

DOCKER FUNDAMENTALS + ENTERPRISE DEVELOPERS (4 Days)

The Docker Fundamentals + Enterprise Developers Bundle includes the full Docker for Enterprise Developers course as well as the prerequisite Docker Fundamentals course run back to back in a single intensive training experience. The Docker Fundamentals training course features the foundational concepts and practices of containerization on a single Docker node. The course offers learners the opportunity to assimilate basic container orchestration and how to scale Docker across multiple nodes in a simple swarm cluster. This course provides essential foundational knowledge for subsequent Docker courses. As the follow-on to the Docker Fundamentals course, Docker for Enterprise Developers is a role-based course designed for an organization's Development and DevOps teams to accelerate their Docker journey in the enterprise. The course covers best practices to containerize and modernize legacy applications or build containerized applications from scratch that are secure, robust, highly available, resilient and self-healing. Platform Availability: Linux, Windows (Fundamentals Only)

Skills Gained

By the end of this course successful learners will be able to:

- Assess the advantages of a containerized software development & deployment
- Use Docker engine features necessary for running containerized applications
- Utilize Swarm and Kubernetes orchestrators to deploy, maintain, and scale a distributed application
- Describe the essential patterns used in a highly distributed EE application
- Understand how to configure EE applications for different environments without code changes
- Produce and containerize scalable, accessible, and fault-tolerant EE applications
- Apply different debugging and testing techniques to containerized EE applications

Who Can Benefit

Software Engineers and DevOps professionals working in an Enterprise developing mission critical line of business applications.

Course Outline

Day 1

- Introducing Docker
- Containerization Fundamentals
- Creating Images
- Docker Volumes

Day 2

- Docker Networking Basics
- Introduction to Docker Compose
- Introduction to Swarm Mode
- Introduction to Kubernetes
- Secrets
- Fundamentals Signature Assignment

Day 3

- Distributed Application Architecture
- Sample Application
- Edit and Continue
- Debugging
- Docker Compose
- Testing
- Service Discovery
- Defensive Programming
- Logging and Error Handling

Day 4

- Health Checks
- Secrets
- Configuration Management
- Development Pipeline Overview
- Universal Control Plane
- Docker Trusted Registry
- Repository Automation
- Build Server