

# Exam AZ-800: Administering Windows Server Hybrid Core Infrastructure – Skills Measured

## Audience Profile

Candidates for the Windows Server Hybrid Administrator Associate certification should have subject matter expertise in configuring and managing Windows Server on-premises, hybrid, and infrastructure as a service (IaaS) platform workloads.

Responsibilities for this role include integrating Windows Server environments with Azure services and managing Windows Server in on-premises networks. This role manages and maintains Windows Server IaaS workloads in Azure, in addition to migrating and deploying workloads to Azure.

This role typically collaborates with Azure administrators, enterprise architects, Microsoft 365 administrators, and network engineers.

Candidates for this exam administer core Windows Server workloads using on-premises, hybrid, and cloud technologies. These professionals should have expertise in implementing and managing on-premises and hybrid solutions, such as identity, management, compute, networking, and storage. They use administrative tools and technologies, such as Windows Admin Center, PowerShell, Azure Arc, and IaaS virtual machine administration.

A candidate for this exam should have extensive experience working with Windows Server operating systems.

## Skills Measured

NOTE: The bullets that follow each of the skills measured are intended to illustrate how we are assessing that skill. This list is NOT definitive or exhaustive.

NOTE: Most questions cover features that are general availability (GA). The exam may contain questions on Preview features if those features are commonly used.

## Deploy and manage Active Directory Domain Services (AD DS) in on-premises and cloud environments (30–35%)

### Deploy and manage AD DS domain controllers

- deploy and manage domain controllers on-premises

- deploy and manage domain controllers in Azure
- deploy Read-Only Domain Controllers (RODCs)
- troubleshoot flexible single master operations (FSMO) roles

### **Configure and manage multi-site, multi-domain, and multi-forest environments**

- configure and manage forest and domain trusts
- configure and manage AD DS sites
- configure and manage AD DS replication

### **Create and manage AD DS security principals**

- create and manage AD DS users and groups
- manage users and groups in multi-domain and multi-forest scenarios
- implement group managed service accounts (gMSAs)
- join Windows Servers to AD DS, Azure AD DS, and Azure AD

### **Implement and manage hybrid identities**

- implement Azure AD Connect
- manage Azure AD Connect Synchronization
- implement Azure AD Connect cloud sync
- integrate Azure AD, 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

### **Manage Windows Server by using domain-based Group Policies**

- implement Group Policy in AD DS
- implement Group Policy Preferences in AD DS
- implement Group Policy in Azure AD DS

## **Manage Windows Servers and workloads in a hybrid environment (10–15%)**

### **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 CredSSP or Kerberos delegation for second hop remoting

- configure JEA for PowerShell Remoting

## **Manage Windows Servers and workloads by using Azure services**

- manage Windows Servers by using Azure Arc
- assign Azure Policy Guest Configuration
- deploy Azure services using Azure Virtual Machine extensions on non-Azure machines
- manage updates for Windows machines
- integrate Windows Servers with Log Analytics
- integrate Windows Servers with Azure Security Center
- manage IaaS virtual machines (VMs) in Azure that run Windows Server
- implement Azure Automation for hybrid workloads
- create runbooks to automate tasks on target VMs
- implement DSC to prevent configuration drift in IaaS machines

## **Manage virtual machines and containers (15–20%)**

### **Manage Hyper-V and guest virtual machines**

- enable VM enhanced session mode
- manage VM using PowerShell Remoting, PowerShell Direct, and HVC.exe
- configure nested virtualization
- configure VM memory
- configure Integration Services
- configure Discrete Device Assignment
- configure VM Resource Groups
- configure VM CPU Groups
- configure hypervisor scheduling types
- manage VM Checkpoints
- implement high availability for virtual machines
- manage VHD and VHDX files
- configure Hyper-V network adapter
- configure NIC teaming
- configure Hyper-V switch

### **Create and manage containers**

- create Windows Server container images
- manage Windows Server container images
- configure Container networking
- manage container instances

### **Manage Azure Virtual Machines that run Windows Server**

- manage data disks
- resize Azure Virtual Machines
- configure continuous delivery for Azure Virtual Machines
- configure connections to VMs
- manage Azure Virtual Machines network configuration

## **Implement and manage an on-premises and hybrid networking infrastructure (15–20%)**

### **Implement on-premises and hybrid name resolution**

- integrate DNS with AD DS
- create and manage zones and records
- configure DNS forwarding/conditional forwarding
- integrate Windows Server DNS with Azure DNS private zones
- implement DNSSEC

### **Manage IP addressing in on-premises and hybrid scenarios**

- implement and manage IPAM
- implement and configure the DHCP server role (on-premises only)
- resolve IP address issues in hybrid environments
- create and manage scopes
- create and manage IP reservations
- implement DHCP high availability

### **Implement on-premises and hybrid network connectivity**

- implement and manage the Remote Access role
- implement and manage Azure Network Adapter
- implement and manage Azure Extended Network
- implement and manage Network Policy Server role
- implement Web Application Proxy
- implement Azure Relay
- implement site-to-site virtual private network (VPN)
- implement Azure Virtual WAN
- implement Azure AD Application Proxy

## **Manage storage and file services (15–20%)**

### **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
- migrate DFS to Azure File Sync

### **Configure and manage Windows Server file shares**

- configure Windows Server file share access
- configure file screens
- configure File Server Resource Manager (FSRM) quotas
- configure BranchCache
- implement and configure Distributed File System (DFS)

### **Configure Windows Server storage**

- configure disks and volumes
- configure and manage Storage Spaces
- configure and manage Storage Replica
- configure Data Deduplication
- configure SMB direct
- configure Storage Quality of Service (QoS)
- configure file systems