

KOENIG SOLUTIONS • COURSE OUTLINE

AZ-800T00: Administering Windows Server Hybrid Core Infrastructure

Learn to administer AD DS, hybrid identities, Windows Server workloads, virtualisation, networking and storage across on-premises and Azure environments.

4 Days

32 HOURS

5

MODULES

100

TOPICS

COURSE OVERVIEW

The AZ-800T00: Administering Windows Server Hybrid Core Infrastructure course is designed to provide IT professionals with the knowledge and skills needed to manage and maintain a hybrid infrastructure combining on-premises Windows Server environments with Azure services. As a part of the course curriculum, learners will delve into deploying and managing Active Directory Domain Services (AD DS), configuring complex environments, managing security principals, and implementing hybrid identities. This comprehensive course also covers best practices for managing Windows Servers in a hybrid environment, leveraging Azure services to optimize workload performance, and understanding how to manage Hyper-V virtual machines and containerization. Additionally, it teaches the essentials of maintaining an Integrated networking infrastructure, including Name resolution and Network connectivity, as well as Managing storage solutions such as Azure File Sync and Windows Server file shares. Upon completion, participants will be equipped with the expertise to efficiently administer a hybrid Windows Server ecosystem, a critical asset for modern IT infrastructure management.

Who Should Attend

The AZ-800T00 course equips IT professionals with skills to manage Windows Server hybrid infrastructures, integrating on-premises and cloud environments.

IT System Administrators responsible for managing and maintaining Windows Servers

Network Administrators who oversee on-premises and hybrid networking infrastructure

Active Directory Administrators focusing on deployment and management of AD DS

Cloud Administrators working with Azure services to manage server workloads

IT Professionals seeking to enhance their knowledge of virtualization with Hyper-V and containers

Infrastructure Architects designing hybrid cloud and on-premises solutions

Security Specialists managing identity and access within Windows Server environments

Technical Support Engineers providing troubleshooting for Windows Server issues

IT Managers looking to update their team's skills in line with current hybrid cloud technologies

Systems Engineers involved in the deployment and management of storage and file services on Windows Server

LEARNING OBJECTIVES

- Deploy and manage AD DS domain controllers on-premises and in Azure
- Configure multi-site, multi-domain and multi-forest AD DS environments
- Implement and manage hybrid identities with Microsoft Entra Connect
- Manage Windows Servers in hybrid environments using Windows Admin Center
- Apply Azure services such as Azure Arc and Automation to hybrid workloads
- Manage Hyper-V virtual machines and Windows Server containers
- Implement on-premises and hybrid name resolution and IP addressing
- Configure storage solutions including Azure File Sync and file shares

5 Modules, 100 Topics

01

30-35%

Deploy and Manage Active Directory Domain Services (AD DS) in on-premises and Cloud Environments

DEPLOY AND MANAGE AD DS DOMAIN CONTROLLERS

- Deploy and manage domain controllers on-premises
- Deploy and manage domain controllers in Azure
- Deploy read-only domain controllers (RODCs)
- Troubleshoot flexible single master operation (FSMO) roles

CONFIGURE AND MANAGE MULTI-SITE, MULTI-DOMAIN, AND MULTI-FOREST ENVIRONMENTS

- Configure and manage forest and domain trusts
- Configure and manage AD DS sites
- Configure and manage AD DS replication

CREATE AND MANAGE AD DS SECURITY PRINCIPALS

- Create and manage AD DS users and groups
- Manage users and groups in multi-domain and multi-forest scenarios
- Implement Group Managed Service Accounts (gMSAs)
- Join Windows Servers to AD DS, Microsoft Entra Domain Services, and Microsoft Entra

IMPLEMENT AND MANAGE HYBRID IDENTITIES

- Integrate Microsoft Entra ID, AD DS and Microsoft Entra Domain Services
- Implement Microsoft Entra Connect Sync
- Manage Microsoft Entra Connect Sync synchronization
- Implement Microsoft Entra Cloud Sync
- Manage Microsoft Entra Domain Services
- Manage Microsoft Entra Connect Health
- Manage authentication in on-premises and hybrid environments
- Configure and manage AD DS passwords

MANAGE WINDOWS SERVER BY USING DOMAIN-BASED GROUP POLICIES

- Implement Group Policy in AD DS
- Implement Group Policy Preferences in AD DS
- Implement Group Policy in Microsoft Entra Domain Services

Manage Windows Servers and Workloads in a Hybrid Environment

MANAGE WINDOWS SERVERS IN A HYBRID ENVIRONMENT

- Deploy a Windows Admin Center Gateway server
- Configure a target machine for Windows Admin Center
- Configure PowerShell remoting
- Configure Credential Security Support Provider protocol (CredSSP) or Kerberos Delegation for 2nd Hop Remoting
- Configure Just Enough Administration (JEA) for PowerShell remoting

MANAGE WINDOWS SERVERS AND WORKLOADS BY USING AZURE SERVICES

- Manage Windows Servers by using Azure Arc
- Create and assign Azure Policy that uses guest configuration extension
- Deploy Azure services using VM extensions on non-Azure machines
- Manage updates for Windows machines
- Integrate Windows Servers with Log Analytics
- Integrate Windows Servers with Microsoft Defender for Cloud
- Manage Windows Server Azure VMs
- Implement Azure Automation for hybrid workloads
- Create runbooks to automate tasks on target VMs
- Implement Azure Automation State Configuration to prevent configuration drift in IaaS machines

Manage Virtual Machines and Containers

MANAGE HYPER-V AND GUEST VIRTUAL MACHINES

- Enable VM Enhanced session mode
- Manage VM using PowerShell remoting, PowerShell Direct and Secure Shell (SSH) Direct for Linux VMs
- Configure nested virtualization
- Configure VM Memory
- Configure integration services
- Configure Discrete Device Assignment
- Configure VM resource groups
- Configure VM CPU groups
- Configure hypervisor scheduling types
- Manage VM checkpoints
- Implementing high availability for virtual machines
- Manage virtual hard disk (VHD) and virtual hard disk v2 (VHDX) files
- Configure Hyper-V Network Adapter
- Configure network interface card (NIC) Teaming
- Configure Hyper-V Switch

CREATE AND MANAGE CONTAINERS

- Create Windows Server container images
- Manage Windows Server container images
- Configure container networking
- Manage container instances

MANAGE AZURE VIRTUAL MACHINES THAT RUN WINDOWS SERVER

- Manage data disks
- Resize Azure VM
- Configure connections to VMs
- Manage Azure VM network configuration

Implement and Manage an on-premises and Hybrid Networking Infrastructure

IMPLEMENT ON-PREMISES AND HYBRID NAME RESOLUTION

- Integrate DNS with AD DS
- Create and manage DNS zones and records
- Configure DNS forwarding/conditional forwarding
- Integrate Windows Server DNS with Azure DNS private zones
- Implement Domain Name System Security Extensions (DNSSEC)

MANAGE IP ADDRESSING IN ON-PREMISES AND HYBRID SCENARIOS

- Implement and manage IP Address Management (IPAM)
- Implement and configure the Dynamic Host Configuration protocol (DHCP) server role (on-premises only)
- Resolve IP address issues in hybrid environments
- Create and manage DHCP scopes
- Create and manage IP reservations
- Implement DHCP high availability

IMPLEMENT ON-PREMISES AND HYBRID NETWORK CONNECTIVITY

- Implement and manage the Remote Access role
- Implement and manage Azure Network Adapter
- Implement and manage Azure extended network
- Implement and manage Network Policy and Access Services role
- Implement Web Application Proxy
- Implement Azure Relay
- Implement site-to-site VPN
- Implement Azure Virtual WAN
- Implement Microsoft Entra Application Proxy

Manage Storage and File Services

CONFIGURE AND MANAGE AZURE FILE SYNC

- Create Azure File Sync Service
- Create sync groups
- Create cloud endpoints
- Register servers
- Create server endpoints
- Configure cloud tiering
- Monitor File Sync
- Migrate Distributed File System (DFS) to Azure File Sync

CONFIGURE AND MANAGE WINDOWS SERVER FILE SHARES

- Configure Windows Server file share access
- Configuring file screens
- Configure file server resource manager (FSRM) quotas
- Configure BranchCache
- Implement and configure Distributed File System (DFS)

Manage Storage and File Services (continued)

CONFIGURE WINDOWS SERVER STORAGE

- Configure disks and volumes
- Configure and manage Storage Spaces
- Configure and manage Storage Replica
- Configure Data Deduplication
- Configure Server Message Block (SMB) direct
- Configure Storage QoS
- Configure file systems

WHAT IS INCLUDED

Everything You Need to Succeed

- Koenig course material for every module
- Delivery by certified instructors and subject matter experts
- Hands-on exercises throughout the course
- Course completion certificate from Koenig

ABOUT KOENIG

Who We Are

Established in 1993, Koenig Solutions is a globally recognised training provider with 35+ technology partnerships, 5,000+ training programmes and a network of certified instructors and subject matter experts, supporting individuals and enterprise teams worldwide.

FLEXIBLE DELIVERY

Learn the Way That Suits You

Classroom Training

Live Online Classes (ILO)

Fly-Me-A-Trainer (FMAT)

Flexi (Self-Paced)

1-on-1 Training

Ready to Get Started?

Talk to a learning advisor about schedules, group training and customised delivery.

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