Cloud Computing Overview

Duration: 2 days Price: € 1299

Open Schedule

Cloud Development 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.

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

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