MQT - Laboratory 8

Lab8_1

1. Create two topics:
from command line
 docker exec -ti kafka /usr/bin/kafka-topics --create --bootstrap-server localhost:9092 --topic TextLinesTopic --partitions 10

 docker exec -ti kafka /usr/bin/kafka-topics --create --bootstrap-server localhost:9092 --topic UppercasedTextLinesTopic --partitions 10

or from the Kafka terminal (Docker Desktop):
 /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic TextLinesTopic --partitions 10

 /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic UppercasedTextLinesTopic --partitions 10
2. Go to Maven panel (top-right in IntelliJ)
 kafka-streams-examples --> Plugins --> avro --> avro:schema --> right click --> Run Maven Build

3. Run streams.MapFunctionLambdaKStreamConsumer

  The application must be running.

4. Run streams.MapFunctionLambdaProducer or

  Produce some values with the console producer.

  docker exec -ti kafka /usr/bin/kafka-console-producer --bootstrap-server kafka:19092 --topic TextLinesTopic

5. Check the topic UppercasedTextLinesTopic

 docker exec -ti kafka /usr/bin/kafka-console-consumer --bootstrap-server kafka:19092 --topic UppercasedTextLinesTopic --from-beginning
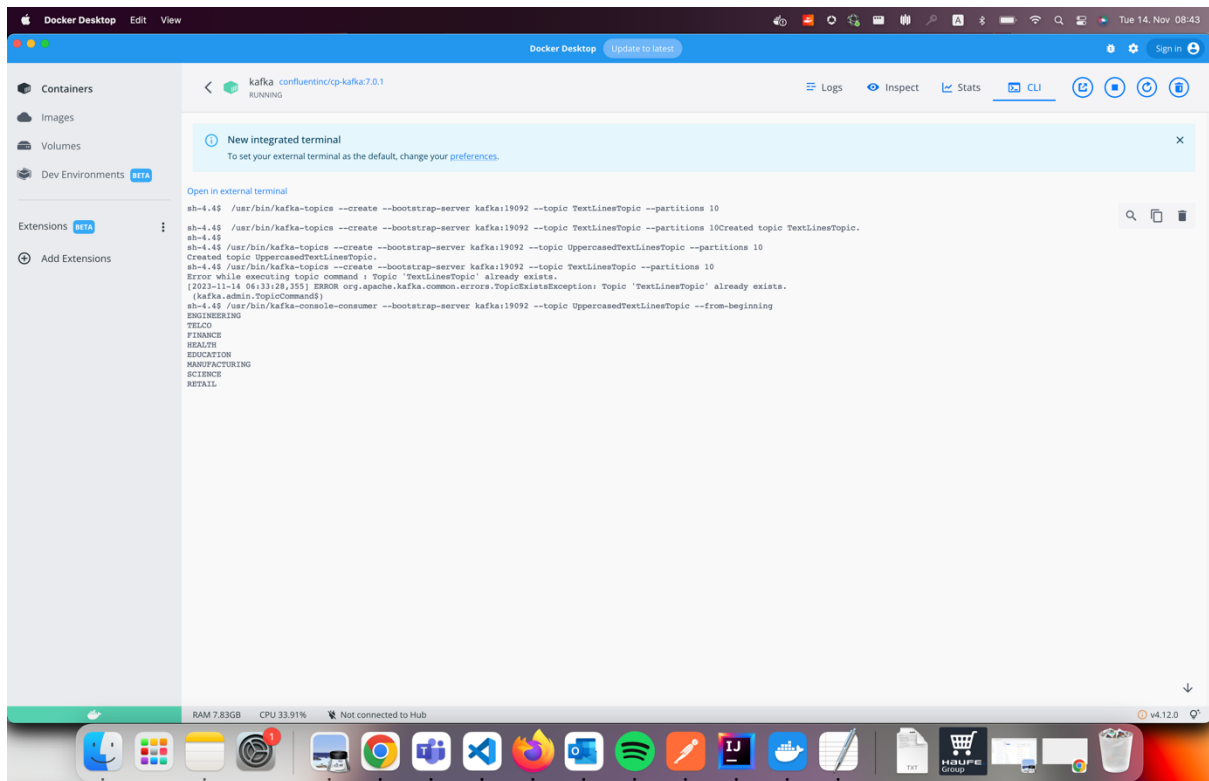
Lab8_2

1. Create two topics:

or from the Kafka terminal (Docker Desktop):

    /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic Purchases --partitions 10

    /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic PurchaseStatistics --partitions 10

```
sh-4.4$ /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic TextLinesTopic --partitions 10
sh-4.4$ /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic TextLinesTopic --partitions 10Created topic TextLinesTopic.
sh-4.4$
sh-4.4$ /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic UppercasedTextLinesTopic --partitions 10
Created topic UppercasedTextLinesTopic.
sh-4.4$ /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic TextLinesTopic --partitions 10
Error while executing topic command : Topic 'TextLinesTopic' already exists.
[2023-11-14 06:33:28,355] ERROR org.apache.kafka.common.errors.TopicExistsException: Topic 'TextLinesTopic' already exists.
 (kafka.admin.TopicCommand$)
sh-4.4$ /usr/bin/kafka-console-consumer --bootstrap-server kafka:19092 --topic UppercasedTextLinesTopic --from-beginning
ENGINEERING
TELCO
FINANCE
HEALTH
EDUCATION
MANUFACTURING
SCIENCE
RETAIL
/usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic Purchases --partitions 10
/usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic PurchaseStatistics --partitions 10
```

2. Run streams.PurchaseStatisticsKStreamConsumer

  The application must be running

3. Run streams.PurchaseStatisticsProduder

4. Check the topic PurchaseStatistics

/usr/bin/kafka-console-consumer --bootstrap-server kafka:19092 --topic PurchaseStatistics --from-beginning

Containers

Images

Volumes

Dev Environments BETA

Extensions BETA

Add Extensions

kafka confluentinc/cp-kafka:7.0.1
RUNNING

Logs   Inspect   Stats   CLI

New integrated terminal
To set your external terminal as the default, change your preferences.

Open in external terminal

```
sh-4.4$  /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic TextLinesTopic --partitions 10
sh-4.4$  /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic TextLinesTopic --partitions 10Created topic TextLinesTopic.
sh-4.4$
sh-4.4$ /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic UppercasedTextLinesTopic --partitions 10
Created topic UppercasedTextLinesTopic.
sh-4.4$ /usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic TextLinesTopic --partitions 10
Error while executing topic command : Topic 'TextLinesTopic' already exists.
[2023-11-14 06:33:28,355] ERROR org.apache.kafka.common.errors.TopicExistsException: Topic 'TextLinesTopic' already exists.
 (kafka.admin.TopicCommand$)
sh-4.4$ /usr/bin/kafka-console-consumer --bootstrap-server kafka:19092 --topic UppercasedTextLinesTopic --from-beginning
ENGINEERING
TELCO
FINANCE
HEALTH
EDUCATION
MANUFACTURING
SCIENCE
RETAIL
/usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic Purchases --partitions 10
/usr/bin/kafka-topics --create --bootstrap-server kafka:19092 --topic PurchaseStatistics --partitions 10
/usr/bin/kafka-console-consumer --bootstrap-server kafka:19092 --topic PurchaseStatistics --from-beginning
/usr/bin/kafka-console-consumer --bootstrap-server kafka:19092 --topic PurchaseStatistics --from-beginning
^CProcessed a total of 8 messages
sh-4.4$ /usr/bin/kafka-console-consumer --bootstrap-server kafka:19092 --topic PurchaseStatistics --from-beginning
[2023-11-14 06:50:39,176] WARN [Consumer clientId=consumer-console-consumer-6110-1, groupId=console-consumer-6110] Error while fetching metadata with correlation id 2 : {PurchaseStatistics=LEADER_NOT_AVAILABL
E} (org.apache.kafka.clients.NetworkClient)
21
22
23
14
```
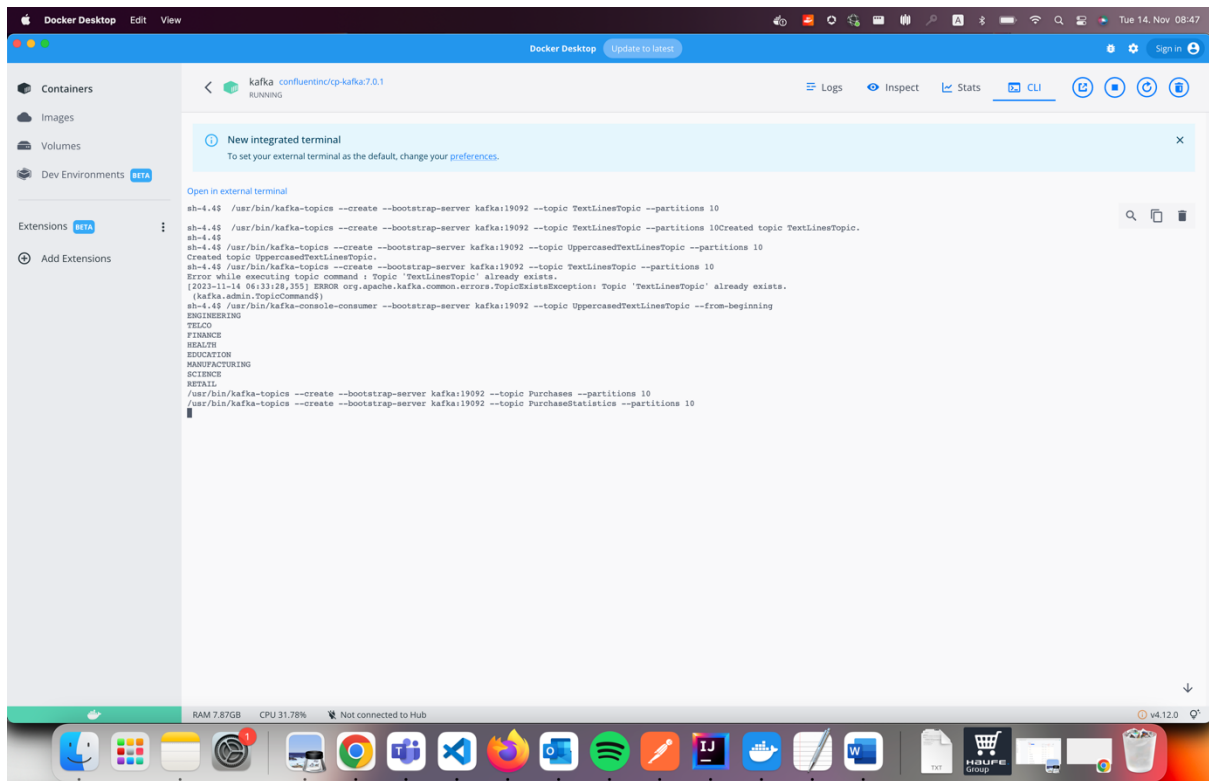
RAM 7.90GB   CPU 33.58%   Not connected to Hub   v4.12.0