**Content:**

1. Create topics from command line

2. Working with console producer.

3. Working with console consumer.

4. Commands to check topic properties and consumer group properties.

1. **Topic creation:**
2. **Create topic:**

bin/kafka-topics.sh --bootstrap-server localhost:9092 --create --topic firstTopic --partitions=1 --replication-factor=1

* everything written after each -- is argument.
* --bootstrap-server localhost:9092 --> kafka server's uri is localhost and port is 9092 so it will connect to kafka server.
* --create --topic firstTopic --> To create topic.
* --partitions=1 --> It will crate 1 partition.
* --replication-factor=1 --> It will create one replication fator.)

1. **Validate if topic is created or not / List all topics from kafka cluster:**

bin/kafka-topics.sh --bootstrap-server localhost:9092 --list

Output:

firstTopic

1. **Describe or check properties of topic:**

bin/kafka-topics.sh --bootstrap-server localhost:9092 --describe --topic firstTopic

* Here we are giving bootstrap server uri to connect to kafka server.
* --describe --topic arguments to describe topic.
* firstTopic is our topic name which we want to describe or get information.)

1. **Create Producer:**

* Producer publishes the messages.

bin/kafka-console-producer.sh --bootstrap-server localhost:9092 --topic firstTopic

Output:

>Hey

>How are you?

>I am fine

>Let's go for lunch

>okay

>thank you!

>

1. **Create Consumer:**

* Consumer consumes the messages.
* --from-beginning helps us to print all the messages present from starting.
* Whenever we are creating consumer, Kafka creates one topic named "\_\_consumer\_offset", which keeps all consumer related information.

bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic firstTopic --from-beginning

Output:

Hey

How are you?

I am fine

Let's go for lunch

okay

thank you!

* We can create a consumer by assigning a consumer group to it as below:

bin/kafka-console-consumer.sh --bootstrap-server localhost:9092 --topic firstTopic --group WMS\_Consumers --from-beginning

* Now verify if it is created as expected or not:

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

* **Output:**

WMS\_Consumers

1. **Consumer group:**

* Every consumer is associated with a consumer group.
* If we will not create a consumer group Kafka creates a consumer group by its own.

1. List all consumer groups:

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

* **Output:**

console-consumer-9033

* If we have mentioned consumer group manually it will show it in our o/p. Here we have created WMS\_Consumers so below is o/p:
* **Output**:

WMS\_Consumers

console-consumer-9033

1. **Describe consumer group:**

bin/kafka-consumer-groups.sh --bootstrap-server localhost:9092

--describe --group console-consumer-9033

* Output:

GROUP TOPIC PARTITION CURRENT-OFFSET LOG-END-OFFSET LAG CONSUMER-ID HOST CLIENT-ID

console-consumer-9033 firstTopic 0 - 15 - console-consumer-44409377-944a-414e-bd37-42b1139064c1 /127.0.0.1 console-consumer