

Starting with Docker

Total Duration

4 days

Audience:

This workshop is intended for developers who need to understand Docker basics and start learning YML.

Course Objectives:

After completing this workshop the participants will be able to do

- Install Docker
- Work with Docker images
- Develop and deploy small application using Docker
- Start working with YML

Pre-requisites:

- Networking basics

Course Contents:

- Understand the architecture
 - What can I use Docker for?
 - What are the major Docker components?
 - What is Docker's architecture?
 - The Docker daemon
 - The Docker client
 - Inside Docker
 - How does a Docker image work?
 - How does a Docker registry work?
 - How does a container work?
 - What happens when you run a container?
 - The underlying technology
 - Namespaces
 - Control groups
 - Union file systems
 - Container format
- Installing Docker
 - Installation from binaries
 - on Linux
 - on Windows
- Running a Docker Container
 - From the Docker Quickstart Terminal

- Using Docker from Windows Command Line Prompt (cmd.exe)
- Using Docker from PowerShell
- Container port redirection
- Login with PUTTY instead of using the CMD
- Getting started with Docker Hub
 - Dockerizing applications: A “Hello world”
 - Working with containers
 - Working with Docker images
 - Linking containers together
 - Managing data in containers
 - Working with Docker Hub
- Overview of Docker Compose
 - Installation and set-up
 - Create a Docker image
 - Define services
 - Build and run your app with Compose
- Work with development container
 - Clean your host of Docker artifacts
 - Build an image
 - Start a container and run a test
 - Restart a container with your source
- Work with YML
 - image
 - build
 - dockerfile
 - command
 - extra_hosts
 - ports
 - links/external_links
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- How to work with .Net applications
- How to work with Microsoft 5.0 image
- Working with web application deployment
- Working with REST Server