

# Course Objectives

During this instructor-led, hands-on course, you will learn how to monitor, troubleshoot and tune a real-time, event-streaming platform built with Apache Kafka®. You will use industry best-practices to monitor, troubleshoot, and tune the components of Kafka and Confluent Platform to support your event-streaming applications. You will learn to utilize native tools, including Confluent Control Center as well as third-party software tools.

## Hands-on Training

Hands-on exercises are included throughout the training to help reinforce the concepts being discussed. Exercises include:

- Monitoring Kafka brokers, ZooKeeper and Kafka clients via JMX and Confluent Control Center, as well as Prometheus and Grafana
- Troubleshooting brokers, ZooKeeper, Producers, Consumers, Confluent KSQL applications, Kafka Streams applications and the Schema Registry, Tuning brokers, Producers, Consumers, Kafka Connect, KSQL and Kafka Streams, applications discussing production-down trouble shooting strategies
- Calculating replication throttling rates
- Evaluating partition strategies

## Course Duration

This is a three-day training course.

## Course Prerequisites

Attendees should have deep knowledge of and hands-on experience with Kafka. An understanding of additional components that contribute to a real-time, event-streaming platform, such as Kafka Connect, KSQL and Kafka Streams applications is also required. It is recommended that students attend the *Confluent Operations for Apache Kafka* course prior to taking Confluent Advanced Skills for Optimizing Apache Kafka.

Participants are required to provide a laptop computer with unobstructed internet access to fully participate in the class.

## Who Should Attend?

This course is designed for engineers, system administrators, and operations staff responsible for in-depth monitoring, tuning and troubleshooting an event-streaming platform powered by Kafka.

Confluent offers public training in class, online and on demand. Please visit <http://confluent.io/training> for more information.

For inquiries about onsite training, please email [training-admin@confluent.io](mailto:training-admin@confluent.io)

# Course Content

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This intensive hands-on course will cover the monitoring, troubleshooting, and tuning of the major components of Apache Kafka and Confluent Platform environments including:

- Brokers
- Producers
- Consumers
- Apache ZooKeeper
- Kafka Streams
- Kafka Connect
- Confluent KSQL
- Confluent Schema Registry

Additional discussions will include:

- Determining Business Needs and SLAs
- Monitoring using JMX Metrics
- Monitoring with Confluent Control Center and third-party tools
- Recommending Troubleshooting Strategies
- Using Kafka Troubleshooting tools
- Analyzing Kafka Log Files
- Performing a Troubleshooting Post-mortem Analysis