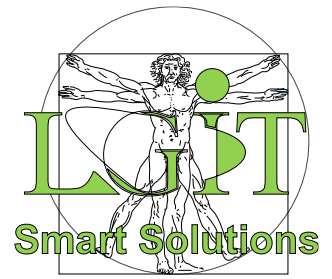


Administering Windows Server Hybrid Core Infrastructure: AZ-800



Course Overview

AZ-800T00: Administering Windows Server Hybrid Core Infrastructure course teaches IT Professionals how to manage core Windows Server workloads and services using on-premises, hybrid, and cloud technologies. AZ-800T00: Administering Windows Server Hybrid Core Infrastructure training 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

Audience Profile

This is intended for Windows Server Hybrid Administrators who have experience working with Windows Server and want to extend the capabilities of their on-premises environments by combining on-premises and hybrid technologies.

Windows Server Hybrid Administrators implement and manage on-premises and hybrid solutions such as identity, management, compute, networking, and storage in a Windows Server hybrid environment.

At course completion

After completing this course, students will be able to:

- Harden the security configuration of the Windows Server operating system environment.
- Enhance hybrid security using Azure Security Center, Azure Sentinel, and Windows Update Management.
- Apply security features to protect critical resources.
- Implement high availability and disaster recovery solutions.
- implement recovery services in hybrid scenarios.
- Plan and implement hybrid and cloud-only migration, backup, and recovery scenarios.
- Perform upgrades and migration related to AD DS, and storage.
- Manage and monitor hybrid scenarios using WAC, Azure Arc, Azure Automation and Azure Monitor.
- Implement service monitoring and performance monitoring and apply troubleshooting.

Prerequisites

- Experience with common Windows Server management tools
- Basic knowledge of core Microsoft compute, storage, networking, and virtualization technologies
- 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
- 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

Duration: 24 hours (8 x 3 hours)

Course Outline

Module 1: Identity services in Windows Server

- Introduction to AD DS
- Manage AD DS domain controllers and FSMO roles
- Implement Group Policy Objects
- Manage advanced features of AD DS
- Lab: Implementing identity services and Group Policy

Module 2: Implementing identity in hybrid scenarios

- Implement hybrid identity with Windows Server
- Deploy and manage Azure IaaS Active Directory domain controllers in Azure
- Lab: Implementing integration between AD DS and Azure AD

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
- Lab: Managing Windows Server

Module 4: Facilitating hybrid management

- Administer and manage Windows Server IaaS virtual machines remotely
- Manage hybrid workloads with Azure Arc
- Lab: Using Windows Admin Center in hybrid scenarios.

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
- Lab: Implementing and configuring virtualization in Windows Server

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
- Lab: Deploying and configuring Windows Server on Azure VMs

Module 7: Network infrastructure services in Windows Server

- Deploy and manage DHCP
- Implement Windows Server DNS
- Implement IP address management
- Implement remote access
- Lab: Implementing and configuring network infrastructure services in Windows Server

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
- Lab: Implementing Windows Server IaaS VM networking

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
- Lab: Implementing storage solutions in Windows Server

Module 10: Implementing a hybrid file server infrastructure

- Overview of Azure file services
- Implementing Azure File Sync
- Lab: Implementing Azure File Sync

Recommended

- Basic experience with implementing and managing IaaS services in Microsoft Azure
- Basic knowledge of Azure Active Directory
- Basic experience with Windows PowerShell