Designing a Microsoft Windows 2000 Upgrade Strategy

Course 2010 is a five-day course that provides students with the knowledge and skills necessary to select and design a strategy to migrate from a Microsoft Windows NT Server 4.0 directory services infrastructure to a Microsoft Windows 2000 Active Directory service by describing the planning processes and implications involved. (Course 1561 is a prerequisite for course 2010.)

Topics:

- Choosing a Migration Path to Windows 2000 Active Directory
- Developing a Domain Upgrade Strategy
- Minimizing the Impact on Network Operations During an Upgrade
- Restructuring Domains
- Developing a Domain Restructure Strategy
- Minimizing the Impact on Network Operations During a Domain Restructure
- Planning to Deploy a Migration Strategy

Course Outline

Module 1: Introduction to Developing a Migration Strategy

Topics

Introduction to Developing a Migration Strategy
Upgrading Versus Restructuring
The Importance of Planning

Skills

Students will be able to:

- Explain the phases in the migration planning process.
- Differentiate between domain upgrade and domain restructure.
- Explain the importance of planning.

Module 2: Choosing a Migration Path to Windows 2000 Active Directory

Topics

Introduction to Choosing a Migration Path
Identifying the Existing Domain Environment
Gathering Information About the Current Network Environment
Defining Goals for Migration
Examining the Active Directory Design
Determining Possible Migration Paths
Evaluating Upgrade Decision Points
Evaluating Restructure Decision Points

Skills

Students will be able to:

- Identify the components of the existing Microsoft Windows NT version 4.0 domain structure that need to be documented prior to migration.
- Identify the areas of their current network environments that need to be documented and gather information about the current computing environment.
- Identify and prioritize their migration goals.
- Examine their organization's Active Directory directory service design.
- Examine the different ways in which organizations can choose to migrate to the Active Directory infrastructure.

Module 3: Developing a Domain Upgrade Strategy

Topics

Introduction to Developing a Domain Upgrade Strategy
Analyzing an Active Directory Design
Single Versus Multiple Forests
Site Design
Administration and Security Plans
Planning a Domain Upgrade
Determining an Upgrade Path
Developing a Recovery Plan
Determining the Order for Upgrading Domains
Determining a Strategy for Upgrading Domain Controllers
Determining When to Switch to Native Mode
Identifying Post-Upgrade Tasks

Lab

Developing a Domain Upgrade Strategy

Skills

Students will be able to:

- Examine the Active Directory design of an organization.
Plan a domain upgrade to Active Directory.

Module 4: Minimizing the Impact on Network Operations During an Upgrade

Topics

Maintaining Network Services During an Upgrade
Providing Reliable NetBIOS Resolution Services
Providing Reliable DHCP Server Services
Supporting LAN Manager Replication
Supporting Remote Access Services
Planning for Interaction Between Group Policy and System Policies
Migrating and Applying Logon Scripts
Maintaining Security During an Upgrade
Migrating Resource Access Components
Migrating Trust Relationships
Planning for Security Policy Application
How user Profiles are Affected by Domain Upgrade
Client Support
Determining the Impact of an Upgrade on Applications
Leveraging Existing Directory Information
Maintaining Network Performance During an Upgrade
Planning for Upgrade Related Replication Traffic
Planning for Authentication Traffic

Lab

Minimizing the Impact on Network Operations During an Upgrade

Skills

Students will be able to:

- Examine existing network services and develop a strategy for ensuring their reliability during an upgrade.
- Determine how a domain upgrade will modify existing security and develop a strategy for maintaining desired security levels during the upgrade.
- Determine in advance how server applications will behave in a Windows 2000 environment.
- Describe how the Active Directory Connector (ADC) allows migration of user attributes to the Active Directory directory service.
- Develop a strategy for regulating traffic to optimize network performance during the upgrade.
Module 5: Restructuring Domains

Topics

Introduction to Domain Restructuring
Understanding Domain Security
Inter-Forest Restructuring
Inter-Forest Restructure Scenarios
Requirements for Inter-Forest Restructuring
Cloning Security Principals in an Inter-Forest Scenario
Cloning Users
Cloning Global and Universal Groups
Migrating Computers and Local Group Accounts
Cloning Local Groups on Domain Controllers
Moving Domain Controllers
Intra-Forest Restructuring
Intra-Forest Restructuring Scenarios
Requirements for Intra-Forest Restructuring
Restrictions for Intra-Forest Restructuring
Moving Security Principals
Using Closed Sets to Move Users and Global Groups
Using Closed Sets to Move Domain Local Groups
Alternatives to Moving with Closed Sets
Moving Computers and Local Accounts
Moving Domain Controllers
Domain Restructure Tools
Active Directory Migration Tool
Additional Restructure Tools

Lab

Performing Inter-Forest Domain Restructuring

Skills

Students will be able to:

- Describe the components of domain security and resource access.
- Describe inter-forest restructure scenarios.
- Examine the implications of inter-forest restructuring on security principals.
- Describe intra-forest restructure scenarios.
- Examine the implications of intra-forest restructuring on security principals.
- Describe and compare the various domain restructure tools.
Module 6: Developing a Domain Restructure Strategy

Topics

Introduction to Developing a Domain Restructure Strategy
Identifying Domain Pre-restructuring Tasks
Examining Existing Domain Environment for Restructure
Choosing a Domain Restructure Methodology
Preparing to Deploy the Target Environment
Developing a Domain Restructure Recovery Plan
Selecting Appropriate Migration Tools
Identifying and Documenting Source Security Principal Details
Determining How to Migrate Security Principal Details
Determining the Order of Restructuring Within a Domain
Identifying Domain Post-Restructure Tasks
Planning for Redefining DACLs
Planning for Cleaning up sIDHistory
Determining When to Convert the Target Domain to Production
Planning for Decommissioning

Lab

Planning a Domain Restructure

Skills

Students will be able to:

- Identify and perform the domain pre-restructuring planning tasks.
- Determine the order of moving objects in a restructuring.
- Identify and perform the domain post-restructuring planning tasks.

Module 7: Minimizing the Impact on Network Operations During a Domain Restructure

Topics

Maintaining Reliability of Network Services During a Domain Restructure
Providing Reliable DNS Services
Providing Reliable NetBIOS Resolution Services
Providing Reliable DHCP Server Services
Providing Remote Access Services in a Mixed Environment
Supporting LAN Manager Replication
Skills

**Students will be able to:**

- Examine existing network services and develop a strategy for ensuring their reliability during the domain restructure.
- Plan for issues that arise due to the cloning of accounts when restructuring a Windows 2000 domain.
- Describe how the Active Directory Connector (ADC) allows migration of user attributes to the Active Directory directory service.

**Module 8: Planning to Deploy a Migration Strategy**

**Topics**

Creating a Migration Project Plan
Defining Migration Vision and Scope
Identifying Personnel Requirements and Migration Teams
Creating a Functional Specification
Creating Project Planning Documents
Choosing an Installation Strategy
Testing the Migration Plan
Piloting the Migration Plan
Planning for a Smooth Transition to Windows 2000
Best Practices

**Labs**

Developing a Domain Upgrade Test Plan
Developing a Domain Restructure Test Plan

**Skills**

*Students will be able to:*
• Plan the deployment of their migration strategy.
• Identify the planning documents to create.
• Choose a method for deploying Microsoft Windows 2000.
• Create the test and pilot plans for their migration strategy.
• Define the steps to ensure a smooth transition from pilot to production.