

The Complete Apache Kafka Practical Guide

Duration: 5 Days

Description

Gain a deep understanding of the architecture, deployment and maintenance of the Kafka platform with Apache Kafka Course. This training will equip candidates with the skills needed to develop a robust and fault tolerant big data application for their enterprise to process massive real-time data streams.

Master Apache Kafka architecture and learn how it is used to process and store multiple continuous data streams faster and more efficiently with this Apache Kafka Training. With easy to follow step-by-step instructions, learn how to install and configure Kafka clusters.

This Apache Kafka course will help candidates to develop the skills needed to take control of their organization's Kafka cluster by correctly configuring Kafka producer, consumer, streams and connectors.

This course will also equip candidates with the skills needed to integrate Kafka with existing application platforms in their organization.

At the end of this Apache Kafka training, candidates will be able to:

- Describe the architecture of Kafka and explain business use cases thereof
- Install & configure Kafka cluster in either single-node or multi-node setup
- Implement Kafka Producer and Consumer using real time streaming data
- Appreciate and leverage reliability, replication, and persistence features of the Kafka system
- Apply their learning to use powerful features like partitions & the messaging system
- Use Kafka interfaces as per their organization's requirement
- Build a streaming data application using Kafka

Audience

- Developers who want to build a streaming data application
- Teams getting started or working on Kafka based projects

Prerequisites

Basic Java programming knowledge is required.

Outline

Module I: Apache Kafka Fundamentals - 3 days

- The Big Data Ecosystem and the Place of Apache Kafka
- Big Data and Importance of Streaming Data
- What is Apache Kafka? When and Why Should It Be Used?
- Apache Kafka Basic Architecture
- Apache Kafka Components
- Apache Kafka Terminology
- What is Zookeeper? When and Why Should It Be Used?
- Apache Kafka Single Node Installation
- Apache Kafka Multi Node(Cluster) Installation
- Apache Kafka Producer Structure
- Apache Kafka Producer Examples
- Synchronous and Asynchronous Message Sending
- Producer Configurations
- Partition Structure
- Apache Kafka Consumer Structure
- Standalone Consumer
- Group Consumer
- Commit and Offset Structure
- Apache Kafka Monitoring
- Client Monitoring
- Log Monitoring

Module II: Apache Kafka Advanced - 2 days

- What is Confluent Kafka?
- Confluent Kafka Advantages/Disadvantages
- What is Kafka Connect?
- Kafka Connect CDC Structure
- Kafka Connect Setup
- Kafka Connect Configuration
- Data Analytics with Apache Kafka
- KSQL Structure
- KStream Structure

- Apache Kafka and Apache Spark Integration
- What is Schema Registry?
- Schema Registry Installation and Configuration

Prerequisites

Basic Java programming knowledge is required.