

# Administer Windows Server Hybrid Core Infrastructure

Administer Windows Server Hybrid Core Infrastructure training prepares IT professionals to manage server environments in on-premises, hybrid, and cloud models. Participants learn methods for deploying, configuring, and maintaining Windows Server services such as identity, management, compute, networking, and storage. During the course, participants learn how to effectively use tools such as Windows Admin Center, PowerShell, Azure Arc, and Azure File Sync to streamline server administration, automate management, and integrate on-premises infrastructure with the Azure platform.



## Training recipients

The training is intended for IT professionals who manage or plan to manage server environments based on Windows Server. It is particularly dedicated to:

- Windows Server system administrators,
- infrastructure and technical support engineers,
- IT specialists deploying hybrid solutions integrated with the Azure platform,
- individuals preparing for the Microsoft Certified: Windows Server Hybrid Administrator Associate exam.



## Benefits

- Windows Server administration – you will learn techniques and tools for managing Windows Server services and workloads in on-premises and hybrid environments.
- Identity services implementation – you will learn how to configure Active Directory, Azure AD DS, and integrate identities between on-premises and cloud environments.
- Hybrid environment management – you will learn how to use Azure Arc to manage servers, virtual

machines, and workloads running both in the cloud and on-premises.

- Implementing virtualization and network infrastructure – you will master the configuration of Hyper-V, virtual machines in Azure, and network services (DNS, DHCP, IPAM).
- Storage and file management – you will learn how to deploy and synchronize file services using Azure Files and Azure File Sync in hybrid environments.



## Training program

### 1: Identity services in Windows Server system

- Introduction to AD DS
- AD DS. domain controllers and FSMO roles
- Implement group rule objects

### 2: Implementing identity in hybrid scenarios

- Implement hybrid identity in Windows Server system
- Implement Azure IaaS Active Directory domain controllers and manage them on Azure platform

### 3: Windows Server administration

- Perform secure Windows Server administration
- Describe Windows Server administration tools
- Perform post-installation Windows server configuration
- Just Enough Administration in Windows Server

### 4: Simplifying hybrid management

- Remote administration and Windows Server IaaS virtual machine management
- Manage hybrid workloads using Azure Arc service

### 5: Hyper-V virtualisation in Windows Server

- Configure and manage Hyper-V
- Configure and manage Hyper-V virtual machines
- Secure Hyper-V workloads
- Launch containers in Windows Server
- Container orchestration in Windows Server using Kubernetes

### 6: Implementing and configuring Azure platform virtual machines

- Plan and implement Windows Server IaaS virtual machines
- Adjust Windows Server IaaS virtual machine images
- Automate configuration of Windows Server IaaS virtual machines

### 7: Network infrastructure services in Windows Server

- Implement and manage DHCP
- Implement Windows Server DNS
- Implement IP address management
- Implement remote access

### 8: Hybrid network infrastructure implementation

- Hybrid network infrastructure implementation
- Implement DNS for IaaS virtual machines with Windows Server system
- Implement addressing and Windows Server IaaS virtual machine IP routing

#### 9: File servers and mass storage management in Windows Server

- Manage Windows Server file servers
- Implement places for storage and places for direct storage
- Implement Windows Server data deduplication
- Implement Windows Server iSCSI
- Implement Windows Server mass storage replica

#### 10: Implementing hybrid file server infrastructure

- Review of Azure file services
- Implementing Azure File Sync



## Expected preparation of the participant

Before attending the course, participants must have:

- Experience in managing Windows Server system and Windows Server workloads in local scenarios, including AD DS, DNS, DFS, Hyper-V, as well as file and storage services
- Experience with popular tools to manage Windows Server
- Basic knowledge of basic computing technologies, mass storage, Microsoft network and virtualisation
- Experience and understanding basic network technologies such as IP addressing, name recognition and Dynamic Host Configuration Protocol (DHCP)
- Work experience and understanding Microsoft Hyper-V technologies and basic server virtualisation concepts
- Basic experience in implementing IaaS services in Microsoft Azure
- Basic knowledge of Azure Active Directory
- Practical work with Client Windows operational systems such as Windows 10 or Windows 11
- Basic experience with Windows PowerShell

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

\* electronic handbook available at:

<https://learn.microsoft.com/pl-pl/training/>

\* access to Altkom Akademia student portal

**Training method:**

- theory
- demos
- individual laboratories
- 70% theory
- 30% practice

**Language**

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

**Examination method**

The exam is on-line. You can enroll at: <https://home.pearsonvue.com/Clients/Microsoft.aspx>

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**Examination description**

After the AZ-800 course, you can take Microsoft certification exams:an Authorized Test Center,online being monitored by an offsite proctor. Details on the website:<https://docs.microsoft.com/en-us/learn/certifications/exams/az-800>