Multiple brokers

Docker command

1. To start kafka process

1. Start yml process
   docker-compose up -d

2. To create a new topic

1. **Start the broker (kafka1)**
   docker exec -it kafka1 /bin/bash
2. **Create a new topic**
   kafka-topics --bootstrap-server localhost:9092 --create --topic randomTopic --partitions 2 --replication-factor 3

3. To create a producer

1. **Start producer (also use kafka1 broker)**
   kafka-console-producer --bootstrap-server localhost:9092 --topic randomTopic
   >Type somethings

4. To create a consumer

1. **Open a new terminal**
2. **Start the broker (kafka2)**
   docker exec -it kafka2 /bin/bash
3. **Start consuming**
   kafka-console-consumer --bootstrap-server localhost:9092 --topic randomTopic --from-beginning

Question

1. What happens if one broker is shut down?
2. What are the maximum partitions you can set?
3. What are the maximum replication factors you can set?

Exercise

1. Experiment to send key/value event?

a. kafka-console-producer --bootstrap-server localhost:9092 --topic t1 --property "parse.key=true" --property "key.separator=,"
   > c001,700

b. How to modify the kafka-console-consumer to receive the event including key? Hint: type kafka-console-consumer -h to see all possible parameters.

2. Create a new topic ‘t1’ with 1024 partitions, and 5 replication factors. Hint: you need to modify docker-compose.yml and restart it again.

Miscellaneous commands

List all topics

kafka-topics --bootstrap-server localhost:9092 --list

Describe a topic

kafka-topics --bootstrap-server localhost:9092 --describe --topic randomTopic

Delete a topic

kafka-topics --bootstrap-server localhost:9092 --delete --topic <topic_name>

Reference

3. https://docs.ksqldb.io/en/latest/concepts/apache-kafka-primer/
4. More understanding about partition and offset https://developer.confluent.io/tutorials/kafka-console-consumer-read-specific-offsets-partitions/kafka.html