MOC6436 Designing a Windows Server 2008 Active Directory Infrastructure and Services

Course Summary

Description

Students will learn how to design an Active Directory Infrastructure in Windows Server 2008. Students will learn how to design Active Directory forests, domain infrastructure, sites and replication, administrative structures, group policies, and Public Key Infrastructures. Students will also learn how to design for security, high availability, disaster recovery, and migrations.

Objectives

At the end of this course, students will be able to:

- Design an Active Directory infrastructure and services in Windows Server 2008.

Topics

- Designing an Active Directory Forest Infrastructure in Windows Server 2008
- Designing an Active Directory Domain Infrastructure in Windows Server 2008
- Designing Active Directory Sites and Replication in Windows Server 2008
- Designing Active Directory Domain Administrative Structures in Windows Server 2008
- Designing Active Directory Group Policy in Windows Server 2008
- Designing AD DS Security in Windows Server 2008
- Designing Active Directory High Availability in Windows Server 2008
- Designing AD DS Disaster Recovery in Windows Server 2008
- Designing Public Key Infrastructure in Windows Server 2008
- Designing an AD RMS Infrastructure in Windows Server 2008
- Designing an Active Directory Federation Services Implementation in Windows Server 2008
- Designing an AD LDS
- Designing Active Directory Migrations in Windows Server 2008

Audience

This course is intended for Windows Server 2008 IT professionals who want to become Windows Server 2008 enterprise administrators and move into the role of designing Active Directory Domain Services (AD DS) environments.

Prerequisites

Before attending this course, students must have:

- Completion of Microsoft Certified Technology Specialist (MCTS) Windows Server 2008 curriculum or equivalent knowledge and skills.
- Knowledge of Windows Vista Terminal Services or Deployment Terminal Services

Duration

Five days

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Course Outline

I. **Designing an Active Directory Forest Infrastructure in Windows Server 2008**
This module explains how to design an Active Directory forest based on business and technical requirements.

A. Determining Active Directory Forest Design Requirements
B. Designing an Active Directory Forest
C. Designing Active Directory Forest Trusts
D. Managing the Active Directory Schema
E. Understanding Windows Time Service

Lab: Designing an Active Directory Forest Infrastructure in Windows Server 2008
Designing an Active Directory Forest

- Designing and Implementing Active Directory Forest Trusts
- Designing and Implementing Active Directory Schema Changes
- Discussions About Exercise 1-3 Design Decisions

After completing this module, students will be able to:

- Determine Active Directory Forest Design Requirements
- Design an Active Directory Forest
- Design Active Directory Forest Trusts
- Manage the Active Directory Schema
- Understand Windows Time Service

II. Designing an Active Directory Domain Infrastructure in Windows Server 2008
This module explains how to design an Active Directory domain infrastructure based on business and technical requirements.

A. Designing Active Directory Domains
B. Designing the Integration of DNS Namespaces
C. Designing the Placement of Domain Controllers
D. Designing Active Directory Domain Trusts

Lab: Designing an Active Directory Domain Infrastructure in Windows Server 2008

- Designing Active Directory Domains
- Designing and Implementing DNS Namespace Integration
- Designing and Implementing Read-Only Domain Controller Security
- Designing and Implementing Active Directory Domain Trusts
- Discussions About Exercise 1-4 Design Decisions

After completing this module, students will be able to:

- Design Active Directory domains
- Design the integration of DNS namespaces
- Design the placement of domain controllers
- Design Active Directory domain trusts

III. Designing Active Directory Sites and Replication in Windows Server 2008
This module explains how to design Active Directory sites and replication roles.

A. Designing Active Directory Sites
B. Designing AD DS Replication
C. Designing the Placement of Domain Controllers in AD DS Sites

Lab: Designing AD DS Sites and Replication in Windows Server 2008

- Designing and Implementing AD DS Sites
- Designing and Implementing AD DS Replication
- Designing the Placement of Domain Controllers
- Discussions About Exercise 1-3 Design Decisions

After completing this module, students will be able to:

- Design Active Directory sites
- Design Active Directory replication
- Design the placement of domain controllers in Active Directory sites

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Course Outline (cont'd)

IV. Designing Active Directory Domain Administrative Structures in Windows Server 2008

This module explains how to design Active Directory domain administrative structures in Windows Server 2008.

A. Planning an Active Directory Domain Administrative Structure
B. Designing Organizational Unit Structures
C. Designing an Active Directory Group Strategy
D. Planning for User and Computer Account Management

Lab: Designing AD DS Administrative Structures in Windows Server 2008

- Designing and Implementing Organizational Units
- Designing and Implementing Active Directory Group Strategies
- Automating User Account Management by using Windows PowerShell
- Discussions About Exercise 1-3 Design Decisions

After completing this module, students will be able to:

- Plan an Active Directory domain administrative structure
- Design organizational unit structures
- Design an Active Directory group strategy
- Plan for User and Computer Account management

V. Designing Active Directory Group Policy in Windows Server 2008

This module explains how to design Active Directory Group Policies in Windows Server 2008.

A. Gathering Information for Group Policy Deployment
B. Designing Group Policy Settings
C. Designing Group Policy Processing
D. Designing Group Policy Management

Lab: Designing Active Directory Administrative Structures in Windows Server 2008

- Designing and Implementing Group Policy Settings
- Designing and Implementing Group Policy Application
- Designing and Implementing Group Policy Management
- Discussions About Exercise 1-3 Design Decisions

After completing this module, students will be able to:

- Gather information for designing the Group Policy deployment.
- Design Group Policy settings
- Design Group Policy processing
- Design Group Policy management

VI. Designing AD DS Security in Windows Server 2008

This module explains how to design AD DS security in Windows Server 2008.

A. Designing Active Directory Security Policies
B. Designing Active Directory Domain Controller Security
C. Designing Administrator Security and Delegation

Lab: Designing AD DS Security in Windows Server 2008

- Designing and Implementing Domain Security Policies
- Designing and Implementing Domain Controller Security Policies
- Designing and Implementing Administrator Security and Delegation
- Discussions About Exercise 1-3 Design Decisions

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Course Outline (cont'd)

After completing this module, students will be able to:

- Design Active Directory security policies
- Design Active Directory domain controller security
- Design administrator security and delegation

VII. Designing Active Directory High Availability in Windows Server 2008

This module explains how to design Active Directory high availability and disaster recovery in Windows Server 2008.

A. Understanding AD DS High Availability
B. Designing an AD DS High Availability Strategy

Lab: Designing AD DS Availability in Windows Server 2008

- Designing a High Availability Plan for AD DS
- Discussions About Exercise 1 Design Decisions

After completing this module, students will be able to:

- Understand AD DS high availability
- Design an AD DS high availability strategy

VIII.Designing AD DS Disaster Recovery in Windows Server 2008

This module explains how to design AD DS disaster recovery in Windows Server 2008.

A. Designing an Active Directory Database Maintenance Strategy
B. Designing an Active Directory Backup and Recovery Strategy
C. Designing an AD DS Monitoring Strategy

Lab: Designing Active Directory Disaster Recovery in Windows Server 2008

- Designing and Implementing a Domain Controller Maintenance Plan
- Designing and Implementing a Domain Controller Monitoring Plan
- Discussions About Exercise 1-2 Design Decisions

After completing this module, students will be able to:

- Design an Active Directory database maintenance strategy
- Design an Active Directory backup and recovery strategy
- Design an Active Directory monitoring strategy

IX. Designing Public Key Infrastructure in Windows Server 2008

This module explains how to design Public Key Infrastructure in Windows Server 2008.

A. Overview of PKI and Active Directory Certificate Services.
B. Designing a Certification Authority Hierarchy
C. Designing Certificate Template
D. Designing Certificate Distribution and Revocation

Lab: Designing Public Key Infrastructure in Windows Server 2008

- Designing and Implementing a CA Hierarchy
- Designing and Implementing AD CS Certificate Templates
- Designing and Implementing Certificate Enrollment and Revocation
- Discussions About Exercises 1-3 Design Decisions

After completing this module, students will be able to:

- Describe PKI and Active Directory Certificate Services
- Design a Certification Authority hierarchy
- Design certificate template
- Design certificate distribution and revocation

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Course Outline (cont'd)

X. Designing an AD RMS Infrastructure in Windows Server 2008
This module explains how to design AD RMS infrastructure in Windows Server 2008.

A. Gathering Information for an Active Directory Rights Management Services (AD RMS) Design
B. Designing AD RMS Clusters and Access
C. Designing AD RMS Backup and Recovery

Lab: Designing an AD RMS Infrastructure in Windows Server 2008

- Designing AD RMS Clusters and Access
- Designing AD RMS Backup and Recovery
- Discussions About Exercises 1-2 Design Decisions

After completing this module, students will be able to:

- Gather information for an AD RMS design
- Design AD RMS clusters and access
- Design AD RMS backup and recovery

XI. Designing an Active Directory Federation Services Implementation in Windows Server 2008
This module explains how to design an Active Directory Federation Services (AD FS) implementation.

A. Overview of an Active Directory Federation Services Design
B. Designing a Business-to-Business Federation
C. Designing Active Directory Federation Services Claims and Applications

Lab: Designing an Active Directory Federation Services Implementation in Windows Server 2008

- Designing Active Directory Federation Services Access to Applications in a Perimeter Network
- Designing Active Directory Federation Services Access to Partner Applications
- Designing Active Directory Federation Services for Partner Access to Applications in a Perimeter Network
- Discussions About Exercise1-3 Design Decisions

After completing this module, students will be able to:

- Describe an AD FS design.
- Design a business-to-business federation.
- Design AD FS claims and applications.

XII. Designing an AD LDS Implementation
This module explains how to design an AD LDS implementation.

A. AD LDS Deployment Scenarios
B. Overview of an AD LDS Implementation Design
C. Designing AD LDS Schema and Replication
D. Integrating AD LDS with AD DS

Lab: Designing an AD LDS Implementation

- Designing and Configuring AD LDS Replication for Internal Applications
- Designing and Configuring AD LDS Replication for External Applications
- Designing Highly Available LDAP Services for Multiple Applications
- Discussions About Exercises 1-3 Design Decisions

After completing this module, students will be able to:

- Describe the AD LDS deployment scenarios
- Describe the AD LDS implementation design
- Design AD LDS schema and replication
- Integrate AD LDS with AD DS

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Course Outline (cont'd)

XIII. Designing Active Directory Migrations in Windows Server 2008

This module explains how to design Active Directory migrations in Windows Server 2008.

A. Choosing an Active Directory Migration Strategy
B. Designing a Domain Upgrade Strategy
C. Designing a Domain Restructure Strategy

Lab: Designing Active Directory Migrations in Windows Server 2008

- Designing an Active Directory Migration Strategy
- Designing an Active Directory Migration Implementation Plan
- Discussions About Exercise 1-2 Design Decisions

After completing this module, students will be able to:

- Choose an Active Directory migration strategy
- Design a domain upgrade strategy
- Design a domain restructure strategy

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