

# Apache Kafka in 16 Hours

**Prerequisites:** Basic knowledge of linux

**Duration:** 2 Days (8 Hrs./Day)

**Course Objective:** This intensive two-day course is designed to provide a solid foundation in Apache Kafka, covering both theoretical concepts and hands-on practical experience. By the end of this course, participants will understand the core components of Kafka, its architecture, and how to set up and manage Kafka clusters.

**Apache Kafka version:** Latest.

**Lab Requirement:** Koenig DC/Linux (CentOS 9) (customizable).

## Day 1 - Introduction to Apache Kafka

Events and event streaming

Use cases

Brokers

Topics

Producers

Consumers

Partitions

Replication

Kafka Connect

Kafka Streams

Kafka and the File System

Batch Processing for Efficiency

Producer Design

Consumer Design

Message Delivery Guarantees

Replication

Log Compaction

Quotas

## **Day 2 – Apache Kafka setup**

**Lab:** Kafka Setup – single broker (docker)

**Lab:** Kafka setup – multi-broker (docker)

**Lab:** Kafka topics basic operations

**Lab:** Kafka producer basic operations

**Lab:** Kafka consumer basic operations