

KOENIG SOLUTIONS • COURSE OUTLINE

AZ-801T00: Configuring Windows Server Hybrid Advanced Services

Learn to secure, cluster, replicate, migrate and troubleshoot Windows Server hybrid environments across on-premises and Azure.

4 Days

32 HOURS

5

MODULES

113

TOPICS

COURSE OVERVIEW

The AZ-801T00: Configuring Windows Server Hybrid Advanced Services course is designed for IT professionals who seek to enhance their skills in implementing, managing, and maintaining a Windows Server hybrid environment. This course covers various advanced topics, including Securing Windows Server infrastructures, Implementing high availability, disaster recovery, Server migration, and Monitoring/troubleshooting. In Module 1, learners focus on securing both on-premises and hybrid infrastructures, emphasizing Operating system security, Active Directory, network, and Storage security, as well as using Azure services to identify and remediate security issues. Module 2 delves into high availability through Failover clustering and Managing Storage Spaces directly, while Module 3 centers on disaster recovery techniques, including Azure Site Recovery and Hyper-V replicas. Module 4 is vital for understanding Server and workload migrations, from on-premises to Azure and upgrading to Windows Server 2022. Lastly, Module 5 equips participants with the knowledge to monitor and troubleshoot diverse environments effectively, using both native Windows Server tools and Azure services. For IT professionals seeking to pass the Microsoft AZ-801 exam, this course is an essential step in acquiring the expertise necessary for optimizing and securing server environments.

Who Should Attend

The AZ-801T00 course equips IT professionals with advanced Windows Server hybrid configuration and security skills.

Systems Administrators

Windows Server Administrators

IT Professionals with experience in Windows Server and Azure environments

Network Engineers focusing on Windows Server infrastructure

Security Specialists overseeing Windows Server and hybrid Active Directory

Disaster Recovery Consultants

Infrastructure Architects planning server migrations and high availability

Cloud Solutions Architects with a focus on Microsoft Azure and Windows Server

Technical Support Engineers for Windows Server environments

IT Professionals looking to upgrade skills from older versions to Windows Server 2022

IT Managers overseeing Windows Server infrastructure and cloud integration

LEARNING OBJECTIVES

- Configure operating system and network security for Windows Server
- Secure hybrid Active Directory infrastructures and domain controllers
- Identify and remediate issues using Microsoft Sentinel and Defender
- Implement failover clustering and Storage Spaces Direct
- Plan disaster recovery using Azure Site Recovery and Hyper-V replicas
- Migrate servers, storage and workloads to Azure or Windows Server 2022
- Migrate an Active Directory Domain Services infrastructure
- Troubleshoot Windows Server networking and Active Directory issues

5 Modules, 113 Topics

01

25-30%

Secure Windows Server on-premises and Hybrid Infrastructures

SECURE WINDOWS SERVER OPERATING SYSTEM

- Configure and manage Exploit Protection
- Configure and manage Windows Defender Application Control
- Configure and manage Microsoft Defender for Servers
- Configure and manage Windows Defender Credential Guard
- Configure SmartScreen
- Implement operating system security by using Group Policies

SECURE A HYBRID ACTIVE DIRECTORY INFRASTRUCTURE

- Configure password policies
- Enable password block lists
- Manage protected users
- Manage account security on a Read-Only Domain Controller (RODC)
- Harden domain controllers
- Configure authentication policy silos
- Restrict access to domain controllers
- Configure account security
- Manage AD built-in administrative groups
- Manage AD delegation
- Implement and manage Microsoft Defender for Identity

IDENTIFY AND REMEDIATE WINDOWS SERVER SECURITY ISSUES BY USING AZURE SERVICES

- Monitor on-premises servers and Azure VMs by using Microsoft Sentinel
- Identify and remediate security issues in on-premises servers and Azure
- VMs by using Microsoft Defender for Cloud

SECURE WINDOWS SERVER NETWORKING

- Manage Windows Defender Firewall
- Implement domain isolation
- Implement connection security rules

SECURE WINDOWS SERVER STORAGE

- Manage Windows BitLocker Drive Encryption (BitLocker)
- Manage and recover encrypted volumes
- Enable storage encryption by using Azure Disk Encryption
- Manage disk encryption keys for IaaS virtual machines

Implement and Manage Windows Server High Availability

IMPLEMENT A WINDOWS SERVER FAILOVER CLUSTER

- Implement a failover cluster on-premises, hybrid, or cloud-only
- Create a Windows failover cluster
- Implement a stretch cluster across datacenters or Azure regions
- Configure storage for failover clustering
- Modify quorum options
- Configure network adapters for failover clustering
- Configure cluster workload options
- Configure cluster sets
- Configure Scale-Out File servers
- Create an Azure witness
- Configure a floating IP address for the cluster
- Implement load balancing for the failover cluster

MANAGE FAILOVER CLUSTERING

- Implement cluster-aware updating
- Recover a failed cluster node
- Upgrade a node to Windows Server 2022
- Failover workloads between nodes
- Install Windows updates on cluster nodes
- Manage failover clusters using Windows Admin Center

IMPLEMENT AND MANAGE STORAGE SPACES DIRECT

- Create a failover cluster using Storage Spaces Direct
- Upgrade a Storage Spaces Direct node
- Implement networking for Storage Spaces Direct
- Configure Storage Spaces Direct

Implement Disaster Recovery

MANAGE BACKUP AND RECOVERY FOR WINDOWS SERVER

- Backup and restore files and folders to Azure Recovery Services Vault
- Install and manage Azure Backup Server
- Back up and recover using Azure Backup Server
- Manage backups in Azure Recovery Services Vault
- Create a backup policy
- Configure backup for Azure VM using the built-in backup agent
- Recover VM using temporary snapshots
- Recover VMs to new Azure VMs
- Restore a VM

IMPLEMENT DISASTER RECOVERY BY USING AZURE SITE RECOVERY

- Configure Azure Site Recovery networking
- Configure Site Recovery for on-premises VMs
- Configure a recovery plan
- Configure Site Recovery for Azure VMs
- Implement VM replication to secondary datacenter or Azure region
- Configure Azure Site Recovery policies

PROTECT VIRTUAL MACHINES BY USING HYPER-V REPLICAS

- Configure Hyper-V hosts for replication
- Manage Hyper-V replica servers
- Configure VM replication
- Perform a failover

Migrate Servers and Workloads

MIGRATE ON-PREMISES STORAGE TO ON-PREMISES SERVERS OR AZURE

- Transfer data and share
- Cut over to a new server by using Storage Migration Service (SMS)
- Use Storage Migration Service to migrate to Azure VMs
- Migrate to Azure file shares

MIGRATE ON-PREMISES SERVERS TO AZURE

- Deploy and configure Azure Migrate appliance
- Migrate VM workloads to Azure IaaS
- Migrate physical workloads to Azure IaaS
- Migrate by using Azure Migrate

MIGRATE WORKLOADS FROM PREVIOUS VERSIONS TO WINDOWS SERVER 2022

- Migrate IIS
- Migrate Hyper-V hosts
- Migrate Remote Desktop Services (RDS) host servers
- Migrate Dynamic Host Configuration protocol (DHCP)
- Migrate print servers

MIGRATE IIS WORKLOADS TO AZURE

- Migrate IIS workloads to Azure Web Apps
- Migrate IIS workloads to containers

MIGRATE AN ACTIVE DIRECTORY DOMAIN SERVICES (AD DS) INFRASTRUCTURE TO WINDOWS SERVER 2022 AD DS

- Migrate AD DS objects, including users, groups and Group Policies using
- AD Migration Tool
- Migrate to a new Active Directory Forest
- Upgrade an existing forest

Monitor and Troubleshoot Windows Server Environments

MONITOR WINDOWS SERVER BY USING WINDOWS SERVER TOOLS AND AZURE SERVICES

- Monitor Windows Server by using Performance Monitor
- Create and configure Data Collector Sets
- Monitor servers and configure alerts by using Windows Admin Center
- Analyze Windows Server system data by using System Insights
- Manage event logs
- Deploy Azure Monitor agents
- Collect performance counters to Azure
- Create alerts
- Monitor Azure VMs by using Azure diagnostics extension
- Monitor Azure VMs performance by using VM Insights

TROUBLESHOOT WINDOWS SERVER ON-PREMISES AND HYBRID NETWORKING

- Troubleshoot hybrid network connectivity
- Troubleshoot on-premises connectivity
- Troubleshoot Windows Server virtual machines in Azure
- Troubleshoot deployment failures
- Troubleshoot booting failures
- Troubleshoot VM performance issues
- Troubleshoot VM extension issues
- Troubleshoot disk encryption issues
- Troubleshoot storage
- Troubleshoot VM connection issues

TROUBLESHOOT ACTIVE DIRECTORY

- Restore objects from AD recycle bin
- Recover Active Directory database using Directory Services Restore mode
- Recover system volume (SYSVOL)
- Troubleshoot Active Directory replication
- Troubleshoot Hybrid authentication issues
- Troubleshoot on-premises Active Director

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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