

AZ-802T00-A: Administer Windows Server

OEM: Microsoft • Duration: 5 Days (40 hrs) • Code: AZ-802T00-A

COURSE MODULES & TOPICS

Deploy and manage Active Directory Domain Services

Deploy and manage Active Directory Domain Services domain controllers

- Introduction
- Define active directory domain services
- Define forests domains
- Deploy active directory domain services controllers
- Migrate domain controller new site
- Operations masters
- Knowledge check
- Summary

Deploy and manage Azure IaaS Active Directory domain controllers in Azure

- Introduction
- Select option implement directory identity services
- Deploy configure active directory domain services domain controllers
- Install replica active directory domain controller azure virtual machine
- Install active directory forest azure virtual network
- Knowledge check
- Summary

Manage AD DS domain controllers and FSMO roles

- Introduction
- Deploy
- Maintain
- Global catalog role
- Operations masters
- Schema
- Knowledge check
- Summary

Create and manage Active Directory objects

- Introduction

- Define users groups computers
- Define organizational units
- Manage objects their properties
- Create objects
- Configure objects
- Perform bulk management tasks user accounts
- Maintain domain services domain controllers
- Knowledge check
- Summary

Implement hybrid identity with Windows Server

- Introduction
- Select azure ad integration model
- Plan azure ad integration
- Prepare premises active directory directory synchronization
- Install configure directory synchronization with azure ad connect
- Implement seamless single sign on
- Enable azure ad login for windows vm azure
- Knowledge check 1
- Describe azure ad ds
- Implement configure azure ad ds
- Manage 2019 azure ad ds environment
- Create configure azure active directory domain services instance
- Join vm managed domain
- Knowledge check 2
- Summary

Create and configure Group Policy Objects in Active Directory

- Introduction
- Define group policy objects
- Implement object scope inheritance
- Define domain based
- Create configure domain based object
- Configure domain password policy
- Configure apply fine grained password policy
- Knowledge check
- Summary

Implement Group Policy Objects

- Introduction
- Define gpos
- Implement gpo scope inheritance
- Define domain based gpos
- Create configure domain based gpo

- Define gpo storage
- Define administrative templates
- Knowledge check
- Summary

Manage advanced features of AD DS

- Introduction
- Create trust relationships
- Implement esae forests
- Monitor troubleshoot
- Create custom partitions
- Knowledge check
- Summary

Manage Windows Server instances and workloads in a hybrid environment

Administer and manage Windows Server IaaS Virtual Machine remotely

- Introduction
- Select appropriate remote administration tools
- Vms with bastion
- Create azure bastion host
- Configure just time administration
- Knowledge check
- Summary

Describe Windows Server administration tools

- Introduction
- Explore windows admin center
- Use server manager
- List remote server administration tools
- Use windows powershell
- Use windows powershell to remotely administer server
- Knowledge check
- Summary

Just Enough Administration in Windows Server

- Introduction
- Explain concept of jea
- Define role capabilities for jea endpoint
- Create session configuration file to register jea endpoint
- Describe how jea endpoints work to limit access to powershell session
- Create connect to jea endpoint
- Demonstration connect to jea endpoint
- Knowledge check

- Summary

Perform Windows Server secure administration

- Introduction
- Define least privilege administration
- Implement delegated privileges
- Use privileged access workstations
- Use jump servers
- Knowledge check
- Summary

Use advanced Windows PowerShell remoting techniques

- Introduction
- Review common of windows powershell
- Send parameters to remote computers
- Set access protection variables aliases scope modifier
- Enable multi hop remoting
- Knowledge check
- Summary

Manage single and multiple computers by using Windows PowerShell remoting

- Introduction
- Review remoting feature of windows powershell
- Compare remoting remote connectivity
- Review remoting security feature of windows powershell
- Enable remoting
- Use one to one remoting
- Use one to many remoting
- Compare remoting output local output
- Knowledge check
- Summary

Manage hybrid workloads with Azure Arc

- Introduction
- Describe
- Onboard windows server instances
- Connect hybrid machines to azure from azure portal
- Use to manage windows server instances
- Restrict access with rbac
- Knowledge check
- Summary

Manage Azure updates

- Introduction

- Describe update management
- Enable update management
- Deploy updates
- View update assessments
- Manage updates for your azure vms
- Knowledge check
- Summary

Automate the configuration of Windows Server IaaS Virtual Machines

- Introduction
- Describe azure automation
- Implement azure automation with dsc
- Remediate noncompliant servers
- Describe custom script extensions
- Configure vm by using dsc
- Knowledge check
- Summary

Enforce VM security configuration with Azure Machine Configuration

- Introduction
- Explore machine configuration capabilities
- Apply built in security baseline policies
- Author assign custom machine configurations
- Knowledge check
- Summary

Explore Azure Automation with DevOps

- Introduction
- Create automation accounts
- What runbook
- Understand automation shared resources
- Explore runbook gallery
- Examine webhooks
- Explore source control integration
- Explore powershell workflows
- Create workflow
- Explore hybrid management
- Examine checkpoint parallel processing
- Knowledge check
- Summary

Manage virtual machines

Configure and manage Hyper-V virtual machines

- Introduction
- List virtual machine configuration versions
- List virtual machine generation versions
- List available vhd formats types
- Create configure vms
- Determine storage options for vms
- Define shared vhds vhd sets
- Implement guest clusters using shared vhd
- Knowledge check
- Summary

Configure and manage Hyper-V

- Introduction
- Define
- Define manager
- Configure hosts using best practices
- Configure networking
- Assess advanced networking features
- Define nested virtualization
- Knowledge check
- Summary

Secure Hyper-V workloads

- Introduction
- Define guarded fabric
- Define host guardian service
- Explore tpm trusted attestation
- Define kps
- Determine key features of shielded vms
- Compare encryption supported shielded vms guarded fabric
- Implement shielded vm
- Knowledge check
- Summary

Implement high availability of Windows Server VMs

- Introduction
- Select options for hyper v
- Consider network load balancing for hyper v vms
- Implement hyper v vm live migration
- Implement hyper v vms storage migration
- Knowledge check
- Summary

Plan and deploy Windows Server IaaS Virtual Machines

- Introduction
- Describe azure compute
- Describe vm storage
- Deploy azure vms
- Create windows vm using portal
- Create windows vm using azure cli
- Deploy azure vms using templates
- Describe additional options
- Knowledge check
- Summary

Implement scale and high availability with Windows Server VM

- Introduction
- Describe virtual machine scale sets
- Implement scaling
- Implement load balancing vms
- Create vm scale set azure portal
- Describe azure site recovery
- Implement azure site recovery
- Knowledge check
- Summary

Implement Windows Server IaaS VM IP addressing and routing

- Introduction
- Implement virtual network
- Implement IaaS virtual machines
- Assign managed IP addresses
- Configure private IP address for virtual machine using Azure portal
- Create virtual machine static public IP address using Azure portal
- Implement routing IaaS virtual machines
- Implement IPv6 virtual machines
- Knowledge check
- Summary

Implement Windows Server IaaS VM network security

- Introduction
- Groups Windows IaaS VMs
- Azure Firewall Windows IaaS VMs
- Windows Firewall Windows IaaS VMs
- Choose appropriate filtering solution
- Deploy configure Azure Firewall using Azure portal
- Capture network traffic with Network Watcher
- Log network traffic using Azure portal
- Knowledge check

- Summary

Implement and manage an on-premises and hybrid networking infrastructure

Implement Windows Server DNS

- Introduction
- Explore dns architecture
- Work with dns zones records
- Install configure dns role
- Implement dns forwarding
- Knowledge check
- Summary

Implement DNS for Windows Server IaaS VMs

- Introduction
- Understand azure dns
- Implement azure dns
- Create an azure dns zone record using azure portal
- Implement dns azure IaaS virtual machines
- Implement split horizon dns azure
- Troubleshoot dns
- Knowledge check
- Summary

Secure Windows Server DNS

- Introduction
- Implement split horizon dns
- Create dns policies
- Implement dns policies
- Secure windows server dns
- Implement dnssec
- Knowledge check
- Summary

Deploy and manage DHCP

- Introduction
- Use dhcp to simplify ip configuration
- Install configure dhcp role
- Configure dhcp options
- Configure dhcp scopes
- Select dhcp high availability options
- Implement dhcp failover
- Knowledge check
- Summary

Implement IP Address Management

- Introduction
- Define ipam
- Deploy ipam
- Administer ipam
- Configure ipam options
- Manage dns zones with ipam
- Manage dhcp servers with ipam
- Use ipam to manage ip addressing
- Knowledge check
- Summary

Manage storage and file services

Implement a hybrid file server infrastructure

- Introduction
- Describe azure file services
- Configure azure files
- Configure connectivity azure files
- Describe azure file sync
- Implement azure file sync
- Deploy azure file sync
- Deploy azure file sync2
- Manage cloud tiering
- Migrate from dfsr to azure file sync
- Knowledge check
- Summary

Manage Windows Server file servers

- Introduction
- Define system
- List benefits uses of file server resource manager
- Define smb its security considerations
- Configure smb protocol
- Define volume shadow copy service
- Knowledge check
- Summary

Implement Storage Spaces and Storage Spaces Direct

- Introduction
- Define architecture its components
- List functionalities benefits use cases of
- Implement storage spaces

- List functionalities components benefits use cases of
- Implement
- Knowledge check
- Summary

Implement Windows Server Data Deduplication

- Introduction
- Define architecture components functionality of
- Define use cases interoperability of
- Implement
- Manage maintain
- Knowledge check
- Summary

Implement Windows Server iSCSI

- Introduction
- List functionalities components use cases of iscsi
- List considerations for implementing iscsi
- Implement iscsi
- Configure high availability for iscsi
- Knowledge check
- Summary

Implement Windows Server Storage Replica

- Introduction
- List functionalities components of
- Examine prerequisites for implementing
- Implement by using windows admin center
- Implement by using windows powershell
- Knowledge check
- Summary

Secure Windows Server infrastructure

Manage Microsoft Defender for Endpoint

- Introduction
- Explore
- Examine key capabilities of
- Explore windows defender application control device guard
- Explore application guard
- Examine windows defender exploit guard
- Explore windows defender system guard
- Knowledge check
- Summary

Manage Microsoft Defender in Windows client

- Introduction
- Explore windows security center
- Explore windows defender credential guard
- Antivirus
- Manage windows defender firewall
- Explore windows defender firewall advanced security
- Knowledge check
- Summary

Manage security in Active Directory

- Introduction
- Configure user account rights
- Configure user account rights restrict access
- Delegate permissions
- Protect user accounts protected users group
- Describe windows defender credential guard
- Block windows ntlm authentication
- Locate problematic accounts
- Knowledge check
- Summary

Secure Windows Server user accounts

- Introduction
- Configure user account rights
- Protect protected users group
- Describe windows defender credential guard
- Block ntlm authentication
- Locate problematic accounts
- Knowledge check
- Summary

Manage security controls for identity and access

- Introduction
- Identity management privileged access
- Microsoft entra id overview
- Secure microsoft entra users
- Create new user
- Secure microsoft entra groups
- Recommend when use external identities
- Secure external microsoft entra identities
- Microsoft entra identity protection
- Microsoft entra connect
- Microsoft entra cloud sync

- Authentication options
- Password hash synchronization with microsoft entra id
- Microsoft entra pass through authentication
- Federation with microsoft entra id
- What microsoft entra authentication
- Configure microsoft entra multifactor authentication settings
- Kerberos authentication
- New technology local area network manager
- Passwordless authentication options
- Passwordless authentication
- Enforce premises microsoft entra password protection
- Microsoft entra id single sign on
- Configure microsoft entra single sign on
- Integrate applications with microsoft entra id
- Microsoft entra verified id
- Configure microsoft entra verified id
- Microsoft entra id authentication verification methods
- Azure management groups
- Configure azure role permissions
- Azure role based access control
- Azure built in roles
- Assign azure role permissions
- Microsoft entra built in roles
- Built roles microsoft entra id
- Microsoft entra role based access control
- Create new custom roles microsoft entra id
- Zero trust security
- Microsoft entra privileged identity management
- Configure privileged identity management
- Microsoft entra id governance
- Identity lifecycle management
- Lifecycle workflows
- Entitlement management
- Delegation roles entitlement management
- Access reviews
- Configure role management access reviews microsoft entra id governance
- Conditional access
- Understand azure lighthouse
- Knowledge check
- Summary

Security monitoring and governance

- Introduction
- Implement pipeline security

- Explore microsoft defender cloud
- Examine microsoft defender cloud usage scenarios
- Explore azure policy
- Understand policies
- Explore initiatives
- Explore resource locks
- Understand microsoft defender identity
- Integrate github advanced security microsoft defender
- Configure github advanced security github
- Knowledge check
- Summary

Monitor and troubleshoot Windows Server environments

Monitor Windows Server IaaS Virtual Machines and hybrid instances

- Introduction
- Enable azure monitor for vms
- Monitor azure vm with azure monitor
- Enable azure monitor hybrid scenarios
- Collect data from windows computer hybrid environment
- Integrate azure monitor with microsoft operations manager
- Knowledge check
- Summary

Monitor your Azure virtual machines with Azure Monitor

- Introduction
- Monitor vm health
- Exercise create virtual machine
- View host metrics
- Enable vm insights
- Collect log data
- Summary

Monitor Windows Server performance

- Introduction
- Use performance monitor to identify performance problems
- Use resource monitor to review current resource usage
- Review reliability reliability monitor
- Implement performance monitoring methodology
- Use data collector sets to analyze
- Monitor network infrastructure services
- Monitor virtual machines running
- Monitor performance windows admin center
- Use system insights to help predict future capacity issues

- Optimize performance of
- Knowledge check
- Summary resources

Manage and monitor Windows Server event logs

- Introduction
- Describe windows server
- Use windows admin center to review logs
- Use server manager to review logs
- Use custom views
- Implement event log subscriptions
- Knowledge check
- Summary

Implement Windows Server auditing and diagnostics

- Introduction
- Describe basic auditing categories
- Describe advanced categories
- Log user access
- Enable setup boot event collection
- Knowledge check
- Summary

Troubleshoot on-premises and hybrid networking

- Introduction
- Diagnose dhcp problems
- Diagnose dns problems
- Diagnose ip configuration issues
- Diagnose routing problems
- Use packet manager to help diagnose network problems
- Use azure network watcher to help diagnose network problems
- Knowledge check
- Summary

Troubleshoot Windows Server Virtual Machines in Azure

- Introduction
- Troubleshoot vm deployment
- Troubleshoot vm startup
- Troubleshoot vm extensions
- Troubleshoot vm connectivity
- Troubleshoot vm performance
- Troubleshoot vm storage
- Knowledge check
- Summary

Windows Server update management

- Introduction
- Overview of windows update
- Wsus server deployment options
- Wsus process
- Describe process of update management
- Knowledge check
- Summary

Troubleshoot Active Directory

- Introduction
- Recover objects from ad recycle bin
- Recover ad ds database
- Recover sysvol
- Troubleshoot ad ds replication
- Troubleshoot hybrid authentication issues
- Knowledge check
- Summary