

AZ-800: Administering Windows Server Hybrid Core Infrastructure



Days: 4

Prerequisites/Audience: Student should have a general working knowledge of the following:

- 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
- 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

Description: This course teaches IT Professionals how to manage core Windows Server workloads and services using on-premises, hybrid, and cloud technologies. The course teaches IT Professionals how to implement and manage on-premises and hybrid solutions such as identity, management, compute, networking, and storage in a Windows Server hybrid environment.

Course Objectives:

- Use administrative techniques and tools in Windows Server.
- Identify tools used to implement hybrid solutions including Windows Admin Center and PowerShell.
- Implement identity services in Windows Server.
- Implement identity in hybrid scenarios, including Azure AD DS on Azure IaaS and managed AD DS.
- Integrate Azure AD DS with Azure AD.
- Manage network infrastructure services.
- Deploy Azure VMs running Windows Server and configure networking and storage.
- Administer and manage Windows Server IaaS Virtual Machine remotely.
- Manage and maintain Azure VMs running Windows Server.
- Configure file servers and storage.
- Implement File Services in hybrid scenarios, using Azure Files and Azure File Sync.

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OUTLINE:

MODULE 1: IDENTITY SERVICES IN WINDOWS SERVICE

- Introduction to AD DS
- Manage AD DS domain controllers and FSMO roles
- Implement Group Policy Objects
- Manage advanced features of AD DS

MODULE 2: IMPLEMENTING IDENTITY IN HYBRID SCENARIOS

- Implement hybrid identity with Windows Server
- Deploy and manage Azure IaaS Active Directory domain controllers in Azure

MODULE 3: WINDOWS SERVER ADMINISTRATION

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

MODULE 4: FACILITATING HYBRID MANAGEMENT

- Administer and manage Windows Server IaaS virtual machines remotely
- Manage hybrid workloads with Azure Arc

MODULE 5: HYPER-V VIRTUALIZATION IN WINDOWS SERVER

- Configure and manage Hyper-V
- Configure and manage Hyper-V virtual machines
- Secure Hyper-V workloads
- Run containers on Windows Server
- Orchestrate containers on Windows Server using Kubernetes

MODULE 6: DEPLOYING AND CONFIGURING AZURE VMS

- Plan and deploy Windows Server IaaS virtual machines
- Customize Windows Server IaaS virtual machine images
- Automate the configuration of Windows Server IaaS virtual machines

MODULE 7: NETWORK INFRASTRUCTURE SERVICES IN WINDOWS SERVER

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

MODULE 8: IMPLEMENTING HYBRID NETWORKING INFRASTRUCTURE

- Implement hybrid network infrastructure
- Implement DNS for Windows Server IaaS VMs
- Implement Windows Server IaaS VM IP addressing and routing

MODULE 9: FILE SERVERS AND STORAGE MANAGEMENT IN WINDOWS SERVER

- Manage Windows Server file servers
- Implement Storage Spaces and Storage Spaces Direct
- Implement Windows Server Data Deduplication
- Implement Windows Server iSCSI
- Implement Windows Server Storage Replica

MODULE 10: IMPLEMENTING A HYBRID FILE SERVER INFRASTRUCTURE

- Overview of Azure file services
- Implement Azure Files Sync