Docker Course Contents

(Duration -3 Days)

Overview
You will learn the difference between the container and the virtual machine. This course will take you through the life cycle of the container and the various stages of development. Moreover, this course will train you to install Docker on various platforms, will create your first container, image, push and pull to the registry hub, will learn how to install your own local registry, volumes, container networking, orchestrating containers, and will learn how to debug your containers. You will build an HTTP server image, run as a service, and connect to it. Also, Finally, you will learn how to create a swarm and prepare your containers for production.

Who this class is for
It is for developers, operation managers, and IT professionals who would like to learn Docker.

Prerequisites
No prior knowledge of Docker is required.
Docker is open-source, so no subscriptions are required.

Course Outline

Day 1

Getting started with Docker
What is Docker?
What is the difference between VM and Containerization?
Installing Docker
Download your first image
Docker Flow

Handling Docker Containers
Run your first container
Terminology
Working with Docker image
Working with interactive container

Day 2

Building images
Docker's integrated image building system
A quick overview of the Dockerfile's syntax
Dockerfile build instructions
How to remove images
How to remove containers

Publishing image
Understanding the Docker Hub
How to push images to the Docker Hub
Automatic building of images
Private repositories on the Docker Hub
Creating organizations on the Docker Hub

Day 3

Orchestrating containers
Linking containers
Orchestrating
Example of docker-compose

Securing Docker containers
Is Docker secure?
Best practices for container security

Running your private Docker infrastructure
The Docker registry and index
Docker registry use cases
Run your own index and registry
Push the image to a newly created registry