目录

[1. 环境准备](#_Toc16637_WPSOffice_Level1) [1](#_Toc16637_WPSOffice_Level1)

[(1) JDK1.8的环境](#_Toc19400_WPSOffice_Level2) [1](#_Toc19400_WPSOffice_Level2)

[(2) 创建kafka用户并进入其家目录](#_Toc4968_WPSOffice_Level2) [2](#_Toc4968_WPSOffice_Level2)

[(3) 下载安装包](#_Toc31458_WPSOffice_Level2) [2](#_Toc31458_WPSOffice_Level2)

[(4) 解压并进入目录](#_Toc19026_WPSOffice_Level2) [2](#_Toc19026_WPSOffice_Level2)

[2. 安装模式选择](#_Toc19400_WPSOffice_Level1) [2](#_Toc19400_WPSOffice_Level1)

[ kafka单机单broker](#_Toc18330_WPSOffice_Level2) [2](#_Toc18330_WPSOffice_Level2)

[(1) 修改配置文件](#_Toc21869_WPSOffice_Level2) [2](#_Toc21869_WPSOffice_Level2)

[(2) 启动自带zookeeper服务并查看启动情况](#_Toc422_WPSOffice_Level2) [2](#_Toc422_WPSOffice_Level2)

[(3) 启动kafka单broker并查看运行情况](#_Toc2003_WPSOffice_Level2) [2](#_Toc2003_WPSOffice_Level2)

[ kafka单机多broker](#_Toc28912_WPSOffice_Level2) [2](#_Toc28912_WPSOffice_Level2)

[(1) 为每个broker准备一份配置文件](#_Toc11804_WPSOffice_Level2) [2](#_Toc11804_WPSOffice_Level2)

[(2) 分别修改每个配置文件信息](#_Toc2748_WPSOffice_Level2) [2](#_Toc2748_WPSOffice_Level2)

[(3) 启动自带zookeeper服务](#_Toc32606_WPSOffice_Level2) [2](#_Toc32606_WPSOffice_Level2)

[(4) 依次启动多个broker](#_Toc27941_WPSOffice_Level2) [2](#_Toc27941_WPSOffice_Level2)

[ kafka集群](#_Toc16185_WPSOffice_Level2) [3](#_Toc16185_WPSOffice_Level2)

[(1) 修改所有主机的server.properties文件](#_Toc15217_WPSOffice_Level2) [3](#_Toc15217_WPSOffice_Level2)

[(2) 启动所有主机的zookeeper服务](#_Toc24928_WPSOffice_Level2) [3](#_Toc24928_WPSOffice_Level2)

[(3) 启动所有主机的kafka服务](#_Toc2563_WPSOffice_Level2) [3](#_Toc2563_WPSOffice_Level2)

[3. 验证测试](#_Toc4968_WPSOffice_Level1) [4](#_Toc4968_WPSOffice_Level1)

[(1) 创建并查看topic](#_Toc16948_WPSOffice_Level2) [4](#_Toc16948_WPSOffice_Level2)

[(2) 生产消息](#_Toc16129_WPSOffice_Level2) [4](#_Toc16129_WPSOffice_Level2)

[(3) 消费消息](#_Toc25966_WPSOffice_Level2) [4](#_Toc25966_WPSOffice_Level2)

[(4) 动态演示](#_Toc13530_WPSOffice_Level2) [4](#_Toc13530_WPSOffice_Level2)

### 环境准备

1. JDK1.8的环境
2. 创建kafka用户并进入其家目录
3. 下载安装包
4. 解压并进入目录

|  |
| --- |
| [root@node1 ~]# java -version  java version "1.8.0\_181"  Java(TM) SE Runtime Environment (build 1.8.0\_181-b13)  Java HotSpot(TM) 64-Bit Server VM (build 25.181-b13, mixed mode)  [root@node1 ~]# useradd -m kafka ; cd /home/kafka  [root@node1 kafka]# wget http://mirrors.hust.edu.cn/apache/kafka/2.0.0/kafka\_2.11-2.0.0.tgz  100%[=======================>] 55,751,827 1.51MB/s in 38s  [root@node1 kafka]# tar xf kafka\_2.11-2.0.0.tgz && mv kafka\_2.11-2.0.0 kafka && cd kafka |

### 安装模式选择

#### kafka单机单broker

1. 修改配置文件
2. 启动自带zookeeper服务并查看启动情况
3. 启动kafka单broker并查看运行情况

|  |
| --- |
| [root@node2 kafka]# sed -i '20alisteners = PLAINTEXT://localhost:9092' config/server.properties  [root@node1 kafka]# ./bin/zookeeper-server-start.sh -daemon config/zookeeper.properties && netstat -anpl | grep 2181  tcp6 0 0 :::2181 :::\* LISTEN 54563/java  [root@node1 kafka]# ./bin/kafka-server-start.sh -daemon config/server.properties && netstat -anpl | grep 9092  tcp6 0 0 127.0.0.1:9092 :::\* LISTEN 54888/java  tcp6 0 0 127.0.0.1:9092 127.0.0.1:38860 ESTABLISHED 54888/java  tcp6 0 0 127.0.0.1:38860 127.0.0.1:9092 ESTABLISHED 54888/java |

#### kafka单机多broker

1. 为每个broker准备一份配置文件
2. 分别修改每个配置文件信息

* broker.id=分别为0、1、2
* listeners = PLAINTEXT://localhost:端口号分别为9092、9093、9094
* log.dirs=分别为/tmp/kafka-logs、/tmp/kafka-logs1、/tmp/kafka-log2

1. 启动自带zookeeper服务
2. 依次启动多个broker

|  |
| --- |
| [root@node1 kafka]# cp config/server.properties config/server1.properties  [root@node1 kafka]# cp config/server.properties config/server2.properties  [root@node1 kafka]# vim config/server.properties  [root@node1 kafka]# vim config/server1.properties  [root@node1 kafka]# vim config/server2.properties  [root@node1 kafka]# ./bin/zookeeper-server-start.sh -daemon config/zookeeper.properties  [root@node1 kafka]# ./bin/kafka-server-start.sh -daemon config/server.properties  [root@node1 kafka]# netstat -anpl | grep 9092  tcp6 0 0 127.0.0.1:9092 :::\* LISTEN 57283/java  tcp6 0 0 127.0.0.1:38886 127.0.0.1:9092 ESTABLISHED 57283/java  tcp6 0 0 127.0.0.1:9092 127.0.0.1:38886 ESTABLISHED 57283/java  [root@node1 kafka]# ./bin/kafka-server-start.sh -daemon config/server1.properties  [root@node1 kafka]# netstat -anpl | grep 9093  tcp6 0 0 127.0.0.1:9093 :::\* LISTEN 57626/java  [root@node1 kafka]# ./bin/kafka-server-start.sh -daemon config/server2.properties  [root@node1 kafka]# netstat -anpl | grep 9094  tcp6 0 0 127.0.0.1:9094 :::\* LISTEN 57966/java  tcp6 0 0 127.0.0.1:35228 127.0.0.1:9094 ESTABLISHED 57283/java  tcp6 0 0 127.0.0.1:9094 127.0.0.1:35228 ESTABLISHED 57966/java |

#### kafka集群

前提：kafka集群所有主机都要完成[环境准备](#_环境准备)

1. 修改所有主机的server.properties文件

* broker.id=分别为0、1、2
* listeners = PLAINTEXT://localhost:端口号分别为9092、9093、9094
* zookeeper.connect=192.168.88.10:2181,192.168.88.12:2181,192.168.88.13:2181

注意：所有主机zookeeper.connect值相同，ip:2181，中间用英文逗号隔开

1. 启动所有主机的zookeeper服务
2. 启动所有主机的kafka服务

注意：nodex表示所有主机都要执行，node1/2/3只需要在其中一个节点执行

|  |
| --- |
| [root@nodex kafka]# vim config/server.properties  [root@nodex kafka]# ./bin/zookeeper-server-start.sh -daemon config/zookeeper.properties && netstat -anpl | grep 2181  tcp6 0 0 :::2181 :::\* LISTEN 59624/java  [root@node1 kafka]# ./bin/kafka-server-start.sh -daemon config/server.properties && netstat -anpl | grep 9092  tcp6 0 0 127.0.0.1:9092 :::\* LISTEN 59940/java  tcp6 0 0 127.0.0.1:9092 127.0.0.1:38916 ESTABLISHED 59940/java  tcp6 0 0 127.0.0.1:38916 127.0.0.1:9092 ESTABLISHED 59940/java  [root@node2 kafka]# ./bin/kafka-server-start.sh -daemon config/server.properties && netstat -anpl | grep 9093  tcp6 0 0 127.0.0.1:9093 :::\* LISTEN 42376/java  tcp6 0 0 127.0.0.1:39436 127.0.0.1:9093 ESTABLISHED 42376/java  tcp6 0 0 127.0.0.1:9093 127.0.0.1:39436 ESTABLISHED 42376/java  [root@node3 kafka]# ./bin/kafka-server-start.sh -daemon config/server.properties && netstat -anpl | grep 9094  tcp6 0 0 127.0.0.1:9094 :::\* LISTEN 41731/java  tcp6 0 0 127.0.0.1:9094 127.0.0.1:55364 ESTABLISHED 41731/java  tcp6 0 0 127.0.0.1:55364 127.0.0.1:9094 ESTABLISHED 41731/java |

### 验证测试

1. 创建并查看topic

|  |
| --- |
| [root@node1 kafka]# ./bin/kafka-topics.sh --create --zookeeper localhost:2181 --replication-factor 1 --partitions 1 --topic test  Created topic "test".  [root@node1 kafka]# ./bin/kafka-topics.sh --list --zookeeper localhost:2181  test |

1. 生产消息

|  |
| --- |
| [root@node1 kafka]# ./bin/kafka-console-producer.sh --broker-list localhost:9092 --topic test  >pre send!!  > |

1. 消费消息

|  |
| --- |
| [root@node1 kafka]# ./bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic test --from-beginning  pre send!! |

1. [动态演示](kafka.gif)