sh
2 vi /opt/module/flume/conf/flume-env.sh
3
4 export JAVA_HOME=/opt/module/java
```

分发

```
1 scp -r /opt/module/flume slave1:/opt/module/
2 scp -r /opt/module/flume slave2:/opt/module/
```

Kafka消息队列

解压并命名

```
1 tar -zxvf /opt/software/kafka_2.12-3.0.0.tgz /opt/module
2 mv /opt/module/kafka_2.12-3.0.0 /opt/module/kafka
```

配置文件

```
1 vi /opt/module/kafka/config/server.properties
2
3 # 需要修改的第一个参数
4 broker.id=1
5
6 # 默认删除topic功能是注释状态 可取消注释
7 delete.topic.enable=true
8
9 # kafka数据存放目录 默认存在tmp下 可以自定义到其他位置
10 log.dirs=/data/kafka-logs/
11
12 # zookeeper的连接地址
13 zookeeper.connect=master:2181,slave1:2181,slave2:2181
```

分发

```
1 scp -r /opt/module/kafka slave1:/opt/module/
2 scp -r /opt/module/kafka slave2:/opt/module/
```

修改配置文件

```
1 slave1上将broker.id改成2
2 slave2上将broker.id改成3
```

启动服务

```
1 /opt/module/kafka/bin/kafka-server-start.sh -daemon /opt/module/kafka/config/server.properties
```

ClickHouse单机部署

安装RPM

```
1 mv /opt/software/clickhouse /opt/module/
2 cd /opt/module/clickhouse
3 rpm -ivh *.rpm
```

配置文件

```
1 vi /etc/clickhouse-server/config.xml
2
3 修改listen_host
```

启动客户端

```
1 systemctl start clickhouse-server
2 systemctl status clickhouse-server
3
4 clickhouse-client --password 123456
```


Redis单机部署模式

解压并命名

```
1 tar -zxvf /opt/software/redis-7.0.5.tar.gz -C /opt/module
2 mv /opt/module/redis-7.0.5 /opt/module/redis
```

编译并安装

```
1 yum install gcc
2 cd /opt/module/redis/
3 make && make install
```

配置文件

```
1 vi /opt/module/redis/redis.conf
2
3 (修改以下参数)
4 daemonize yes
5 appendonly yes
6 bind master
7 (增加以下参数)
8 requirepass 123123
```

启动服务

```
1 redis-server /opt/module/redis/redis.conf
```

连接客户端

```
1 redis-cli -h master -p 6379
2 AUTH 123123
3
4 set key1 v1
5 get key1
```

MaxWell采集工具

部署基础

安装kafka和MySQL。

解压并命名

```
1 tar -zxvf /opt/software/maxwell-1.29.2.tar.gz -C /opt/module/
```

MySQL环境准备

1. 修改mysql的配置文件，开启MySQL Binlog设置

```
1 vi /etc/my.cnf
2 在[mysqld]模块下添加一下内容
3 server_id=1
4 log-bin=master
5 binlog_format=row
6 #binlog-do-db=test_maxwell
7
8 并重启Mysql服务
9 systemctl restart mysqld
10 登录mysql并查看是否修改完成
11 mysql> show variables like '%binlog%';
12 查看下列属性 binlog_format | ROW
```

2. 进入/var/lib/mysql目录，查看MySQL生成的binlog文件

```
1 cd /var/lib/mysql
2 master.000001
3 master.index
```

注：MySQL生成的binlog文件初始大小一定是154字节，然后前缀是log-bin参数配置的，后缀是默认从.000001，然后依次递增。除了binlog文件文件以外，MySQL还会额外生产一个.index索引文件用来记录当前使用的binlog文件。

初始化Maxwell元数据库

```
1 1. 在MySQL中建立一个maxwell库用于存储Maxwell的元数据
2
3 mysql> CREATE DATABASE maxwell;
4
5 2. 设置mysql用户密码安全级别
6
7 mysql> set global validate_password_length=4;
8
9 mysql> set global validate_password_policy=0;
10
11 3. 分配一个账号可以操作该数据库
12
13 mysql> GRANT ALL ON maxwell.* TO 'maxwell'@'%' IDENTIFIED BY '123456';
14
15 4. 分配这个账号可以监控其他数据库的权限
16
17 mysql> GRANT SELECT ,REPLICATION SLAVE , REPLICATION CLIENT ON *.* TO maxwell@'%';
18
19 5. 刷新mysql表权限
20
21 mysql> flush privileges;
```

Maxwell进程启动

```
1 bin/maxwell -user='maxwell' --password='123456' --host='master' -producer=stdout
```

Prometheus监控组件

Prometheus

```
1 tar -zxvf prometheus-2.29.1.linux-amd64.tar.gz -C /opt/module/
2 mv prometheus-2.29.1.linux-amd64/ prometheus
3
4 vim prometheus.yml
5 将localhost改为master
6 添加以下内容
7 - job_name: 'pushgateway'
8   static_configs:
9     - targets: ['master:9091']
10  labels:
11    instance: pushgateway
12
13
14 - job_name: 'node exporter'
15   static_configs:
16     - targets: ['master:9100', 'master:9100', 'master:9100']
```

Alertmanager

```
1 tar -zxvf alertmanager-0.23.0.linux-amd64.tar.gz -C /opt/module/
2 mv ../module/alertmanager-0.23.0.linux-amd64/ ../module/alertmanager
```

pushgateway

```
1 tar -zxvf pushgateway-1.4.1.linux-amd64.tar.gz -C /opt/module/
2 mv ../module/pushgateway-1.4.1.linux-amd64/ ../module/pushgateway
```

node_exporter

```
1 tar -zxvf node_exporter-1.2.2.linux-amd64.tar.gz -C /opt/module/
2 mv ../module/node_exporter-1.2.2.linux-amd64/ ../module/node_exporter
3 scp -r node_exporter/ root@slave1:/opt/module/
4 scp -r node_exporter/ root@slave2:/opt/module/
```

启动

```
1 nohup ./prometheus --config.file=prometheus.yml > ./prometheus.log 2>&1 &
2 nohup ./pushgateway --web.listen-address :9091 > ./pushgateway.log 2>&1 &
3 nohup ./alertmanager --config.file=alertmanager.yml > ./alertmanager.log 2>&1 &
```

Yml文件

```
1  # my global config
2  global:
3      scrape_interval: 15s # Set the scrape interval to every 15 seconds. Default is every 1 minute.
4      evaluation_interval: 15s # Evaluate rules every 15 seconds. The default is every 1 minute.
5      # scrape_timeout is set to the global default (10s).
6
7  # Alertmanager configuration
8  alerting:
9      alertmanagers:
10         - static_configs:
11             - targets:
12                 # - alertmanager:9093
13
14  # Load rules once and periodically evaluate them according to the global 'evaluation_interval'.
15  rule_files:
16      # - "first_rules.yml"
17      # - "second_rules.yml"
18
19  # A scrape configuration containing exactly one endpoint to scrape:
20  # Here it's Prometheus itself.
21  scrape_configs:
22      # The job name is added as a label `job=<job_name>` to any timeseries scraped from this config.
23      - job_name: "prometheus"
24
25        # metrics_path defaults to '/metrics'
26        # scheme defaults to 'http'.
27
28        static_configs:
29            - targets: ['master:9090']
30
31      - job_name: 'pushgateway'
32        static_configs:
33            - targets: ['master:9091']
34          labels:
35              instance: pushgateway
36
37      - job_name: 'node exporter'
38        static_configs:
39            - targets: ['master:9100', 'slave1:9100', 'slave2:9100']
40
```

Web端

```
1  192.168.10.138:9090
```

grafana

直接解压即可

