



Docker Fundamentals (DO101)

Master Container Technology with Red Hat's Official Docker Training.

Course Overview

This foundational course introduces Docker containerization technology, teaching you how to deploy, manage, and scale applications using containers. Perfect for developers, system administrators, and DevOps professionals.

- ✦ Hands-on container labs
- ✦ Industry-standard practices
- ✦ Real-world projects
- ✦ DCA certification pathway



Course Curriculum (DO101)

Module 1. Container Technology Overview

- ✦ Introduction to containerization
- ✦ Docker vs Virtual Machines
- ✦ Container ecosystem overview
- ✦ Benefits and use cases

Module 2. Docker Installation & Setup

- ✦ Docker Engine installation
- ✦ Docker Desktop setup
- ✦ Docker CLI basics
- ✦ Registry configuration

Module 3. Working with Images

- ✦ Docker images fundamentals
- ✦ Dockerfile creation and best practices
- ✦ Image layers and optimization
- ✦ Docker Hub and registry management



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Module 4. Container Lifecycle Management

- ✦ Running and managing containers
- ✦ Container networking basics
- ✦ Volume management and data persistence
- ✦ Environment variables and configuration

Module 5. Multi-Container Applications

- ✦ Docker Compose introduction
- ✦ YAML file configuration
- ✦ Service orchestration
- ✦ Application stack deployment

Module 6. Security & Best Practices

- ✦ Container security fundamentals
- ✦ Image scanning and vulnerability assessment
- ✦ Resource limits and constraints
- ✦ Production deployment guidelines