Updated on 16/05/2023

Sign up

Microprofile training
3 days (21 hours)

Presentation

MicroProfile is an open-source community that provides a set of specifications designed to help developers build native Java cloud enterprisemicroservices.

MicroProfile is derived from Jakarta EE, formerly Java EE, and therefore enables developers to seamlessly migrate and reuse their existing Java EE code in modern microservices applications.

The aim of MicroProfile is to define collections of Java APIs for optimal development of cloud-native microservers. One of the main reasons for MicroProfile's popularity is the speed with which code can be written.

Our MicroProfile training course will introduce you to the fundamentals of developing modern cloud-native microservices with MicroProfile.

It will teach you how to add missing elements, for example, support for open APIs, JWT authentication, resilience (retries, circuit-breaking, fallback), and so on. You'll also learn how to avoid vendor lock-in when implementing applications using MicroProfile.

As with all our training courses, this one will introduce you to the very latest version of MicroProfile, which at the time of writing is: 24.06.2022 MicroProfile 5.0.

Objectives

- Master the MicroProfile concept and specifications
- Gain a better understanding of the open-source community
- Understand how MicroProfile's specific features interact with other open source specifications, tools and technologies, including JakartaEE, Open Liberty and cloud technologies.

Target audience

- Developers
- Infrastructure engineer
- System administrators
- DevOps

Prerequisites

- Knowledge of Java
- Knowledge of application development

Microprofile training program

Introduction to MicroProfile

- What is MicroProfile?
- What are these advantages?
- Installation and configuration
- MicroProfile architecture
- What's new in version 5.0

Fault tolerance

- Building fault-tolerant services
- Using different tolerance strategies
- Fault management in a distributed system
- Models for fault tolerance specification

MicroProfile specifications

- Add missing elements
- Support for open APIs
- JWT authentication
- Adding resilience to the application

Metric

- The importance of metrics
- Displaying indicators in a MicroProfile application
- Adding custom metrics to a MicroProfile application
- Collect and visualize metrics

Distributed tracing

- The importance of distributed tracing
- Adding OpenTracing to a MicroProfile application
- Connecting two MicroProfile applications
- Activate distributed tracing

Companies concerned

This course is aimed at companies, large or small, wishing to train their teams in a new, advanced computer technology.

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.