

Administer Windows Server (AZ-802T00)

Duration: 5 Days

Audience: Professionnel TI

Who is this training for?

This course is intended for Windows Server administrators who deploy, implement, manage, and troubleshoot Windows Server workloads in on-premises, hybrid, and cloud environments. It is designed for IT professionals responsible for identity, security, compute, networking, storage, and monitoring services.

Training objectives

- Deploy, manage, and maintain Active Directory Domain Services in on-premises and hybrid environments.
- Implement and manage Windows Server workloads across on-premises, Azure, and hybrid infrastructures.
- Configure and administer Hyper-V, virtual machines, and Windows Server virtualization solutions.
- Deploy and manage networking services, including DNS, DHCP, IPAM, IP addressing, and routing.
- Implement and manage Windows Server storage, file services, Azure File Sync, and hybrid storage solutions.
- Secure Windows Server environments using secure administration practices, Group Policy, Microsoft Entra, and Azure security tools.
- Automate management and operational tasks using PowerShell, Azure Automation, and Azure Arc.
- Monitor, troubleshoot, and optimize Windows Server environments. Implement high availability, disaster recovery, and business continuity solutions.

Summary

This course teaches IT professionals how to deploy, manage, secure, and troubleshoot Windows Server workloads across on-premises, hybrid, and cloud environments. Participants build skills in Active Directory Domain Services (AD DS), virtualization, networking, storage, security, and monitoring

while using Azure services and hybrid management tools. They work with Windows Admin Center, PowerShell, Azure Arc, Azure Monitor, Azure Update Manager, and Microsoft Defender for Cloud.

Course outline

Learning Path 1 – Deploy and Manage Active Directory Domain Services (AD DS)

- Module 1 – Deploy and manage Active Directory Domain Services domain controllers
- Module 2 – Deploy and manage Azure IaaS Active Directory domain controllers in Azure
- Module 3 – Manage AD DS domain controllers and FSMO roles
- Module 4 – Create and manage Active Directory objects
- Module 5 – Implement hybrid identity with Windows Server
- Module 6 – Create and configure Group Policy Objects in Active Directory
- Module 7 – Implement Group Policy Objects
- Module 8 – Manage advanced features of AD DS

Learning Path 2 – Manage Windows Server Instances and Workloads in a Hybrid Environment

- Module 1 – Administer and manage Windows Server IaaS Virtual Machines remotely
- Module 2 – Describe Windows Server administration tools
- Module 3 – Just Enough Administration in Windows Server
- Module 4 – Perform Windows Server secure administration
- Module 5 – Use advanced Windows PowerShell remoting techniques
- Module 6 – Manage single and multiple computers by using Windows PowerShell remoting
- Module 7 – Manage hybrid workloads with Azure Arc
- Module 8 – Manage Azure updates
- Module 9 – Automate the configuration of Windows Server IaaS Virtual Machines
- Module 10 – Enforce VM security configuration with Azure Machine Configuration
- Module 11 – Explore Azure Automation with DevOps

Learning Path 3 – Manage Virtual Machines

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Module 1 – Configure and manage Hyper-V virtual machines

- Module 2 – Configure and manage Hyper-V
- Module 3 – Secure Hyper-V workloads
- Module 4 – Implement high availability of Windows Server virtual machines
- Module 5 – Run containers on Windows Server
- Module 6 – Plan and deploy Windows Server IaaS Virtual Machines
- Module 7 – Implement scale and high availability with Windows Server virtual machines
- Module 8 – Implement Windows Server IaaS VM IP addressing and routing
- Module 9 – Implement Windows Server IaaS VM network security
- Module 10 – Administer and manage Windows Server IaaS Virtual Machines remotely

Learning Path 4 – Implement and Manage an On-Premises and Hybrid Networking Infrastructure

- Module 1 – Implement Windows Server DNS
- Module 2 – Implement DNS for Windows Server IaaS Virtual Machines
- Module 3 – Secure Windows Server DNS
- Module 4 – Deploy and manage DHCP
- Module 5 – Implement IP Address Management (IPAM)
- Module 6 – Implement Windows Server IaaS VM IP addressing and routing

Learning Path 5 – Manage Storage and File Services

- Module 1 – Implement a hybrid file server infrastructure
- Module 2 – Manage Windows Server file servers
- Module 3 – Implement Storage Spaces and Storage Spaces Direct
- Module 4 – Implement Windows Server Data Deduplication
- Module 5 – Implement Windows Server iSCSI
- Module 6 – Implement Windows Server Storage Replica

Approach and methodology

Practical and structured approach combining focused theory and guided hands-on workshops. Participants learn how to deploy, manage, secure, and troubleshoot Windows Server workloads across on-premises, hybrid, and cloud environments. Through demonstrations and practical exercises, they develop skills in Active Directory, virtualization, networking, storage, hybrid administration, automation, and security. The training emphasizes real-world administrative scenarios and best practices that can be applied immediately in professional environments.

Prerequisites

Experience administering Windows Server operating systems. Familiarity with Active Directory Domain Services (AD DS). Basic knowledge of virtualization technologies, including Hyper-V and Azure Virtual Machines. Understanding of core networking concepts such as DNS, DHCP, IP addressing, and routing. Basic knowledge of Windows PowerShell. Familiarity with Azure administration fundamentals and hybrid management concepts.