

# Configuring Windows Server Hybrid Advanced Services

**Authorized Microsoft** Configuring Windows Server Hybrid Advanced Services AZ-801 Distance Learning training.

## Target audience:

- Administrator
- Architect
- Engineer
- Specialist



## Purpose of the training

This four day course conducted by instructor is intended for IT specialists who configure advanced Windows Server services using local, hybrid and cloud technologies. These specialists manage infrastructure which consists of local workloads and the ones hosted in Azure IaaS service, based on Windows Server, which handle it. The course teaches IT specialists how to use hybrid opportunities of Azure platform, how to migrate virtual and physical server migration to Azure IaaS, as well as how to manage and secure Azure platform virtual machines with Windows Server system. The course also includes the way of doing tasks related to high availability, problem solving and Disaster Recovery. It discusses different tools and administration technologies as well, such as Windows Admin Center, PowerShell, Azure Arc, Azure Automation Update Management, Microsoft Defender for Identity, Azure Security Center, Azure Migrate and Azure Monitor



## Benefits of completing the training

- Solidify the configuration of Windows Server securities.
- Increase hybrid security using Azure Security Center, Azure Sentinel and Windows Update Management.

- Use security functions to protect critical resources.
- Implement high availability and Disaster Recovery solutions.
- Implement Disaster Recovery services in hybrid scenarios.
- Plan and implement hybrid and cloud only scenarios of migration, back-ups and Disaster Recovery.
- Perform updates and migrations related to AD DS, services and storage.
- Manage hybrid scenarios and monitor them using WAC, Azure Arc, Azure Automation and Azure Monitor.
- Implement service monitoring and performance monitoring, as well as problem solving.



## Examination method

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



## Exam description

After the AZ-801 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-801>



## Expected Listener Preparation

Before attending the course, participants should have:

- Experience in managing Windows Server operational 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 Windows Server management tools
- Fundamental 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
- Knowledge of security best practices
- Basic knowledge of technologies related to security (Firewalls, multi-factor authentication, ciphering, SIEM/SOAR).
- Basic knowledge of local computing and storage technologies based on Windows Server system

(Disaster Recovery cluster, place for storage).

- Basic experience in implementing and managing 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 experienced with Windows PowerShell
- Understanding the following terms related to Windows Server technologies:
  - High availability and Disaster Recovery
  - Automation
  - Monitoring
  - Troubleshooting



## Training Language

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

## 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% practices

## Duration

4 days / 28 hours

## Training agenda

### 1: Windows Server security

- Secure accounts of Windows Server users
- Solidifying Windows Server
- Managing Windows Server updates
- Windows secure DNS server

### 2: Implementing security solutions in hybrid scenarios

- Implementing network securities of IaaS virtual machines in Windows Server.
- Security audit of Windows Server IaaS virtual machines
- Manage Azure platform updates
- Create and implement lists of allowable applications with adaptive control of application
- Configure disk coding with BitLocker function for Windows IaaS virtual machines
- Implementation of change tracking and monitoring file integrity for IaaS virtual machines with Windows Server

### 3: Implementing high availability

- Introduction to shared cluster volumes.
- Implementing Disaster Recovery clusters in Windows Server.
- Implementing high availability of virtual machines with Windows Server.
- Implementing high availability of Windows Server files.
- Implementation of scaling and high availability thanks to virtual machines with Windows Server system.

### 4: Disaster Recovery in Windows Server

- Implement Hyper-V replica
- Protect your local infrastructure against failures thanks to Azure Site Recovery

### 5: Implementing Disaster Recovery scenarios in hybrid scenarios

- Implementing hybrid creation of back-ups and Disaster Recovery using Windows Server IaaS system
- Protect your Azure infrastructure thanks to Azure Site Recovery service
- Protect your virtual machines using Azure Backup service

### 6: Updating and migration in Windows Server system

- Active Directory domain service migration
- Migrating file server workloads using mass storage service
- Windows Server system role migration

### 7: Implementing migration in hybrid scenarios

- Migrating local Windows Server occurrences to Azure IaaS virtual machines
- Update and migrate Windows Server IaaS virtual machines
- Containerisation and migrating ASP.NET applications to Azure App Service

### 8: Monitoring server and performance in Windows Server system

- Monitoring Windows Server system performance
- Managing and monitoring Windows Server eventlogs
- Implementing audit and Windows Server diagnostics

- Problem solving with Active Directory
- 9: Operational monitoring implementation in hybrid scenarios
- Monitorowanie maszyn wirtualnych IaaS systemu Windows Server i instancji hybrydowych
  - Monitor the condition of Azure platform virtual machines using Azure Metrics Explorer and metrics' alerts
  - Monitor performance of virtual machines using Azure Monitor VM Insights
  - Troubleshooting local and hybrid networks
  - Troubleshooting Windows Server virtual machines on Azure platform