Updated 10/30/2024

Sign up

Knative training: The new generation of service
2 days (14 hours)

Presentation

Our Knative training will equip you with the skills you need to create highly scalable and flexible applications with Knative.

During this training course, you'll gain in-depth expertise in serverless development by exploring Knative's key features and concepts in detail, while learning how to apply them in practice.

This course will help you gain an in-depth understanding of concepts such as services, revisions and events.

You'll learn how to configure the development environment, and master the deployment of serverless services.

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

Objectives

- In-depth understanding of Knative's core concepts
- Preparing an efficient development environment
- Knative installation and configuration skills

Target audience

- Web developers
- Software architects

- System administrators

Prerequisites

Basic knowledge of software development would be a plus.

Our Knative training program

Introduction to Knative

- What is Knative?
- Contextualization in the world of microservices
- Exploring Knative's basic architecture
- Learning the fundamentals
- The benefits of using Knative
- Potential challenges in adopting Knative

Key components

- In-depth analysis of Serving
- Building
- Eventing
- How to optimize the use of Knative Serving
- Error handling strategies in the Knative environment
- The impact of key components

Installation and configuration

- Installation and configuration
- Deployment of a first application with Knative
- Version and update management
- Using the command line interface (CLI)
- Recommended practices
- Troubleshooting during initial setup

Performance optimization

- Automatic scalability
- Intelligent caching strategies
- Monitoring and troubleshooting
- Best practices for performance optimization
- Advanced resource management techniques
- Use of third-party monitoring tools

Continuous Integration and Deployment (CI/CD)

- Integrating Knative into a CI/CD pipeline
- Automated deployment
- Automated testing and validation
- Rollback strategies in the event of deployment failure
- Using observability
- Securing CI/CD processes

Advanced use cases

- Knative in a multi-cloud environment
- Asynchronous workload management
- Advanced use of events
- Deploying complex microservices
- Problem-solving for advanced use cases
- Tips and tricks from the experts to maximize the benefits of Knative

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.