

TCP/IP Introduction

Starting from the reference model of OSI, all participants will receive a detailed overview of IP-based LANs. They will learn more about Ethernet and the PPT protocol. The internet protocol, the IP addressing, Routing in IP networks as well as other protocols of the network layer will be discussed in this course. The concept of ports and sockets will be introduced in combination with the functionality and characteristics of the transfer protocols UDP and TCP as well as other important applications.

This course provides a basic understanding of TCP/IP and demonstrates typical implementations.

Target Group / Requirements

The course is addressed mainly to network operators and network administrators, but suits also those who require a basic understanding of TCP/IP for their day-to-day business. Basic knowledge of data networks are a prerequisite for this course.

Course Content

Introduction into reference model

- Reference model and its purpose
- OSI reference model
- Layers and their functions
- TCP/IP protocol

Local Area Networks

- Common terms
- Transfer mediums
- Ethernet
- Network components

Network layer protocol

- Introduction to IP
- IP Addressing
- ARP protocol family
- IP routing
- Routing protocols (RIP, OSPF, IS-IS, BGP)
- ICMP

Transport layer protocol

- Properties of TCP and UDP
- Ports and sockets
- User Datagram Protocol (UDP)
- Transmission Control Protocol (TCP)

New addressing concepts

- Network Address (Port) Translation (NA(P)T)
- IPv6

Course Duration:

3 days

Course Number:

ND1340

Requirements:

Basic knowledge of data networks

Certification

Certificates are given to all participants at the end of the course about the successful completion.

Course Registration:

Please contact us via

- phone: +49 89 1894354-405
- email: training@tfk.de or
- via our website www.tfk.de/training

You will receive a confirmation of your registration. We can also advise you concerning the best combination of course contents.

For clients with special requirements the optimal training concept can be customized. Modules from our training portfolio can be combined to meet your company-specific needs.