

Configuring Windows Server Hybrid Advanced Services. (AZ-801)

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 Seminar	 8 Termine verfügbar	 Teilnahmebescheinigung
 Präsenz / Virtual Classroom	 32 Unterrichtseinheiten	 Online durchführbar

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Dieser viertägige Kurs richtet sich an IT-Professionals, die advanced Windows Server-Dienste mit lokalen, hybriden und Cloud-Technologien konfigurieren. Diese Administratoren verwalten und unterstützen eine Infrastruktur, die lokale On Premise und auf Azure IaaS gehostete Windows Server-basierte Cloud Workloads umfasst.

Nutzen

Nach dem Besuch dieses Seminars verfügen Sie über folgende Skills und Kenntnisse:

- Optimieren der Sicherheitskonfiguration einer Windows Server-Betriebsumgebung.
- Verbesserung der hybriden Sicherheit mit Azure Security Center, Azure Sentinel und Windows Update Management.
- Anwendung von Sicherheitsfunktionen zum Schutz kritischer Ressourcen.
- Implementierung von Hochverfügbarkeits- und Disaster-Recovery-Lösungen.
- Wiederherstellungsdienste in hybriden Szenarien implementieren.
- Planen und Implementieren von hybriden und reinen Cloud-Szenarien für Migration, Backup und Wiederherstellung.
- Durchführung von Upgrades und Migrationen in Bezug auf AD DS und Storage.
- Verwalten und Überwachen von hybriden Szenarien mit WAC, Azure Arc, Azure Automation und Azure Monitor.
- Implementierung von Service- und Leistungsüberwachung sowie Fehlerbehebung.

Zielgruppe

Dieses Training richtet sich an Windows Server Administratoren, die Erfahrung mit Windows Server haben und die Möglichkeiten Ihrer lokalen On Premise Umgebungen durch die Kombination von lokalen und hybriden Cloud-Technologien erweitern möchten.

Voraussetzungen

Erfahrung in der Konfiguration und Administration von Windows Server 2019 Systemen in On Premise und Hybrid Infrastrukturen, wie sie im Seminar "Administering Windows Server Hybrid Core Infrastructure." (AZ-800) vermittelt werden.

Inhalte des Seminars

Module 1: Windows Server security

This module discusses how to protect an Active Directory environment by securing user accounts to least privilege and placing them in the Protected Users group. It covers how to limit authentication scope and remediate potentially insecure accounts. It also describes how to harden the security configuration of a Windows Server operating system environment. In addition, the module discusses the use of Windows Server Update Services to deploy operating system updates to computers on the network. Finally, it covers how to secure Windows Server DNS to help protect the network name resolution infrastructure.

- Secure Windows Server user accounts
- Hardening Windows Server
- Windows Server Update Management
- Secure Windows Server DNS

Module 2: Implementing security solutions in hybrid scenarios

This module describes how to secure on-premises Windows Server resources and Azure IaaS workloads. It covers how to improve the network security for Windows Server infrastructure as a service (IaaS) virtual machines (VMs) and how to diagnose network security issues with those VMs. In addition, the module introduces Azure Security Center and explains how to onboard Windows Server computers to Security Center. It also describes how to enable Azure Update Management, deploy updates, review an update assessment, and manage updates for Azure VMs. And it explains how Adaptive application controls and BitLocker disk encryption are used to protect Windows Server IaaS VMs. Finally, the module explains how to monitor Windows Server Azure IaaS VMs for changes in files and the registry, as well as monitoring modifications made to application software.

- Implement Windows Server IaaS VM network security.
- Audit the security of Windows Server IaaS Virtual Machines

- Manage Azure updates
- Create and implement application allowlists 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

Module 3: Implementing high availability

This module describes technologies and options to create a highly available Windows Server environment. It introduces Clustered Shared Volumes for shared storage access across multiple cluster nodes. It also highlights failover clustering, stretch clusters, and cluster sets for implementing high availability of Windows Server workloads. The module then discusses high availability provisions for Hyper-V and Windows Server VMs, such as network load balancing, live migration, and storage migration. The module also covers high availability options for shares hosted on Windows Server file servers. Finally, the module describes how to implement scaling for virtual machine scale sets and load-balanced VMs, and how to implement Azure Site Recovery.

- 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.

Module 4: Disaster recovery in Windows Server This module introduces Hyper-V Replica as a business continuity and disaster recovery solution for a virtual environment. It discusses Hyper-V Replica scenarios and use cases, and prerequisites to use it. The module also discusses how to implement Azure Site Recovery in on-premises scenarios to recover from disasters.

- Implement Hyper-V Replica
- Protect your on-premises infrastructure from disasters with Azure Site Recovery

Module 5: Implementing recovery services in hybrid scenarios

This module covers tools and technologies for implementing disaster recovery in hybrid scenarios, whereas the previous module focuses on BCDR solutions for on-premises scenarios. It begins with Azure Backup as a service to protect files and folders before highlighting how to implement Recovery Vaults and Azure Backup Policies. The module describes how to recover Windows IaaS virtual machines, perform backup and restore of on-premises workloads, and manage Azure VM backups. It also covers how to provide disaster recovery for Azure infrastructure by managing and orchestrating replication, failover, and failback of Azure virtual machines 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

Module 6: Upgrade and migrate in Windows Server

This module discusses approaches to migrating Windows Server workloads running in earlier versions of Windows Server to more current versions. It covers the necessary strategies needed to move domain controllers to Windows Server 2022 and describes how the Active Directory Migration Tool can consolidate domains within a forest or migrate domains to a new AD DS forest. The module also discusses the use of Storage Migration Service to migrate files and file shares from existing file servers to new servers running Windows Server 2022. Finally, it covers how to install and use the Windows Server Migration Tools cmdlets to migrate commonly used server roles from earlier versions of Windows Server.

- Active Directory Domain Services migration
- Migrate file server workloads using Storage Migration Service
- Migrate Windows Server roles

Module 7: Implementing migration in hybrid scenarios

This module discusses approaches to migrating workloads running in Windows Server to an infrastructure as a service (IaaS) virtual machine. It introduces using Azure Migrate to assess and migrate on-premises Windows Server instances to Microsoft Azure. It also covers how to migrate a workload running in Windows Server to an infrastructure as a service (IaaS) virtual machine (VM) and to Windows Server 2022 by using Windows Server migration tools or the Storage Migration Service. Finally, this module describes how to use the Azure Migrate App Containerization tool to containerize and migrate ASP.NET applications to Azure App Service.

- 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

Module 8: Server and performance monitoring in Windows Server

This module introduces a range of tools to monitor the operating system and applications on a Windows Server computer as well as describing how to configure a system to optimize efficiency and to troubleshoot problems. It covers how Event Viewer provides a convenient and accessible location for observing events that occur, and how to interpret the data in the event log. It also covers how to audit and diagnose a Windows Server environment for regulatory compliance, user activity, and troubleshooting. Finally, the module explains how to troubleshoot AD DS service failures or degraded performance, including recovery of deleted objects and the AD DS database, and how to troubleshoot hybrid authentication issues.

- Monitor Windows Server performance
- Manage and monitor Windows Server event logs

- Implement Windows Server auditing and diagnostics
- Troubleshoot Active Directory

Module 9: Implementing operational monitoring in hybrid scenarios

This module covers using monitoring and troubleshooting tools, processes, and best practices to streamline app performance and availability of Windows Server IaaS VMs and hybrid instances. It describes how to implement Azure Monitor for IaaS VMs in Azure, implement Azure Monitor in on-premises environments, and use dependency maps. The module then explains how to enable diagnostics to get data about a VM, and how to view VM metrics in Azure Metrics Explorer, and how to create a metric alert to monitor VM performance. It then covers how to monitor VM performance by using Azure Monitor VM Insights. The module then describes various aspects of troubleshooting on-premises and hybrid network connectivity, including how to diagnose common issues with DHCP, name resolution, IP configuration, and routing. Finally, the module examines how to troubleshoot configuration issues that impact connectivity to Azure-hosted Windows Server virtual machines (VMs), as well as approaches to resolve issues with VM startup, extensions, performance, storage, and encryption.

- 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

Wichtige Hinweise

Zusammen mit dem Wissen aus dem Seminar "Administering Windows Server Hybrid Core Infrastructure." (AZ-800) können Sie über die MCP Examen AZ-800 und AZ-801 die Zertifizierung zum "Microsoft Certified: Windows Server Hybrid Administrator Associate" erreichen.

Terminübersicht und Buchung

Buchen Sie Ihren Wunschtermin jetzt direkt online unter <https://akademie.tuv.com/s/29532> und profitieren Sie von diesen Vorteilen:

- Schneller Buchungsvorgang
- Persönliches Kundenkonto
- Gleichzeitige Buchung für mehrere Teilnehmer:innen

Alternativ können Sie das Bestellformular verwenden, um via Fax oder E-Mail zu bestellen.