

Network architectures for multi-cloud solutions

SD-WAN, Cloud Connectivity and IT Security

Cloud solutions are an important part of enterprise IT, with hybrid cloud and multi-cloud scenarios mostly being applied. This inevitably raises the question of how on-premises IT should ideally be networked with the various clouds. A distinction must be made here between client-server connectivity and connectivity between private and public clouds. In both cases, there are many aspects to consider.

In this training, typical SD-WAN solutions and IT security concepts are highlighted, which create an optimal user experience when accessing IT services in multi-cloud environments. Furthermore, the different Cloud Connect variants are presented and their advantages and disadvantages are discussed. The special network functions and connectivity options of the so-called hyperscalers - Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform and Alibaba Cloud - will be discussed in detail, in addition to Oracle, IBM and SAP. With this knowledge, typical solution scenarios will be worked out interactively.

Course Contents

- Multi-cloud - network aspects and challenges
- Application requirements
- Special case Office 365
- Structure and limitations of classic WANs
- SD-WAN: Concepts, solutions and market overview
- Security concepts for SD-WAN: SASE, zScaler and Cisco Umbrella SIG
- Network and security concepts for Microsoft Azure, AWS, GCP, Alibaba, Oracle, IBM and SAP
- Connectivity options for Microsoft Azure, AWS, GCP, Alibaba, Oracle, IBM and SAP
- Cloud Exchange Colocation & Interconnection Solutions
- Colocation via Equinix Cloud Exchange (ECX) and NTT Global Data Centers EMEA (formerly eShelter)
- Interconnection via DE-CIX Cloud Exchange via private cloud provider
- Interconnection via Carrier
- Typical designs, case study and best practices
- Outlook
- Final discussion and feedback round

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Target Group

This course is aimed at networkers, security specialists and IT architects who want to build or optimize network and security solutions for multi-cloud solutions. In addition to the possible connectivity options, it also covers the typical terms and concepts used by hyperscalers and large cloud providers in this context.

For networkers, security and IT architects who have been less involved with these topics, the course provides an ideal introduction to the world of SD-WAN, cloud connectivity and modern security concepts.

Prerequisites

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A basic understanding of WAN technologies, cloud computing and IT security is required.

This Course in the Web



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