

Microsoft Windows NT Server 4.0 Exam Objectives

B

Exam 70-67: Implementing and Supporting Microsoft Windows NT Server 4.0

This appendix consists of four parts:

- The first part contains portions of Microsoft's *Preparation Guide for Exam 70-67: Implementing and Supporting Microsoft Windows NT Server 4.0*, including a complete list of this exam's objectives.
- The second part lists the basic facts for this exam, including the number of questions, passing score, and time allowed to take the exam.
- The third part is an exhaustive exam objectives cross-reference chart for study purposes. Every exam objective is linked to the corresponding materials (text and labs) in this book.
- The fourth part is a quick-reference chart listing the chapters and labs in this book that you should read and study to prepare for the exam.



web links

This exam information is current as of the date this book went to press, but is subject to change by Microsoft at any time. You can ensure that you have the most current version of this exam's objectives by accessing the Microsoft Training and Certification Web site at: www.microsoft.com/train_cert/

Credit Toward Certification

A passing score on this exam counts as core credit toward *Microsoft Certified Systems Engineer* certification and as core credit toward *Microsoft Certified Product Specialist* certification.

Skills Measured

The *Implementing and Supporting Microsoft Windows NT Server 4.0* certification exam measures your ability to implement, administer, and troubleshoot information systems that incorporate Windows NT Server 4.0 in a simple computing environment. A simple computing environment is typically a homogeneous LAN. It might include one or more servers, a single domain, and a single location; and it might have file-sharing and print-sharing capabilities. Before taking the exam, you should be proficient in the following job skills.

Exam Objectives

Planning

- Plan the disk drive configuration for various requirements. Requirements include choosing a file system and choosing a fault-tolerance method.
- Choose a protocol for various situations. Protocols include TCP/IP, NWLink IPX/SPX Compatible Transport, and NetBEUI.

Installation and Configuration

- Install Windows NT Server on Intel-based platforms.
- Install Windows NT Server to perform various server roles. Server roles include primary domain controller, backup domain controller, and member server.

- Install Windows NT Server by using various methods. Installation methods include CD-ROM, over-the-network, Network Client Administrator, and express versus custom.
- Configure protocols and protocol bindings. Protocols include TCP/IP, NWLink IPX/SPX Compatible Transport, and NetBEUI.
- Configure network adapters. Considerations include changing IRQ, IObase, memory addresses, and configuring multiple adapters.
- Configure Windows NT Server core services. Services include Directory Replicator, License Manager, and other services.
- Configure peripherals and devices. Peripherals and devices include communication devices, SCSI devices, tape device drivers, UPS devices and UPS service, mouse drivers, display drivers, and keyboard drivers.
- Configure hard disks to meet various requirements. Requirements include allocating disk space capacity, providing redundancy, improving performance, providing security, and formatting.
- Configure printers. Tasks include adding and configuring a printer, implementing a printer pool, and setting print priorities.
- Configure a Windows NT Server computer for various types of client computers. Client computer types include Windows NT Workstation, Microsoft Windows 95, and Microsoft MS-DOS-based.

Managing Resources

- Manage user and group accounts. Considerations include managing Windows NT user accounts, managing Windows NT user rights, managing Windows NT groups, administering account policies, and auditing changes to the user account database.
- Create and manage policies and profiles for various situations. Policies and profiles include local user profiles, roaming user profiles, and system policies.
- Administer remote servers from various types of client computers. Client computer types include Windows 95 and Windows NT Workstation.
- Manage disk resources. Tasks include copying and moving files between file systems, creating and sharing resources, implementing permissions and security, and establishing file auditing.

Connectivity

- Configure Windows NT Server for interoperability with NetWare servers by using various tools. Tools include Gateway Service for NetWare and Migration Tool for NetWare.
- Install and configure Remote Access Service (RAS). Configuration options include configuring RAS communications, configuring RAS protocols, configuring RAS security, and configuring Dial-Up Networking clients.

Monitoring and Optimization

- Monitor performance of various functions by using Performance Monitor. Functions include processor, memory, disk, and network.
- Identify performance bottlenecks.

Troubleshooting

- Choose the appropriate course of action to take to resolve installation failures.
- Choose the appropriate course of action to take to resolve boot failures.
- Choose the appropriate course of action to take to resolve configuration errors.
- Choose the appropriate course of action to take to resolve printer problems.
- Choose the appropriate course of action to take to resolve RAS problems.
- Choose the appropriate course of action to take to resolve connectivity problems.
- Choose the appropriate course of action to take to resolve resource access problems and permission problems.
- Choose the appropriate course of action to take to resolve fault-tolerance failures. Fault-tolerance methods include tape backup, mirroring, stripe set with parity, and disk duplexing.

Exam Facts

| | |
|-----------------------------------|------------|
| Number of questions on this exam: | 55 |
| Passing score: | 764 |
| Time allowed to take exam: | 90 minutes |

Exam Objectives Cross-Reference Chart for Study Purposes

Table B-1 lists the stated objectives for Exam 70-67, Implementing and Supporting Microsoft Windows NT Server 4.0, in a cross-reference chart for study purposes. Use this table to help you determine the specific chapters in this book that you should study, as well as the labs that you should perform to prepare for the exam.

TABLE B-1 NT SERVER 4.0 EXAM OBJECTIVES CROSS-REFERENCE CHART

| <i>EXAM OBJECTIVE</i> | <i>CHAPTER(S)</i> | <i>LAB(S) (IF APPLICABLE)</i> |
|--|---------------------------|----------------------------------|
| Planning | | |
| Plan the disk drive configuration for various requirements. Requirements include choosing a file system and choosing a fault-tolerance method. | Chapter 3, pages 69–99 | Review Activities, pages 110–112 |
| Choose a protocol for various situations. Protocols include TCP/IP, NWLink IPX/SPX Compatible Transport, and NetBEUI. | Chapter 2, pages 40–42 | None |
| | Chapter 4, pages 132–137 | |
| | Chapter 16, pages 585–586 | |
| | Chapter 17, pages 645–653 | |

continued

TABLE B-1 (continued)

| <i>EXAM OBJECTIVE</i> | <i>CHAPTER(S)</i> | <i>LAB(S) (IF APPLICABLE)</i> |
|---|---|-------------------------------|
| Installation and Configuration | | |
| Install Windows NT Server on Intel-based platforms. | Chapter 2, pages 27–50 | Lab 2.2 |
| | | Lab 10.15 |
| Install Windows NT Server to perform various server roles. Server roles include primary domain controller, backup domain controller, and member server. | Chapter 2, pages 36 – 37, 49 Chapter 4, pages 128–132 | Lab 2.2 |
| | | Lab 10.15 |
| Install Windows NT Server using various methods. Installation methods include CD-ROM, over-the-network, Network Client Administrator, and express versus custom. | Chapter 2, pages 45–47 Chapter 5, pages 175–189 | Lab 2.2 |
| | | Lab 10.15 Lab 5.7 |
| Configure protocols and protocol bindings. Protocols include TCP/IP, NWLink IPX/SPX Compatible Transport, and NetBEUI. | Chapter 4, pages 132–142 Chapter 16, pages 586–589, 592-595 Chapter 17, pages 650–653 | Lab 16.27 |
| | | Lab 17.30 |
| | | |
| Configure network adapters. Considerations include changing IRQ, IObase, memory addresses, and configuring multiple adapters. | Chapter 4, pages 127–128, 144 – 148 | Lab 2.2 |
| | | Lab 16.27 |
| Configure Windows NT Server core services. Services include Directory Replicator, License Manager, and other services. | Chapter 4, pages 127–128, 144 – 148 Chapter 13, pages 521–524 Chapter 25, pages 912-914 | Lab 4.5 |
| | | Lab 13.21 |
| | | |
| Configure peripherals and devices. Peripherals and devices include communication devices, SCSI devices, tape device drivers, UPS devices and UPS service, and mouse drivers, display drivers, and keyboard drivers. | Chapter 4, pages 119–127 | Lab 4.6 |

| <i>EXAM OBJECTIVE</i> | <i>CHAPTER(S)</i> | <i>LAB(S) (IF APPLICABLE)</i> |
|---|---------------------------|---|
| Configure hard disks to meet various requirements. Requirements include allocating disk space capacity, providing redundancy, improving performance, providing security, and formatting. | Chapter 3, pages 69–99 | Lab 3.3 Review Activities, pages 110–112 |
| Configure printers. Tasks include adding and configuring a printer, implementing a printer pool, and setting print priorities. | Chapter 6, pages 201–243 | Lab 6.8 Lab 6.9 |
| Configure a Windows NT Server computer for various types of client computers. Client computer types include Windows NT Workstation, Microsoft Windows 95, and Microsoft MS-DOS-based. | Chapter 5, pages 175–182 | None |
| Managing Resources | | |
| Manage user and group accounts. Considerations include managing Windows NT user accounts, managing Windows NT user rights, managing Windows NT groups, administering account policies, and auditing changes to the user account database. | Chapter 7, pages 261–301 | Lab 7.10 |
| | Chapter 8, pages 305–331 | Lab 8.11 |
| | | Lab 8.12 |
| Create and manage policies and profiles for various situations. Policies and profiles include local user profiles, roaming user profiles, and system policies. | Chapter 9, pages 335–359 | Lab 9.13 Lab 9.14 |
| Administer remote servers from various types of client computers. Client computer types include Windows 95 and Windows NT Workstation. | Chapter 14, pages 541–558 | Lab 14.23 |

continued

TABLE B-1 (continued)

| <i>EXAM OBJECTIVE</i> | <i>CHAPTER(S)</i> | <i>LAB(S) (IF APPLICABLE)</i> |
|---|--|-------------------------------|
| Manage disk resources. Tasks include copying and moving files between file systems, creating and sharing resources, implementing permissions and security, and establishing file auditing. | Chapter 12, pages 451–489 | Lab 12.18 Lab 12.19 |
| Connectivity | | |
| Configure Windows NT Server for interoperability with NetWare servers by using various tools. Tools include Gateway Service for NetWare and Migration Tool for NetWare. | Chapter 17, pages 645–658, 662–672 Chapter 18, pages 685–704 | Lab 17.30 |
| Install and configure Remote Access Service (RAS). Configuration options include configuring RAS communications, configuring RAS protocols, configuring RAS security, and configuring Dial-Up Networking clients. | Chapter 19, pages 707–741 | Lab 19.32 |
| Monitoring and Optimization | | |
| Monitor performance of various functions by using Performance Monitor. Functions include processor, memory, disk, and network. | Chapter 22, pages 809–845 | Lab 22.35 |
| Identify performance bottlenecks. | Chapter 25, pages 903–921 | Lab 25.37 |
| Troubleshooting | | |
| Choose the appropriate course of action to take to resolve installation failures. | Chapter 2, pages 52–53 Chapter 26, pages 925–938 | Review Activity, page 56 |

| <i>EXAM OBJECTIVE</i> | <i>CHAPTER(S)</i> | <i>LAB(S) (IF APPLICABLE)</i> |
|--|-----------------------------------|-----------------------------------|
| Choose the appropriate course of action to take to resolve boot failures. | Chapter 27, pages 941–949 | None |
| | Chapter 26, pages 925–938 | |
| Choose the appropriate course of action to take to resolve configuration errors. | Chapter 4, pages 156–157 | None |
| | Chapter 26, pages 925–938 | |
| Choose the appropriate course of action to take to resolve printer problems. | Chapter 6, pages 243–245 | Review Activity, pages 252–253 |
| | Chapter 26, pages 925–938 | |
| Choose the appropriate course of action to take to resolve RAS problems. | Chapter 19, pages 742–743 | Review Activity, pages 748–749 |
| | Chapter 26, pages 925–938 | |
| Choose the appropriate course of action to take to resolve connectivity problems. | Chapter 16, pages 626–627 | Lab 16.28 |
| | Chapter 17, pages 672–673 | |
| | Chapter 26, pages 925–938 | |
| Choose the appropriate course of action to take to resolve resource access problems and permission problems. | Chapter 12, page 490 | Lab 12.20 |
| | Chapter 26, pages 925–938 | |
| Choose the appropriate course of action to take to resolve fault-tolerance failures. Fault-tolerance methods include tape backup, mirroring, stripe set with parity, and disk duplexing. | Chapter 3, pages 100–107 | Lab 3.4 |
| | Chapter 15, pages 559–579 | Lab 15.24 |
| | Chapter 27, pages 946–949, 963 | |
| | Chapter 26, pages 925–938 | |

Quick Reference – Chapters and Labs That Prepare You for the Windows NT Server 4.0 Exam

Table B-2 lists the specific chapters you should read and study, as well as the labs that you should perform, to prepare for Exam 70-67, *Implementing and Supporting Microsoft Windows NT Server 4.0*. With the exception of Chapter 1, which provides basic Windows NT information, each of these chapters and labs corresponds directly to the exam objectives listed in the previous section.

TABLE B-2 CHAPTERS AND LABS THAT PREPARE YOU FOR THE WINDOWS NT SERVER 4.0 EXAM

| <i>CHAPTER NUMBER</i> | <i>CHAPTER TITLE</i> | <i>APPLICABLE LAB(S) IN THIS CHAPTER</i> |
|-----------------------|--|--|
| Chapter 1 | Overview of Windows NT Workstation and Windows NT Server | None |
| Chapter 2 | Installing Windows NT Workstation and Windows NT Server | Lab 2.1 (Note: Lab 2.1 is not required to meet the exam objectives covered in this chapter; however, it is required to perform some of the later labs.) Lab 2.2, Review Activity: Installing Windows NT troubleshooting practice exercise |
| Chapter 3 | Configuring Disks | Lab 3.3, Lab 3.4, Review Activities: File system planning exercise, Disk partitioning and fault tolerance planning exercise |
| Chapter 4 | Using Control Panel | Lab 4.5, Lab 4.6 |
| Chapter 5 | Server-Based Deployment | Lab 5.7 |

| <i>CHAPTER NUMBER</i> | <i>CHAPTER TITLE</i> | <i>APPLICABLE LAB(S) IN THIS CHAPTER</i> |
|---------------------------|--|---|
| Chapter 6 | Managing Printing | Lab 6.8, Lab 6.9, Review Activity: Windows NT printing troubleshooting exercise |
| Chapter 7 | Managing User and Group Accounts | Lab 7.10 |
| Chapter 8 | Managing Account Policy, User Rights, and Auditing | Lab 8.11, Lab 8.12 |
| Chapter 9 | Managing User Profiles and System Policy | Lab 9.13, Lab 9.14 |
| Chapter 12 | Sharing and Securing File Systems | Lab 12.18, Lab 12.19, Lab 12.20 |
| Chapter 13 | Accessing Resources on the Network | Lab 13.21 |
| Chapter 14 | Using Windows NT Server Tools | Lab 14.23 |
| Chapter 15 | Backing Up and Restoring Data | Lab 15.24 |
| Chapter 16 | Networking Using TCP/IP | Lab 16.27, Lab 16.28 |
| Chapter 17 | Coexistence with NetWare | Lab 17.30 |
| Chapter 18 | Migrating to Windows NT from NetWare | None |
| Chapter 19 | Installing and Configuring Remote Access Service (RAS) | Lab 19.32, Review Activity: Troubleshooting common RAS problems |
| Chapter 22 | Using Performance Monitor | Lab 22.35 |
| Chapter 25 | Performance Optimization | Lab 25.37 |
| Chapter 26 | The Troubleshooting Process | None |
| Chapter 27 | Advanced Troubleshooting Topics | None |
