

Docker Fundamentals

Duration: 2 days (8hrs/day)

Prerequisites: Basic knowledge of Linux.

Course Objective: The course primarily focuses on containerization technology, its implementation and working with volumes and networking.

Docker Version: Latest

Lab Requirement: Koenig DC (CentOS 9)

Module 1 - Installation of Docker

Introduction to Docker

Docker Architecture

Docker Components: Docker Client, Docker Host and Docker Registry

Lab: Installation of Docker

Module 2 - Docker Client Operations

Understanding the Docker Client

Lab: Running a Container

Lab: Managing Containers

Lab: Executing Commands in Running Containers

Module 3 - Building Custom Images and Docker Registry

Introduction to Image

Lab: Creating Docker Images using Docker Commit

Lab: Building a Dockerfile

Lab: Tagging an Image

Lab: Pull and Push Images

Lab: Creating Private Registry using Nexus Container

Module 4 - Storage

Storage Overview

Lab: Creating and Managing Volumes

Lab: Using Bind Mounts

Module 5 - Container Networking

Overview of Container Networking

Introduction to Bridge Network Driver

Introduction to Host Network Driver

Introduction to None Network Driver

Lab: Managing Network Bridges

Lab: Create Container with Host Network Driver

Lab: Create Container with None Network Driver