

Iniciando o ambiente do Kafka em Docker Desktop

```
PS E:\projetos> cd docker-kafka
PS E:\projetos\docker-kafka> docker ps
CONTAINER ID   IMAGE          COMMAND                  CREATED        STATUS        PORTS        NAMES
PS E:\projetos\docker-kafka> docker-compose up -d
Docker Compose is now in the Docker CLI, try `docker compose up`

Starting zookeeper ... done
Starting broker   ... done
Starting schema-registry ... done
Starting connect   ... done
Starting rest-proxy ... done
Starting ksqldb-server ... done
Starting ksql-datagen ... done
Starting control-center ... done
Starting ksqldb-cli ... done
```

Criar o tópico msg-usuario-csv

```
PS E:\projetos\docker-kafka> docker exec -it broker bash
root@broker:/# kafka-topics --bootstrap-server localhost:9092 --topic msg-usuario-csv --create --partitions 3 --replication-factor 1
Created topic msg-usuario-csv.
root@broker:/# kafka-topics --bootstrap-server localhost:9092 --topic msg-usuario-csv --describe
Topic: msg-usuario-csv PartitionCount: 3 ReplicationFactor: 1 Configs:
  Topic: msg-usuario-csv Partition: 0 Leader: 1 Replicas: 1 Isr: 1 Offline:
  Topic: msg-usuario-csv Partition: 1 Leader: 1 Replicas: 1 Isr: 1 Offline:
  Topic: msg-usuario-csv Partition: 2 Leader: 1 Replicas: 1 Isr: 1 Offline:
root@broker:/# |
```

Criar um produtor para enviar 3 mensagens contendo id e nome separados por vírgula para o tópico msg-usuário-csv

```
root@broker:/# kafka-console-producer --broker-list localhost:9092 --topic msg-usuario-csv
>1,Marcelo
>2,Goulart
>3,Feliciani
>|
```

Visualizar os dados do tópico msg-usuario-csv

```
root@broker:/# kafka-topics --bootstrap-server localhost:9092 --topic msg-usuario-csv --list
msg-usuario-csv
root@broker:/# kafka-topics --bootstrap-server localhost:9092 --topic msg-usuario-csv --describe
Topic: msg-usuario-csv PartitionCount: 3 ReplicationFactor: 1 Configs:
    Topic: msg-usuario-csv Partition: 0 Leader: 1 Replicas: 1 Isr: 1 Offline:
    Topic: msg-usuario-csv Partition: 1 Leader: 1 Replicas: 1 Isr: 1 Offline:
    Topic: msg-usuario-csv Partition: 2 Leader: 1 Replicas: 1 Isr: 1 Offline:
root@broker:/# |
```

```
root@broker:/# kafka-topics --bootstrap-server localhost:9092 --list
__confluent.support.metrics
__consumer_offsets
__transaction_state
_confluent-command
_confluent-controlcenter-5-5-2-1-AlertHistoryStore-changelog
_confluent-controlcenter-5-5-2-1-AlertHistoryStore-repartition
_confluent-controlcenter-5-5-2-1-Group-ONE_MINUTE-changelog
_confluent-controlcenter-5-5-2-1-Group-ONE_MINUTE-repartition
_confluent-controlcenter-5-5-2-1-Group-THREE_HOURS-changelog
_confluent-controlcenter-5-5-2-1-Group-THREE_HOURS-repartition
_confluent-controlcenter-5-5-2-1-KSTREAM-OUTEROTHER-0000000106-store-changelog
_confluent-controlcenter-5-5-2-1-KSTREAM-OUTEROTHER-0000000106-store-repartition
_confluent-controlcenter-5-5-2-1-KSTREAM-OUTERTHIS-0000000105-store-changelog
_confluent-controlcenter-5-5-2-1-KSTREAM-OUTERTHIS-0000000105-store-repartition
_confluent-controlcenter-5-5-2-1-MetricsAggregateStore-changelog
_confluent-controlcenter-5-5-2-1-MetricsAggregateStore-repartition
_confluent-controlcenter-5-5-2-1-MonitoringMessageAggregatorWindows-ONE_MINUTE-changelog
_confluent-controlcenter-5-5-2-1-MonitoringMessageAggregatorWindows-ONE_MINUTE-repartition
_confluent-controlcenter-5-5-2-1-MonitoringMessageAggregatorWindows-THREE_HOURS-changelog
_confluent-controlcenter-5-5-2-1-MonitoringMessageAggregatorWindows-THREE_HOURS-repartition
_confluent-controlcenter-5-5-2-1-MonitoringStream-ONE_MINUTE-changelog
_confluent-controlcenter-5-5-2-1-MonitoringStream-ONE_MINUTE-repartition
_confluent-controlcenter-5-5-2-1-MonitoringStream-THREE_HOURS-changelog
_confluent-controlcenter-5-5-2-1-MonitoringStream-THREE_HOURS-repartition
_confluent-controlcenter-5-5-2-1-MonitoringTriggerStore-changelog
_confluent-controlcenter-5-5-2-1-MonitoringTriggerStore-repartition
_confluent-controlcenter-5-5-2-1-MonitoringVerifierStore-changelog
_confluent-controlcenter-5-5-2-1-MonitoringVerifierStore-repartition
```

```
_confluent-controlcenter-5-5-2-1-TriggerActionsStore-repartition
_confluent-controlcenter-5-5-2-1-TriggerEventsStore-changelog
_confluent-controlcenter-5-5-2-1-TriggerEventsStore-repartition
_confluent-controlcenter-5-5-2-1-actual-group-consumption-rekey
_confluent-controlcenter-5-5-2-1-aggregate-topic-partition-store-changelog
_confluent-controlcenter-5-5-2-1-aggregate-topic-partition-store-repartition
_confluent-controlcenter-5-5-2-1-aggregatedTopicPartitionTableWindows-ONE_MINUTE-changelog
_confluent-controlcenter-5-5-2-1-aggregatedTopicPartitionTableWindows-ONE_MINUTE-repartition
_confluent-controlcenter-5-5-2-1-aggregatedTopicPartitionTableWindows-THREE_HOURS-changelog
_confluent-controlcenter-5-5-2-1-aggregatedTopicPartitionTableWindows-THREE_HOURS-repartition
_confluent-controlcenter-5-5-2-1-cluster-rekey
_confluent-controlcenter-5-5-2-1-expected-group-consumption-rekey
_confluent-controlcenter-5-5-2-1-group-aggregate-store-ONE_MINUTE-changelog
_confluent-controlcenter-5-5-2-1-group-aggregate-store-ONE_MINUTE-repartition
_confluent-controlcenter-5-5-2-1-group-aggregate-store-THREE_HOURS-changelog
_confluent-controlcenter-5-5-2-1-group-aggregate-store-THREE_HOURS-repartition
_confluent-controlcenter-5-5-2-1-group-stream-extension-rekey
_confluent-controlcenter-5-5-2-1-metrics-trigger-measurement-rekey
_confluent-controlcenter-5-5-2-1-monitoring-aggregate-rekey-store-changelog
_confluent-controlcenter-5-5-2-1-monitoring-aggregate-rekey-store-repartition
_confluent-controlcenter-5-5-2-1-monitoring-message-rekey-store
_confluent-controlcenter-5-5-2-1-monitoring-trigger-event-rekey
_confluent-ksql-default__command_topic
_confluent-license
_confluent-metrics
_confluent-monitoring
_schemas
default_ksql_processing_log
docker-connect-configs
docker-connect-offsets
docker-connect-status
msg-cli
msg-rapida
msg-usuario-csv
teste
root@broker:/# |
```

Criar o Stream usuario_csv para ler os dados do tópico msg-usuario-csv

```
PS C:\Users\marce> docker exec -it ksqldb-server ksql http://ksqldb-server:8088
```

```
=====
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=      | < \_ \ ( | | | | | | | ) |   =
=      |_ \| \___/\___|_| |_____/|_____/   =
=                               |_|          =
= Event Streaming Database purpose-built    =
=       for stream processing apps         =
=====
```

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```
CLI v5.5.2, Server v5.5.2 located at http://ksqldb-server:8088
```

Having trouble? Type 'help' (case-insensitive) for a rundown of how things work!

```
ksql> list streams;
```

Stream Name	Kafka Topic	Format
KSQL_PROCESSING_LOG	default_ksql_processing_log	JSON

```
ksql> |
```

```
ksql> create stream usuario_csv (id int, nome varchar) with (kafka_topic='msg-usuario-csv',value_format='delimited');
```

Message

Stream created

```
ksql> list streams;
```

Stream Name	Kafka Topic	Format
KSQL_PROCESSING_LOG	default_ksql_processing_log	JSON
USUARIO_CSV	msg-usuario-csv	DELIMITED

```
ksql> |
```

Visualizar o Stream usuario_csv

```
ksql> list streams;
```

Stream Name	Kafka Topic	Format
KSQL_PROCESSING_LOG	default_ksql_processing_log	JSON
USUARIO_CSV	msg-usuario-csv	DELIMITED

```
ksql> describe usuario_csv;
```

Name : USUARIO_CSV

Field	Type
ROWTIME	BIGINT (system)
ROWKEY	VARCHAR(STRING) (system)
ID	INTEGER
NOME	VARCHAR(STRING)

For runtime statistics and query details run: DESCRIBE EXTENDED <Stream,Table>;

```
ksql> |
```

```
ksql> list streams;
```

Stream Name	Kafka Topic	Format
KSQLE_PROCESSING_LOG	default_ksql_processing_log	JSON
USUARIO_CSV	msg-usuario-csv	DELIMITED

```
ksql> SET 'auto.offset.reset'='earliest';
```

Successfully changed local property 'auto.offset.reset' from 'earliest' to 'earliest'.

```
ksql> SELECT id,nome FROM USUARIO_CSV EMIT CHANGES LIMIT 10;
```

ID	NOME
1	Marcelo
2	Goulart
3	Feliciani

^CQuery terminated

```
ksql> |
```

Visualizar apenas o nome do Stream usuario_csv

```
ksql> list streams;
```

Stream Name	Kafka Topic	Format
KSQLE_PROCESSING_LOG	default_ksql_processing_log	JSON
USUARIO_CSV	msg-usuario-csv	DELIMITED

```
ksql> |
```