

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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Status 02/24/2023



Table of Contents

Cloud BootCamp – Processes, Infrastructure, Security, Migration, and Market Overview

1	Cloud Computing	6.9	Characteristic IT Parameters	9	Storage Consolidation and Virtualization
1.1	Setup of Applications	6.10	Further Standards, Directives, and Methods in an Overview	9.1	Significance of the Data Storage Unit
1.2	The Motivation from the Viewpoint of the Customer	6.10.1	ISO/IEC 20000	9.1.1	Direct Attached Storage
1.2.1	Business Availability	6.10.2	COBIT	9.2	Network Storage
1.2.2	From Fixed to Variable Costs	6.10.3	ISO/IEC 27001 and 27002	9.2.1	Network-Attached Storage
1.2.3	Agile Infrastructure	6.10.4	IPMA, PMP, and PRINCE2	9.2.2	Storage Area Networks
1.2.4	Technologically Always State-of-the-Art			9.2.3	NFS, iSCSI, FC, and FCoE in Comparison
1.2.5	High Utilization of Resources and Energy Efficiency	7	Server and Desktop Virtualization	9.3	Storage Consolidation and Data Deduplication
1.2.6	High Performance, Availability and Service Quality	7.1	Business Requirements Made on IT	9.4	Storage Virtualization
1.2.7	Security and Compliance	7.2	Server Centralization	9.4.1	Host-Based Virtualization—LVM
1.2.8	Cost Reduction and Time Savings	7.3	Server Virtualization, Consolidation, and Automation	9.4.2	Host-Based Virtualization—Storage Meta-Data Server
1.3	Typical Objections	7.3.1	Advantage: Faster Provisioning	9.4.3	Server-Based Storage APIs
1.4	Growth Market Cloud Computing	7.3.2	Advantage: Automation	9.4.4	Storage-System-Based Virtualization
1.5	Virtualization as an Enabler for Cloud Computing	7.3.3	Advantage: Consolidation	9.4.5	Distributed Modular Array Virtualization
1.6	Cloud Computing	7.3.4	Advantage: Pooling	9.4.6	Network-Based Virtualization
1.6.1	Service Models of Cloud Computing	7.3.5	Advantage: High Availability	9.4.7	Virtualization Appliances
1.6.2	Various Cloud Variants	7.3.6	Advantage: Green IT	9.4.8	Decisive Points in the Selection of Virtualization Technologies
1.7	Challenges of Cloud Computing	7.4	VMware, KVM, Xen, and Hyper-V in Comparison	9.5	Storage Virtualization—Vendor Overview
1.8	Services from the Cloud	7.5	Server Virtualization by Means of VMware	9.6	FCoE and Competitors
1.8.1	Typical Services	7.5.1	Development	9.7	The Storage Market
		7.6	The vSphere Product Range	9.8	Cisco Products and Positioning
2	Security Requirements	7.7	Hyper-V 3.0	9.9	Brocade Products and Positioning
2.1	Basic IT Standards	7.8	Fields of Application and Benefits	9.10	Introduction to SAN Security
2.2	Basic BSI Protection According to BSI Standard 100-4 and ISO 27001	7.8.1	Virtual Networks	9.11	Myths and Assumptions
2.3	BS 25999 and ISO 22301	7.8.2	Challenges for Network Configuration	9.11.1	Isolated Environment
2.4	ISO/IEC 27001 and 27002	7.8.3	VMotion	9.11.2	Security by Obscurity
		7.8.4	Distributed Resource Scheduling (DRS)	9.11.3	Tapping of Fibre Channel
3	Data Protection, Contract Law, Information Security, and Compliance	7.8.5	High Availability (HA) and Fault Tolerance (FT)	9.11.4	Delivered Security
3.1	Which law is applicable?	7.9	The Software-Defined Data Center	9.12	Security in the Fabric
3.2	Data Protection	7.10	Server Hardware and Software	9.12.1	Security at the Storage Unit
3.2.1	European Data Protection Directive	7.11	Special Features in the Sectors Network, Server, and Memory	9.12.2	Advanced Security Features in the SAN
3.2.2	Basic Data Protection Directive	7.12	The Network in the Course of Change	9.12.3	NPIV and NPV
3.2.3	Current National Legal Situation	7.12.1	FabricPath	9.12.4	Unified Fabric Data Center
3.2.4	Effects on Cloud Computing	7.12.2	Overlay Transport Virtualization—OTV	9.12.5	Brocade: Virtual Fabrics
3.2.5	Further Legal Aspects	7.12.3	Example: VCS by Brocade	9.12.6	The Cisco Cloud Story for the SAN
3.2.6	Summary—Part 1	7.12.4	The Switch on the Server	9.12.7	VSAN Concept
3.3	Contract Law	7.13	Virtual Desktop Infrastructure		
3.4	Information Security	7.14	Security in Virtual Environments	10	Modern Data Center Design
3.5	Compliance	7.14.1	Cisco Virtual Security Gateway—VSG	10.1	Classic Network Virtualization Methods
3.6	The Biggest Risk			10.2	Data Center Network Design
3.7	Important Links	8	Unified Computing System—UCS	10.3	Data Center Infrastructure
		8.1	The Server Market	10.4	Access Layer Design
4	Cloud Security—Server and LAN	8.2	The Unified Computing System	10.5	Service Virtualization
4.1	Setup of Cloud Infrastructures	8.3	The Cisco UCS C Series	10.6	Aggregation Layer Design
4.2	Cloud Security Basics	8.4	The Cisco UCS B Series	10.7	Data Center Core Layer Design
4.3	Server Security in Virtualized Environments	8.4.1	Chassis	10.8	WDM between Data Centers
4.4	Network Security in Virtualized Environments	8.4.2	Power Supplies	10.9	Unified Fabric
		8.4.3	Blade Server	10.10	Current Changes
5	Licensing and Standardization	8.4.4	Mezzanine Adapter	10.10.1	Security in the Data Center
5.1	Licensing in the Hybrid Cloud	8.4.5	I/O Modules (IOM)	10.10.2	Manufacturers
5.2	Standardization and Interfaces	8.4.6	Fabric Interconnect	10.10.3	HP
		8.4.7	UCS Manager	10.10.4	Brocade
6	Important Models of Service Management	8.5	Added Value of the Unified Computing System	10.10.5	Cisco
6.1	The Classic: Plan—Build—Run	8.6	All-in Solutions	10.11	Cloud Security—Infrastructure
6.1.1	Service Model Phases	8.6.1	FlexPod—Cisco and NetApp	10.11.1	Data Center Edge Security
6.1.2	Limitations	8.6.2	Vblock	10.11.2	Data Center Core Security
6.2	ITIL Edition 2011	8.6.3	EMC VSPeX	10.11.3	The Technologies in an Overview
6.3	Service Strategy	8.7	Cisco VXI Infrastructure	10.11.4	Protection of Management Access and Control Plane
6.4	Service Design	8.8	Design Scenarios with UCS	10.11.5	Protection of the Data Plane
6.5	Service Transition	8.9	HP c-Class Series	10.11.6	Quality of Service
6.5.1	Transition Planning and Support	8.10	IBM BladeCenter	10.11.7	Link Encryption According to IEEE 802.1AE and Cisco TrustSec
6.5.2	Change Management	8.11	Dell	10.11.8	Virtual Switches: Example of Cisco VDCs
6.5.3	Service Asset and Configuration Management	8.12	Management Server Area	10.11.9	MPLS or VRF Lite for Separate Networks
6.5.4	Release and Deployment Management	8.13	Application Security in Cloud Environments	10.11.10	Security on the Aggregation Layer
6.5.5	Service Validation and Testing	8.14	The Term Proxy	10.11.11	Data Center Services
6.5.6	Change Evaluation	8.14.1	Explicit Proxies	10.11.12	Security in the Access Area
6.5.7	Knowledge Management	8.14.2	Transparent Proxies	10.11.13	IEEE 802.1X
6.6	Service Operation	8.14.3	Reverse Proxies	10.11.14	DHCP Snooping
6.6.1	Event Management	8.14.4	Generic Proxies	10.11.15	Dynamic ARP Inspection
6.6.2	Incident Management	8.14.5	Application Layer Gateways	10.11.16	IP Source Guard
6.6.3	Request Fulfillment	8.14.6	Working Mode		
6.6.4	Problem Management	8.14.7	Limitations	11	WAN Connection
6.6.5	Access Management	8.14.8	Web Proxies	11.1	WAN Basics
6.6.6	Service Desk, Technical Management, IT Operations, and Application Management	8.14.9	Authentication at the Firewall	11.2	Requirements Made by the Applications
6.6.7	Service Operations	8.14.10	The Server End	11.2.1	Typical Pitfalls
6.7	Continual Service Improvement (CSI)	8.14.11	The Client End	11.2.2	Possible Solutions
6.8	Organizational Aspects—Example: Cloud Security	8.15	Mail Relays	11.2.3	Applications which Are not Applicable in the Cloud

