

Course syllabus

CATEGORY

Windows Server, Linux courses

TRAINING FORMAT

In Bratislava or online with a lecturer

PRICE EXCL. VAT

340,00 €

PRICE INCL. VAT

418,20 €

including 23 % VAT

PDF SYLLABUS

LINUX in a Network

Clear overview of course topics, training scope and key information.

You will find out how a local computer network works with emphasis on the specifics of the LINUX system. You will use the theoretical basics of computer networks in practical tasks for network setup in the LINUX operating system.

COURSE CONTENT

01

Many Practical Examples

, exercises for independent practice and especially thinking. The advantage of our training center is that we have various physical computer network devices available for demonstration, which will better help you recognize them in practice and fully use their capabilities. In addition, you will have your own LINUX virtual computer available, which you can copy after the course and later independently explore additional options at home.

02

Principles of Computer Networks

Division and characteristics of a computer network, RM OSI reference model, TCP/IP, devices in a network: hub, switch, router, firewall, WiFi AP, ... types of computer network connection, connection-oriented and connectionless network interconnection, packet fragmentation and defragmentation, interconnection at the first, second and third layer of RM OSI, network addressing - basics of IPv4/6 addresses, terms IP address, MAC address, mask, subnet, broadcast, public and static IP address, principles of NAT technology, when it is used and why it is currently needed.

03

Computer Network Setup in LINUX

Network interfaces, turning the network on and off, configuration files, manual configuration, routing - routing, mainly static routing, Domain Name System (DNS) configuration, local domain translation, names of your PC in the network, Netstat tool and its use for checking the use of network resources, Nmap tool and its use for legitimate security checking purposes, Netcat tool and sockets for communication between multiple PCs, Address Resolution Protocol (ARP) and its use in network diagnostics

04

Network Security Elements in LINUX

Firewall, rule settings, packet path through IPTables, Secure Shell (SSH) server

05

Services

Hypertext Transfer Protocol (HTTP) server for placing your own website, Apache Webserver, File Transfer Protocol (FTP)

06

Daily Tasks of a Network Administrator

07

Security Aspects of a Computer Network

, types of some attacks and their prevention

This document serves as an informational overview of the course syllabus. Current dates, venue and availability are listed at Macrosoft.sk.

<https://www.macrosoft.sk/en/courses/linux-network-services>