



Certificate

Kubernetes 101

Fundamentals in Kubernetes

Nico Ismaili

participated in the two-day course "**Kubernetes 101 - Fundamentals in Kubernetes**" on **14 and 15 February 2024** and successfully completed the course.

- **Overview of the Kubernetes ecosystem and the underlying concepts**
- **Introduction & Concepts:**
Containerization, Orchestration, History & Architecture
- **Installation & Access:**
Setting up a cluster, configuration, update, kubectl, tools, managed Kubernetes
- **Kubernetes Resources & Management:**
Configuration and deployment of applications, management, management of application in cluster, useful and helpful features
- **Networking, Loadbalancing & High Availability:**
Kube-proxy, high availability pattern with Kubernetes (HPA, VPA), service mesh, kube-proxy, resilience patterns
- **Security, Backup, Disaster Recovery:**
Important security features, secret management, backup possibilities
- **Observability (Logging, Monitoring, Alerting, Tracing):**
Metrics, logs (Cluster, Application), log shipping, alerting

Kubernetes is a complex system. Used correctly, it can solve many DevOps challenges. However, it takes a lot of time to understand the overall scope of Kubernetes' features and capabilities. Effective use of Kubernetes can only be learned through years of use.

In the Kubernetes 101 training, we cover the basics and demonstrate which problems a Kubernetes cluster can solve. For this purpose, a Kubernetes trainer with practical experience presents an overview of the concepts of Kubernetes.

You learn what it means to run a Kubernetes cluster as well as what skills and prerequisites are necessary to do so.

In the training, what you have learned is consolidated and practically applied through several, practice-oriented Lab & Exercise units.

Wiesbaden, February, 15 2024

A handwritten signature in blue ink, appearing to read 'KS' or 'Kevin Schu'.

Kevin Schu

Director Cloud & Devops Consulting
Academy Trainer