



## **Docker and Kubernetes**

Docker and Kubernetes are revolutionizing the way you develop, manage, and ship your apps. This course will help you'll be taught the basics that are involved in Docker as well as Kubernetes.

In the beginning, you'll learn the fundamentals of the definition of a container and how it can be used to enable cloud-native application designs. Then, you'll explore the functions in Docker and Kubernetes and the fundamentals of how they operate. Then, you'll learn how you can prepare your business and yourself to succeed in a world that is dominated by containers. After you have completed the program, you will have everything you need to take your container journey to the next level.

### **Content of the 2 days Live Training:**

#### **1) Module 01: Virtualization & Cloud computing**

1. Virtualization Overview and concept
2. Cloud Introduction
3. Essential cloud characteristics
4. Service models
5. Cloud Services
6. Cloud Services Specifications
7. The Telco/IT Cloud
8. Cloud Models: IaSS, Pass, SaSS
9. Concept & Architecture of Clo

## 2) Module 02: Cloud Native

1. Cloud native overview and principles
2. Evolution and lead up
3. Cloud native Ecosystem
4. CI/CD Overview and benefits
5. CNCF Overview
6. Benefits of Microservices
7. Scope of Microservices
8. Microservices for industry verticals and enterprises
9. Examples of Microservices

## 3) Module 03 : Dockers

1. Dockers overview
2. Dockers Architecture
3. Dockers objects
4. Containers usage
5. Dockers storage and networking
6. Dockers containers & Hosts and shells
7. Dockers MML brief

## 4) Module 04 : Microservices Principles

1. Microservices concepts
2. Benefits of Microservices
3. Microservices Drivers
4. Design characteristics of microservice architecture
5. Concepts and benefits
6. Containers management
7. Microservices implementation
8. Use cases and example of Microservices

## 5) Module 05: Microservices with Kubernetes

1. Kubernetes Overview

2. Architecture of Kubernetes
3. Container orchestration with Kubernetes
4. Kubernetes architecture and key components
5. Kubernetes Nodes, service ,pods

#### 6) Module 06: Kubernetes explained

1. Kubernetes Deployments
2. Kubernetes Images
3. Kubernetes volumes
4. Kubernetes - Replication Controller
5. Kubernetes - Replica Sets
6. Kubernetes API
7. Kubernetes dashboard
8. Kubectl
9. Kubectl commands