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Sign up

OpenFaas training

2 days (14 hours)

Presentation

Our OpenFaas training course will immerse you in the exciting world of serverless computing, equipping you with the essential skills to build scalable, efficient applications with OpenFaaS.

Over the course of this course, you'll develop in-depth expertise in serverless development by exploring the key features and concepts of OpenFaaS in detail, and learning how to put them into practice.

You'll discover how to design and develop serverless functions, while adopting the best techniques to guarantee smooth execution and automatic scalability.

This training course will help you understand how OpenFaaS simplifies the deployment of your applications and exploit its potential to create high-performance solutions.

As with all our training courses, this one will introduce you to the latest OpenFaas resources.

Objectives

- Understanding the basic concepts of OpenFaaS
- Preparing a development environment
- Installing and configuring OpenFaaS
- Developing custom functions with OpenFaaS

Target audience

- Web developers
- Software architects

System administrators

Prerequisites

- A solid understanding of software development concepts
- Basic knowledge of Docker containers would be an asset

OpenFaas training program

OpenFaaS architecture

- Understand the basic concepts of serverless computing
- Discover how OpenFaaS simplifies feature development and deployment
- Presentation of training objectives and structure
- OpenFaaS global architecture
- Understanding key components
 - Gateways
 - The functions
- Discussion of how features are scaled automatically
- Introduction to the OpenFaaS Web user interface

Preparing the development environment

- Development environment configuration
 Hardware and software requirements
- Installing the necessary tools: such as Docker and Kubernetes
- Initial configuration of the OpenFaaS development environment

Installing and configuring OpenFaaS

- OpenFaas installation
- Initial system configuration
 - User and authorization management
- Check the status of your OpenFaaS deployment
- Customize advanced configurations

Function development with OpenFaaS

- Using templates
- Creating custom functions
- Function debugging and error handling
- [PRACTICE] Creating an initial function

Advanced use of OpenFaaS

- Asynchronous calls and queue management
- Linking several functions (function composition)
- Data storage and sharing between functions
- [PRACTICE] Creating a complex workflow

Security, surveillance and troubleshooting

- Safety strategies
- Use of authentication and authorization
- Logging configuration
- Troubleshooting methods
- Use of monitoring tools
- [PRACTICE] Securing and monitoring functions

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.

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.