

Apache Kafka Industrial Training

Lesson 1: APACHE KAFKA ARCHITECTURE

- The Course Overview
- Building Applications in the Publish-Subscribe Architecture
- Topics and Partitions
- How Kafka Cluster is Built? - Brokers
- Setup of Kafka - Using Docker

Lesson 2: PRODUCERS AND CONSUMERS

- Sending Events to Kafka - Producers API
- Asynchronous Send
- Partitioning of Topics - Implementing Custom Partitioner
- Reading Events from Kafka - Consumer API
- Consumer Pool Loop - Offset Management
- Rebalancing of Consumers

Lesson 3: ADVANCED KAFKA - UNDERSTANDING INTERNALS

- Electing Partition Leaders - Kafka Controller Component
- Data Replication in Kafka
- Append-Only Distributed Log - Storing Events in Kafka
- Compaction Process
- Summary of Apache Kafka Course

Apache Kafka Package In Brief

Module 1 - Introduction to Apache Kafka

What Kafka is and why it was created

The Kafka Architecture

The main components of Kafka

Some of the use cases for Kafka

Module 2 - Kafka Command Line

The contents of Kafka's /bin directory

How to start and stop Kafka

How to create new topics

How to use Kafka command line tools to produce and consume messages

Module 3 - Kafka Producer Java API

The Kafka producer client

Some of the KafkaProducer configuration settings and what they do

How to create a Kafka producer using the Java API and send messages both synchronously and asynchronously

Module 4 - Kafka Consumer Java API

The Kafka consumer client

Some of the KafkaConsumer configuration settings and what they do

How to create a Kafka consumer using the Java API

Module 5 - Kafka Connect and Spark Streaming

Kafka Connect and how to use a pre-built connector

Some of the components of Kafka Connect

How to use Kafka and Spark Streaming together