Containers Fundamentals

Duration: 3 Days (8Hours per day)

Module 1 – Virtualization vs Containers

What is Virtualization
What is Container
Virtualization vs Container Architecture

Module 2 – Docker Installation and Architecture

Configure Repository for Docker
Installing Docker
Understanding Docker Architecture

Module 3 – Managing Containers

Creating/Deleting Container
Container Operations like start, stop and exec
Port Mapping

Module 4 – Image Operations

Creating a Docker Image using Docker Commit
Building a Dockerfile
Tagging an Image
Pull and Push Image
Creating Private Registry

Module 5 – Storage

Storage Overview
Creating and Managing Volumes
Using Bind Mounts

Module 6 – Networking

Overview of Container Networking
Introduction to Bridge Network Driver
Managing Network Bridges
Introduction to Host Network Driver
Create Container with Host Network Driver
Introduction to None Network Driver
Create Container with None Network Driver

Module 7 – Container Security

Understanding Linux Capabilities
Managing Containers Linux Capabilities

Module 8 – Kubernetes Basics

What is Kubernetes
Need of Kubernetes
Kubernetes Architecture
Managing Basic Resources like Pod, Replica Set and Cluster IP Service