

Apache Kafka Fundamentals

Duration: 3 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.

Further, through cloud labs, candidates will gain hands-on experience in Kafka implementation by building a real-life twitter streaming application using Kafka.

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

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

Prerequisites

Basic Java programming knowledge is required.