Reference: 2B/EN/DK

Docker to Kubernetes Training Course

Master the Entire Cycle from Containerisation to Cloud-Native Orchestration

Duration: 4 Days | Hours: 28 h

Remote · Sessions guaranteed from 1 registrant · 60% hands-on practice

DESCRIPTION

Containerising applications has become an essential standard in modern environments. But moving from a Docker image to a controlled deployment on Kubernetes or in the cloud requires a gradual, structured and practical increase in skills.

This training course teaches you how to use the key tools (Docker, Compose, Kubernetes) and link them to a real cloud-ready deployment process. From the local environment to the cluster, you will learn how to automate, expose and monitor your containerised applications.

LEARNING OBJECTIVES

By the end of this training course, participants will be able to:

- Efficiently containerise applications with Docker
- Manage multi-container development environments via Docker Compose
- Understand the fundamentals of Kubernetes and services deployed in a cluster
- Orchestrate deployments in cloud environments (GCP, Azure, AWS or on-premises)
- Monitor, secure and expose your containerised applications
- Link containerisation to a DevOps workflow (CI/CD, versioning, rolling updates)

PREREQUISITES

- Basic knowledge of Linux command line
- Basic understanding of application development (Node, Java, Python, etc.)
- Comfortable with concepts of service, API and web architecture

> *Because each participant is unique, a personalised interview is systematically organised in advance with our expert to design a training programme perfectly aligned with their objectives, level and professional challenges.*

TARGET AUDIENCE

Developers, system administrators and DevOps professionals transitioning to a modern, modular and scalable infrastructure.

DETAILED PROGRAMME

> The training alternates between theoretical input and hands-on practice (approximately 60% of the time). Modules are built around practical exercises based on real-world business use cases.

Module 1 – Docker: solid foundations of containerisation

- Images, containers, networks and volumes
- Dockerfile best practices
- Log management and debugging

Module 2 – Docker Compose: local orchestration

- Multi-container development environments
- docker-compose.yml files and isolated networks
- Environment variables and reproducible setups

Module 3 – Introduction to Kubernetes

- Fundamental components: Pods, Services, Deployments
- kubectl commands and YAML structure
- Probes and lifecycle management

Module 4 – Cloud-native deployment

- Deployment on minikube, k3s or cloud (GKE, AKS, EKS)
- Helm charts for templating
- Secrets and Ingress configuration

Module 5 – Monitoring, logs and security

- Prometheus and Grafana integration
- Centralised logs with Loki or ELK
- RBAC and network policies

Module 6 – Dev to Prod use case

- Full deployment of a containerised application
- From local to cloud via CI/CD pipeline
- Rolling updates and rollback strategies

TEACHING METHODS

Format and Delivery

The training is delivered remotely via an interactive virtual classroom. It can also be delivered on-site, with content customised to match the needs of your professional project. The theory/practice split is approximately 40%/60%.

MFE-IT Ultra-Personalised Format

Each session accommodates between 1 and 3 participants, ensuring highly individualised support. A preliminary interview allows us to tailor the content to each participant's profile. Inter-company sessions are guaranteed from just 1 registrant (except in cases of force majeure).

Skills Assessment

Throughout the training, the trainer assesses participant progress through multiple-choice questions, role-playing exercises and hands-on work. At the end, a certificate of achievement is issued to each participant.

Post-Training Support

For one month following the training, each participant can contact MFE-IT trainers with questions about implementing acquired knowledge. A response is provided by email or telephone within 48 working hours.

Accessibility

MFE-IT is committed to welcoming people with disabilities. Contact: contact@mfe-it.com.

PRACTICAL INFORMATION

Trainer Resources

- Structured demonstrations aligned with the detailed programme
- Exercise briefs and solutions throughout the training
- A ready-to-use technical environment for practical workshops
- Trainer validation of acquired knowledge at the end of each workshop
- Digital reference documents

Certification and Validation

At the end of the training, a certificate is sent by email specifying the objectives, nature, duration and assessment results. A completion certificate can also be provided on request.

Benefits for Participants

- Train from your workplace or home, with no travel required
- Benefit from an expert trainer-consultant on the subject
- Enjoy an ultra-personalised format (1 to 3 participants)
- Continue training even in the event of unforeseen circumstances

Benefits for the Organisation

- Optimise the training budget by reducing travel and accommodation costs
- Offer quality training to all employees, regardless of location
- Reduce absence time linked to travel
- Support team upskilling in all contexts