Comprehensive Flink

Course Summary

Description

Apache Flink is an open source platform for distributed stream and batch data processing. This course will present all essential concepts, libraries and techniques, in a complete hands-on environment, for understanding, creating and supporting Flink and Flink-ecosystem-based applications.

Objectives

After taking this course, students will have learned every technical aspect a developer, architect and DevOps, an individual will need to know to install, administrate, develop toward, manage and monitor every capability of this 4th generation, distributed data-flow Apache Software Project (ASF).

Topics

- Introduction to Flink concepts, ecosystem, use cases
- Application development with Flink
- Extending Flink into the Flink ecosystem
- DevOps, installation options, deployment and monitoring
- Performance enhancement practices with Flink and Flink ecosystem

Audience

The audience for this class will be bifurcated into two types of software engineers. First, those Java or Scala software engineers, with minimal knowledge of Spark and Kafka, who must quickly generate rigorous, extensible, enterprise-level applications reliant upon a distributed data flow topology. Second, those software engineers who have worked with Java, the Spark API and the Kafka API who desire to understand how the Flink functionality and performance complements or supersedes the functionality offered by Spark and Kafka. Companies like Alibaba, Capital One, Ericsson, Netflix and Uber consider Spark and Kafka to be 3rd generation and Flink 4th generation in their capabilities.

Prerequisites

Development experience with Linux, Java and Hadoop are a prerequisite. Knowledge or experience with implementing EAI/EII patterns is assumed. Experience with a distributed data flow project such as NiFi is helpful. Experience with or comprehensive conceptual knowledge of Spark and/or Kafka are helpful. It is suggested that a student new to Hadoop first take the course “Advanced Hadoop.” A student not familiar with EAI/EII patterns is referred to http://www.enterpriseintegrationpatterns.com

Duration

Five Days

Due to the nature of this material, this document refers to numerous hardware and software products by their trade names. References to other companies and their products are for informational purposes only, and all trademarks are the properties of their respective companies. It is not the intent of ProTech Professional Technical Services, Inc. to use any of these names generically.