

# **Cloud Native Logging with Fluentd (LFS242)**

**Modality: On Demand**

**Duration: 30 Hours**

## **About this Course:**

With the growth of large scale, distributed systems the challenges of managing logs has become acute. It is increasingly common to have thousands of nodes and tens of thousands of services all emitting data which needs to be attributed, normalized and aggregated i.e. “logged”. This course is designed to introduce individuals with a technical background to the Fluentd log forwarding and aggregation tool for use in Cloud Native Logging. Known as the “unified logging layer”, Fluentd provides fast and efficient log transformation and enrichment, as well as aggregation and forwarding.

In this course you will explore the full range of Fluentd features, from installing fluentd to running fluentd in a container, and from using fluentd as a simple log forwarder to using fluentd as a sophisticated log aggregator and processor. Upon completion you will have the skills necessary to deploy Fluentd in a wide range of production settings.

## **Course Objectives:**

- Install and configure Fluentd in Cloud Native environments
- Configure Fluentd to process log data from multiple inputs
- Configure Fluentd to filter and transform data
- Configure Fluentd to distribute log data to various backends
- Configure Fluentd for high availability and high performance

## **Prerequisites:**

- Some familiarity with logging and log management is helpful
- Familiarity with Linux system administration
- Labs require a minimal Ubuntu 16.04 system with Docker installed

## **Course Outline:**

### **Course Introduction**

#### **Chapter 1.**

- Introduction to Fluentd and Unified Logging

#### **Chapter 2.**

- Fluentd Configuration

### **Chapter 3.**

- Extending Fluentd with Plugins

### **Chapter 4.**

- Filtering Data and Creating Pipelines

### **Chapter 5.**

- Parsing and Formatting Data

### **Chapter 6.**

- Designing Effective configurations with Labels and Includes

### **Chapter 7.**

- High Availability with Fluentd

### **Chapter 8.**

- Monitoring the Unified Logging Layer

### **Chapter 9.**

- Debugging and Tuning Fluentd

### **Chapter 10.**

- Introduction to Fluent Bit