

#### **Course Content: Apache Kafka**

## Introduction to Big data and Apache Kafka

- Introduction to Big Data
- Big Data Customer Scenarios
- What is Kafka?
- Need for Kafka
- Core Concepts of Kafka
- Kafka Architecture
- Where is Kafka Used

#### **About Kafka Cluster**

- Understanding the components of Kafka Cluster
- Installation of Kafka Cluster
- Configuring Kafka Cluster
- Producer of Kafka
- Consumer of Kafka
- Producer and Consumer in Action

### **Kafka Operations and Performance Tuning**

- Offset
- Design
- Hardware
- Kafka Monitoring and Issues
- Kafka Performance Tuning
- Reading data from Kafka
- Demo-Twitter Kafka Producer
- Introduction to Scala
- Mixed Paradigm-Functional Programming
- Scala Installation & Configuration
- Scala REPL
- Scala Project Using Eclipse

### Integration of Kafka with Hadoop and Strom

- Understanding the Hadoop Cluster
- Integrating Kafka with Hadoop Cluster
- Understanding Apache Storm
- Implementing Spouts and Bolts
- Kafka with Storm Spout

# Integration of Kafka with Spark

- Ecosystem of Spark
- Understanding the Spark Cluster
- Integrating Kafka with Spark