

Implementing and Administering Microsoft® Windows® 2000 Directory Services

Delivery Guide

Course Number: 2154B

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Appendix D: Common User Account Attributes

Appendix E: Using ADSI Programming to Automate Administrative Tasks

About This Course

This section provides you with a brief description of the course, audience, suggested prerequisites, and course objectives.

Description

This course provides students with the knowledge and skills necessary to install, configure, and administer Active Directory® directory service, which is the directory service for Microsoft® Windows® 2000. The course also focuses on the tasks required to implement Group Policy to centrally manage large numbers of users and computers. This course will help prepare students for the Windows 2000 MCSE Exam 70-217: *Implementing and Administering a Microsoft Windows 2000 Directory Services Infrastructure*.

Audience

This course is intended for Information Technology (IT) professionals, with little or no experience supporting previous versions of Windows, who will support a medium to large Windows 2000 network, and who will be responsible for installing, configuring, and administering Active Directory.

This course is also intended for those who are on the Microsoft Certified Systems Engineer Windows 2000 track.

Student Prerequisites

This course requires that students meet the following prerequisites:

- Completion of Course 2151, *Microsoft Windows 2000 Network and Operating System Essentials*, or equivalent skills and knowledge.
- Completion of Course 2152, *Implementing Microsoft Windows 2000 Professional and Server*, or equivalent knowledge and skills.

This includes installing Windows 2000, using Windows 2000 administration tools, configuring hard disks and partitions, creating users, creating and using security groups to manage access to resources, creating and administering printers, and setting up and administering permissions for files and folders, implementing local security policies by using Security Templates and Security Configuration and Analysis, and implementing an Audit policy.

- Completion of Course 2153, *Implementing a Microsoft Windows 2000 Network Infrastructure*, or equivalent knowledge and skills.

This includes installing and configuring Transmission Control Protocol/Internet Protocol (TCP/IP), Domain Name System (DNS), and Certificate services.

- A thorough understanding of DNS, including hands-on experience configuring DNS, and setting up forward and reverse lookup zones.

Course Objectives

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

- Describe the logical and physical components of Windows 2000 Active Directory.
- Configure the Domain Name System (DNS) Server service on a computer running Windows 2000 Server to support Active Directory.
- Create a Windows 2000 domain by installing and configuring Active Directory, and implement an organizational unit (OU) structure.
- Set up and administer domain user accounts and groups to enable users to gain access to resources in a Windows 2000 network.
- Publish network resources in Active Directory to allow users to locate the resources and to allow centralized management of those resources.
- Delegate administrative control of Active Directory objects to decentralize administrative tasks in a Windows 2000 network.
- Implement Group Policy to centrally manage users and computers in a Windows 2000 network.
- Configure and manage users' desktop environments by using Group Policy.
- Deploy and manage software by using Group Policy.
- Create and manage trees and forests in a Windows 2000 network, and administer forest-wide resources.
- Manage and troubleshoot Active Directory replication within a site and between sites.
- Manage operations masters.
- Manage and restore the Active Directory database.
- Implement an Active Directory infrastructure that is based on a directory services design provided by an enterprise architect.

Course Timing

The following schedule is an estimate of the course timing. Your timing may vary.

Day 1

Start	End	Module
8:30	9:00	Introduction
9:00	10:00	Module 1: Introduction to Active Directory in Windows 2000
10:00	10:15	Break
10:15	11:00	Module 2: Implementing DNS to Support Active Directory
11:00	11:30	Lab A: Installing and Configuring DNS to Support Active Directory
11:30	12:00	Module 3: Creating a Windows 2000 Domain
12:00	1:00	Lunch
1:00	1:30	Lab A: Creating a Windows 2000 Domain
1:30	2:15	Module 3: Creating a Windows 2000 Domain (<i>continued</i>)
2:15	2:45	Lab B: Performing Post Active Directory Installation Tasks
2:45	3:00	Break
3:00	3:30	Module 3: Creating a Windows 2000 Domain (<i>continued</i>)
3:30	4:15	Module 4: Setting Up and Administering Users and Groups
4:15	4:45	Lab A: Setting Up and Administering Domain User Accounts

Day 2

Start	End	Module
8:30	8:45	Day 1 review
8:45	9:15	Module 4: Setting Up and Administering Users and Groups (<i>continued</i>)
9:15	9:45	Lab B: Setting Up and Administering Groups in a Single Domain
9:45	10:00	Break
10:00	10:45	Module 5: Publishing Resources in Active Directory
10:45	11:00	Lab A: Publishing Resources in Active Directory
11:00	12:15	Module 6: Delegating Administrative Control
12:15	1:15	Lunch
1:15	1:45	Lab A: Delegating Administrative Control
1:45	2:15	Module 6: Delegating Administrative Control (<i>continued</i>)
2:15	2:45	Lab B: Creating Custom Administrative Tools
2:45	3:00	Break
3:00	4:30	Module 7: Implementing Group Policy

Day 3

Start	End	Module
8:30	8:45	Day 2 review
8:45	9:15	Module 7: Implementing Group Policy (<i>continued</i>)
9:15	10:00	Lab A: Implementing Group Policy
10:00	10:30	Module 7: Implementing Group Policy (<i>continued</i>)
10:30	10:45	Break
10:45	11:15	Lab B: Delegating Group Policy Administration
11:15	11:45	Module 8: Using Group Policy to Manage User Environments
11:45	12:15	Lab A: Using Administrative Templates to Assign Registry-Based Group Policy
12:15	1:15	Lunch
1:15	1:30	Module 8: Using Group Policy to Manage User Environments (<i>continued</i>)
1:30	1:45	Lab B: Using Group Policy to Assign Scripts to Users and Computers
1:45	2:00	Module 8: Using Group Policy to Manage User Environments (<i>continued</i>)
2:00	2:15	Lab C: Implementing Folder Redirection Policy
2:15	2:30	Module 8: Using Group Policy to Manage User Environments (<i>continued</i>)
2:30	2:45	Lab D: Implementing Security Settings by Using Group Policy
2:45	3:00	Break
3:00	3:45	Module 9: Using Group Policy to Manage Software
3:45	4:15	Lab A: Assigning and Publishing Software

Day 4

Start	End	Module
8:30	8:45	Day 3 review
8:45	9:15	Module 9: Using Group Policy to Manage Software (<i>continued</i>)
9:15	9:45	Lab B: Upgrading and Removing Software
9:45	10:30	Module 10: Creating and Managing Trees and Forests
10:30	10:45	Break
10:45	11:45	Lab A: Creating Domain Trees and Establishing Trusts
11:45	12:45	Lunch
12:45	1:30	Module 10: Creating and Managing Trees and Forests (<i>continued</i>)
1:30	2:00	Lab B: Using Groups in a Forest
2:00	3:00	Module 11: Managing Active Directory Replication
3:00	3:15	Break
3:15	3:30	Lab A: Tracking Active Directory Replication
3:30	4:15	Module 11: Managing Active Directory Replication (<i>continued</i>)
4:15	4:45	Lab B: Using Sites to Manage Active Directory Replication
4:45	5:00	Lab C: Monitoring Replication

Day 5

Start	End	Module
8:30	8:45	Day 4 review
8:45	9:30	Module 12: Managing Operations Masters
9:30	10:15	Lab A: Managing Operations Masters
10:15	10:30	Break
10:30	11:00	Module 13: Maintaining the Active Directory Database
11:00	11:30	Lab A: Backing Up and Restoring Active Directory
11:30	12:00	Module 13: Maintaining the Active Directory Database (<i>continued</i>)
12:00	1:00	Lunch
1:00	1:30	Lab B: Maintaining the Active Directory Database
1:30	2:15	Module 14: Implementing an Active Directory Infrastructure
2:15	2:30	Break
2:30	5:00	Lab A: Implementing the Active Directory Infrastructure

Trainer Materials Compact Disc Contents

The Trainer Materials compact disc contains the following files and folders:

- *Default.htm*. This file opens the Trainer Materials Web page.
- *Readme.txt*. This file contains a description of the compact disc contents and setup instructions in ASCII format (non-Microsoft Word document).
- *2154a_sg.doc*. This file is the Classroom Setup Guide. It contains a description of classroom requirements, classroom configuration, and classroom setup instructions.
- *2154a_ms.doc*. This file is the Manual Classroom Setup Guide. It contains instructions to set up the classroom manually.
- *Errorlog*. This folder contains three documents:
 - The Change Log documents all the changes that were made from the previous version of the course to the current version. The page numbers from the previous and current versions are provided to help you locate the changes.
 - The Error Log documents the known errors in this course and their fixes. Because changes to classroom setup and labs may have introduced new errors, the courseware development team did not make any changes that would require retesting of these components.
 - The Feedback form contains a template for recording any errors and corrections that you find in the course, and information about how to send this feedback to the courseware development team at Microsoft.
- *Manual*. This folder contains files that can be used to manually set up the instructor computer and the student computers.
- *Powerpnt*. This folder contains the PowerPoint slides that are used in this course.
- *Pptview*. This folder contains the PowerPoint Viewer, which is used to display the PowerPoint slides.
- *Setup*. This folder contains the standard Microsoft Official Curriculum automated setup scripts that install and configure Windows 2000 on the instructor and student computers.
- *Studntcd*. This folder contains the Web page that provides students with links to resources pertaining to this course, including additional reading, review and lab answers, lab files, multimedia presentations, and course-related Web sites.
- *Tools*. This folder contains the post-installation scripts used to configure the instructor and student computers specifically for this course.
- *Tprep*. This folder contains the Trainer Preparation Presentation, a narrated slide show that explains the instructional strategy for the course and presentation tips and caveats. To open the presentation, on the Trainer Materials Web page, click **Trainer Preparation Presentation**.

Student Materials Compact Disc Contents

The Student Materials compact disc contains the following files and folders:

- *Default.htm*. This file opens the Student Materials Web page. It provides students with resources pertaining to this course, including additional reading, review and lab answers, lab files, multimedia presentations, and course-related Web sites.
- *Readme.txt*. This file contains a description of the compact disc contents and setup instructions in ASCII format (non-Microsoft Word document).
- *AddRead*. This folder contains additional reading pertaining to this course. If there are no additional reading files, this folder does not appear.
- *Answers*. This folder contains answers to the module review questions and hands-on labs.
- *Appendix*. This folder contains appendix files for this course. If there are no appendix files, this folder does not appear.
- *Courses*. This folder contains the self-paced courses that are included with this course.
- *Fonts*. This folder contains fonts that are required to view the PowerPoint presentation and Web-based materials.
- *Labfiles*. This folder contains files that are used in the hands-on labs. These files may be used to prepare the student computers for the hands-on labs.
- *Media*. This folder contains files that are used in multimedia presentations for this course. If this course does not include any multimedia presentations, this folder does not appear.
- *Webfiles*. This folder contains the files that are required to view the course Web page. To open the Web page, open Windows Explorer, and in the root directory of the compact disc, double-click **Default.htm**.
- *Wordview*. This folder contains the Word Viewer that is used to view any Word document (.doc) files that are included on the compact disc. If no Word documents are included, this folder does not appear.

Document Conventions

The following conventions are used in course materials to distinguish elements of the text.

Convention	Use
◆	Indicates an introductory page. This symbol appears next to a slide title when additional information on the topic is covered on the page or pages that follow it.
bold	Represents commands, command options, and portions of syntax that must be typed exactly as shown. It also indicates commands on menus and buttons, icons, dialog box titles and options, and icon and menu names.
<i>italic</i>	In syntax statements, indicates placeholders for variable information. Italic is also used for introducing new terms, for book titles, and for emphasis in the text.
Title Capitals	Indicate domain names, user names, computer names, directory names, folders, and file names, except when specifically referring to case-sensitive names. Unless otherwise indicated, you can use lowercase letters when you type a directory name or file name in a dialog box or at a command prompt.
ALL CAPITALS	Indicate the names of keys, key sequences, and key combinations—for example, ALT+SPACEBAR.
monospace	Represents code samples, examples of screen text, or entries that you type at a command prompt or in initialization files.
[]	In syntax statements, enclose optional items. For example, <i>[filename]</i> in command syntax indicates that you can choose to type a file name with the command. Type only the information within the brackets, not the brackets themselves.
{ }	In syntax statements, enclose required items. Type only the information within the braces, not the braces themselves.
	In syntax statements, separates an either/or choice.
►	Indicates a procedure with sequential steps.
...	In syntax statements, specifies that the preceding item may be repeated.
.	Represents an omitted portion of a code sample.
.	
.	