

# Microsoft Certified Administrator: Windows Server 2025

(On-Premise and Cloud Environments / Hybrid - AZ-800 & AZ-801)

Microsoft certification training equips individuals with the skills to proficiently handle Windows Servers and workloads within a hybrid setting. It instructs on deploying and overseeing Active Directory Domain Services (AD DS) across on-premises and cloud environments, as well as managing virtual machines and containers. Moreover, this course provides insights into effective storage and file service management, along with the implementation and administration of on-premises and hybrid networking infrastructure.

The Windows Server Hybrid Administrator Associate certification comprises two distinct exams. The AZ-800 exam focuses on fundamental server administration duties, while the AZ-801 delves deeper into specialized tasks such as disaster recovery and workload migration. Achieving the Windows Server Hybrid Administrator Associate certification necessitates successfully passing both of these exams.

**Microsoft  
Certified  
Administrator:  
Windows  
Server 2025**

## Course Outline

### Deploy and Manage On-premises Network

- *Introduction Network and Networking*
- *Types of Networks – Lan, Man and Wan*
- *History of Microsoft Windows Operating system – Client and Server OS*
- *Microsoft Windows Operating System Editions*

### Installations of Microsoft Windows Operating system

- *Installation of Windows Server 2022 AND 2025 OS*
- *Installation of Windows 11 OS*
- *Creating Local user accounts*

### Implement and Manage IP Address

- *Overview of Tcp / Internet Protocol.*
- *Versions of IP Address – IP V4 and IP V6*
- *IP Address Classes*
- *IP – Private and Public IP*

### Topologies

- *Topologies – Physical and Logical*
- *Logical Topologies – Workgroup Model and Domain Model and Features*

### Deploy and Manage ADDS On-premises and Cloud Environments

- Introduction to ADDS
- Features of ADDS
- Installing ADDS – Domain Controller

### Configure and Manage – IAM in On-premises Domain

- Configuring Clients and Member Servers
- Creating and Manage – Users, Groups and Organization Units in ADDS
- Users Logon to and Logon Hours Policies
- Configure Password Policies
- Account Lockout Policies
- Users Properties manage

### Configure Windows Server Storage

- Configure disk and volumes
- Configure file Systems
- Applying Security and Sharing level Permissions – Folder and Files
- Configuring MAP Network drive
- Applying Disk Quota
- Access Based Enumeration Permissions
- Overview FSRM Service
- Installing FSRM Server – Screens, Quota management
- Deploy and manage DFS Server – Name Space

### Configure and Manage Multi – Domain and Multi – Forest Environments –ADDS

- Configure Domain – ADC and RODC Server
- Configure Tree – Child Domain Controller
- Configure Forest – NDEF Domain Controller

### Configuring FSMO ROLES

- Overview of Roles of ADDS
- FSMO Roles
- Transfer of Roles
- Seize of Roles

### Configure and Manage ADDS Trust

- Overview of Trust Relationship
- Types of transitive Trust
- Types of Trust
- Configuring - Multi Forest Trust

### Configure and manage Multi Sites

- Configure and Manage ADDS Sites
- Configure and Manage ADDS Replication – Schedule

### Manage Windows Server by using ADDS Domain-Based Group Policies

- Overview ADDS Domain-Based Group Policy Management
- Implement Group Policy in ADDS
- OU level

- Domain Level
- Sites Level
- Group Policy Modelling
- Group Policy - Block Inheritance
- Group Policy - Backup and Restore
- Group Policy – Preferences in ADDS

### Implement and Manage an On-premises and Hybrid Networking Infrastructure

- On-premises and Hybrid Name Resolution
- Overview and Integrate DNS Server with ADDS, SRV Records
- DNS Naming Hierarchy
- Types of Lookup – Forward and Reverse Lookup
- Types of Zones – Primary, Secondary, Stub Zone and ADDS integrated Primary Zone
- Types of Records
- Configuring Forwarder and Conditional forwarder

### Manage IP Addressing in on-premises and Hybrid Environment

- Overview – DHCP Server
- Implement and Configure DHCP Server Role
- Create and manage DHCP Scope
- Create and manage DHCP IP Reservations
- Implement DHCP high Availability

### Implement On-premise and Hybrid Network Connectivity Role – VPN

- Implement and Manage the Remote Access Role
- Network Policy and Access Services Role

### Manage Hyper – V and Guest Virtual Machines

- Configure – Hyper-V Role
- Create Virtual Machines
- Configure – Hyper – V Switches
- Manage VHD and VHDX Disk
- Manage Hyper – V Replica Server
- Configure VM Replication / Replicas
- Perform a Failover

### Deploy and Manage IIS – Webserver On-premise / Azure Cloud

- Overview – IIS Service
- Installing – IIS Role
- Creating Web Sites – HTTP and HTTPS

### Deploy and Manage IIS – FTP server On-premise / Azure Cloud

- Overview – FTP Service
- Installing – FTP Role
- Creating FTP Sites

### Manage - Hybrid Cloud Environments

- Overview Cloud and Hybrid Cloud Environment
- Benefits of Cloud
- Types of Cloud Deployment Model
- Types of Cloud Services Model

### Microsoft Cloud Environment

- Overview of Microsoft Azure
- Creating Azure Free Account
- Azure Resources and Resource Group

### Manage and Configure Azure Network

- Overview – Azure Network
- Manage and configure Azure Vnet and Subnets

### Manage Azure Virtual Machines that Run Windows Server

- Overview of Azure Vm
- Creating Azure Vms
- Manage VM Disk – OS Disk / Temporary Disk / Data Disk
- Configure Connections to Vm Remotely
- Resize Azure Vm
- Manage Azure VM Network Configuration

### Deploy and manage ADDS in Cloud Environment

- Deploy a VM in Azure
- Deploy and manage Domain Controller in Azure

### Implement and manage hybrid identities

- Implement Azure Entra ID Connect
- Manage Azure Entra ID Connect Synchronization
- Implement Azure Entra ID Connect cloud sync
- Integrate Azure Entra ID, AD DS, and Azure AD DS
- Manage Azure AD DS
- Manage Azure AD Connect Health
- Manage authentication in on-premises and hybrid environments
- Configure and manage AD DS passwords
- Implement Group Policy in Azure ADDS

### Manage Windows Servers in a hybrid environment

- Deploy a Windows Admin Center gateway server
- Configure a target machine for Windows Admin Center
- Configure PowerShell Remoting
- Configure JEA for PowerShell Remoting

### Configure and manage Azure File Sync

- Create Azure File Sync service
- Create sync groups
- Create cloud endpoints
- Register servers
- Create server endpoints
- Configure cloud tiering
- Monitor File Sync

### Implement a Windows Server failover cluster

- Implement a failover cluster on-premises, hybrid, or cloud-only
- Create a Windows failover cluster

- Stretch cluster across data center or Azure regions
- Configure storage for failover clustering
- Modify quorum options
- Configure network adapters for failover clustering
- Configure cluster workload options
- Configure cluster sets
- Configure Scale-Out File Servers
- Create an Azure witness
- Configure a floating IP address for the cluster
- Implement load balancing for the failover cluster

### Implement and manage Storage Spaces Direct

- Create a failover cluster using Storage Spaces Direct
- Upgrade a Storage Spaces Direct node
- Implement networking for Storage Spaces Direct
- Configure Storage Spaces Direct

### Manage backup and recovery for Windows Server in Azure Cloud

- Backup and restore files and folders to Azure Recovery Services vault
- Install and manage Azure Backup Server
- Backup and recovery using Azure Backup Server
- Manage backups in Azure Recovery Services vault
- Create a backup policy
- Configure backup for Azure Virtual Machines using the builtin backup agent
- Recover a VM using temporary snapshots
- Recover VMs to new Azure Virtual Machines
- Restore a VM

### Implement disaster recovery by using Azure Site Recovery

- Configure Azure Site Recovery networking
- Configure Site Recovery for on-premises VMs
- Configure a recovery plan
- Configure Site Recovery for Azure Virtual Machines
- Implement VM replication to secondary data center or Azure region
- Configure Azure Site Recovery policies

### Troubleshoot Windows Server virtual machines in Azure

- Troubleshoot deployment failures
- Troubleshoot booting failures
- Troubleshoot VM performance issues
- Troubleshoot VM extension issues
- Troubleshoot disk encryption issues
- Troubleshoot storage
- Troubleshoot VM connection issues