

# Docker and Kubernetes Basics

Learn to build, manage and monitor containerized applications using Docker and Kubernetes, from architecture to networking and storage.

**2 Days**

16 HOURS

**7**

MODULES

**19**

TOPICS

## COURSE OVERVIEW

This course helps to understanding basics architecture, installation on Docker and Kubernetes. It gains knowledge on basic objects, networking and storage in Kubernetes and also provide exposure in Docker and Kubectl tool commands.

## WHO THIS COURSE IS FOR

DevOps Engineers

System Administrators

Cloud Engineers

Application Developers

Infrastructure Engineers

## LEARNING OBJECTIVES

- Explain the architecture and workflow of Docker containerization
- Describe the Docker container image registry
- Apply Docker CLI commands to manage containers
- Explain the architecture and components of Kubernetes
- Install Kubernetes using kubeadm and Kubectl CLI tools
- Create and manage basic Kubernetes objects
- Configure networking and persistent storage in Kubernetes
- Monitor containers and clusters using Octant and Fluentd

# 7 Modules, 19 Topics

01

## Introduction on Docker

### TOPICS

- Explore the basic requirements on containerization
- Learn about the overview on Docker Container Runtime Engine
- Understandings the architecture and workflow on containerization using Docker
- Learn about container image registry

02

## Docker CLI Commands

### TOPICS

- Understanding the CLI commands
- Exploring the commands through containerization

03

## Introduction on Kubernetes

### TOPICS

- Learn about the overview on Kubernetes Orchestration Tool
- Understanding the architecture and workflow on Kubernetes
- Explore the components on Kubernetes

04

## Kubernetes Installation

### TOPICS

- Discuss about the Kubectl CLI Tool
- Understanding the kubeadm tool for Kubernetes Installation
- Kubernetes Installation and Management

05

## Basic Kubernetes Objects

### TOPICS

Explore and creation of Kubernetes objects · Implementing orchestration through Kubernetes

06

## Networking and Storage

### TOPICS

- Exploring Networking with containerization and Kubernetes
- Providing stateful containers through Persistent Storage

07

## Monitoring

### TOPICS

Monitoring using Docker and Kubectl commands · Exploring Octant for monitoring · Collecting Logs and forwarding using Fluentd

#### WHAT IS INCLUDED

## Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

#### ABOUT KOENIG

## Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

#### FLEXIBLE DELIVERY

## Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

## Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

Visit [koenig-solutions.com](https://koenig-solutions.com)

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