

# **DOCKER COURSE SYLLABUS**

### Hi Folks,

Oranium Tech introducing some amazing content on Docker. Docker is an open-source platform that enables developers to build, deploy, run, update and manage containers—standardized, executable components that combine application source code with the operating system (OS) libraries and dependencies required to run that code in any environment.

#### Docker World - An introduction

- Introducing Docker
- Comparing VM and Docker
- Docker –An Architecture Overview
- The Docker Hub Brief Introduction
- Preparing docker-machine Installation and configuration
- Start containerizing
- Play with docker images
- Customizing container on your own
- Running Container with Docker commands
- Port forwarding with docker container
- Exercise: Installation of docker and Image Setup
- Exercise: Creating your own Images
- Exercise: Creating your own Images
- Exercise: Exposing Container Ports to the Host and test it

## The Dockerfile, Builds, and Network Configuration

- Dockerfile Directives
- USER and RUN
- RUN Order of Execution
- ENV
- CMD vs. RUN
- ENTRYPOINT



- EXPOSE
- Docker Container Volume Management An introduction
- Docker Networking concepts
- List and Inspect
- Create and Remove
- Assign to Containers
- Exercise: Creating a Custom Image from a Dockerfile
- Exercise: Managing Containers
- Exercise: Adding External Content to Containers

## **Docker Commands and Structures**

- Inspect Container Processes
- Previous Container Management
- Controlling Port Exposure on Containers
- Naming Our Containers
- Docker Events
- Managing and Removing Base Images
- Saving and Loading Docker Images
- Image History
- Taking Control of Our Tags
- Pushing to Docker Hub
- Exercise: Base Image Maintenance and Cleanup
- Exercise: Advanced Container Creation at the Command Line
- Exercise: Create a Dockerized Basic Web Server
- Continuous Integration for Docker

# **Docker-Compose**

- Networking Overview
- The Default Network
- Isolating Containers
- Aliases & Container Names
- Links
- How Updates Affect Networking
- Using External Networks
- Configuring Compose



- Bringing an Environment Up
- Changing a Running Environment
- Introspecting On An Environment
- Taking an Environment Down

# Docker swarm – A deep dive

- Swarm Intro and Creating a 3-Node Swarm Cluster
- Swarm Mode A Built-In Orchestration
- Creating Your First Service and Scale It Locally
- Creating a 3-Node Swarm Cluster
- Swarm Basic Features and How to Use Them In Your Workflow
- Scaling Out with Overlay Networking
- Create A Multi-Service Multi-Node Web App
- Service Placement Preference
- Node Availability

Looking for Classroom Training learn Docker Course at your nearest location in Chennai Also, you can learn from anywhere and take Docker Course Through online.

All The Best
Phone / WhatsApp Details / Mail Id

**CHROMPET**: 73053 43555 whatsapp / oraniumtech@gmail.com

**VELACHERY**: 73052 77748 whatsapp / oraniumtechvh@gmail.com