Course 2154 is a five-day course designed to provide students with the knowledge and skills necessary to install, configure, and administer the Microsoft Windows 2000 Active Directory™ service. The course also focuses on implementing Group Policy and understanding the Group Policy tasks required to centrally manage users and computers. (Course 2153 is a prerequisite for course 2154.)

Topics:

- Understanding the Logical and Physical Structure of Active Directory
- Configuring the Domain Name System (DNS) Server Service to Support Active Directory
- Creating and Administering User Accounts and Group Resources
- Delegating and Administrative Control of Active Directory Objects
- Implementing and Using Group Policy
- Managing Replication of Active Directory
- Maintaining and Restoring the Database of Active Directory

Course Outline

Module 1: Introduction to Active Directory in Windows 2000

Topics

Introduction to Active Directory
Active Directory Logical Structure
Active Directory Physical Structure
Methods for Administering a Windows 2000 Network

Skills

Students will be able to:

- Describe the function of Active Directory.
- Describe the logical structure of Active Directory.
- Describe the physical structure of Active Directory.
- Describe the methods for administering a Windows 2000 network.

Module 2: Implementing DNS to Support Active Directory

Topics
Introduction to the Role of DNS in Active Directory
DNS and Active Directory
DNS Name Resolution in Active Directory
Active Directory Integrated Zones
Installing and Configuring DNS to Support Active Directory

Lab
Installing and Configuring DNS to Support Active Directory

Skills

Students will be able to:

• Install and configure DNS to support an installation of Active Directory.

Module 3: Creating a Windows 2000 Domain

Topics

Introduction to Creating a Windows 2000 Domain
Installing Active Directory
The Active Directory Installation Process
Examining the Default Structure of Active Directory
Performing Post Active Directory Installation Tasks
Troubleshooting the Installation of Active Directory
Removing Active Directory

Labs

Creating a Windows 2000 Domain
Performing Post Active Directory Installation Tasks

Skills

Students will be able to:

• Create a Windows 2000 domain by installing Active Directory.
• Examine the default structure of Active Directory.
• Perform post Active Directory installation tasks.
• Troubleshoot common problems that may occur when installing Active Directory.
• Remove Active Directory by using the Active Directory Installation wizard.
Module 4: Setting Up and Administering Users and Groups

Topics

Introduction to User Accounts and Groups
User Logon Names
Creating Multiple User Accounts
Administering User Accounts
Using Groups in Active Directory
Strategies for Using Groups in a Domain
Troubleshooting Domain User Accounts and Groups

Labs

Setting Up and Administering Domain User Accounts
Setting Up and Administering Groups in a Single Domain

Skills

Students will be able to:

- Create multiple user accounts by importing user information into Active Directory.
- Administer user accounts.
- Use groups to manage access to domain resources.
- Implement strategies for using security groups to manage access to domain resources.
- Troubleshoot common problems with administering user accounts and groups.

Module 5: Publishing Resources in Active Directory

Topics

Introduction to Publishing Resources
Setting Up and Administering Published Printers
Implementing Printer Locations
Setting Up and Administering Published Shared Folders
Comparing Published Objects and Shared Resources
Troubleshooting Published Resources

Lab
Publishing Resources in Active Directory

Skills

Students will be able to:

- Set up and administer published printers in Active Directory.
- Set up printer locations for published printers.
- Set up and administer published shared folders in Active Directory.
- Troubleshoot common problems with publishing resources in Active Directory.

Module 6: Delegating Administrative Control

Topics

Object Security in Active Directory
Controlling Access to Active Directory Objects
Delegating Administrative Control of Active Directory Objects
Customizing MMC Consoles
Setting Up Taskpads

Labs

Delegating Administrative Control
Creating Custom Administrative Tools

Skills

Students will be able to:

- Manage object security in Active Directory.
- Control access to Active Directory objects.
- Delegate administrative control of Active Directory objects.
- Create and deploy customized consoles.
- Create and deploy customized taskpads.
- Apply best practices for delegating administrative control.

Module 7: Implementing Group Policy

Topics

Introduction to Group Policy
Group Policy Structure
Working with Group Policy Objects
How Group Policy Settings Are Applied in Active Directory
Modifying Group Policy Inheritance
Delegating Administrative Control of Group Policy
Monitoring and Troubleshooting Group Policy

Labs

Implementing Group Policy
Delegating Group Policy Administration

Skills

Students will be able to:

• Implement Group Policy.
• Modify Group Policy inheritance.
• Delegate administrative control of Group Policy objects.
• Monitor and troubleshoot Group Policy.

Module 8: Using Group Policy to Manage User Environments

Topics

Introduction to Managing User Environments
Introduction to Administrative Templates
Using Administrative Templates in Group Policy
Assigning Scripts in Group Policy
Using Group Policy to Redirect User Folders
Using Group Policy to Secure the User Environment
Troubleshooting User Environment Management

Labs

Using Administrative Templates to Assign Registry-Based Group Policy
Using Group Policy to Assign Scripts to Users and Computers
Implementing Folder Redirection Policy
Implementing Security Settings by Using Group Policy

Skills

Students will be able to:
• Use Administrative Templates in Group Policy to assign registry-based Group Policy to control and configure user and computer environments.
• Assign scripts, such as startup, shutdown, logon, and logoff, with Group Policy to control user environments.
• Use Group Policy to redirect folders to a central network location.
• Use Group Policy to apply security policies to secure the user environment.
• Troubleshoot managing user environments by using Group Policy.

Module 9: Using Group Policy to Manage Software

Topics

Introduction to Managing Software Deployment
Windows Installer Technology
Deploying Software
Configuring Software Deployment
Maintaining Deployed Software
Removing Deployed Software
Troubleshooting Software Deployment

Labs

Assigning and Publishing Software
Upgrading and Removing Software

Skills

Students will be able to:

• Use Group Policy to deploy software.
• Use Group Policy to configure software deployment.
• Use Group Policy to maintain software.
• Use Group Policy to remove software.
• Troubleshoot common problems with software deployment.

Module 10: Creating and Managing Trees and Forests

Topics

Introduction to Trees and Forests
Creating Trees and Forests
Trust Relationships in Trees and Forests
The Global Catalog
Strategies for Using Groups in Trees and Forests
Troubleshooting Creating and Managing Trees and Forests

Labs

Creating Domain Trees and Establishing Trusts
Using Groups in a Forest

Skills

Students will be able to:

• Create and manage trees and forests in Windows 2000.
• Manage trust relationships in trees and forests.
• Implement group strategies to gain access to resources across trees and forests.
• Troubleshoot common problems that can occur when creating and managing trees and forests in Windows 2000.

Module 11: Managing Active Directory Replication

Topics

Introduction to Active Directory Replication
Replication Components and Processes
Replication Topology
Using Sites to Optimize Active Directory Replication
Implementing Sites to Manage Active Directory Replication
Monitoring Replication Traffic
Adjusting Replication
Troubleshooting Active Directory Replication

Labs

Tracking Active Directory Replication
Using Sites to Manage Active Directory Replication
Monitoring Replication

Skills

Students will be able to:

• Use sites to manage Active Directory replication.
• Monitor replication traffic.
• Adjust the replication behavior to improve replication performance.
• Troubleshoot common problems with Active Directory replication.

Module 12: Managing Operations Masters

Topics

Introduction to Operations Masters
Operations Master Roles
Managing Operations Master Roles
Managing Operations Master Failures

Lab

Managing Operations Masters

Skills

Students will be able to:

• Determine the holder of an operations master role.
• Transfer and seize an operations master role.

Module 13: Maintaining the Active Directory Database

Topics

Introduction to Maintaining the Active Directory Database
The Process of Modifying Data in Active Directory
The Garbage Collection Process
Backing Up Active Directory
Restoring Active Directory
Moving the Active Directory Database
Defragmenting the Active Directory Database

Labs

Backing Up and Restoring Active Directory
Maintaining the Active Directory Database

Skills
Students will be able to:

- Back up the system state data by using the Backup utility.
- Restore Active Directory by restoring the system state data.
- Move the Active Directory database to a new location.
- Defragment the Active Directory database.

Module 14: Implementing an Active Directory Infrastructure

Topics

Business Scenario
Requirements for the Active Directory Infrastructure
Class Discussion: How to Implement the Active Directory Infrastructure

Lab

Implementing the Active Directory Infrastructure

Skills

Students will be able to:

- Perform the tasks necessary to implement an Active Directory infrastructure.