Kafka CCAAK® certification preparation course

ALL-IN-ONE: EXAM INCLUDED IN COURSE FEE

2 days (14 hours)

Presentation

Kafka is a distributed messaging system for Big Data event flows. Our Confluent Certified Administrator for Apache Kafka® training course will help you pass the exam with ease.

In this practical training course, you will learn all the practical and theoretical skills required to pass the CCAAK® certification.

In particular, you'll learn about Brokers, Zookeeper and cluster coordinators. You'll also learn about cluster management functions and how to secure them.

The exam is included in the price of the course, and you can be certified at the end of the program.

As with all our training courses, our CCAAK® certification course will introduce you to the latest version and its new features: kafka 3.9.

Objectives

- Pass the CCAAK® exam
- Mastering Kafka Stream and data processing
- Master Confluent Schema Registry and Rest Proxy.
- Mastering security in your Kafka applications

Target audience

- Data Scientists
- Developers
- DevOps

Prerequisites

- Basic knowledge of a Unix system
- Basic knowledge of Kafka
- Knowledge of modern development languages: Java, Python and Scala
- Test My Knowledge

Technical requirements

- Machine running Linux or MacOS
- Have Java installed

Kafka CCAAK TRAINING PROGRAM

INTRODUCTION TO APACHE KAFKA

- Introducing Kafka as a distributed streaming platform
- Understanding Kafka's distributed diary
- Introduction to the concepts of producers and consumers
- The importance of Kafka in modern data architectures
- Discussion of typical Kafka use cases

APACHE KAFKA ARCHITECTURE

- Detail from Kafka's commit diary
- Replication mechanisms to ensure high availability
- Explanation of partitions and consumer groups for scalability
- Overview of security aspects in Kafka

SUSTAINABILITY MANAGEMENT AND PERFORMANCE OPTIMIZATION

- Data replication and recovery techniques
- Managing log files and offsets
- EOS semantics
- Monitoring, testing and adjusting broker and customer performance

KAFKA CLUSTER MANAGEMENT

- Installation and start-up
- Cluster configuration management
- Cluster monitoring and maintenance techniques
- Log retention and compaction strategies

SECURITY IN APACHE KAFKA

- Implementing transport encryption and authentication
- Securing data and access in a Kafka environment
- Steps for migrating to a secure cluster
- Discussion of best safety practices

KAFKA CONNECT AND KAFKA IN PRODUCTION

- Introduction to Kafka Connect and motivation to use it
- Connector types and configuration
- Deploying Kafka in stand-alone and distributed mode
- Reference architecture for Kafka production deployments
- Capacity planning and management of multi-data center deployments

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, with brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.