

Administering Windows Server Hybrid Core Infrastructure (AZ-800T00)

Duration: 4 days

Audience: Professionnel TI

Who is this training for?

Windows Server Hybrid administrators who have experience using Windows Server and want to extend the capabilities of their on-premises environments by combining on-premises and hybrid technologies. Hybrid Windows Server administrators implement and manage on-premises and hybrid solutions, such as identity, management, computing, networking, and storage in a Windows Server hybrid environment.

Training objectives

- Use administrative techniques and tools in Windows Server.
- Identify the tools used to implement hybrid solutions, including the Windows Admin Center and PowerShell.
- Implement identity services in Windows Server.

Summary

This course provides the ability to manage key Windows Server services and workloads across on-premises, hybrid, and cloud environments. You will learn how to implement and administer identity, management, computing, networking, and storage solutions in a Windows Server hybrid environment, addressing both on-premises and Microsoft Azure contexts.

Course outline

Learning Path 1: Deploy and Manage an Identity Infrastructure (Windows Server)

- Module 1: Introduction to AD DS
- Module 2: Manage AD DS Domain Controllers and FSMO Roles
- Module 3: Implement Group Policy Objects
- Module 4: Manage Advanced Features of AD DS

Learning Path 1: Deploy and Manage an Identity Infrastructure (Hybrid Scenarios)

- Module 1: Implement a hybrid identity with Windows Server
- Module 2: Deploy and manage Azure IaaS Active Directory domain controllers

Learning path 2: Manage Windows servers and workloads in a hybrid environment (Windows Server Administration)

- Module 1: Perform secure administration of Windows Server
- Module 2: Describe Windows Server administration tools
- Module 3: Perform Windows Server post-installation configuration
- Module 4: Use Just Enough Administration in Windows Serve

Learning Path 2: Manage Windows Servers and Workloads in a Hybrid Environment (Facilitate Hybrid Management)

- Module 1: Remotely Administer and Manage Windows Server IaaS Virtual Machines
- Module 2: Manage Hybrid Workloads with Azure Arc

Learning Path 3: Manage Virtualization and Containers in a Hybrid Environment (Hyper-V Virtualization in Windows Server)

- Module 1: Configure and Manage Hyper-V
- Module 2: Configure and Manage Hyper-V Virtual Machines
- Module 3: Secure Hyper-V Workloads
- Module 4: Run Containers on Windows Server
- Module 5: Orchestrate Containers on Windows Server with Kubernetes

Learning Path 3: Manage virtualization and containers in a hybrid environment (Deploy and configure Azure VMs)

- Module 1: Plan and deploy Windows Server IaaS VMs
- Module 2: Customize Windows Server IaaS VM images
- Module 3: Automate the configuration of Windows Server IaaS VMs

Learning Path 4: Implement and manage hybrid and on-premises network infrastructure (Infrastructure Services)

- Module 1: Deploy and Manage DHCP
- Module 2: Implement Windows Server DNS
- Module 3: Implement IP Address Management
- Module 4: Implement Remote Access

Learning Path 4: Implement and Manage Hybrid and On-Premises Network Infrastructure (Implementing Hybrid Network Infrastructure)

- Module 1: Implement Hybrid Network Infrastructure
- Module 2: Implement DNS for Windows Server IaaS Virtual Machines
- Module 3: Implement IP Addressing and Routing for Windows Server IaaS Virtual Machines

Learning Path 5: Configure Storage and File Services (File Servers and Storage Management in Windows Server)

- Module 1: Manage Windows Server File Servers
- Module 2: Implement Storage Spaces and Storage Spaces Direct
- Module 3: Implement Data Deduplication in Windows Server
- Module 4: Implement iSCSI in Windows Server
- Module 5: Implement Storage Replication in Windows Server

Learning Path 5: Configure Storage and File Services (Implementing a Hybrid File Server Infrastructure)

- Module 1: Implement a hybrid file server infrastructure (Azure File Services Overview)
- Module 2: Implement a hybrid file server infrastructure (Implementing Azure File Sync)

Approach and methodology

Practical and structured approach combining focused theory and guided workshops. Participants gradually administer the Windows Server Hybrid core infrastructure through real-world exercises

inspired by business scenarios, promoting immediate application of learning. They learn how to manage critical services, integrate on-premises environments with Azure, and ensure the security and availability of hybrid infrastructures. Led by a Microsoft certified trainer, the training focuses on interactivity and the development of directly transferable technical skills to effectively manage hybrid environments in a professional context.

Prerequisites

- Hands-on experience with Windows Server (management, deployment, maintenance)
- Good understanding of environments: Active Directory (AD DS) networks (DNS, IP, DHCP) storage and virtualization [iform.fr] Familiarity with tools such as: PowerShell Windows Admin Center (an asset) Azure tools like Azure Arc or Azure Monitor

Recommendations

- Experience managing the Windows Server operating system and Windows Server workloads in on-premises scenarios, including AD DS, DNS, DFS, Hyper-V, and file and storage services
- Experience with common Windows Server management tools
- Basic knowledge of key Microsoft compute, storage, networking, and virtualization technologies
- Experience and understanding of core networking technologies, such as IP addressing, name resolution, and Dynamic Host Configuration Protocol (DHCP)
- Experience working with and understanding of Microsoft Hyper-V and core server virtualization concepts
- Basic experience implementing and managing IaaS services in Microsoft Azure
- Basic knowledge of Azure Active Directory
- Hands-on experience working with Windows client operating systems, such as Windows 10 or Windows 11
- A basic experience with Windows PowerShell