Microsoft® Training & Certification

Microsoft® Official Curriculum

Implementing a Microsoft® Windows® Server 2003 Network Infrastructure: Network Hosts

Delivery Guide

Course Number: 2276B

Part Number: X09-62540
Released: 05/2003

Microsoft®

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Contents

Introduction

Course Materials....2
Additional Reading from Microsoft Press....3
Prerequisites....4
Course Outline....5
Setup....7
Microsoft Official Curriculum....8
Microsoft Certified Professional Program....9
Multimedia: Job Roles in Today's Information Systems Environment....12
Facilities....13

Module 1: Reviewing the Suite of TCP/IP Protocols

Overview....1
Lesson: Overview of the OSI Model....2
Lesson: Overview of the TCP/IP Protocol Suite....7
Lesson: Viewing Frames Using Network Monitor....14

Module 2: Assigning IP Addresses in a Multiple Subnet Network

Overview....1
Lesson: Assigning IP Addresses....2
Lesson: Creating a Subnet....19
Lesson: Using IP Routing Tables....29
Lesson: Overcoming Limitations of the IP Addressing Scheme....45

Module 3: Configuring a Client IP Address

Overview....1
Lesson: Configuring a Client to Use a Static IP Address....2
Lesson: Configuring a Client to Obtain an IP Address Automatically....9
Lesson: Using Alternate Configuration....19
Course Evaluation....27

Module 4: Configuring a Client for Name Resolution

Overview....1
Lesson: Resolving Client Names....2
Lesson: Managing the ARP Cache....4
Lesson: Overview of NetBIOS....13
Lesson: Using Static Name Resolution....25
Lesson: Using Dynamic Name Resolution....35
Lesson: Summarizing the Name Resolution Process....44

Module 5: Isolating Common Connectivity Issues

Overview....1
Lesson: Determining the Causes of Connectivity Issues....2
Lesson: Network Utilities That You Can Use to Isolate Connectivity Issues....12
Lab A: Isolating Common Connectivity Issues....33
Course Evaluation....41

Problem Isolation Flow Chart

About This Course

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

Description

The goal of this two-day course is to provide students with the skills and knowledge necessary to configure a Windows-based computer to operate in a Microsoft® Windows® Server 2003 networking infrastructure.

Audience

The target audience for this course includes individuals who are either employed by, or who are seeking employment as, a Systems Administrator in Medium and Large (M/LORG) organizations. The entry criterion for this course includes individuals who are:

- Entry-level IT professionals, new to hands-on Windows server and network administration.
- Preparing for exam 70-291, *Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure*, a core requirement for the MCSA and MCSE certification credentials.

Student prerequisites

This course requires that students meet the following prerequisites:

- A+ certification or have equivalent knowledge and skills.
- Network+ certification or have equivalent knowledge and skills.
- Course 2274, *Managing a Microsoft Windows Server 2003 Environment*, or have equivalent knowledge and skills.

Course objectives

After completing this course, the student will be able to:

- Describe the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol architecture.
- Convert Internet Protocol (IP) addresses between decimal and binary.
- Calculate a subnet mask.
- Create subnets using Variable-Length Subnet Mask (VLSM) and Classless Inter-Domain Routing (CIDR).
- Configure a host to use a static IP address.
- Assign IP addresses in a multiple subnet network.
- Describe the IP routing process.
- Configure a host to obtain an IP address automatically.
- Configure a host so that automatic private IP address configuration is disabled.
- Configure a host to use name servers.
- Isolate common connectivity issues.

Course Timing

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

Day 1

Start	End	Module
9:00	9:30	Introduction
9:30	10:15	Module 1: Reviewing the Suite of TCP/IP Protocols
10:15	10:35	Break
10:35	11:00	Module 1: Reviewing the Suite of TCP/IP Protocols *(continued)*
11:00	11:30	Module 2: Assigning IP Addresses in a Multiple Subnet Network
11:30	12:30	Lunch
12:30	1:45	Module 2: Assigning IP Addresses in a Multiple Subnet Network *(continued)*
1:45	2:05	Break
2:05	3:00	Module 2: Assigning IP Addresses in a Multiple Subnet Network *(continued)*
3:00	4:00	Module 3: Configuring a Client IP Address

Day 2

Start	End	Module
9:00	9:30	Day 1 review
9:30	10:30	Module 4: Configuring a Client for Name Resolution
10:30	10:50	Break
10:50	11:30	Module 4: Configuring a Client for Name Resolution *(continued)*
11:30	12:30	Lunch
12:30	1:30	Module 5: Isolating Common Connectivity Issues
1:30	1:50	Break
1:50	2:50	Lab A: Isolating Common Connectivity Issues

Trainer Materials Compact Disc Contents

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

- *Autorun.exe*. When the compact disc is inserted into the compact disc drive, or when you double-click the **Autorun.exe** file, this file opens the compact disc and allows you to browse the Student Materials or Trainer Materials compact disc.
- *Autorun.inf*. When the compact disc is inserted into the compact disc drive, this file opens Autorun.exe.
- *Default.htm*. This file opens the Trainer Materials Web page.
- *Readme.txt*. This file explains how to install the software for viewing the Trainer Materials compact disc and its contents and how to open the Trainer Materials Web page.
- *2276b_ms.doc*. This file is the Manual Classroom Setup Guide. It contains the steps for manually setting up the classroom computers.
- *2276b_sg.doc.* This file is the Automated Classroom Setup Guide. It contains a description of classroom requirements, classroom configuration, instructions for using the automated classroom setup scripts, and the Classroom Setup Checklist.
- *Powerpnt*. This folder contains the Microsoft PowerPoint® slides that are used in this course.
- *Pptview*. This folder contains the Microsoft PowerPoint Viewer 97, which can be used to display the PowerPoint slides if Microsoft PowerPoint 2002 is not available. Do not use this version in the classroom.
- *Setup*. This folder contains the files that install the course and related software to computers in a classroom setting.
- *Student*. 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 files and utilities used to complete the setup of the instructor computer.
- *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** or **Autorun.exe**.

Student Materials Compact Disc Contents

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

- *Autorun.exe*. When the compact disc is inserted into the CD-ROM drive, or when you double-click the **Autorun.exe** file, this file opens the compact disc and allows you to browse the Student Materials compact disc.
- *Autorun.inf*. When the compact disc is inserted into the compact disc drive, this file opens Autorun.exe.
- *Default.htm*. This file opens the Student Materials Web page. It provides you 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 explains how to install the software for viewing the Student Materials compact disc and its contents and how to open the Student Materials Web page.
- *Addread*. This folder contains additional reading pertaining to this course.
- *Appendix*. This folder contains appendix files for this course.
- *Flash*. This folder contains the installer for the Macromedia Flash 5.0 browser plug-in.
- *Fonts*. This folder contains fonts that may be required to view the Microsoft Word documents that are included with this course.
- *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.
- *Mplayer*. This folder contains the setup file to install Microsoft Windows Media® Player.
- *Practices*. This folder contains files that are used in the hands-on practices.
- *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** or **Autorun.exe**.
- *Wordview*. This folder contains the Word Viewer that is used to view any Word document (.doc) files that are included on the compact disc.

Document Conventions

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

Convention	Use
Bold	Represents commands, command options, and syntax that must be typed exactly as shown. It also indicates commands on menus and buttons, dialog box titles and options, and icon and menu names.
Italic	In syntax statements or descriptive text, indicates argument names or 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, and folder 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 or examples of screen text.
[ ]	In syntax statements, enclose optional items. For example, [*filename*] 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.