



kafka

◆ Setup a dev environment

- ▶ To setup a dev environment, clone the following [repository](#) and run `docker compose up -d` inside the `cp-all-in-one-kraft` folder. You can use `localhost:9092` as your bootstrap server using the default settings. You can also access the schema registry via `localhost:8081`.
- ▶ To get started using the commands, download the latest version of kafka from [here](#), unpack using `tar -xzf kafka*.tgz`, and add the `bin` folder to your `PATH`.

◆ Topics

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

- ▶ List all topics in your kafka cluster

```
kafka-topics --bootstrap-server localhost:9092 --list  
--exclude-internal
```

- ▶ List all topics, but exclude all internal topics like `__consumer_offsets`



◆ Topics

```
kafka-topics --bootstrap-server localhost:9092 --create  
--topic YOUR_TOPIC --partitions 3 --replication-factor 1
```

- ▶ Create a topic with three partitions and a replication factor of one.

```
kafka-topics --bootstrap-server localhost:9092 --delete  
--topic YOUR_TOPIC
```

- ▶ Delete a topic

```
kafka-topics --bootstrap-server localhost:9092 --describe  
--topic YOUR_TOPIC
```

- ▶ Get detailed information on a topic and the partitions (e.g: leader of each partition and number of in-sync replicas)

```
kafka-topics --bootstrap-server localhost:9092 --alter  
--topic YOUR_TOPIC --partitions 5
```

- ▶ Alter the number of partitions. Can only be increased.
Caution: Messages with keys might be produced to different topics. This could change your ordering.

◆ Consuming & Producing

```
kafka-topics --bootstrap-server localhost:9092 --describe  
--topic YOUR_TOPIC
```

- ▶ Consume messages from a topic.

```
kafka-console-consumer --bootstrap-server localhost:9092  
--topic YOUR_TOPIC --from-beginning
```

- ▶ Consume messages from a topic and also print all messages from beginning.



◆ Consuming & Producing

```
kafka-console-producer --broker-list localhost:9092
--topic YOUR_TOPIC
```

- ▶ Opens a prompt which takes values of new messages and produces them to the topic.

```
kafka-console-producer --broker-list localhost:9092
--topic YOUR_TOPIC --property "parse.key=true" --property
"key.separator=:"
```

- ▶ Opens a prompt which takes a string in the format "KEY:VALUE" and produces the message with the parsed key and value to the topic.

```
kafka-avro-console-consumer \  
--bootstrap-server localhost:9092 \  
--topic YOUR_TOPIC \  
--property schema.registry.url=http://localhost:8081 \  
--property print.key=true --property key.separator=":"
```

- ▶ Consumes messages in the AVRO format. Also prints the key.

```
kafka-avro-console-producer \  
--bootstrap-server localhost:9092 \  
--topic mytest \  
--property schema.registry.url=http://localhost:8081  
--property value.schema.id=1
```

- ▶ Opens a prompt which let's you produce AVRO messages to a topic. Message has to be in JSON format. The message will be checked against the specified schema.