

IP Multicasting

Routing Concepts in Multimedia Networks

IP-based networks are increasingly used by multimedia applications from the voice and video sector. A typical feature of such applications is the transfer of big data volumes to a large number of end devices. A good example is IPTV. The transmission via multicasting helps to save the resources of the network and of the end devices. The switching of multicast packets, however, requires the application of special routing protocols and, thus, exceeds the usual scope of functions of the systems involved. The course at hand imparts an understanding of multicast problems. It enables the participants to competently assess the topic within their working environments and to handle the terms and functions adequately.

Course Contents

- Transmission of IP Multicasts via LAN and WAN Technologies
- Multicast Addresses
- IGMP Protocol, Multicast Listener Discovery (MLD) for IPv6
- Multicast Distribution Trees
- DVMRP
- PIM-Dense Mode and PIM-Sparse Mode, PIMv6
- Interdomain Multicasting with MSDP
- Multicasting in Layer-3-VPNs, Extranet Solutions
- Automatic Multicast Tunneling (AMT)
- Multicast Security, PGM
- Multicast Applications: IPTV and beyond
- Demonstrations at a Test Network of Cisco Routers

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Target Group

The course addresses network administrators and operators who are concerned with the implementation of multicasting and the migration to multimedia-capable IP networks

Prerequisites

Sound knowledge on Ethernet, IP, and routing are requirements for a successful participation in the course.

This Course in the Web



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Date/course venue		
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