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Vzdelávanie s trvalým efektom

DOCUMENT

Course syllabus

CATEGORY

Computer network, CISCO courses

TRAINING FORMAT

In Bratislava or online with a lecturer

PRICE EXCL. VAT

350,00 €

PRICE INCL. VAT

430,50 €

including 23 % VAT

PDF SYLLABUS

MikroTik II Course - Firewall and QoS

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

Expand your skills in the area of Firewall and QoS. Gain an overview of how network security concepts work in MikroTik device conditions. In RouterOS, you will set rules for secure and effective communication and quality of transmission in a computer network. In addition, you will connect your own VPN network, which you will use not only in an enterprise network. Advanced network settings are illustrated on practical examples on real MikroTik devices.

COURSE CONTENT

01 **Repetition**

02 **Introduction to Networks**

Definition of the term computer network Explanation of the term Internet Network classification LAN, MAN, WAN

03 **VPN**

Meaning of VPN

04 **Number Systems**

Decimal system Binary system

05 **Network Speed**

Data transmission units Bandwidth Throughput Delay

06 **OSI Model**

Description of OSI model layers Peer to peer communication Data encapsulation Network devices

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07 **TCP/IP Model**

Application layer Transport layer Internet layer Network access layer Comparison with the OSI model

08 **Basic Internet Communication Protocols and Their Meaning**

TCP protocol UDP protocol IP protocol ARP protocol

09 **IPv4 Addressing Based on Classes**

IP address structure IP addresses Security gateway Firewall Definition of terms Firewall Filter QoS Network filter Ethernet datagram and its parts Basic rule construction Input Output and Forward chain Method of executing multiple rules

10 **NAT - Address Translation**

Difference between Source and destination NAT Static Source NAT Source NAT through masquerade Destination NAT through IP or port forwarding Destination NAT through redirect

11 **QoS - Quality of Service, Network Flow Control and Network Operation Optimization in MikroTik Conditions**

Introduction to QoS Meaning and use What queue is

12 **Simple Queue**

Basic parameters Max-limit and limit-at Parameters Target and dst Use of Burst Creating Simple queue with burst

13 **Monitoring Tools**

Interface traffic monitor Torch SNMP

14 **Network Tunnels**

Basic terminology PPP PPPoE Tunneling protocols PPTP

15 **PPP Settings**

Profile setup Range of assigned IP addresses Creating users

16 **PPPoE**

PPPoE client PPPoE server

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PPTP VPN

Client to site Site to site

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Conclusion

The conclusion of the network technologies and network security course also includes discussion with participants and best practices from professional practice.

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Did You Not Find the Course Areas You Were Looking For?

Do you need to consult specific cases from the area of MikroTik, RouterOS and other network technology elements? Write to us and we will prepare a tailor-made training or consultation offer for you! Our lecturers are ready to answer your specific questions.

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/mikrotik-2