

Kafka Basic Training

Duration : 8 hours

1. Introduction to Kafka

Introduction to Synchronous and Asynchronous Processing

Distributed Event Streaming Platform

Kafka Architecture (Kafka, Zookeeper/Kraft)

Kafka Vs Other Messaging Platforms

Kafka Core Concepts: Broker, Topic, Partition, Message, Producer, Consumer

2. Kafka Core/Administration

Configuration of Brokers, Topics, Partition, Replication-Factor

Important Configuration Properties

Producer & Consumer CLI

Lab : Start & Stop Kafka/Zookeeper Server, Create Topic, Producer & Consumer CLI

3. Programming with Kafka

Producer API & Consumer API

Consumer Group Concepts

Producer : Transaction Management

Consumer: seek() vs subscribe()

Message Delivery Semantics (Both Producer & Consumer Side)

At-Most-Once & At-Least-Once & Exactly-Once

Lab: Producer & Consumer API using Java Program

4. Kafka Streams

Streams Overview & Architecture, Usecases

Kafka Stream API Concepts

KStream, KTable

Stateless Vs Stateful Operations

Transformation, Filters, Joins & Aggregation

Lab: Kafka Streaming Lab with above concepts