



Kafka

Day 2



Day 2 - Overview

- Kafka Topics, Partitions Configuration
- Kafka Producer Introduction
- Kafka Producer API
- Send messages to Kafka



Installing Kafka

Follow the instruction in the below article to install kafka2.5.0 in your local system/VM.

<https://www.geeksforgeeks.org/how-to-install-and-run-apache-kafka-on-windows/>

Start Zookeeper

```
.\bin\windows\zookeeper-server-start.bat .\config\zookeeper.properties
```

Start Kafka

```
.\bin\windows\kafka-server-start.bat .\config\server.properties
```



Creating Topics

Navigate to the below location in PowerShell

C:\kafka_2.13-2.5.0

Execute below command

*./bin/windows/kafka-topics --zookeeper localhost:2181 --topic first-topic --create
--partitions 1 --replication-factor 1*

Validate that topic is persisted in kafka

./bin/windows/kafka-topics --zookeeper localhost:2181 --list



Fetch details of an topic

Navigate to the below location in PowerShell

`C:\kafka_2.13-2.5.0`

Execute below command to view topic details

`./bin/windows/kafka-topics --zookeeper localhost:2181 --topic first-topic --describe`



Deleting Topic (Only for reference)

Navigate to the below location in PowerShell

`C:\kafka_2.13-2.5.0`

Deleting a topic

`./bin/windows/kafka-topics --zookeeper localhost:2181 -topic first-topic --delete`

Note: It's a known issue in windows where deleting topics log cleanup crashes the kafka server

<https://issues.apache.org/jira/browse/KAFKA-1194>



Kafka console producer

Navigate to the below location in PowerShell

`C:\kafka_2.13-2.5.0`

Execute below command to start a kafka console consumer

`./bin/windows/kafka-console-producer--bootstrap-server localhost:9092 --topic first-topic`

`./bin/windows/kafka-console-producer--bootstrap-server localhost:9092 --topic first-topic-x`

What happens when you send message to a topic that doesn't exists?



Kafka console consumer

Navigate to the below location in PowerShell

`C:\kafka_2.13-2.5.0`

Execute below command to start a kafka console consumer

`./bin/windows/kafka-console-consumer --bootstrap-server localhost:9092 --topic first-topic`

To read a topic from beginning

`./bin/windows/kafka-console-consumer --bootstrap-server localhost:9092 --topic first-topic --from-beginning`



Kafka console consumer group

Navigate to the below location in PowerShell

`C:\kafka_2.13-2.5.0`

Execute below command in 2 different terminal to start 2 kafka console consumer

`./bin/windows/kafka-console-consumer --bootstrap-server localhost:9092 --topic first-topic --group demo`

Why is messages being consumed by only one consumer and not load balanced?



Kafka console consumer group

Navigate to the below location in PowerShell

`C:\kafka_2.13-2.5.0`

Create a new topic with 2 partitions

`./bin/windows/kafka-topics --zookeeper localhost:2181 --topic second-topic --create
--partitions 2 --replication-factor 1`

Start Producer

`./bin/windows/kafka-console-producer --broker-list localhost:9092 --topic second-topic`

Start 2 consumer in 2 different terminals

`./bin/windows/kafka-console-consumer --bootstrap-server localhost:9092 --topic
second-topic --group demo --property print.partition=true`



Kafka consumer commands

Navigate to the below location in PowerShell

`C:\kafka_2.13-2.5.0`

List all consumer groups

`./bin/windows/kafka-consumer-groups --bootstrap-server localhost:9092 --list`

Details of a consumer group

`./bin/windows/kafka-consumer-groups --bootstrap-server localhost:9092 --group demo --describe`



Task

Create a new topic called **third-topic** with 3 partitions

Create 2 different console producer to produce message to the new topic

Create 2 different console consumer to consume messages from the new topic



Q and A