ExperTeach E NETWORKING

Software-Defined Telecom

Cloudification, Virtualization and Automation

The networks of telecommunications providers are undergoing rapid change. The buzzword is "network disaggregation". The technological advantages of cloudification, virtualization and automation are increasingly being exploited. Specialized appliance solutions, which in the past performed their work as "black boxes", are increasingly being replaced by open source software and technical terms such as "Access 4.0" or "Open RAN" express this.

The path taken in both fixed and mobile networks is driving "Fixed Mobile Convergence". The intelligence of the platforms is shifting to the software layer. The operation of standardized compute and virtualization solutions, as well as the use of software-defined networking solutions and network functions virtualization, not only reduces the number of platforms and operating costs, it also creates high availability, agility and flexibility.

A software-defined telco platform set up in this way makes it possible to provide new or modified services very quickly. The focus of work shifts towards service development. The transformation of OSS and BSS goes hand in hand with a significant change in partner landscapes. Technologies such as machine learning and big data are playing an increasingly important role.

This course describes the current technologies and designs for access and core networks as well as for 5G networks. The implementation of a service-based architecture (SBA) is examined as well as the integration of fixed access.

Course Contents

- Technologies in access and core
- 5G
- Service Based Architecture (SBA)
- Fixed Access (BNG), Access 4.0
- Disaggregation
- Implementation of SDN and NFV
- Areas of application for programming in provider networks
- Automation approaches
- Role of big data and machine learning in the provider network
- Future applications and areas of use
- Challenges for public networks (regulation, legal requirements)

E-Book The detailed digital documentation package, consisting of an e-book and PDF, is included in the price of the course.

Target Group

If you are looking for an introduction to the design of modern provider networks and at the same time want to understand the underlying technologies and developments, you will find what you are looking for in this course.

Prerequisites

A basic understanding of the concepts and technologies of modern communication networks - as taught in the course Network Technologies - Everything you need to know at a glance! - is an ideal basis for attending the course.

Course Target

You will understand that providers are driving forward automation and flexibility in order to operate their architectures, and to what extent tools such as software-defined networking, virtualization, and cloudification are being used for this purpose. You will learn about practical examples such as O-RAN and Access 4.0, and gain an understanding of how and for what purpose artificial intelligence is needed for further development toward self-organizing networks.

This Course in the Web

You can find the up-to-date information and options for ordering under the following link: www.experteach-training.com/go/**SDTE**

Reservation

On our Website, you can reserve a course seat for 7 days free of charge and in an non-committal manner. This can also be done by phone under +49 6074/4868-0.

Guaranteed Course Dates

To ensure reliable planning, we are continuously offering a wide range of guaranteed course dates.

Your Tailor-Made Course!

We can precisely customize this course to your project and the corresponding requirements.

Training	Prices, excl. of V.A.T.	
Classes in Germany	**3 Days**	**€ 1,995**
Online Training	**3 Days**	**€ 1,995**
Date/course venue	Course language German	
27/04-29/04/26 HY Frankfurt	09/09-11/09/26 HY Frankfurt	
27/04-29/04/26 HY Online	09/09-11/09/26 HY Online	

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Software-Defined Telecom – Cloudification, Virtualization and Automation

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