

AZ-1008: Administer Active Directory Domain Services Course

Course Duration: 8 Hours

Course code: AZ-1008

1. Course Overview

This deep-dive course prepares IT professionals to plan, deploy, secure, and maintain on-premises and hybrid Active Directory Domain Services (AD DS) environments. You'll gain hands-on experience configuring domains, managing users and groups, implementing Group Policy, integrating with Azure AD, and troubleshooting identity-related issues. By the end, you'll have the skills needed to confidently manage enterprise identity infrastructure.

2. What you'll learn?

By the end of this course, you will be able to:

- Design and deploy domains, domain controllers, and site topology
- Manage user, group, and computer accounts efficiently
- Create and maintain Group Policy Objects (GPOs) for centralized configuration
- Implement Roaming Profiles, Folder Redirection, and credential delegation
- Configure and monitor DNS, AD replication, trust relationships, and FSMO roles
- Perform backup, recovery, and disaster-recovery planning
- Secure AD DS with auditing, delegation, and AD CS
- Integrate AD DS with Azure AD and manage hybrid identity scenarios

3. Target Audience

This course is ideal for:

- Systems Administrators and AD DS Engineers
- Infrastructure Specialists and IT Support professionals
- Consultants and integrators working with on-prem or hybrid identity solutions
- Anyone preparing for Microsoft certification exams (e.g. AZ-800, AZ-801)

4. Pre-Requisites

Learners should have:

- Basic Windows Server experience (2012 R2 or later)
- Familiarity with networking (TCP/IP, DNS, DHCP)
- Comfort with PowerShell scripting at a beginner-to-intermediate level
- Understanding of core virtualization and system deployment

5. Course content

Module 1: Introduction & Architecture

- AD DS overview, forest/domain structure
- FSMO roles and site topology design
- Lab: Deploying new forest and domain

Module 2: Domain Controller Deployment

- Hardware vs Virtual domain controllers
- Read-only DCs (RODCs), accelerated cloning
- Lab: Deploying and demoting DCs

Module 3: Identity Objects Management

- Users, computers, groups, OUs
- Group type scopes and best practices
- PowerShell automation: New-ADUser, Add-ADGroupMember

Module 4: Group Policy Fundamentals

- GPO creation, linking, inheritance, filtering
- Security settings, preferences, scripts
- Lab: Centralizing desktop configuration

Module 5: Advanced GPO & Settings

- Administrative templates, folder redirection, roaming profiles
- Troubleshooting GPO with Resultant Set of Policy
- Lab: Implementing profile redirection

Module 6: DNS and Replication

- AD-integrated DNS zones, zone delegation
- Multi-master replication, replication monitoring (AD Sites & Services)
- Lab: Configuring replication sites and schedules

Module 7: Trusts and Delegation

- One-way/two-way trust relationships
- Enabling external authentication, forest trusts
- Delegation using ACLs and administrative models

Module 8: AD DS Backup & Recovery

- System State backup, NTDS.dit recovery
- Authoritative vs non-authoritative restore
- Lab: Simulating DC failure and restore

Module 9: Securing Active Directory

- Auditing, delegation of admin rights
- Group Managed Service Accounts (gMSA)
- Active Directory Certificate Services basics

Module 10: Integrating with Azure AD

- Hybrid identity overview (AD Connect)
- Password hash sync, Federation with AD FS
- Lab: Establishing one-way sync to Azure AD

Module 11: Monitoring & Troubleshooting

- Event logs, performance counters
- Repadmin, dcdiag, replications diagnostics
- Lab: Troubleshooting replication and DNS issues

Module 12: Course Capstone Project

- Design a multi-site AD infrastructure
- Implement user and GPO roll-out
- Backup, restore scenario based on real-world outage