

Kafka 集群部署

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原文链接: <https://ld246.com/article/1551410299990>

来源网站: [链滴](#)

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一、基础环境

```
Servers:      192.168.255.128/129/130
JAVA:         r
m -qa | grep java &gt;&gt; java-1.8.0-openjdk-1.8.0.161-0.b14.el7_4.x86_64
Zookeeper:    h
tp://mirrors.hust.edu.cn/apache/zookeeper/zookeeper-3.4.11/zookeeper-3.4.11.tar.gz
Kafka:        ht
p://mirrors.shu.edu.cn/apache/kafka/1.1.0/kafka_2.12-1.1.0.tgz
```

二、环境部署

注：各节点均需部署

2.1 安装 JAVA、Zookeeper 及 Kafka

```
[root@host128 ~]# yum -y install java
wget http://mirrors.hust.edu.cn/apache/zookeeper/zookeeper-3.4.11/zookeeper-3.4.11.tar.gz
wget http://mirrors.shu.edu.cn/apache/kafka/1.1.0/kafka_2.12-1.1.0.tgz
tar -zxf kafka_2.12-1.1.0.tgz && mv kafka_2.12-1.1.0 /opt/kafka
tar -zxf zookeeper-3.4.11.tar.gz && mv zookeeper-3.4.11 /opt/zookeeper
```

2.2 修改 Zookeeper 配置

```
#添加集群配置 (server.0/1/2):
cat &&EOF&&/opt/zookeeper/conf/zoo.cfg
tickTime=2000
initLimit=10
syncLimit=5
dataDir=/data/zookeeper
clientPort=2181
server.128=192.168.255.128:2888:3888
server.129=192.168.255.129:2888:3888
server.130=192.168.255.130:2888:3888
EOF
```

2.3 Kafka 配置

```
#添加解析
cat &&EOF&&/etc/hosts
192.168.255.128 ost128
192.168.255.129 ost129
```

```
</span></span><span class="highlight-line"><span class="highlight-cl">192.168.255.130
ost130
</span></span><span class="highlight-line"><span class="highlight-cl">EOF
</span></span></code></pre>
<hr>
<h2 id="2-4-防火墙配置">2.4 防火墙配置</h2>
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">#zk:
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
firewall-cmd --permanent --add-port=2181/tcp #对cline端提供服务
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
firewall-cmd --permanent --add-port=2888/tcp #集群内机器通讯使用（Leader监听此端口）
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
firewall-cmd --permanent --add-port=3888/tcp #选举leader使用
</span></span><span class="highlight-line"><span class="highlight-cl">#kafka:
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
firewall-cmd --permanent --add-port=9092/tcp #Kafka监听端口
</span></span><span class="highlight-line"><span class="highlight-cl">#配置加载
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
firewall-cmd --reload
</span></span><span class="highlight-line"><span class="highlight-cl">注：
</span></span><span class="highlight-line"><span class="highlight-cl">#针对特定IP放开
问
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
firewall-cmd --permanent --add-rich-rule 'rule family=ipv4 source address=10.65.1.0/24 port
port=2181 protocol=tcp accept'
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
firewall-cmd --permanent --add-rich-rule 'rule family=ipv4 source address=10.65.1.0/24 port
port=2888 protocol=tcp accept'
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
firewall-cmd --permanent --add-rich-rule 'rule family=ipv4 source address=10.65.1.0/24 port
port=3888 protocol=tcp accept'
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
firewall-cmd --permanent --add-rich-rule 'rule family=ipv4 source address=10.65.1.0/24 port
port=9092 protocol=tcp accept'
</span></span></code></pre>
<hr>
<h4 id="注-各节点配置不同部分">注：各节点配置不同部分</h4>
<h2 id="2-5-Zk配置及启动测试">2.5 Zk 配置及启动测试</h2>
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">#创建zookeeper的myid文件，取IP地址D位作为ID
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
export ID="$(ip a|grep "inet "|grep -v "lo"|awk '{print$2}'|awk -F"/" '{print$1}'|awk -F"." '{prin
$NF}')"
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
mkdir /data/zookeeper && echo "${ID}" &gt; /data/zookeeper/myid
</span></span><span class="highlight-line"><span class="highlight-cl">#各节点依次执行
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
zkServer.sh start
</span></span></code></pre>
<hr>
<h2 id="2-6-Kafka配置及启动测试">2.6 Kafka 配置及启动测试</h2>
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">#修改broker.id为ID地址，不可大于reserved.broker.max.id（1000）
```

```
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
sed -i "/broker.id/ s/0/${ID}/g" /opt/kafka/config/server.properties
</span></span><span class="highlight-line"><span class="highlight-cl">各节点依次执行
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
/opt/kafka/bin/kafka-server-start.sh /opt/kafka/config/server.properties &
</span></span><span class="highlight-line"><span class="highlight-cl">...
</span></span><span class="highlight-line"><span class="highlight-cl">...
</span></span><span class="highlight-line"><span class="highlight-cl">[2018-04-17 21:43
32,246] INFO [/config/changes-event-process-thread]: Starting (kafka.common.ZkNodeChan
eNotificationListener$ChangeEventProcessThread)
</span></span><span class="highlight-line"><span class="highlight-cl">[2018-04-17 21:43
32,302] INFO Kafka version : 1.1.0 (org.apache.kafka.common.utils.AppInfoParser)
</span></span><span class="highlight-line"><span class="highlight-cl">[2018-04-17 21:43
32,302] INFO Kafka commitId : fdcf75ea326b8e07 (org.apache.kafka.common.utils.AppInfoPar
er)
</span></span><span class="highlight-line"><span class="highlight-cl">[2018-04-17 21:43
32,315] INFO [KafkaServer id=0] started (kafka.server.KafkaServer)
</span></span><span class="highlight-line"><span class="highlight-cl">## 启动成功
</span></span></code></pre>
<hr>
<h2 id="2-7-systemd配置">2.7 systemd 配置</h2>
<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">#Zookeeper
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
useradd zookeeper -U -d /opt/zookeeper/ -s /sbin/nologin
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
chown -R zookeeper.zookeeper /opt/zookeeper/
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
chown -R zookeeper.zookeeper /data/zookeeper/
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
cat &lt;&lt; "EOF"&gt;/lib/systemd/system/zookeeper.service
</span></span><span class="highlight-line"><span class="highlight-cl">[Unit]
</span></span><span class="highlight-line"><span class="highlight-cl">Description=Zook
eper service
</span></span><span class="highlight-line"><span class="highlight-cl">After=network.tar
et
</span></span><span class="highlight-line"><span class="highlight-cl">[Service]
</span></span><span class="highlight-line"><span class="highlight-cl">Type=forking
</span></span><span class="highlight-line"><span class="highlight-cl">Environment=ZH
ME=/opt/zookeeper
</span></span><span class="highlight-line"><span class="highlight-cl">Environment=ZO
_LOG_DIR=/opt/zookeeper
</span></span><span class="highlight-line"><span class="highlight-cl">ExecStart=/opt/z
ookeeper/bin/zkServer.sh start \
</span></span><span class="highlight-line"><span class="highlight-cl"> ${ZHOME}/conf/
oo.cfg
</span></span><span class="highlight-line"><span class="highlight-cl">ExecStop=/opt/z
ookeeper/bin/zkServer.sh stop
</span></span><span class="highlight-line"><span class="highlight-cl">Restart=always
</span></span><span class="highlight-line"><span class="highlight-cl">User=zookeeper
</span></span><span class="highlight-line"><span class="highlight-cl">Group=zookeeper
</span></span><span class="highlight-line"><span class="highlight-cl">[Install]
</span></span><span class="highlight-line"><span class="highlight-cl">WantedBy=multi-
ser.target
```

```

</span></span><span class="highlight-line"><span class="highlight-cl">EOF
</span></span><span class="highlight-line"><span class="highlight-cl">#Kafka
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
useradd kafka -U -d /opt/kafka/ -s /sbin/nologin
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
chown -R kafka.kafka /opt/kafka
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
mkdir /data/kafka-logs && chown -R kafka.kafka /data/kafka-logs/
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
cat &&"EOF"&>/lib/systemd/system/kafka.service
</span></span><span class="highlight-line"><span class="highlight-cl">[Unit]
</span></span><span class="highlight-line"><span class="highlight-cl">Description=Kafka
service
</span></span><span class="highlight-line"><span class="highlight-cl">After=network.tar
et
</span></span><span class="highlight-line"><span class="highlight-cl">[Service]
</span></span><span class="highlight-line"><span class="highlight-cl">Type=forking
</span></span><span class="highlight-line"><span class="highlight-cl">Environment=KH
ME=/opt/kafka
</span></span><span class="highlight-line"><span class="highlight-cl">ExecStart=/opt/ka
ka/bin/kafka-server-start.sh -daemon \
</span></span><span class="highlight-line"><span class="highlight-cl"> ${KHOME}/config
server.properties
</span></span><span class="highlight-line"><span class="highlight-cl">ExecStop=ExecSt
p=/opt/kafka/bin/kafka-server-stop.sh
</span></span><span class="highlight-line"><span class="highlight-cl">Restart=always
</span></span><span class="highlight-line"><span class="highlight-cl">User=kafka
</span></span><span class="highlight-line"><span class="highlight-cl">Group=kafka
</span></span><span class="highlight-line"><span class="highlight-cl">[Install]
</span></span><span class="highlight-line"><span class="highlight-cl">WantedBy=multi-
ser.target
</span></span><span class="highlight-line"><span class="highlight-cl">EOF
</span></span><span class="highlight-line"><span class="highlight-cl">#启动服务及开机
动配置
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
systemctl start zookeeper && systemctl enable zookeeper
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
systemctl start kafka && systemctl enable kafka
</span></span></code></pre>

```

<hr>

<h3 id="三-测试">三、测试</h3>

<hr>

```

<pre><code class="highlight-chroma"><span class="highlight-line"><span class="highlight-cl">#生产者启动:
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host128 ~]
/opt/kafka/bin/kafka-console-producer.sh --broker-list 192.168.255.128:9092,192.168.255.12
:9092,192.168.255.2 --topic test
</span></span><span class="highlight-line"><span class="highlight-cl">&&test  ##
测试消息输入
</span></span><span class="highlight-line"><span class="highlight-cl">&&
</span></span><span class="highlight-line"><span class="highlight-cl">#消费者启动:
</span></span><span class="highlight-line"><span class="highlight-cl">[root@host129 ~]
/opt/kafka/bin/kafka-console-consumer.sh --bootstrap-server 192.168.255.128:9092,192.168
255.129:9092,192.168.255.130:9092 --topic test

```

```
</span></span><span class="highlight-line"><span class="highlight-cl">test    ## 消息输
```

```
</span></span></code></pre>  
<hr>
```