

# Session 22:KAFKA INTRODUCTION

## Assignment 1

Daemons required for this assignment

```
[acadgild@localhost bin]$ jps
3280 ConsoleProducer
28323 QuorumPeerMain
28612 Kafka
3946 Jps
3516 ConsoleConsumer
```

### Task 1:

Create a kafka topic named KeyLessTopic.

Inside KeyLessTopic insert following data:

```
{"name":"John", "exp":16}
{"name":"Finn", "exp":20}
{"name":"Cylin", "exp":18}
{"name":"Mark", "exp":2}
{"name":"Akshay", "exp":14}
```

#### ➔ Creating a topic

```
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-topics.sh --create --topic KeyLessTopic --zookeeper localhost:2181 --partitions 1 --replication-factor 1
Created topic "KeyLessTopic".
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-topics.sh --list --zookeeper localhost:2181
KeyLessTopic
TestTopic
__consumer_offsets
my-replicated-topic
[acadgild@localhost ~]$ jps
16100 QuorumPeerMain
16400 Kafka
17855 Jps
[acadgild@localhost ~]$
```

#### ➔ Inserting data in producer

```
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-topics.sh --create --topic KeyLessTopic --zookeeper localhost:2181 --partitions 1 --replication-factor 1
Error while executing topic command : Topic "KeyLessTopic" already exists.
[2018-12-01 22:53:40,215] ERROR org.apache.kafka.common.errors.TopicExistsException: Topic "KeyLessTopic" already exists.
(kafka.admin.TopicCommand$)
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyLessTopic
{"name":"John", "exp":16}
{"name":"Finn", "exp":20}
{"name":"Cylin", "exp":18}
{"name":"Mark", "exp":2}
{"name":"Akshay", "exp":14}
```

## Task 2:

Create a console consumer that reads KeyLessTopic from beginning

➔ Creating consumer that takes the producer data from the topic KeyLessTopic.

```
Last login: Sat Dec 1 22:52:48 2018 from 10.0.2.2
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-consumer.sh --topic KeyLessTopic --from-beginning --zookeeper localhost:2181 --property print.key=true
Using the ConsoleConsumer with old consumer is deprecated and will be removed in a future major release. Consider using the new consumer by passing [bootstrap-
server] instead of [zookeeper].
null    {"name":"John", "exp":16}
null    {"name":"Finn", "exp":20}
null    {"name":"Cylin", "exp":18}
null    {"name":"Mark", "exp":2}
null    {"name":"Akshay", "exp":14}
^CProcessed a total of 5 messages
You have new mail in /var/spool/mail/acadgild
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-consumer.sh --topic KeyLessTopic --from-beginning --zookeeper localhost:2181 --property print.key=true
Using the ConsoleConsumer with old consumer is deprecated and will be removed in a future major release. Consider using the new consumer by passing [bootstrap-
server] instead of [zookeeper].
null    {"name":"John", "exp":16}
null    {"name":"Finn", "exp":20}
null    {"name":"Cylin", "exp":18}
null    {"name":"Mark", "exp":2}
null    {"name":"Akshay", "exp":14}
```

## Task 3:

Create a kafka topic named KeyedTopic. Inside KeyedTopic insert following data:

The part before comma(,) should be treated as key and after comma(,) should be treated as value

{"name":"John"}, {"exp":16}

{"name":"Finn"}, {"exp":20}

{"name":"Cylin"}, {"exp":18}

{"name":"Mark"}, {"exp":2}

{"name":"Akshay"}, {"exp":14}

➔ Inserting the data in producer as key value in Keyed Topic

```
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyedTopic --property "parse.key=true" --property "key.separator="
^C[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyedTopic --property "parse.key=true" --property "key.separator=",
{"name":"John"}, {"exp":16}
{"name":"Finn"}, {"exp":20}
{"name":"Cylin"}, {"exp":18}
{"name":"Mark"}, {"exp":2}
{"name":"Akshay"}, {"exp":14}
```

➔ Output from the console.

```
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-consumer.sh --topic KeyedTopic --from-beginning --zookeeper localhost:2181 --property print.key=true
Using the ConsoleConsumer with old consumer is deprecated and will be removed in a future major release. Consider using the new consumer by passing [bootstrap-
server] instead of [zookeeper].
{"name":"John"} {"exp":16}
{"name":"Finn"} {"exp":20}
{"name":"Cylin"} {"exp":18}
{"name":"Mark"} {"exp":2}
{"name":"Akshay"} {"exp":14}
```

## Task 4:

Create a console consumer that reads KeyedTopic from beginning

The key and value should be separated by '-'

➔ Input of data in producer again

```
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-producer.sh --broker-list localhost:9092 --topic KeyedTopic --property "parse.key=true" --property "key.separator=",  
hi,hi  
Now i am showing the key value separated by "-", wait and watch  
{ "name": "John", "exp": 16 }  
{ "name": "Finn", "exp": 20 }  
{ "name": "Cylin", "exp": 18 }  
{ "name": "Mark", "exp": 2 }  
{ "name": "Akshay", "exp": 14 }
```

➔ Output of consumer Key value are separated from “-”

```
[acadgild@localhost ~]$ $KAFKA_HOME/bin/kafka-console-consumer.sh --topic KeyedTopic --from-beginning --zookeeper localhost:2181 --property print.key=true --pr  
perty key.separator="-"  
Using the ConsoleConsumer with old consumer is deprecated and will be removed in a future major release. Consider using the new consumer by passing [bootstrap-  
server] instead of [zookeeper].  
{ "name": "John", "exp": 16 }  
{ "name": "Finn", "exp": 20 }  
{ "name": "Cylin", "exp": 18 }  
{ "name": "Mark", "exp": 2 }  
{ "name": "Akshay", "exp": 14 }  
{ "name": "John", "exp": 16 }  
{ "name": "Finn", "exp": 20 }  
{ "name": "Cylin", "exp": 18 }  
{ "name": "Mark", "exp": 2 }  
{ "name": "Akshay", "exp": 14 }  
hi-hi  
Now i am showing the key value separated by "-". wait and watch  
{ "name": "John", "exp": 16 }  
{ "name": "Finn", "exp": 20 }  
{ "name": "Cylin", "exp": 18 }  
{ "name": "Mark", "exp": 2 }  
{ "name": "Akshay", "exp": 14 }
```