

Identity with Windows Server (55344AC)

Duration: 40 Hours (5 Days)

Course Overview

The Identity with Windows Server (55344AC) course, also known as 70-742, is designed to impart knowledge and skills related to identity management with Windows Server 2019. It focuses on the critical aspects of installing, maintaining, and managing Active Directory Domain Services (AD DS) and the technologies associated with it. The course is structured around various modules that guide learners through the installation and configuration of domain controllers, management of AD DS objects, advanced infrastructure management, AD DS replication, Group Policy implementation, and securing AD DS. Additionally, the course covers the deployment and management of Active Directory Certificate Services (AD CS), Active Directory Federation Services (AD FS), Active Directory Rights Management Services (AD RMS), and the synchronization of AD DS with Microsoft Azure AD. It also includes lessons on monitoring, managing, and recovering AD DS. Learners will benefit from hands-on experience through labs, gaining practical skills to manage and optimize the identity infrastructure in a Windows Server 2019 environment, making them adept at handling real-world challenges associated with identity with Windows Server 2019.

Audience Profile

The Identity with Windows Server (55344AC) course equips IT professionals with advanced skills in managing and securing Active Directory (AD) environments.

- Target Audience:
- System Administrators
- Active Directory Administrators
- IT Infrastructure Managers
- Network Administrators
- Security Professionals
- Systems Engineers
- IT Professionals aiming for a career in AD DS
- Technical Support Specialists
- Professionals preparing for Microsoft certifications related to Windows Server and Active Directory
- IT Consultants
- Information Security Analysts

Course Syllabus

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 1: Deploying and Administering AD DS

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

After completing this module, students will be able to:

- Describe AD DS and its main components.
- Describe the purpose and roles of domain controllers.
- Describe the considerations for deploying domain controllers.

Module 2: Managing Objects in AD DS

This module explains how to manage objects in AD DS, including 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

After completing this module, students will be able to:

- Manage user accounts in AD DS.
- Manage groups in AD DS.
- Manage computer objects in AD DS.
- Use Windows PowerShell for AD DS administration.
- Implement and manage OUs.
- Administer AD DS.

Module 3: Advanced AD DS Infrastructure Management

This module explains how to plan and implement an AD DS deployment with multiple domains and forests.

Lessons:

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

Lab 1: Domain and Trust Management in AD DS

- Implementing forest trusts
- Implementing child domains in AD DS

After completing this module, students will be able to:

- Describe the components of an advanced AD DS deployment.
- Deploy a distributed AD DS environment.
- Configure AD DS trusts.

Module 4: Implementing and Administering AD DS Sites and Replication

This module explains how to plan and implement an AD DS deployment that includes multiple locations and how replication works in AD DS.

Lessons:

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

Lab 1: 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

After completing this module, students will be able to:

- Describe how AD DS replication works.
- Configure AD DS sites to optimize authentication and replication traffic.
- Configure and monitor AD DS replication.

Module 5: Implementing Group Policy

This module explains how to implement a GPO infrastructure and provides an overview of 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

After completing this module, students will be able to:

- Explain what Group Policy is.
- Implement and administer GPOs.
- Describe Group Policy scope and processing.
- Troubleshoot GPO application.

Module 6: Managing User Settings with Group Policy

This module explains how to configure Group Policy settings and preferences, including folder redirection and scripts.

Lessons:

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

Lab 1: Managing User Settings with GPOs

- Using administrative templates to manage user settings
- Implementing settings by using Group Policy preferences
- Configuring Folder Redirection

After completing this module, students will be able to:

- Implement administrative templates.
- Configure Folder Redirection, software installation, and scripts.
- Configure Group Policy preferences.

Module 7: Securing Active Directory Domain Services

This module explains how to secure domain controllers, accounts, passwords, and Group Managed Service Accounts (gMSA).

Lessons:

- Securing domain controllers
- Implementing account security
- Implementing audit authentication

- Configuring managed service accounts

Lab 1: Securing AD DS

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

After completing this module, students will be able to:

- Secure domain controllers.
- Implement account security.
- Implement audit authentication.
- Configure managed service accounts (MSAs).

Module 8: Deploying and Managing AD CS

This module explains how to implement and manage AD CS deployments, including deploying and troubleshooting CAs.

Lessons:

- Deploying CAs
- Administering CAs
- Troubleshooting and maintaining CAs

Lab 1: Deploying and Configuring a Two-Tier CA Hierarchy

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

After completing this module, students will be able to:

- Deploy CAs.
- Administer CAs.
- Troubleshoot and maintain CAs.

Module 9: Deploying and Managing Certificates

This module explains how to deploy and manage certificates in an AD DS environment.

Lessons:

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

Lab 1: Deploying and Using Certificates

- Configuring certificate templates
- Enrolling and using certificates

- Configuring and implementing key recovery

After completing this module, students will be able to:

- Deploy and manage certificate templates.
- Manage certificate deployment, revocation, and recovery.
- Use certificates in a business environment.
- Implement and manage smart cards.

Module 10: Implementing and Administering AD FS

This module explains how to configure AD FS in single-organization and partner-organization scenarios.

Lessons:

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

Lab 1: 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

After completing this module, students will be able to:

- Describe AD FS.
- Explain how to deploy AD FS.
- Implement AD FS for a single organization.
- Extend AD FS to external clients.
- Implement Single Sign-On (SSO) to support online services.

Module 11: Implementing and Administering AD RMS

This module explains how to implement and manage AD RMS deployments.

Lessons:

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

Lab 1: Implementing an AD RMS Infrastructure

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

After completing this module, students will be able to:

- Describe AD RMS.
- Deploy and manage an AD RMS infrastructure.
- Configure AD RMS content protection.

Module 12: Implementing AD DS Synchronization with Microsoft Azure AD

This module explains how to plan and configure directory synchronization between Azure AD and on-premises AD DS.

Lessons:

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

Lab 1: Configuring Directory Synchronization

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

After completing this module, students will be able to:

- Plan and prepare for directory synchronization.
- Implement directory synchronization using Azure AD Connect.
- Manage identities with directory synchronization.

Module 13: Monitoring, Managing, and Recovering AD DS

This module explains how to monitor, manage, and maintain AD DS to ensure high availability.

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 1: Recovering Objects in AD DS

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

After completing this module, students will be able to:

- Monitor AD DS.
- Manage the Active Directory database.
- Describe backup and recovery options for AD DS and other identity access solutions.