Course Outline

Microsoft
Solutions Partner
Microsoft Cloud

Training Services

Course Name: Configuring Windows Server Hybrid Advanced Services

Course Code: MS-AZ-801T00

DURATION	LEVEL	TECHNOLOGY	DELIVERY METHOD	TRAINING CREDITS
4 Days	Intermediate	Microsoft	VITL/In Class	N/A

Course Overview

This course teaches you IT Professionals to configure advanced Windows Server services using on-premises, hybrid, and cloud technologies. This course teaches IT Professionals how to leverage the hybrid capabilities of Azure, how to migrate virtual and physical server workloads to Azure IaaS, and how to secure Azure VMs running Windows Server. The course also teaches IT Professionals how to perform tasks related to high availability, troubleshooting, and disaster recovery. The course highlights administrative tools and technologies including Windows Admin Center, PowerShell, Azure Arc, Azure Automation Update Management, Microsoft Defender for Identity, Azure Security Center, Azure Migrate, Azure Monitor.

Prerequisites

Before attending this course, students must have:

- Experience with managing Windows Server operating systems and Window 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 prerequisites).
- Basic knowledge of core Microsoft compute, storage, networking, and virtualization technologies (implied in the first prerequisite).

- Experience and a understanding of core network 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 virtualization.

An understanding of the following concepts as related to Windows Server technologies.
- High availability and disaster recovery
- Automation
- Monitoring
- Troubleshooting

Concepts
- An awareness of basic security best practices.
- Basic understanding of security-related technologies (firewalls, encryption, multi-factor authentication SIEM/SOAR).
- Basic knowledge of on-premises resiliency Windows Server-based compute and storage technologies (Failover Clustering, Storage Spaces).
- 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.
- Besic experience with Windows PowerShell implement and manage on-premises core technologies want to secure and protect their environments, migrate virtual and physical workloads to Azure IaaS, enable a highly available, fully redundant environment, and perform monitoring and troubleshooting.

Target Audience

This four-day course 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 who already implement and manage on-premises core technologies want to secure and protect their environments, migrate virtual and physical workloads to Azure IaaS, enable a highly available, fully redundant environment, and perform monitoring and troubleshooting.

Course Topics

- Secure Windows Server user accounts
- Hardening Windows Server
- Windows Server update management
- Secure Windows Server DNS
- Implement Windows Server IaaS VM network security
- Audit the security of Windows Server IaaS Virtula Machines
- Manage Azure updates
- Create and implement application allowlist with adaptive application control
- Configure BitLocker disk encryption for Windows IaaS Virtual Machines
- Implement change tracking and file integrity monitoring for Windows IaaS VMs
- Introduction to Cluster Shared Volumes
- Implement Windows Server failover clustering

- Implement high availability of Windows Server VMs
- Implement scale and high availability with Windows Server VM
- Implement Hyper-V Replica
- Protect your on-premises infrastructure from disasters with Azure Site Recovery
- Implement hybrid backup and recovery with Windows Server IaaS
- Protect your Azure infrastructure with Azure Site Recovery
- Protect your virtual machines by using Azure Backup
- Active Directory Domain Services migration
- Migrate file server workloads using Storage Migration Services
- Migrate Windows Server roles
- Migrate on-premises Windows Server instances to Azure IaaS virtual machines
- Upgrade and migrate Windows Server IaaS virtual machines
- Containerize and migrate ASP.NET applications to Azure App Services
- Monitor Windows Server performance
- Manage and monitor Windows Server event logs
- Implement auditing diagnostics
- Troubleshoot Active Directory
- Monitor Windows Server IaaS Virtual and hybrid instances
- Monitor the health of your Azure virtual machine by using Azure Metrics Explorer and metrics alerts
- Monitor performance of virtual machines by using Azure Monitor VM Insights
- Troubleshoot on-premises and hybrid networking
- Troubleshoot Windows Server Virtual Machines in Azure