Kubernetes CKAD Professional

Duration: 3 Days **Course Code: GKKUBCKAD** **Delivery Method: Company Event**

Overview:

This Kubernetes CKAD Professional course is a training for Developers and a Certified Kubernetes Application Developer (CKAD) exam theory training. The training covers the Kubernetes Fundamentals for Developers as defined by the Cloud Native Computing Foundation (CNCF) and tested in the CKAD exam: from the background of the Kubernetes Architecturein the context of IT development, Microservices, and Cloud-Native so that you can start using Kubernetes from a point of view, understanding, and insight at the end of the training
The training is hands-on: every participant has their own bare-metal clusterthe training is loaded with exercises and examples (which you carry out yourself), so Kubernetes will be taught by doing, at the level of CKAD.
The experiences you gain during the training will give you tools to use Kubernetes in practice and prepare them, based on the theory, for the CKAD exam.
Does your organization start embracing Kubernetes? And do you want to make the next step in the world of Kubernetes and become a specialist? Then this training is perfect for you.

Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

Target Audience:

The training is meant for: Developers or DevOps Engineers who are responsible for developing, building, or rolling out applications that need to run on Kubernetes hosting. The entry-level level is from beginning to medium knowledge of Kubernetes. For anyone who aims to obtain certification as a Certified Kubernetes Application Developer (CKAD). This training teaches the theory needed for the CKA Exam..

Objectives:

- The starting points of this training are:
- Hands-on learning of Kubernetes in the basics and on bare metal. In accordance with the theory as expected by the Cloud Native Foundation for certification.
- After this training, the participant will be able to make a start with Kubernetes in his/her organization.
- After this training, the participant has the basic knowledge to set up and use Kubernetes on both on-premise and managed hosting.
- Learning the Kubernetes basis, as formulated by the CNCF, from a hands-on approach and based on the Kubernetes architecture (to provide understanding and context).
- This training lays the foundation needed for certification and deepening so that follow-up training can build on this.
- On the basis of this training the participant gets insight into Kubernetes and an overview of the level of application, microservice, and ‘modern application architecture’.
- Based on working and elaborated expert examples the participant can start with Kubernetes expert parts in their own organization after the training or build a solution based on obtained examples.

Prerequisites:

- Minimum dexterity/basic knowledge of Linux command-line (Bash, Linux commands), Private Keys and Public Keys are required to follow the pace of this training.

Testing and Certification

In this training, the basic knowledge required for the CKAD exam will be taught. The exam itself consists of assignments, which makes the exam a test for skills and speed of action.

Follow-on-Courses:

The following courses are recommended for further study:

- Kubernetes Developer Advanced (GKKUBCKADA)

Content:

The fundamentals follow the content as prescribed for the CKAD exams for certification. The training consists of a part theory in presentation form plus performing some 30 to 40 detailed exercises. Topics that are passing by:

- A History IT
- Virtualization: What is a Virtual Machine and what is a Container. And what is the difference between the two?
- The Microservices paradigm
- What is Kubernetes, what is Cloud Native? And why is this development important
- Kubernetes architecture;
- Kubernetes principles
- Kubernetes components
- Kubernetes Resources (deployment, replicaset, pods)
- Basic concepts of Kubernetes: control plane, resources in detail, services, draining nodes, setting limits, tolerations, affinity/anti-affinity, horizontal scaling, deployments, release management ; canary releases, startup/liveliness ; readiness checks, rollbacks, configsmaps ; secrets, lifecycle-hooks ; init containers, logging, monito
- Storage
- Kubernetes use principles: Helmet, Ingress Controller
- Kubernetes security: Role-Based Access Control (RBAC)

Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931

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