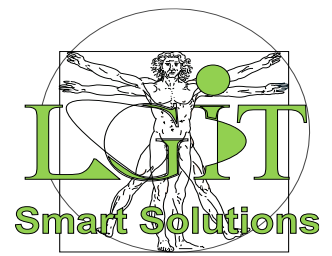


Administering Windows Server Hybrid Advanced Services: AZ-801



Course Overview

AZ-801T00: Configuring Windows Server Hybrid Advanced Services training 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 manage and secure Azure VMs running Windows Server. The course also covers how to perform tasks related to high availability, troubleshooting, and disaster recovery. The course highlights various administrative tools and technologies including Windows Admin Center, PowerShell, Azure Arc, Azure Automation Update Management, Microsoft Defender for Identity, Azure Security Center, Azure Migrate, and Azure Monitor

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 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.

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.

Duration: 24 Hours (8 x 3 hrs)

Course Outline

Module 1: Windows Server security

- Secure Windows Server user accounts.
- Hardening Windows Server
- Windows Server Update Management.
- Secure Windows Server DNS.
- Lab: Configuring security in Windows Server.

Module 2: Implementing security solutions in hybrid scenarios

- implement Windows Server IaaS VM network security
- Audit the security of Windows Server IaaS Virtual Machines.
- Manage Azure updates.
- Create and implement application allow lists with adaptive application control.
- Configure BitLocker disk encryption for Windows IaaS Virtual Machines.
- Implement change tracking and file integrity monitoring for Windows Server IaaS VMs.
- Lab: Using Azure Security Center in hybrid scenarios

Module 3: Implementing high availability

- Introduction to Cluster Shared Volumes
- Implement Windows Server failover clustering
- Implement high availability of Windows Server VMs
- Implement Windows Server File Server high availability.
- Implement scale and high availability with Windows Server VMs
- Lab: Implementing failover clustering

Module 4: Disaster recovery in Windows Server

- Implement Hyper-V Replica
- Protect your on-premises infrastructure from disasters with Azure Site Recovery
- Lab: Implementing Hyper-V Replica and Windows Server Backup.

Module 5: Implementing recovery services in hybrid scenarios

- 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.
- Lab: Implementing Azure-based recovery services.

Module 6: Upgrade and migrate in Windows Server

- Active Directory Domain Services migration.
- Migrate file server workloads using Storage Migration Service.
- Migrate Windows Server roles.
- Lab: Migrating Windows Server workloads to IaaS VMs

Module 7: Implementing migration in hybrid scenarios

- 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 Service
- Lab: Migrating on-premises VMs servers to IaaS VMs

Module 8: Server and performance monitoring in Windows Server

- Monitor Windows Server performance.
- Manage and monitor Windows Server event logs.
- Implement Windows Server auditing and diagnostics.
- Troubleshoot Active Directory
- Lab: Monitoring and troubleshooting Windows Server

Module 9: Implementing operational monitoring in hybrid scenarios

- Monitor Windows Server IaaS Virtual Machines and hybrid instances.
- Monitor the health of your Azure virtual machines by using Azure Metrics Explorer and metric 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
- Lab: Monitoring and troubleshooting of IaaS VMs running Windows Server