

**Configuring Windows Server Hybrid Advanced Services (AZ-801)**

**Course Number:** MOC-AZ-801
**Duration:** 4 days

**Overview**

This official Microsoft course AZ-801T00, Configuring Windows Server Hybrid Advanced Services, teaches IT Professionals how to configure advanced Windows Server services using on-premises, hybrid, and cloud technologies.

**Prerequisites**

All students must have:

* Experience with managing Windows Server operating system and Windows Server workloads in on-premises scenarios, including AD DS, DNS, DFS, Hyper-V, and File and Storage Services
* Experience with common Windows Server management tools (implied in the first prerequisite).
* Basic knowledge of core Microsoft compute, storage, networking, and virtualization technologies (implied in the first prerequisite).
* Experience and an understanding of core networking technologies such as IP addressing, name resolution, and Dynamic Host Configuration Protocol (DHCP)
* Experience working with and an understanding of Microsoft Hyper-V and basic server virtualization concepts
* An awareness of basic security best practices
* Basic understanding of security-related technologies (firewalls, encryption, multi-factor authentication, SIEM/SOAR).
* Basic knowledge of on-premises resiliency Windows Server-based compute and storage technologies (Failover Clustering, Storage Spaces).
* Basic experience with implementing and managing IaaS services in Microsoft Azure
* Basic knowledge of Azure Active Directory
* Experience working hands-on with Windows client operating systems such as Windows 10 or Windows 11
* Basic experience with Windows PowerShell
* An understanding of the following concepts as related to Windows Server technologies:
	+ High availability and disaster recovery
	+ Automation
	+ Monitoring
	+ Troubleshooting

**Materials**

All Microsoft Azure training students receive Microsoft official courseware.

For all Microsoft Official Courses taught in their entirety that have a corresponding certification exam, an exam voucher is included for each participant.

**Software Needed on Each Student PC**

The class will be conducted in a remote environment that Accelebrate will provide; students will only need a local computer with a web browser and a stable Internet connection. Any recent version of Microsoft Edge, Mozilla Firefox, or Google Chrome will work well.

**Objectives**

* Leverage the hybrid capabilities of Azure
* Migrate virtual and physical server workloads to Azure IaaS
* Secure Azure VMs running Windows Server
* Perform tasks related to high availability, troubleshooting, and disaster recovery
* Use administrative tools and technologies including Windows Admin Center, PowerShell, Azure Arc, Azure Automation Update Management, Microsoft Defender for Identity, Azure Security Center, Azure Migrate, and Azure Monitor

**Outline**

* Secure Windows Server user accounts
* Hardening Windows Server
* Windows Server update management
* Secure Windows Server DNS
* Implement Windows Server IaaS VM network security
* Audit the security of Windows Server IaaS Virtual Machines
* Manage Azure updates
* Create and implement application allowlists with adaptive application control
* Configure BitLocker disk encryption for Windows IaaS Virtual Machines
* Implement change tracking and file integrity monitoring for Windows IaaS VMs
* Introduction to Cluster Shared Volumes
* Implement Windows Server failover clustering
* Implement high availability of Windows Server VMs
* Implement Windows Server File Server high availability
* Implement scale and high availability with Windows Server VM
* Implement Hyper-V Replica
* Protect your on-premises infrastructure from disasters with Azure Site Recovery
* Implement hybrid backup and recovery with Windows Server IaaS
* Protect your Azure infrastructure with Azure Site Recover
* Protect your virtual machines by using Azure Backup
* Active Directory Domain Services migration
* Migrate file server workloads using Storage Migration Service
* Migrate Windows Server roles
* Migrate on-premises Windows Server instances to Azure IaaS virtual machines
* Upgrade and migrate Windows Server IaaS virtual machines
* Containerize and migrate ASP.NET applications to Azure App Service
* Monitor Windows Server performance
* Manage and monitor Windows Server event logs
* Implement Windows Server auditing and diagnostics
* Troubleshoot Active Directory
* Monitor Windows Server IaaS Virtual Machines and hybrid instances
* Monitor the health of your Azure virtual machine by using Azure Metrics Explorer and metric alerts
* Monitor performance of virtual machines by using Azure Monitor VM Insights
* Troubleshoot on-premises and hybrid networking
* Troubleshoot Windows Server Virtual Machines in Azure