

# Cloud BootCamp

Processes, Infrastructure, Security, Migration, and Market Overview

The course at hand offers a comprehensive overview of the topic of Cloud Computing in a compressed form. After an introduction to the changes in the IT architectures, terms like Cloud Computing, Cloud Services, and Cloud Models are explained and the benefits for the companies entailed are discussed. The new IT architecture, however, also has significant effects on the sectors of organizational and technical structures, staff, and infrastructure of the companies concerned. These effects are discussed from the viewpoints of both the user and provider. Subsequently, the technical setup of typical cloud infrastructures and the security mechanisms and technologies related are discussed. The BootCamp is concluded with a market overview, the discussion of state-of-the-art offers and a preview.

### Course Contents

- Definition of Cloud Computing (NIST, CSA and BSI) as well as of the Cloud and Service Models
- Private Clouds: VMware vCloud Suite, Microsoft Windows Azure Pack, and OpenStack
- Data Protection in Europe and on an International Scale Laws and their Limits
- Data Privacy Risk of Data Theft and Legal Overall Conditions
- Contract Law, Data Protection, Information Security, and Compliance
- SOX, HGB, KonTraG, EG Dual Use, etc.
- SLAs and Service Management: ITIL, CoBit, ISO 27001/2, BSI Standard 100-4, etc.
- Cloud Standards and Interfaces (REST-API, OVF, vCloud API, etc.)
- Server and Desktop Virtualization VMware, Microsoft, XEN, KVM, and Docker
- Modern Data Center Design and Technological Developments
- FabricPath, SDN, OpenFlow, Cisco ACI, VMware NSX, VXLAN, and NFV
- Storage Development: Object Storage, Software-Defined Storage, and SAN Security
- Software-defined Data Center (SDDC) Architecture and Implementation Variants
- vCloud Suite and OpenStack
- Innovative Server and Overall Solutions, as well as Hyperconvergent Systems
- Cloud Security—Introduction and Setup (ISO 27001, BSI)
- Demands Made on the WAN and Possible Pitfalls
- Transition Phase, Possible Pitfalls, as well as Typical Application and Migration Scenarios
- Market Overview, Internationally and for Germany, as well as Market Development and Trends
- Public Cloud Offers in a Comparison: AWS, Azure, vCloud Air, Google, Salesforce, etc.

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### Target Group

The course addresses all students who wish to acquire profound know-how on the topic Cloud from conceptual, legal, and technical viewpoints.

### Prerequisites

The student should be willing to discuss and deal with conceptual and legal aspects. Basic networking and IT know-how would be a major advantage to understand the technical issues imparted in the course.

### This Course in the Web



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