training code: Windows Server 2022 / ENG DL 5d / EN

Managing Windows Server 2022

Training recipients

The training is dedicated for following specialists:

- **Administrator**
- **IT administrator**
- **IT specialist**
- **HelpDesk**

Purpose of the course:

- Gaining a basic managing of Windows Server 2022

Training is aimed at

- People who deal with earlier versions of Windows Server and/or would like to start administrating Windows Server 2022.
- Administrators who want to implement Windows Server 2022 in their own infrastructure.
- IT administrators who want to learn about the benefits of new to Windows Server 2022 prior to migration.
- IT department employees responsible for managing Microsoft Windows 2022 servers

Benefits

- Gaining knowledge and practical skills in installing and configuring Windows Server 2022 services , including Windows Server Core versions , incl remote management with RSAT and Powershell Remoting from Windows 11 and management with Windows Admin Center.
- Acquiring knowledge and practical skills in the field of Active Directory management and introduction to the practical use of certificates in the field of secure access to resources.
- Gaining knowledge and practical skills in the management of network infrastructure related to Active Directory, including DNS , DHCP , VPN , RDS servers and file servers.
- Learn the mechanisms of securing Windows Server systems against damage and restoring infrastructure elements after such events.

- Learn the basics of managing virtual machines and related infrastructure using Hyper-V .
- Gaining basic knowledge in the field of task automation using PowerShell .

This training cross-section covers the core roles and features of Windows Server 2022 used in most organizations. The training prepares for independent administration of the Active Directory infrastructure and the related network infrastructure, as well as for ensuring business continuity and system monitoring.

Training program

1. Introduction to Windows Server 2022
   - Hardware requirements
   - System versions
   - System installation
   - Post-installation tasks
   - Roles and functions in the system
   - Features on demand in the "Core" system version
2. Managing Windows Server 2022
   - Management via the mmc console
   - Management via remote desktop
   - Management with Server Manager
   - Management via Windows Admin Center
   - Management with PowerShell
3. Introduction to Active Directory
   - Basic concepts related to Active Directory
   - Active Directory infrastructure
   - Domain controllers
   - Installation of Active Directory
   - Basic administrative tools for Active Directory
   - Organizational units in the domain
   - Active Directory Users and Groups
   - Computers in Active Directory
4. Introduction to Group Policy Objects (GPOs)
   - What is GPO
   - Central Store and Administrative Templates
   - Preferences
   - Password policy
   - Inspection
   - Manage user settings

5. Introduction to the use of certificates in the Windows Server 2022 environment
   - Introduction to the public key infrastructure
   - Management of certificate templates
   - The use of certificates in the Windows Server environment
6. Introduction to online services
   - Overview of IPv4 settings .
   - Defining the subnets .
   - Public, private and APIPA addresses.
   - Configuring an IPv4 host.
   - IPv6 overview
7. Domain Name System (DNS)
   - Introduction to DNS
   - Configuration of zones
   - Zone transfer and replication
   - Cache
   - AD DS and DNS integration
   - DNS configuration
   - Monitoring and logging of DNS events
   - DNS name resolution
8. Dynamic Host Configuration Protocol (DHCP)
   - Introduction to DHCP
   - Installation and configuration of the DHCP server
   - DHCP Failover
   - Monitoring
9. Remote access in Windows Server 2022 environment
   - Overview of remote access
   - Remote Access Service (VPN) Configuration
10. Introduction to Remote Desktop Services (RDS)
    - Overview of the RDS service
    - Prerequisites
    - RDS installation and configuration
11. File system and disk space management
    - Disk and volume management
    - Implementing Storage Spaces
    - Data deduplication
    - Shared folders
    - Access Control Lists
    - File Server Resource Manager
12. Server operation monitoring
    - Monitoring tools
    - Using the Performance Monitor

- Event Logs monitoring

13. Disaster Recovery
    - Active Directory Recycle Bin
    - Shadow Copy
    - Windows Server Backup
14. Introduction to Operating System Virtualization (Hyper-V)
    - Overview of Hyper-V
    - Installing Hyper-V
    - Configuring storage on Hyper-V host servers
    - Network configuration on Hyper-V host servers
    - Configuring Hyper-V virtual machines
    - Virtual Machine Management
    - PowerShell Direct

Expected preparation of the participant

- Basic technical knowledge related to client, server and network systems (Windows, Linux). Free movement on the interfaces of IT systems in the English version.

To increase the comfort of work and training's effectiveness we suggest using an additional monitor. The lack of additional monitor does not exclude participation in the training, however, it significantly influences the comfort of work during classes.
You can find information and requirements of participation in Distance Learning trainings at:
https://www.altkomakademia.pl/en/how-it-works/about-courses/

Training Includes

Training method:

- Lecture
- Demonstration
- Laboratories

The amount of theory to practice

- 50% theory
- 50% practice

Duration

> 5 days / 35 hours

Language

- **Training**: English
- **Materials**: English