



**Enterprise Computing Solutions - Education Services**

## **TRAINING OFFERING**

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# Identify with Windows Server 2016

CODE:	LENGTH:	PRICE:
MCS_M20742	40 Hours (5 days)	£2,495.00

## Description

This five-day instructor-led course teaches IT Pros 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 how to monitor and troubleshoot Active Directory–related issues with Windows Server 2016. Additionally, this course teaches how to deploy other Active Directory server roles such as Active Directory Federation Services (AD FS) and Active Directory Certificate Services (AD CS).

## Objectives

- Install and configure domain controllers.
- Manage objects in AD DS by using graphical tools and Windows PowerShell.
- Implement AD DS in complex environments.
- Implement AD DS sites, and configure and manage replication.
- Implement and manage Group Policy Objects (GPOs).
- Manage user settings by using GPOs.
- Secure AD DS and user accounts.
- Implement and manage a certificate authority (CA) hierarchy with AD CS.
- Deploy and manage certificates.
- Implement and administer AD FS.
- Implement and administer Active Directory Rights Management Services (AD RMS).
- Implement synchronization between AD DS and Azure AD.
- Monitor, troubleshoot, and establish business continuity for AD DS services.

## 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 2016.

## Prerequisites

- Some exposure to and experience with AD DS concepts and technologies in Windows Server 2012 or Windows Server 2016.
- Experience working with and configuring Windows Server 2012 or Windows Server 2016
- Experience and an understanding of core networking technologies such as IP addressing, name resolution, and Dynamic Host Configuration Protocol (DHCP).
- Experience working with and an understanding of Microsoft Hyper-V and basic server virtualization concepts.
- An awareness of basic security best practices.
- Hands-on working experience with Windows client operating systems such as Windows 7, Windows 8, Windows 8.1, or Windows 10.
- Basic experience with the Windows PowerShell command-line interface.

## Programme

### Module 1: Installing and configuring DCs

- Overview of AD DS

- Overview of AD DS DCs
- Deploying DCs
- Lab : Deploying and administering AD DS
- Deploying AD DS
- Deploying a DC by performing DC cloning
- Administering AD DS by using Active Directory Administrative Center

## **Module 2: Managing objects in AD DS**

- Managing user accounts
- Managing groups in AD DS
- Managing computer accounts
- Using Windows PowerShell for AD DS administration
- Implementing and managing organizational units
- Lab : Deploying and administering AD DS
- Creating and configuring user accounts in AD DS
- Creating and configuring groups in AD DS
- Managing computer objects in AD DS
- Lab : Administering AD DS
- Delegating administration for a branch office
- Creating user accounts and groups by using Windows PowerShell

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

- 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 child domains in AD DS
- Implementing forest trusts

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

- Overview of AD DS replication
- Configuring AD DS sites
- Configuring and monitoring AD DS replication
- Lab : Managing and 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**

- Introducing Group Policy
- Implementing and administering GPOs
- Group Policy scope and Group Policy processing
- Troubleshooting the application of GPOs
- Lab : Implementing a Group Policy infrastructure
- Creating and configuring GPOs
- Managing GPO scope
- Lab : Troubleshooting a Group Policy infrastructure
- Verify GPO application
- Troubleshooting GPOs

## **Module 6: Managing user settings with GPOs**

- Implementing administrative templates
- Configuring Folder Redirection 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 AD DS**

- Securing domain controllers
- Implementing account security

- Audit authentication
- Configuring managed service accounts (MSAs)
- Lab : Securing AD DS
- Implementing security policies for accounts and passwords
- Implementing administrative security policies
- Deploying and configuring a read-only domain controller (RODC)
- Creating and associating a gMSA

## **Module 8: Deploying and managing AD CS**

- 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**

- Deploying and managing certificate templates
- Managing certificate deployment, revocation, and recovery
- Using certificates in a business environment
- Implementing and managing smart cards
- Lab : Deploying certificates
- Configuring certificate templates
- Enrolling and using certificates
- Configuring and implementing key recovery

## **Module 10: Implementing and administering AD FS**

- Overview of AD FS
- AD FS requirements and planning
- Deploying and configuring AD FS
- Overview of Web Application Proxy
- Lab : Implementing AD FS
- Configuring AD FS prerequisites
- Installing and configuring AD FS
- Configuring AD FS for a single organization
- Configuring AD FS for federated business partners

## **Module 11: Implementing and administering AD RMS**

- 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 Azure AD**

- 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

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

- Monitoring AD DS
- Managing the AD DS database
- Recovering AD DS objects
- Lab : Recovering objects in AD DS
- Backing up and restoring AD DS
- Recovering objects in AD DS

## Session Dates

On request. Please [Contact Us](#)

## Additional Information

[This training is also available as onsite training. Please contact us to find out more.](#)