

Kafka Proof of Concept

Your task is to produce a demo application of Kafka in Python with at least one producer and at least two topics, then demo it with some suitable test data of your choice. The suggested approach is as follows:

1. Choose a suitable use-case and find (or invent) some test data. Suitable use-cases might be a feed of social media posts, financial transactions, e-commerce purchases, sports results, or any other event-driven source.

The source doesn't have to be "real" – you can create your own sample data if you like, put it in a file and then your producer can iterate through it in a for loop – preferably with a suitable delay so that it looks more interesting and realistic.

Ideally we want a use-case with at least two potential topics, e.g.: different hashtags; different types of financial security (stocks, bonds); e-commerce purchases and returns; football results vs cricket results.

Make sure your topic names don't clash with anyone else's!

2. Create a producer in Python. The producer can source its data from a real web service or other feed if you have one, or you can simulate your chosen scenario in some other way. The producer application should forward messages into a topic or topic(s) on the broker.
3. Create a consumer or consumer(s) that listen to one or more topics. The consumers should at least print out the message contents but could also write it to a file.

Remember to close your consumer after you have used it.