

## Docker

### Course Description

Docker-Container play an essential role in modern software architectures like microservices running in an orchestrated Kubernetes cluster. This training introduces the basic Docker concepts (images, container, volumes). A Dockerfile is used to define and build new images that are published inside a docker registry.

### Topics

#### Docker Basics:

- > installation
- > images and containers
- > port mapping
- > details of the container file system detail: union, host mounts and volumes
- > docker registry: docker as software package manager

#### Software Development:

- > use docker images as applications
- > debugging and monitoring containers
- > test your docker images
- > build and release
- > CI/CD and docker
- > using an own docker registry

#### Architecture:

- > Service orientation and microservices
- > use docker compose to create a container topology
- > run your containers in Kubernetes

<b>Trainingsinstitut</b>	
<b>Methoden</b>	Präsentation, Diskussion, Übungen
<b>Teilnehmerkreis und Voraussetzungen</b>	Software-Entwickler, System-Architekten. Grundkenntnisse der Programmierung und des Build-Prozesses sind von Vorteil.
<b>Interne Ansprechpartner</b>	AER1