

Docker Fundamentals

Duration: 2 Days · **Training format:** Virtual Classroom / Online

Description

In this course, you will learn 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 or Kubernetes cluster. This course provides essential foundational knowledge for subsequent Docker courses.

Delegates will learn

- Understand the foundations of containerization on a single Docker node
- Create an image using Dockerfile best practices
- Use volumes in the application development process
- Apply concepts of the Docker networking model
- Understand the goal of services as a method of scaling containers
- Utilize two different orchestrators (Swarm and Kubernetes) to deploy a single application across multiple machines
- Create a secret and understand its accessibility capabilities

Audience

Developers, operators, and architects desiring a strong foundation in Docker technologies and an introductory hands-on experience building, shipping, and running Docker containers.

Outline

Day 1

- Understanding the DevOps
- The Docker Technology
- Install Docker Server
- Docker Machine
- Docker Commands
- Docker Registry and Repositories
- Creating and Managing Docker Images
- Running and Managing Containers

Day 2

- Creating and Running a Simple Web App.
- GitHub
- Docker Networking Basics
- Docker Compose
- YAML files
- Scaling out with Swarm
- What is next?
- Kubernetes
- Openshift
- CI/CD Servers
- Ansible / Puppet / Chef

Prerequisites

There are no prerequisites for this course.