

Docker Containers

Audience Course Docker Containers

The course **Docker** Containers is intended for developers who want to use Docker containers for application development.

Prerequisites Course Docker Containers

To participate in the course Docker Containers the participants should have experience with the development of applications and related matters.

Realization Training Docker Containers

The theory is explained on the basis of presentations. The concepts are illustrated with demos. The theory is interspersed with exercises. The course times are from 9.30 to 16.30.

Official Certificate Course Docker Containers

Participants receive an official certificate Docker Containers after successful completion of the course.



Content Course Docker Containers

In the course Docker Containers participants learn how to use Docker containers in application development. Docker is a container manager that creates and starts containers with a specific runtime environment.

Docker Intro

The course Docker Containers starts with an explanation of how Docker containers work. The participants learn to create and run Docker containers. Unlike virtual machines, Docker uses resource isolation so that several independent containers can run in an operating system instance. The containers can be created, started, and stopped just like processes.

Docker Commands

The various Docker commands such as run, pull, push, build and search are covered. Attention is also paid to hosting Docker containers, such as hosting in the registry or hosting in web applications

Docker Images

Next attention is paid to Docker Images, in which the difference between Base and Child images is discussed, among other things. A Docker image is a runtime environment and the image is created with the instructions in a Dockerfile. The content of a Docker file is also explained.

Cloud Deployment

Cloud Deployment on various cloud platforms such as AWS, Azure and Google App Engine is also on the program of the course Docker Containers. Docker machines are local or remote computers with an IP address on which the Docker service runs. Typically these are also present in cloud environments such as AWS, Amazon Web Services.

Multi Container Environments

Finally attention is paid to the use of Docker containers in a Microservices Architecture, the use of multiple containers side by side and in a cluster in combination with the Kubernetes cluster orchestration system.



Modules Course Docker Containers

Module 1 : Docker Intro	Module 2 : Docker Commands	Module 3 : Docker Images
What is Docker?	pull Command	Base Images
Packaging Applications	run Command	Child Images
Containers versus Virtual Machines	Container ID's	Official Images
Cloud Deployment	ps Command	User Images
Amazon Web Services	docker container prune	Creating Images
Docker Hub	docker rm	onbuild Version
Installing Docker	docker search	Using a Dockerfile
Running Docker	Hosting in registry	FROM Keyword
Docker Daemon	Hosting WebApps	EXPOSE Keyword
Docker Hub and Registry	Publishing Ports	CMD Keyword
Docker Images	Detached Mode	docker build
Docker Client	Snapshots	Development Workflow
Module 4 : Cloud Deployment	Module 5 : Multi Container Environments	Module 6 : Docker Network
Docker on AWS	Multiple Services	Exposing IP Address
Elastic Beanstalk	Multiple Containers	Bridge Network
docker push	Decoupling Application Tiers	Default Network
Heroku	Microservice Architecture	docker network Command
Google App Engine	Scalability	network create Command
AWS Console	Adding Containers	Automatic Service Discovery
cmd for EB	Tweaking Base Images	Docker Compose
Dockerrun.aws.json	Custom Dockerfiles	docker-compose.yml
Upload and Deploy	ADD command	Docker Machine
Configuration	package.json	Docker Swarm
Monitoring and Alarms	Preparing Images	Kubernetes