

# Kafka Connect

Prerequisites: Basic knowledge of java and Apache Kafka

**Duration**: 3 Days (8 Hrs./Day)

**Course Objective**: This course aims to provide a thorough understanding of Apache Kafka Connect, covering its architecture, components, and practical applications. By the end of the course, you will be proficient in setting up, configuring, and managing Kafka Connect clusters and developing custom connectors.

Apache Kafka version: Latest.

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

#### Module 1 - Introduction to Kafka Connect

What is Kafka Connect?

Kafka Connect Architecture Design

Connectors, Configuration, Tasks, Workers

Standalone vs Distributed Mode

Distributed Architecture in Details

**Errors and Dead Letter Queues** 

Lab: Starting Kafka Connect Cluster using Docker

#### Module 2 - Kafka Connect Source

Kafka Connect Source Architecture Design

Lab: FileStream Source Connector - Standalone Mode

Lab: FileStream Source Connector - Distributed Mode



Lab: List of Available Connectors

### Module 3 - Kafka Connect Sink

Kafka Connect Sink Architecture Design

Lab: ElasticSearch Sink Connector - Distributed Mode

Lab: Kafka Connect REST API

Lab: JDBC Sink Connector - Distributed Mode

## Module 4 - Kafka Connect Connector programming

Lab: Core Concepts and APIs

Lab: Developing a Simple Connector

Lab: Dynamic Input/Output Streams

**Lab**: Configuration Validation

**Lab:** Working with Schemas