Kubernetes CKA Professional

Duration: 3 Days **Course Code: GKKUBCKA**

Overview:

This Kubernets CKA Professional course is a Kubernetes Fundamentals and CKA exam theory training.
The training covers the Kubernetes Fundamentals for engineers as defined by the Cloud Native Computing Foundation (CNCF) and tested in the CKA exam:based on an understanding of the Kubernetes Architecturein the context of IT development, Microservices, and Cloud-Native so that you, at the end of this course, can start using Kubernetes as Engineer based on understanding, and insight into Kubernetes,
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 CKA.
The experiences you gain during the training will give you tools to use Kubernetes in practice and prepares you, for the theoretical part, for the CKA exam.

Virtual Learning

This interactive training can be taken from any location, your office or home and is delivered by a trainer. This training does not have any delegates in the class with the instructor, since all delegates are virtually connected. Virtual delegates do not travel to this course, Global Knowledge will send you all the information needed before the start of the course and you can test the logins.

Target Audience:

The training is meant for:Engineers responsible for designing, setting up, or managing Kubernetes clusters. The level of entry is from beginning to medium knowledge of Kubernetes.For anyone who aims to obtain certification as a Certified Kubernetes Administrator (CKA). This training teaches the theory needed for the CKA Exam.

Objectives:

- Hands-on learning of Kubernetes in the base and on bare metal. In line with the theory expected by the Cloud Native Computing Foundation for certification.
- The aim of this training is that after this training the participant is able to start using Kubernetes in his/her organization as an Engineer:
- After this training, the participant has the basic knowledge to set up and use Kubernetes on both on-premise (self-hosting) and managed-hosting.
- Learning the Kubernetes basis, as formulated by the CNCF, from a hands-on approach and based on the Kubernetes architecture.
- This training lays the foundation needed for certification so that subsequent exam training courses can build on this.
- This training gives participants inside in Kubernetes as an application, at the hosting architecture level, and as a hosting platform.

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 Certified Kubernetes Administrator exam is taught. The exam itself consists of assignments, which allow the exam to focus on skills and speed of action. In addition to this training (Kubernetes CKA Professional), the following training is recommended for optimal preparation for the exam: Kubernetes CKA Exam Prep (GKKUBCKA-E)

A theoretical/comprehensive basis is therefore not enough to actually take the exam if passing is the starting point.

Follow-on-Courses:

The following is recommended for further study:

- Kubernetes CKA Exam Prep (GKKUBCKA-E)
- Kubernetes Administrator Advanced (GKKUBCKAA)
- GKKUBCKA-E -

Content:

This training follows the contents as prescribed for the CKA exam for certification by offering the theory in presentation form and performing 30 to 40 detailed exercises.

Topics taught:

- A History of IT
- Virtualization: what is a Virtual Machine and what is a Container. And what is the difference between the two?
- 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, anti-affinity, horizontal scaling, deployments, release management ; canary releases, liveliness checks, readiness checks updates, rollbacks, configsmaps ; secrets, lifecycle-hooks ; init containers, logging, monitorin
- 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 Tel.: +974 40316639

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