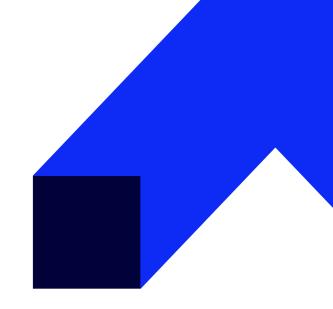# Windows Server Administration 2019/2022/2025

Training recipients

The aim of the course:
- Administrator,
- HelpDesk,
- IT Specialist

This five-day community course is primarily intended for IT professionals who have some experience with Windows Server. It is intended for professionals who will be responsible for managing identity, networking, storage and compute with Windows Server 2022 and who need to understand the scenarios, requirements and options available and applicable to Windows Server systems. The course teaches IT professionals the basic administrative skills required to deploy and operate Windows Server in most organizations. This five-day course is primarily intended for IT professionals who have some experience with Windows Server. The course teaches IT professionals the basic administrative skills required to deploy and operate Windows Server in most organizations.

The main target groups of this course are:
– Windows Server administrators who have basic knowledge of Windows Server administration and related technologies and who want to learn more about Windows Server.
– IT professionals with general IT knowledge who want to gain knowledge about Windows Server, especially about identity and network management technologies in Windows Server.
– IT specialists who already have some experience in working with Windows Server and want to expand or consolidate their knowledge.

This course is equivalent of the withdrawn authorized WS-011 Windows Server 2019 Administration training.
This course is equivalent of the MS 55371 Windows Server Administration community training.

Benefits

Using administrative techniques and tools in Windows Server 2022

Identity service implementation

Management of network infrastructure services

Ability to configure file servers and mass storage

Managing virtual machines with Hyper-V virtualization and containers

Implementing a high availability and disaster recovery solution

Ability to apply security features to protect critical assets

Configuring Remote Desktop Services

Configure a virtual machine-based desktop infrastructure deployment

Implementation of remote access and network services

Ability to implement service and performance monitoring and troubleshooting

Perform AD DS and storage upgrades and migrations.

Training program

1. Introduction
- Informations about course
- Agenda
- Informations about practices

2. Introducing Windows Server
- Windows Server Core Overview
- Windows Server administration principles and tools overview
- Lab 1: Deploying and configuring Windows Server

3. Identity Services in Windows Server
- AD DS Overview
- Deploying Windows Server domain controllers
- Azure AD overview
- Implementing Group Policy
- Active Directory Certificate Services overview
- Lab 1: Implementing Identity Services and Group Policy

4. Network Infrastructure services in Windows Server
- Deploying and managing DHCP
- Deploying and managing DNS service
- Deploying and managing IPAM
- Remote Access Services in Windows Server

- Lab 1: Implementing and configuring network infrastructure services in Windows Server

5.File Servers and Storage management in Windows Server

- Volumes and File Systems in Windows Server
- Implementing sharing in Windows Server
- Implementing Storage Spaces in Windows Server
- Implementing Data Deduplication
- Implementing iSCSI
- Deploying Distributed File System
- Lab 1: Implementing storage solutions in Windows Server

6. Hyper-V virtualization and containers in Windows Server

- Hyper-V in Windows Server
- Configuring VMs
- Securing virtualization in Windows Server
- Containers in Windows Server
- Overview of Kubernetes
- Lab 1: Implementing and configuring virtualization in Windows Server

7.High Availablity in Windows Server

- Planning for failover clustering implementation
- Creating and configuring failover cluster
- Overview of stretch clusters
- High availability and disaster recovery solutions with Hyper-V VMs
- Lab 1: Implementing failover clustering

8.Disaster recovery in Windows Server

- Hyper-V Replica
- Backup and restore infrastructure in Windows Server
- Lab 1: Implementing Hyper-V Replica and Windows Server Backup

9. Windows Server security

- Credentials and privileged access protection
- Hardening Windows Server
- JEA in Windows Server
- Securing and analyzing SMB traffic
- Windows Server update management
- Lab 1: Configuring security in Windows Server

10.RDS in Windows Server

- Overview of RDS
- Configuring a session-based desktop deployment
- Overview of personal and pooled virtual desktops
- Lab 1: Implementing RDS in Windows Server

11.Remote access and web services in Windows Server

- Implementing VPNs
- Implementing Always On VPN

- Implementing NPS
- Implementing Web Server in Windows Server
- Lab 1: Deploying network workloads

12. Server and performance monitoring in Windows Server

- Overview of Windows Server monitoring tools
- Using Performance Monitor
- Monitoring event logs for troubleshooting
- Lab 1: Monitoring and troubleshooting Windows Server

13. Upgrade and migration in Windows Server

- AD DS migration
- Storage Migration Service
- Windows Server migration tools
- Lab 1: Migrating Server workloads

Expected preparation of the participant

Knowledge of ADDS administration basics on Windows Server systems, experience and understanding of core networking technologies such as IP addressing, name resolution, and Dynamic Host Configuration Protocol (DHCP).
Experience working with Microsoft Hyper-V technology and basic server virtualization concepts.
Knowledge of basic security best practices.
Hands-on experience with Windows client operating systems such as Windows 10 or Windows 11.
Basic experience with Windows PowerShell.
Ability to use English-language materials.

Training Includes

access to Altkom Akademia's student portal
Training method:

- theory
- demos
- workshops

specifying theory vs. practice

- 50% theory
- 50% practise

Czas trwania

5 dni / 35 godzin

Language

- Training: English
- Materials: English