

# Identity with Windows Server («55344A»)

This five-day instructor-led course teaches IT professionals how to deploy and configure Active Directory Domain Services (AD DS) in a distributed environment, how to implement Group Policy, how to perform backup and restore and much more.

**Duration:** 5 days

**Price:** 3'950.–

**Course documents:** Digital Courseware

## Content

### IMPORTANT NOTICE

This is not an official Microsoft course. The content of this training is based on the retired legacy MOC 20742B of Microsoft and is developed by the Microsoft Community.

### Module 1: Installing and configuring domain controllers

This module describes the features of AD DS and how to install domain controllers (DCs). It also covers the considerations for deploying DCs.

#### Lessons

- Overview of AD DS
- Overview of AD DS domain controllers
- Deploying a domain controller

#### Lab: Deploying and administering AD DS

- Deploying AD DS
- Deploying domain controllers by performing domain controller cloning
- Administering AD DS

### Module 2: Managing objects in AD DS

This module describes how to use various techniques to manage objects in AD DS. This includes creating and configuring user, group, and computer objects)

#### Lessons

- Managing user accounts
- Managing groups in AD DS
- Managing computer objects in AD DS
- Using Windows PowerShell for AD DS administration
- Implementing and managing OUs

#### Lab 1: Managing AD DS objects

- Creating and managing groups in AD DS
- Creating and configuring user accounts in AD DS
- Managing computer objects in AD DS

#### Lab 2: Administering AD DS

- Delegate administration for OUs

- Creating and modifying AD DS objects with Windows PowerShell

### **Module 3: Advanced AD DS infrastructure management**

This module describes how to plan and implement an AD DS deployment that includes multiple domains and forests. The module provides an overview of the components in an advanced AD DS deployment, the process of implementing a distributed AD DS environment, and the procedure for configuring AD DS trusts.

#### **Lessons**

- Overview of advanced AD DS deployments
- Deploying a distributed AD DS environment
- Configuring AD DS trusts

#### **Lab: Domain and trust management in AD DS**

- Implementing forest trusts
- Implementing child domains in AD DS

### **Module 4: Implementing and administering AD DS sites and replication**

This module describes how to plan and implement an AD DS deployment that includes multiple locations. The module explains how replication works in a Windows Server AD DS environment.

#### **Lessons**

- Overview of AD DS replication
- Configuring AD DS sites
- Configuring and monitoring AD DS replication

#### **Lab: Implementing AD DS sites and replication**

- Modifying the default site
- Creating additional sites and subnets
- Configuring AD DS replication
- Monitoring and troubleshooting AD DS replication

### **Module 5: Implementing Group Policy**

This module describes how to implement a GPO infrastructure. The module provides an overview of the components and technologies that compose the Group Policy framework.

#### **Lessons**

- Introducing Group Policy
- Implementing and administering GPOs
- Group Policy scope and Group Policy processing
- Troubleshooting the application of GPOs

#### **Lab 1: Implementing a Group Policy infrastructure**

- Creating and configuring GPOs
- Managing GPO scope

#### **Lab 2: Troubleshooting Group Policy infrastructure**

- Verify GPO application
- Troubleshooting GPOs

## Module 6: Managing user settings with Group Policy

This module describes how to configure Group Policy settings and Group Policy preferences. This includes implementing administrative templates, configuring folder redirection and scripts, and configuring Group Policy preferences.

### Lessons

- Implementing administrative templates
- Configuring Folder Redirection, software installation, and scripts
- Configuring Group Policy preferences

### Lab: Managing user settings with GPOs

- Using administrative templates to manage user settings
- Implement settings by using Group Policy preferences
- Configuring Folder Redirection
- Planning Group Policy (optional)

## Module 7: Securing Active Directory Domain Services

This module describes how to configure domain controller security, account security, password security, and Group Managed Service Accounts (gMSA).

### Lessons

- Securing domain controllers
- Implementing account security
- Implementing audit authentication
- Configuring managed service accounts

### Lab: Securing AD DS

- Implementing security policies for accounts, passwords, and administrative groups
- Deploying and configuring an RODC
- Creating and associating a group MSA

## Module 8: Deploying and managing AD CS

This module describes how to implement an AD CS deployment. This includes deploying, administering, and troubleshooting CAs.

### Lessons

- Deploying CAs
- Administering CAs
- Troubleshooting and maintaining CAs

### Lab: Deploying and configuring a two-tier CA hierarchy

- Deploying an offline root CA
- Deploying an enterprise subordinate CA

## Module 9: Deploying and managing certificates

This module describes how to deploy and manage certificates in an AD DS environment. This involves deploying and managing certificate templates, managing certificate revocation and recovery, using certificates in a business environment, and implementing smart cards.

### Lessons

- Deploying and managing certificate templates
- Managing certificate deployment, revocation, and recovery
- Using certificates in a business environment
- Implementing and managing smart cards

#### Lab: Deploying and using certificates

- Configuring certificate templates
- Enrolling and using certificates
- Configuring and implementing key recovery

### Module 10: Implementing and administering AD FS

This module describes AD FS and how to configure AD FS in a single-organization scenario and in a partner-organization scenario.

#### Lessons

- Overview of AD FS
- AD FS requirements and planning
- Deploying and configuring AD FS
- Web Application Proxy Overview

#### Lab: Implementing AD FS

- Configuring AD FS prerequisites
- Installing and configuring AD FS
- Configuring an internal application for AD
- Configuring AD FS for federated business partners

### Module 11: Implementing and administering AD RMS

This module describes how to implement an AD RMS deployment. The module provides an overview of AD RMS, explains how to deploy and manage an AD RMS infrastructure, and explains how to configure AD RMS content protection.

#### Lessons

- Overview of AD RMS
- Deploying and managing an AD RMS infrastructure
- Configuring AD RMS content protection

#### Lab: Implementing an AD RMS infrastructure

- Installing and configuring AD RMS
- Configuring AD RMS templates
- Using AD RMS on clients

### Module 12: Implementing AD DS synchronization with Microsoft Azure AD

This module describes how to plan and configure directory syncing between Microsoft Azure Active Directory (Azure AD) and on-premises AD DS. The modules describes various sync scenarios, such as Azure AD sync, AD FS and Azure AD, and Azure AD Connect.

#### Lessons

- Planning and preparing for directory synchronization
- Implementing directory synchronization by using Azure AD Connect
- Managing identities with directory synchronization

## Lab: Configuring directory synchronization

- Preparing for directory synchronization
- Configuring directory synchronization
- Managing Active Directory users and groups and monitoring directory synchronization

## Module 13: Monitoring, managing, and recovering AD DS

This module describes how to monitor, manage, and maintain AD DS to help achieve high availability of AD DS.

### Lessons

- Monitoring AD DS
- Managing the Active Directory database
- Active Directory backup and recovery options for AD DS and other identity and access solutions

### Lab: Recovering objects in AD DS

- Backing up and restoring AD DS
- Recovering objects in AD DS

## Key Learnings

- Installing and configuring domain controllers
- Managing objects in AD DS by using graphical tools and Windows PowerShell
- Implementing AD DS in complex environments
- Implementing and administering Active Directory Rights Management Services (AD RMS)
- Implementing AD DS sites, and configuring and managing replication
- Implementing and managing Group Policy Objects (GPOs)
- Managing user settings by using GPOs
- Securing AD DS and user accounts
- Implementing and managing a certificate authority (CA) hierarchy with AD CS
- Deploying and managing certificates
- Implementing and administering AD FS
- Implementing synchronization between AD DS and Azure AD
- Monitoring, troubleshooting, and establishing business continuity for AD DS services

## Target audience

This course is primarily intended for existing IT professionals who have some AD DS knowledge and experience and who aim to develop knowledge about identity and access technologies in Windows Server. This would typically include:

- AD DS administrators who are looking to train in identity and access technologies with Windows Server 2016, Windows Server 2019 or Windows Server 2022.
- System or infrastructure administrators with general AD DS experience and knowledge who are looking to cross-train in core and advanced identity and access technologies in Windows Server 2016, Windows Server 2019 or Windows Server 2022.

## Any questions?

We are happy to advise you on +41 44 447 21 21 or [info@digicomp.ch](mailto:info@digicomp.ch). You can find detailed information about dates on [www.digicomp.ch/courses-microsoft-technology/microsoft-server/course-identity-with-windows-server](https://www.digicomp.ch/courses-microsoft-technology/microsoft-server/course-identity-with-windows-server)

