

Training: Component Soft  
DCK-101 Docker Intro

## TRAINING TERMS

2025-06-13 | 1 day | Virtual Classroom

## TRAINING GOALS:

Linux containers are changing the way companies think about service development and deployment. Containers play a vital role in the modern data-center, and Docker is leading the way. This course covers all the core features of Docker including: container creation and management, interacting with Docker hub, using Dockerfile to create and manage custom images, advanced Docker networking (how to safely expose container services to the world, and link containers), the use of Docker volumes to manage persistent data, and Docker Compose to build multi-container applications.

Structure: 50% theory 50% hands on lab exercises.

Target audience: System administrators, developers and devops who want to understand and use Docker in cloud and data center environments.

## CONSPECT:

- Module 1. Container introduction
  - Application containers
  - Container runtimes
  - Docker introduction
  - LAB TASKS: Understand Linux namespaces
- Module 2. Managing containers using Docker
  - Starting/stopping containers with docker
  - Listing/inspecting containers
  - Executing commands in containers
  - LAB TASKS: Managing docker containers
- Module 3. Managing the container's filesystem with Docker
  - Accessing the filesystem
  - Overlay FS
  - Volumes
  - LAB TASKS: Managing volumes

- Module 4. Managing container images
  - Image layers
  - Creating images from running containers
  - Working with images
  - Building images using Dockerfile
  - LAB TASKS: Managing images
- Module 5. Managing container networking
  - How containers are connected to the network
  - Using host networking
  - Sharing the network among multiple containers
  - Publishing ports
  - LAB TASKS: Check container connectivity
- Module 6. Docker architecture
  - The processes
  - Extracting logs
  - Registry
  - LAB TASKS: Accessing container logs

## REQUIREMENTS:

Proficiency with Linux CLI. A broad understanding of Linux system administration.

## Difficulty level



## CERTIFICATE:

The participants will obtain certificates signed by Component Soft (course completion).

## TRAINER:

Component Soft Certified Trainer