

Cloud Computing Overview

Audience Course Cloud Computing Overview

The course Cloud Computing Overview is aimed at everyone who wants to use Cloud Computing and requires a detailed understanding of the relevant technologies.

Prerequisites Course Cloud Computing Overview

Experience in modern IT technologies and preferably development methodologies is required.

Realization Training Cloud Computing

The subject matter is treated on the basis of presentation slides. Demos are used to clarify the theory. During the course theory and exercises are interchanged. The course material is in English. The course times are from 9.30 up and to 16.30.

Certification Cloud Computing Overview

Participants receive an official certificate of participation in Cloud Computing Overview after successful completion of the course.

Duration: 2 days

Price: € 1499

[Open Schedule](#)


Content Course Cloud Computing Overview

Cloud Computing is used by more and more organizations to meet their IT needs. Cloud Computing means a major change in the way we think about the IT infrastructure. Cloud Computing eliminates the need to make costs for the purchase of hardware and software and for setting up and managing your own on-site data centers. Many Cloud Computing services are provided as self-service on demand and at much less cost than an infrastructure in-house.

Intro Cloud Computing

The course Cloud Computing starts with a discussion of the advantages of Cloud Computing such as less management costs, better scalability, up to date security and backup. The possibilities for virtualization and monitoring are also treated.

Type of Clouds

Furthermore attention is paid to the different types such as public clouds that are managed by external cloud providers and private clouds that are specifically intended for one company. Hybrid and community clouds are also covered.

Cloud Services

Part of the program of the course Cloud Computing Overview is also what is called the Cloud Computing Stack. Cloud Services come in four main categories: Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Serverless and Software as a Service (SaaS).

Cloud Providers

Various Cloud Providers such as Amazon Web Services, Microsoft Azure and Google Cloud are reviewed. Their differences are explained as well as how you deploy applications on them.

Containers

Attention is also paid to the use of lightweight container images that contain applications with all dependencies and that can be started quickly. The difference between containers and virtual machines is treated and both Docker and OpenShift containers are covered.

Container Orchestration

Finally container orchestration with Docker Swarm and Kubernetes is discussed and the use of ADC Controllers with Load Balancing and Multiplexing is explained.

Modules Course Cloud Computing Overview

Module 1 : Cloud Computing Intro	Module 2 : Type of Clouds	Module 3 : Cloud Providers
What is Cloud Computing? Cloud Computing Concepts Virtualization Principles Cloud Features Elasticity and On-demand Usage Measurement Benefits and Risks Distributed storage Concurrent computing Redundancy and Security Virtual Servers Monitoring Application Health	Platforms en Cloud Services Cloud Resource Administrator Cloud Service Owner Cloud Delivery Models Software as a Service (SaaS) Platform as a Service (PaaS) Infrastructure as a Service (IaaS) Combining Delivery Models Public and Private Cloud Hybrid and Community Cloud Cloud Balancing Cloud Bursting Architectures	Amazon Web Services EC2 Instances AWS CLI Tools Amazon SimpleDB Services Deploying AWS Applications Microsoft Azure Configuring Services Fabric Controller Google Cloud Platform Using Google API's Google App Engine Cloud Storage
Module 4 : Containerization	Module 5 : Container Orchestration	Module 6 : ADC Controllers
Intro Container Technology Role of Containers Creating Containerized Services Managing Containers Managing Container Images Creating Custom Images Container Hosting Logical Pod Containers Containerization vs Virtualization OpenShift versus Docker Docker Details OpenShift Details Deploying Container Apps	Docker Swarm Filtering and Scheduling Highly Available Infrastructure High Availability HA Discovery Service HA Swarm Managers Standard Constraints Custom Constraints Install and Configure Kubernetes Use Docker Client Stateless Apps on Kubernetes Stateful Apps on Kubernetes Serverless Computing	What is an ADC? Load Balancing User Data Offloading of Secure Sockets Layer Offloading Firewall Functions Types of LoadBalancing Ensuring Server Health Monitoring DNS and HTTP Multiplexing Contributing in Cybersecurity Firewall Protection Facilities Preventing DDOS Preventing Vendor Lock In Future Improvements