TCP/IP Networking

Varighed: 5 Days   Kursus Kode: GK9025

Beskrivelse:

TCP/IP is the globally accepted group of protocols at the core of the Internet and organizational intranets. A solid understanding of each of these protocols and how they work will give you the ability to deploy the most effective network for your organization. In this course, you will gain the essential knowledge and skills required to set up, configure, support, and troubleshoot your TCP/IP-based network.
Our expert instructors and extensive hands-on labs will prepare you to face and overcome the challenges of today's complex networks. This course - the longest running of its kind in the industry - also prepares you for more specialized courses in network security, wireless integration, Voice over IP, as well as for product-specific training such as Cisco, Nortel, and Microsoft.

Målgruppe:

Anyone who is responsible for designing, installing, configuring, and maintaining TCP/IP networks or who needs to understand TCP/IP protocol structures and functions will benefit from this course. This course also provides excellent preparation for more advanced networking training.

Agenda:

- The essential elements of the TCP/IP protocol suite

- Install and configure TCP/IP in a live classroom network

- The roles of various devices in a TCP/IP network

- IP addressing and subnetting including Variable Length Subnet Masking (VLSM)

- Subnet an IP network and implement the resulting addresses

- Details of ARP, IP, ICMP, TCP, and UDP - their functions and relationships

- Automate address assignment and name resolution using DHCP and DDNS

- IP routing and the protocols that support it, such as RIP and OSPF

- How applications like FTP, HTTP, Telnet, and others work in a TCP/IP network

- Functions of IPv6 and its related protocols

- Functions and capabilities of multicasting, Voice over IP, and e-mail

- Use of a protocol analyzer to isolate and troubleshoot network problems

- Troubleshoot problems at each layer of a TCP/IP network

Forudsætninger:

- Understanding Networking Fundamentals

Test og certificering

This course is part of the following programs or tracks:

- Networking Specialist Certificate

Yderligere Kurser:
- Essentials of Information Security - Security+
- Voice over IP Foundations
- Wireless LAN Foundations

Indhold:

Lab 1: Numbering Systems
Lab 2: Lab Setup and Ethernet Header Analysis
Lab 3: IP Addressing and Subnetting
Lab 4: Address Resolution Protocol
Lab 5: Multicasting
Lab 6: Troubleshooting the Network Access Layer
Lab 7: IP Processes
Lab 8: Routing
Lab 9: Troubleshooting the Internetwork Layer
Lab 10: UDP Transactions
Lab 11: TCP ProcessesLab 12: Troubleshooting the Host-to-Host Layer
Lab 13: DHCP Process
Lab 14: Domain Name System (DNS)
Lab 15: ICMP Messaging
Lab 16: TCP Applications
Lab 17: UDP Applications
Lab 18: Voice over IP
Lab 19: Internet Protocol version 6 (IPv6)
Lab 20: Troubleshooting the Classroom Net

Flere Informationer:

For yderligere informationer eller booking af kursus, kontakt os på tlf.nr.: 44 88 18 00

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