Kafka Project

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1 Tools

May use Java 8

May use Spring Boot and Swagger to implement a REST API

Test REST using Postman

Use zkClient or Apache's Zookeeper to connect to Zookeeper

Use AdminClient to connect to Kafka

Use Kafka version 2.1 or 0.11

2 CRUDL and architecture

Consider multiple architectures: microservices, monolith or client server

Construct CRUDL operations resource by resource (create, read, update, delete, list)

The important Kafka resources are: topics, partitions, messages, consumers, producers, streams

It is impossible to create all CRUDL operations for each resource

Assume an intranet for the purpose of security

Construct a minimal UI for testing

3 Implementation

Wrap each and every Kafka functions in your own function to prevent API changes from effecting the project

Make notes about naming conventions

Take notes about Kafka resources and API

Always have the bigger picture in mind

Monitoring seems to be a bit more important then CRUDL operations

Take notes about the different preexisting solutions and libraries

Abstract the configuration

4 Misc

Hamag Bicro agency, a big project

5 Design considerations

Package names are singular.

Centralize error processing.

Don't return null. Return benign neutral values.

Avoid dependency conflicts is more important then using your favourite JSON library.

Codify external system behaviours.

Write comments only if you cannot write anything else.