WS-012T00: Windows Server® 2019 Hybrid and Azure® IaaS

Duration: 3 Days
Method: Instructor-Led Training (ILT) | Live Online Training

Course Description

This course prepares participants for planning, implementing, and managing environments that include Azure IaaS-hosted Windows Server-based workloads. The course covers how to leverage the hybrid capabilities of Azure, how to migrate virtual and physical server workloads to Azure IaaS, and how to manage and secure Azure VMs running Windows Server 2019.

Target Audience

This course is intended for:
- IT Professionals who have experience with managing an on-premises Windows Server environment.
- Windows Server administrators and system engineers, preparing for transitioning from on-premises to hybrid and cloud-only environments.
- Persons in any role that involves administrative and operational tasks targeting Microsoft Azure IaaS workloads.

Prerequisites

To attend this course, candidates must have:
- 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 by the first prerequisite).
- Basic knowledge of core Microsoft® computer, storage, networking, and virtualization technologies (implied by the first prerequisite).
- Basic knowledge of on-premises resiliency Windows Server-based computer and storage technologies (Failover Clustering, Storage Spaces).
- Basic experience with implementing and managing IaaS services in Microsoft Azure.
- Basic knowledge of Azure Active Directory®.
- Basic understanding security-related technologies (firewalls, encryption, multi-factor authentication, SIEM/SOAR).
- Basic knowledge of PowerShell® scripting.
- An understanding of the concepts (High Availability and Disaster Recovery, Automation and Monitoring) as related to Windows Server technologies.

Course Objectives

Upon successful completion of this course, attendees will be able to:
- Describe the foundational principles of Azure IaaS, including compute, storage, and networking.
- Identify tools used to implement hybrid solutions, including Windows Admin Centre and PowerShell.
- Implement identity in Hybrid scenarios, including AD DS on Azure IaaS and managed AD DS.
- Integrate AD DS with Azure AD.
- Manage and monitor hybrid scenarios using WAC, Azure Arc, Azure Automation and Azure Monitor.
- Enhance hybrid security using Azure Security Centre, Azure Sentinel, and Windows Update Management.
- Implement File Services in hybrid scenarios, using Azure Files and Azure File Sync.
- Plan and implement hybrid and cloud-only migration, backup, and recovery scenarios.
- Deploy Azure VMs running Windows Server 2019, and configure networking, storage, and security.
- Manage and maintain Azure VMs running Windows Server 2019.

Course Topics

Module 1: Introducing Azure Hybrid IaaS with Windows Server 2019
- Overview of Azure IaaS
- Overview of the Azure Hybrid Model
- Using Hybrid Admin Tools

Module 2: Implementing Identity in Hybrid Scenarios
- Implementing AD DS on Azure IaaS
- Integrating AD DS with Azure AD
- Implementing Managed AD DS Environments

Module 3: Facilitating Hybrid Management and Operational Monitoring in Hybrid Scenarios
- Windows Admin Centre
- Azure Arc
- Azure Monitor
- Azure Automation

Module 4: Implementing Security Solutions in Hybrid Scenarios
- Azure Security Centre
- Azure Sentinel
- Managing Windows Updates

Module 5: Implementing File Services in Hybrid Scenarios
- Implementing Azure Files
- Implementing Azure File Sync

Module 6: Deploying and Configuring Azure VMs
- Deploying Azure VMs
- Configuring Azure VM Networking
- Configuring Azure VM Storage
- Configuring Azure VM Security

Module 7: Managing and Maintaining Azure VMs
- Managing Azure VMs Running Windows Server
- Maintaining Azure VMs Running Windows Server

Module 8: Planning and Implementing Migration and Recovery Services in Hybrid Scenarios
- Azure Migrate
- Storage Migration Server
- Azure Site Recovery
- Storage Replica
- Azure Backup

LABS INCLUDED