

The Docker certification training course provides an overview of the core Docker technologies including the Docker Compose, Dockerfile, Docker Engine and Docker Network. The course also covers the Docker Hub, Docker Swarm, Docker Containers and Docker Storage. Master the key concepts of Docker with our two day Docker certification training program. The delegates will be introduced to the Docker platform, the architecture of Docker, containerization and Docker Hub. They will learn how to deploy various Container based Applications on the Cloud, data containerization into a single or multiple containers and different ways to create a Docker Image. Throughout the course, the delegates will explore the various terminology associated with Docker, describe what is Container in Docker, start, stop and remove containers and write Dockerfiles for your various application services. The delegates will also learn to create a WordPress site using Docker Compose and manage them locally using Docker UI and Kitematic UI.

Docker is the software containerization platform that helps the users to build, ship and run applications on any platform. Docker is most widely used by the Developers, Operators and Enterprises to eliminate “works on my machine” problems, run and manage apps side-by-side in isolated containers and build agile software delivery pipelines to ship for both Linux and Windows Server apps. By the completion of the course, the delegates will be able to build any application with the use of any toolchain in any language.

## Prerequisites

The delegates must have a basic understanding of Linux before attending the course. However, good knowledge of how to run basic commands, open your favorite shell or terminal, manipulate files and navigate a directory tree would be beneficial.

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## Course Objectives

- Get insights into the basics of Docker
- Understand Docker Hub and Docker File and learn how to create Docker images
- Learn how to run a basic hello world in Docker
- Explore the various networking mechanisms available in Docker
- Deploy various Container based Applications on the Cloud
- Understand the concept of containerization and various operations performed on it
- Learn about the Docker daemon's configuration

## Getting Started with Docker

- Explain to Docker
- What are Containers?
- Installing Docker
- Running and Building Images
- Docker Fundamentals
  - Docker Architecture

- Linking Containers
- Managing Data with Volumes and Data Containers
- Docker Commands

## **Software Lifecycle with Docker**

- Using Docker in Development
- Creating a Web App
- Image Distribution
- Continuous Integration and Testing with Docker
  - Adding Unit Tests to Identidock
  - Creating a Jenkins Container
  - Pushing the Image
  - Backing Up Jenkins
  - Hosted CI Solutions
  - Testing and Microservices
- Deploying Containers
- Logging and Monitoring
  - Logging
- Monitoring and Alerting

## **Tools and Techniques**

- **Networking and System Discovery**
  - Service Discovery
  - Networking Options
  - New Docker Networking
  - Networking Solutions
- **Orchestration, Clustering, and Management**
  - Clustering and Orchestration Tools
  - Container Management Platforms

## **Securing and Limiting Containers**

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