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Sign up

KCNA Preparation and Certification

ALL-IN-ONE: EXAMINATION INCLUDED IN PRICE

1 day (7 hours)

Presentation

Mastering Kubernetes in cloud native increases the agility and delivery speed of your development teams. This translates into faster time-to-market and greater operational efficiency.

The KCNA is a recognized certification that allows you to prove to your employees that you have the conceptual knowledge to use Kubernetes and the entire native cloud ecosystem.

The exam is divided into 5 parts: Kubernetes fundamentals, container orchestration, cloud-native architecture, cloud-native observability and cloud-native application delivery. During this preparation day, we'll go back over these 5 concepts while giving you the automatisms and tactics you need to complete your assessment more quickly.

Objectives

- Fundamental knowledge of Kubernetes and cloud-native technologies
- Be prepared to pass the KCNA exam

Target audience

- Developers
- Architects
- DevOps system administrators

Prerequisites

An interest in cloud-native technologies.

Hardware requirements

- SSH client and virtual machines at your disposal
- Docker installed
- Unrestricted Internet access

KCNA exam preparation program

Cloud Native Architecture

- Introduction cloud-native application development with microservices architectures
- Introducing microservices
- From a monolithic approach to microservices
- Autoscaling
- Authentication

Kubernetes fundamentals

- Architectural overview
- Understanding resources
- Container presentation
- APIs and Access
- API objects
- Volumes and data

Container orchestration

- Kubernetes vs Docker Swarm
- Overview of the container ecosystem
- Launch these containers
- Image container
- Runtimes container
- Container lifecycle hook
- Networking
- Service discovery and DNS
- Service Mesh
- Storage

Observability

- Data types
- Data sources
- Determining metrics
- Tracks
- Observability mistakes not to be made
- Telemetry
- Logging, monitoring and follow-up

Optimizing Cloud Native application delivery

- Introducing GitOps
- What is a CI/CD pipeline, why use it with Kubernetes?
- Introducing Gitlab
- Development cycle overview
- Building your pipeline
- Automate build in a continuous integration chain

Strategy and methods for exam success

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, 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.

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