微软指定 MCSE 教材 (影印版)

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MCSE Training Kit

Exam 70-221

Microsoft®

Windows 2000 网络基础结构设计(影印版)

Designing a Microsoft Windows 2000 Network Infrastructure 2000 Advanced 120 天试用 Microsoft 公司

- ▶ MCP 70-221 考试 (Designing a Microsoft Windows 2000 Net
 - work Infrastructure) 微软指定教
- ▶ 培养设计技能的案例学习. 可自主安排学习进度
- 涵盖认证考试所要求的概念、 过程和任务, 获取现实的系 统支持技能

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Microsoft Windows 2000 网络基础结构设计

(影印版)

Microsoft 公司 **活苏工业学院图书馆** 一藏书章

北京大学出版社

内容简介

本书为微软指定教材,通过学习本书,您将能够做出正确的网络服务设计决策,同时为 MCP 考试做准备。本书提供了一系列的案例和学习指导,可帮您获得分析和优化 Windows 2000 Server 网络基础结构的实际经验。当您获得实际设计技能时,也为 MCP 70-221 考试做好了准备。

本书由微软经验丰富的专家编写,集权威性与实用性为一体,专门针对 MCSE 考试,是应试者的绝佳复习资料,同时也可以作为系统管理者的参考用书。

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出版前言

如果用一个成语来概括国内计算机图书市场的现状,当谓之"汗牛充栋"。然而,如果您是一位从事计算机应用系统开发或管理的中、高级专业人士,很可能发现这貌似种类 齐全的计算机图书中,为您量身定做的并不多见。

依据多年从事计算机图书工作所积累的经验,以及与 IT 领域广泛而深入的接触所获取的信息,我们认识到,具有相当的专业深度和技术前沿性的图书,是计算机专业人员的迫切需要,当然,也是我们从事计算机图书工作、服务专业领域的一大着眼点。

基于这一点,2000年元月,我们与微软出版社(Microsoft Press)达成合作协议,成立微软图书影印中心,独家代理微软出版社图书影印版在中国大陆的出版、发行,为 IT 业界提供及时的专业技术服务。选题和策划上的匠心独运,使得我们的影印书成为计算机图书中的标新立异者。这里,有四大特色值得读者朋友予以关注。

首先,这是微软出版社第一次授权在中国大陆影印、发行它的版权书。在选题上,可以说独辟蹊径。在内容上,立足技术广度和深度,系统推介微软产品。所有这些,都是目前国内一般计算机图书所无法比拟的。

其次,我们的理念是为国内计算机专业人员学习前沿性的微软技术提供服务。为此,我们不但与微软公司紧密协作与沟通,及时掌握微软最新技术动向,而且组织了精干的工作人员,倾力于微软影印书的出版和发行。

再者,微软影印书主要面向中、高级专业人员,印量有限。这类书的读者对象有较强的针对性,一般来说,包括 IT 决策人员,中、高级开发人员,以及中、高级系统管理人员。因而,我们将每套书的印数控制在1000~2000 册之间。

最后,微软图书影印版几乎与原版书保持同步发行,最大限度地满足了国内读者跟踪微软最新技术的需求。软件升级越来越快,新软件令人目不暇接。作为技术载体之一的图书,只有迅速作出反应,把新软件介绍给读者,才能赢得他们的青睐。总之,兵贵神速,这是我们的目标。

正应验了前人的预言,21 世纪是一个信息时代。软件作为信息系统的神经,在我们生活的这个时代里发挥着举足轻重的作用,而微软公司和它推出的各种软件,更是令世人为之瞩目。我们将立足图书,继续并扩大与微软公司的合作,在中国信息产业的发展道路上留下自己的足迹。

出版者 2000 年 10 月

About This Book

Welcome to MCSE Training Kit—Designing a Microsoft Windows 2000 Network Infrastructure. This kit prepares you to analyze the business and technical requirements of an organization and then create a networking services design that provides an appropriate solution by using Windows 2000. In addition, you will learn how to evaluate existing designs and recommend solutions to improve the security, availability, and performance characteristics of the existing network.

This course supports the Microsoft Certified Systems Engineer program.

Note For more information on becoming a Microsoft Certified Systems Engineer, see the section titled "The Microsoft Certified Professional Program," later in this introduction.

Each chapter in this book is divided into lessons, activities, labs, and reviews. Lessons include discussions of the key design decisions and then provides examples of how you would make those design decisions. The activities and labs are designed to allow you to apply the design decisions discussed within a chapter. At the end of each chapter, a set of review questions are presented to illustrate alternative solutions, and pose hypothetical situations, and test your knowledge of the chapter material.

Content and labs are written in a scenario format to help you develop the soft skills required for the MCSE certification. The scenarios are incorporated into each chapter and provide a "real world" example of how design decisions are made.

The scenarios in the chapter content are brief and focus only on the design decision that you're currently reading. In some instances, multiple scenarios are presented for a design decision to illustrate why you would choose an alternative solution.

The scenarios in the activities focus on the design decision discussed in the previous lessons in the chapter. The scenarios in the activities allow you to see how multiple design decisions interact with each other and let you create a portion of a complete solution.

Finally, the lab scenarios provide an overall picture of an organization and let you create a complete solution for the organization. You must apply all the design decisions in the chapter to create the design for the organization depicted in the lab scenario.

Intended Audience

This book was developed for the information technology (IT) professional who

 Is a network designer (network architect, senior support professional, or consultant)

Or

Wants to become a network designer (architect)

Or

 Plans to take the Microsoft Certified Professional Exam 70-221, Designing a Microsoft Windows 2000 Network Infrastructure

Prerequisites

This course requires that students meet the following prerequisites.

- A minimum of one year's experience implementing, administering, and configuring network operating systems, including Novell NetWare, UNIX, Macintosh networks
- Gained their experience in environments that have the following characteristics:
 - Supported users range from 200 to 26,000+
 - Physical locations range from 5 to 150+
 - Typical network services and applications include file and print, database, messaging, proxy server or firewall, dial-in remote access, virtual private networking (VPN), desktop management, and Web hosting
 - Connectivity needs include connecting individual offices and users at remote locations to the corporate network and connecting corporate networks to the Internet
- Successful completion of the following four core exams for the Microsoft Windows 2000 MCSE track is recommended:
 - Exam 70-210: Installing, Configuring, and Administering Microsoft Windows 2000 Professional
 - Exam 70-215: Installing, Configuring, and Administering Microsoft Windows 2000 Server
 - Exam 70-216: Implementing and Administering a Microsoft Windows 2000 Network Infrastructure
 - Exam 70-217: Implementing and Administering a Microsoft Windows 2000 Directory Services Infrastructure

Or completion of the following exam:

Exam 70-240: Microsoft Windows 2000 Accelerated Exam for MCPs Certified on Microsoft Window NT 4.0

Reference Materials

You might find the following reference materials useful.

- Microsoft Corporation. MCSE Training Kit—Microsoft Windows 2000 Server.
 Redmond, Washington: Microsoft Press, 2000.
- Microsoft Corporation. MCSE Training Kit—Microsoft Windows 2000 Active Directory Services. Redmond, Washington: Microsoft Press, 2000.
- Microsoft Corporation. MCSE Training Kit—Microsoft Windows 2000 Network Infrastructure Administration. Redmond, Washington: Microsoft Press, 2000.
- Windows 2000 white papers and case studies, available online at http://www.microsoft.com/windows2000/library/.

About the Supplemental Course Materials CD-ROM

The Supplemental Course Materials compact disc contains a set of the work-sheets in electronic form that may be used in conjunction with the lab sections of this book. See the Readme.txt file in the CD root directory for instructions on how to view and print these worksheets. For more information regarding the contents of this CD-ROM, see the section of this introduction titled "Getting Started."

Features of This Book

Each chapter opens with a "About This Chapter" section, which prepares you for completing the chapter.

► The chapters are then divided into lessons, activities, and labs.

The "Review" section at the end of the chapter allows you to test what you have learned in the chapter's lessons.

The Appendix, "Questions and Answers," contains all the book's questions and corresponding answers.

Notes

Several types of notes appear throughout the lessons.

- Notes marked Tip contain explanations of possible results or alternative methods.
- Notes marked Important contain information that is essential to completing a task.
- Notes marked Note contain supplemental information.
- Notes marked Caution contain warnings about potential problems to look out for.

Conventions

The following conventions are used throughout this book.

Notational Conventions

- Italic in sentences indicates an important term, concept, or information. Italic is also used for book titles and URLs.
- Names of files and folders appear in Title caps.
- File name extensions appear in all lowercase.
- Acronyms appear in all uppercase.
- Icons represent specific sections in the book as follows:

Icon

Represents



A hands-on activity or lab. You should perform the activity or lab to give yourself an opportunity to use the skills being presented in the lesson. The answers to the activity questions are in the Appendix, "Questions and Answers," at the end of the book. Completed sample lab design worksheets are on the Supplemental Course Materials CD-ROM in the Completed Worksheets folder.



Chapter review questions. These questions at the end of each chapter allow you to test what you have learned in the lessons. The answers to the review questions are in the Appendix, "Questions and Answers," at the end of the book.

Fictitious Name Conventions

The content of this training kit requires the use of fictitious company and domain names in fictitious scenarios. This training kit makes every effort to avoid using domain names that represent live Web sites. To accomplish this, each domain name illustrated in the book for fictitious companies uses the nonexistent top-level domain.msft rather than the standard ones of .com or .net. In reality, domain names should represent an organization's identity.

Chapter and Appendix Overview

This self-paced training course combines notes, hands-on activities and labs, professional interviews and worksheets, and review questions to teach you how to evaluate and create networking services designs. Typically, you will use this course by completing the chapters in sequence, from beginning to end. However, you can choose a customized track and complete only the sections that interest you. (See the next section, "Finding the Best Starting Point for You," for more information.) If you choose the customized track option, see the "Before You Begin" section in each chapter. Any labs or chapter that require preliminary work or study from preceding chapters refer to the appropriate chapters.

The book is divided into the following chapters.

The "About This Book" section contains a self-paced training overview and introduces the components of this training. Read this section thoroughly to get the greatest educational value from this self-paced training and to plan which lessons you will complete.

Chapter 1, "Introduction to Networking Services Design," introduces the technologies that comprise a networking services design. In addition, the chapter describes how to create a successful networking services design. Read this chapter to learn what technologies are available and to learn a method for approaching the creation of networking services design.

Chapter 2, "Networking Protocol Design," identifies the design decisions in creating a foundation for the networking services by using Transmission Control Protocol/Internet Protocol (TCP/IP). Many of the networking services utilize TCP/IP exclusively as a transport protocol. Read this chapter to learn how to create TCP/IP designs that will support the Windows 2000 networking services that will, in turn, support your applications.

In Chapter 3, "Multiprotocol Network Design," the discussion turns to the design decisions for other transport protocols, including Internetwork Packet Exchange (IPX), AppleTalk, and System Network Architecture (SNA) protocols. Read this chapter to determine how to create multiprotocol designs to provide integration between systems that use IPX, AppleTalk, and SNA protocols.

Chapter 4, "IP Routing Designs," discusses how to utilize the Internet Protocol (IP) routing capabilities in the Routing and Remote Access feature in Windows 2000. Read this chapter to learn how to create edge of network and internal IP routing designs.

In Chapter 5, "Multiprotocol Routing Designs," the content focuses on how to create routing solutions for IPX and AppleTalk protocols by using the Routing and Remote Access feature in Windows 2000. Read this chapter to determine how to create multiprotocol solutions for edge of network and internal routing solutions.

Chapter 6, "Proxy Server in Internet and Intranet Designs," covers how to provide Internet connectivity by using Microsoft Proxy Server 2.0. Read this chapter to create secure Internet connectivity solutions that scale to large designs and are accessible to users a high percentage of time.

In Chapter 7, "NAT in Internet and Intranet Designs," Internet connectivity is revisited with the NAT protocol in Routing and Remote Access as the technology used to create the solutions. Read this chapter to create Internet connectivity solutions for small offices or home offices (SOHOs).

Chapter 8, "DHCP in IP Configuration Designs," describes how to automate and manage the IP configuration of your network by using the Dynamic Host

Configuration Protocol (DHCP) implementation in Windows 2000. To create designs that reduce IP administration and common IP configuration errors, read this chapter.

Chapter 9, "DNS in Name Resolution Designs," presents the design decisions in creating a Domain Name System (DNS) solution for Windows 2000 networks. DNS is crucial to the proper deployment of Active Directory, Internet connectivity, and extranet connectivity. Read this chapter to learn how to create designs to support Active Directory and to integrate with DNS running on other operating systems (such as Windows NT 4.0 and UNIX).

In Chapter 10, "WINS in Name Resolution Designs," the decisions for creating Network Basic Input Output System (NetBIOS) name resolution designs are presented. Although Windows 2000 no longer requires NetBIOS for file and print services, many applications and earlier versions of Windows operating systems require NetBIOS. Read this chapter when you must create networks that incorporate applications that rely on NetBIOS or that must integrate with versions of Windows operating systems prior to Windows 2000.

In Chapter 11, "Dial-Up Connectivity in Remote Access Designs," the remote access solutions for organizations that want to control every aspect of their remote access connectivity is discussed. Dial-up remote access is the only remote access solution that allows an organization to control all aspects of its remote access design. Read this chapter when you must create solutions for organizations with these requirements.

In Chapter 12, "VPN Connectivity in Remote Access Designs," another type of remote access solution is discussed. Organizations that are willing to outsource the dial-up portion of their remote access solution can utilize virtual private networking (VPN) to provide secured remote connectivity to their private network. Read this chapter to provide remote access solutions when the organization wants to outsource the dial-up portion of its remote access solution, but doesn't want to enter into an agreement with any individual provider.

In Chapter 13, "RADIUS in Remote Access Designs," the remote access solutions are extended by providing enhanced security, administration and management to dial-up or VPN remote access solutions. Organizations might want to outsource their dial-up connectivity while enforcing certain security measures (such as caller-ID or callback). Read this chapter to determine how to provide these enhanced security features, and to reduce the administration and management of all remote access solutions.

Chapter 14, "Monitoring and Managing a Microsoft Windows 2000 Network," discusses the strategies for monitoring and managing the networking services after they are deployed in your network. Read this chapter to identify the critical applications in your network, the networking services that support the critical applications, and how to ensure the networking services are always operating at optimal efficiency to support the critical applications.

Finally, Chapter 15, "Networking Services Design Optimization," discusses the strategies for optimizing your networking services design for applications or to reduce the number of servers in your design. Read this chapter to determine which combinations of networking services can be combined on a single server and how to ensure that applications are supported by the networking services in your designs.

The Appendix, "Questions and Answers," lists all the activity and review questions from the book and shows the suggested answers.

The glossary lists and defines the acronyms and terminology utilized in this book. Read this section to locate the definition for any unfamiliar acronyms or terms.

Finding the Best Starting Point for You

Because this book is self-paced, you can skip some lessons and revisit them later. Use the following table to find the best starting point for you.

If You	Follow This Learning Path		
Are preparing to take the Microsoft Certified Professional exam 70-221, Designing a Microsoft Windows 2000 Network Infrastructure	Read the "Getting Started" section later in this introduction. Then work through Chapters 1 through 15 in order.		
Want to review information about specific topics from the exam	Use the "Where to Find Specific Skills in This Book" section that follows this table.		

Where to Find Specific Skills in This Book

The following tables provide a list of the skills measured on certification exam 70-221, Designing a Microsoft Windows 2000 Network Infrastructure. The table provides the skill and where in this book you will find the lesson relating to that skill.

Note Exam skills are subject to change without prior notice and at the sole discretion of Microsoft.

Analyzing Business Requirements

Skill Being Measured	Location in Book		
Analyze the existing and planned business models			
Analyze the company model and the geographical scope. Models include regional, national, international, subsidiary, and branch offices	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter		
Analyze the company model and the geographical scope. Models include regional, national, international, subsidiary, and branch offices	See the "Making the Decision" and "Applying The Decision" sections for each design topic in each chapter		

Analyze company processes. Processes include information flow, communication flow, service and product lifecycles, and decision-making See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter

Analyze the existing and planned organizational structures

Consider management model; company organization; vendor, partner, and customer relationships; and acquisition plans

See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter

Analyze factors that influence company strategies

Identify company priorities	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Identify the projected growth and growth strategy	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Identify relevant laws and regulations	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Identify the company's tolerance for risk	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Identify the total cost of operations	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter

Analyze the structure of IT management

Consider type of administration, such ascentralized type or decentralized; funding model; outsourcing; decision-making process; and change-management process See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter

Analyzing Technical Requirements

Skill Being	Measured	Location	in	Be	ook

Skin being Measured	Location in Dook	
Evaluate the company's existing and planned technical environment and goals		
Analyze company size and user and resource distribution	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter	
Assess the available connectivity between the geographic location of worksites and remote sites	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter	
Assess net available bandwidth and latency issues	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter	

Analyze performance, availability, and scalability requirements of service	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Analyze data and system access patterns	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Analyze network roles and responsibilities	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Analyze security considerations	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Analyze the impact of infrastructure environment	design on the existing and planned technical
Assess current applications	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Analyze network infrastructure, protocols, and hosts	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Evaluate network services	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Analyze TCP/IP infrastructure	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
Assess current hardware	See the "Making the Decision" and "Applying

Analyze	technical	support	structure

in each chapter

See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter

the Decision" sections for each design topic

See the "Making the Decision" and "Applying

See the "Making the Decision" and "Applying the Decision" sections for each design topic

the Decision" sections for each design topic

Analyze existing and planned network and systems management

Identify existing and planned

upgrades and rollouts

Analyze the network requirements for client computer access

Analyze end-user work needs	See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter
	cach chapter

in each chapter

in each chapter

Analyze end-user usage patterns

See the "Making the Decision" and "Applying the Decision" sections for each design topic in each chapter

Analyze the existing disaster recovery strategy for client computers, servers, and the network

Skill Being Measured	Location in Book
Modify and design a network topology	Chapter 2: Lessons 1-
Design a TCP/IP networking strategy	
Analyze IP subnet requirements	Chapter 2: Lesson 2
Design a TCP/IP addressing and implementation plan	Chapter 2: Lesson 2
Measure and optimize a TCP/IP infrastructure design	Chapter 2: Lesson 4
Integrate software routing into existing networks	Chapter 4: Lessons 1-4
Integrate TCP/IP with existing WAN requirements	Chapter 4: Lessons 1-4
Design a DHCP strategy	
Integrate DHCP into a routed environment	Chapter 8: Lesson 1 Chapter 8: Lesson 2
Integrate DHCP with Windows 2000	Chapter 8: Lesson 1 Chapter 8: Lesson 2
Design a DHCP service for remote locations	Chapter 8: Lesson 1 Chapter 8: Lesson 2
Measure and optimize a DHCP infrastructure design	Chapter 8: Lesson 4
Design name resolution services	
Create an integrated DNS design	Chapter 9: Lesson 1 Chapter 9: Lesson 2
Create a secure DNS design	Chapter 9: Lesson 3
Create a highly available DNS design	Chapter 9: Lesson 4
Measure and optimize a DNS infrastructure design	Chapter 9: Lesson 4
Design a DNS deployment strategy	Chapter 9: Lessons 1-4
Create a Windows Internet Name Service (WINS) design	Chapter 10: Lessons 1-4
Create a secure WINS design	Chapter 10: Lesson 3
Measure and optimize a WINS infrastructure design	Chapter 10: Lesson 4
Design a WINS deployment strategy	Chapter 10: Lessons 1-4
Design a multiprotocol strategy	-
Protocols include IPX/SPX and SNA	Chapter 3: Lessons 1-4 Chapter 5: Lessons 1-3

Design the placement of a Dfs root	Chapter 14: Lesson 1 Chapter 15: Lesson 1
Design a Dfs root replica strategy	Chapter 14: Lesson 1 Chapter 15: Lesson 1
Designing for Internet Connectivity	
Skill Being Measured	Location in Book
Design an Internet and extranet access solution	Chapter 4: Lessons 1-4
Components of the solution can include proxy server,	Chapter 5: Lessons 1-4
firewall, routing and remote access, Network Address	Chapter 6: Lessons 1-4
Translation (NAT), connection sharing, Web server, or mail server.	Chapter 7: Lessons 1-4
Design a load-balancing strategy.	Chapter 4: Lesson 4
	Chapter 5: Lesson 4
	Chapter 6: Lesson 4
	Chapter 8: Lesson 4
	Chapter 9: Lesson 4
	Chapter 10: Lesson 4
	Chapter 11: Lesson 4
	Chapter 12: Lesson 4
	Chapter 13: Lesson 4
	Chapter 15: Lesson 3
Designing a Wide Area Network Infrastructure	
<u> </u>	
Skill Being Measured	Location in Book
Skill Being Measured	
Skill Being Measured Design an implementation strategy for dial-up remote	access
Skill Being Measured Design an implementation strategy for dial-up remote Design a remote access solution that uses Routing	Access Chapter 11: Lessons 1-4
Skill Being Measured Design an implementation strategy for dial-up remote Design a remote access solution that uses Routing	Chapter 11: Lessons 1-4 Chapter 12: Lessons 1-4
Skill Being Measured Design an implementation strategy for dial-up remote Design a remote access solution that uses Routing	Access Chapter 11: Lessons 1-4
Design an implementation strategy for dial-up remote Design a remote access solution that uses Routing and Remote Access Integrate authentication with Remote Authentication	Chapter 11: Lessons 1-4 Chapter 12: Lessons 1-4 Chapter 13: Lessons 1
Skill Being Measured Design an implementation strategy for dial-up remote Design a remote access solution that uses Routing and Remote Access Integrate authentication with Remote Authentication Dial-In User Service (RADIUS)	Chapter 11: Lessons 1-4 Chapter 12: Lessons 1-4 Chapter 13: Lessons 1 Chapter 11: Lessons 1-4 Chapter 13: Lessons 1-4
	Chapter 11: Lessons 1-4 Chapter 12: Lessons 1-4 Chapter 13: Lessons 1 Chapter 11: Lessons 1-4

Design a Distributed file system (Dfs) strategy

Designing a Management and Implementation Strategy for Windows 2000 Networking

Skill Being Measured	Location in Book		
Design a strategy for monitoring and managing Windows 2000 network services.			
Services include global catalog, Lightweight Directory Access Protocol (LDAP) services, Certificate Services, DNS, DHCP, WINS, Routing and Remote Access, Proxy Server, and Dfs.	Chapter 14: Lessons 1-2		
Design network services that support application architecture	Chapter 15: Lesson 1		
Design a plan for the interaction of Windows 2000 network services such as WINS, DHCP, and DNS Design a resource strategy	Chapter 4: Lesson 1 Chapter 5: Lesson 1 Chapter 6: Lesson 1 Chapter 7: Lesson 1 Chapter 8: Lesson 1 Chapter 9: Lesson 1 Chapter 10: Lesson 1 Chapter 11: Lesson 1 Chapter 12: Lesson 1 Chapter 13: Lesson 1 Chapter 13: Lesson 1 Chapter 15: Lesson 1		
Plan for the placement and management of resources	Chapter 15: Lessons 1-3 See the "Making the Decision" and "Applying the Decision" sections for each design decision in each chapter.		
Plan for growth	Chapter 15: Lessons 1-3 See the "Making the Decision" and "Applying the Decision" sections for each design decision in each chapter.		
Plan for decentralized resources or centralized resources	Chapter 15: Lessons 1-3 See the "Making the Decision" and "Applying the Decision" sections for each design decision in each chapter.		

Getting Started

This self-paced training course contains activities and labs to help you learn about designing Microsoft Windows 2000 networking services. The focus of this self-paced training course is design, so the activities and labs that you complete

will require you to evaluate the requirements of an organization and then create a design that meets the organization's requirements.

Software Requirements

A copy of the 120-day evaluation edition of Microsoft Windows 2000 Advanced Server isn't required to do the activities and labs in this course.

Caution The 120-day Evaluation Edition of Windows 2000 Advanced Server provided with this training isn't the full retail product and is provided only for training purposes. Microsoft Technical Support doesn't support this evaluation edition. For additional support information regarding this book and the CD-ROMs (including answers to commonly asked questions about installation and use), visit the Microsoft Press Technical Support Web site at http://mspress.microsoft.com/support/. You can also e-mail TKINPUT@MICROSOFT.COM or send a letter to Microsoft Press, Attn: Microsoft Press Technical Support, One Microsoft Way, Redmond, WA 98502-6399.

Setup Instructions

The following information is a checklist of the tasks you need to perform to prepare your computer to install the evaluation software. If you don't have experience installing Windows 2000 or another network operating system, you might need help from an experienced network administrator. As you complete a task, mark it off in the check box. Step-by-step instructions for each task follow.

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Create Windows 2000 Advanced Server setup diskettes.
Run the Windows 2000 Advanced Server Pre-Copy and Text Mode Setup Routine.
Run the graphical user interface (GUI) mode and gathering information phase of Windows 2000 Advanced Server Setup.
Complete the Installing Windows Networking Components phase of Windows 2000 Advanced Server Setup.
Complete the hardware installation phase of Windows 2000 Advanced Server Setup.

Note The installation information provided will help you prepare a computer with the evaluation software. It isn't intended to teach you installation.

Installing Windows 2000 Advanced Server

Install Windows 2000 Advanced Server on a computer with no formatted partitions. During installation, you can use the Windows 2000 Advanced Server Setup program to create a partition on your hard disk, on which you install Windows 2000 Advanced Server as a stand-alone server in a workgroup.