

**Administering Windows Server Hybrid Core Infrastructure (AZ-800)**

**Course Number:** MOC-AZ-800
**Duration:** 4 days

**Overview**

This Administering Windows Server Hybrid Core Infrastructure training (Microsoft course AZ-800) 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.  This course prepares students for the [AZ-800 exam](https://docs.microsoft.com/en-us/learn/certifications/exams/AZ-800) for which every attendee receives a voucher.

**Prerequisites**

* 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 with 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

**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**

Attendees will not need to install any software on their computer for this class. 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 be fine.

**Objectives**

* Understand the fundamentals of Active Directory Domain Services (AD DS) in Windows Server
* Maintain and deploy AD DS domain controllers
* Implement Group Policy Objects (GPOs) in Active Directory Domain Services (AD DS) in Windows Server
* Build advanced AD DS administration tasks
* Configure an Azure environment so that Windows IaaS workloads requiring Active Directory are supported
* Extend an existing Active Directory environment into Azure
* Select the most appropriate Windows Server administration tool for a given situation and learn how to use that tool
* Perform post-installation configuration of Windows Server by using several methods and tools
* Streamline administration of Windows Server environments with Just Enough Administration (JEA)
* Use suitable tools and techniques to manage Windows IaaS VMs remotely
* Describe Azure Arc, implement Azure Arc with on-premises server instances
* Deploy Azure policies with Azure Arc
* Use role-based access control (RBAC) to restrict access to Log Analytics data
* Use best practices for preparing Hyper-V hosts
* Configure and manage Hyper-V virtual machines in Windows Server
* Describe the features and functionality of the HGS in Windows Server
* Work with Kubernetes, containers, container orchestration, and Kubernetes orchestration
* Create new VMs from generalized images
* Use Azure Image Builder templates to create and manage images in Azure
* Implement automatic IP configuration with Dynamic Host Configuration Protocol (DHCP) in Windows Server
* Implement IPAM to help manage your organization’s DHCP and DNS servers and IP address space
* Manage Microsoft Azure virtual networks (VNets) and IP address configuration
* Deploy Azure File Sync, migrate from DFS, and use Storage Migration Services to migrate file servers to Azure

**Outline**

* Introduction to AD DS
* Manage AD DS domain controllers and FSMO roles
* Implement Group Policy Objects
* Manage advanced features of AD DS
* Implement hybrid identity with Windows Server
* Deploy and manage Azure IaaS Active Directory domain controllers in Azure
* Perform Windows Server secure administration
* Describe Windows Server administration tools
* Perform post-installation configuration of Windows Server
* Just Enough Administration in Windows Server
* Administer and manage Windows Server IaaS Virtual Machine remotely
* Manage hybrid workloads with Azure Arc
* 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
* Plan and deploy Windows Server IaaS Virtual Machines
* Customize Windows Server IaaS Virtual Machine images
* Automate the configuration of Windows Server IaaS Virtual Machines
* Deploy and manage DHCP
* Implement Windows Server DNS
* Implement IP Address Management
* Implement remote access
* Implement hybrid network infrastructure
* Implement DNS for Windows Server IaaS VMs
* Implement Windows Server IaaS VM IP addressing and routing
* 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
* Implement a hybrid file server infrastructure