# MCSE:
# Internet Information
# Server 4 考试指南

（英文原版）

**MCSE Test Success:
Internet Information
Server 4**

微软认证的系
统工程师系列
丛书之十三

〔美〕 LISA DONALD 著

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Internet Information Server 4

# MCSE: Internet Information Server 4 考试指南（英文原版）

〔美〕　LISA DONALD　著

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# 微软认证考试系列丛书出版说明

当前，计算机系统的开发、管理、使用及维护需要大量不同层次的专业技术人员，评价各种技术人员的水平是一件既复杂又必不可少的工作。为考查、评测有关人员对微软操作系统、软件和网络系统的理解和熟练使用程度，Microsoft公司设计了如下几种认证考试方案：

Microsoft Certified Professional（MCP，微软认证专业人员）

Microsoft Certified Solution Developer（MCSD，微软认证软件开发专家）

Microsoft Certified System Engineer（MCSE，微软认证系统工程师）

Microsoft Certified Trainer（MCT，微软认证培训员）

为帮助国内的技术人员学好、用好微软的产品，顺利通过有关的考试，我们分别以翻译和英文原版重印的形式推出了"MCSE学习指南系列"（中文译本）、" MCSE考试指南系列"（英文原版）和"MCSD学习指南系列"（英文原版）三个系列书。

## MCSE考试

MCSE是Microsoft Certified Systems Engineer（微软认证系统工程师）的缩写形式。MCSE证书意味着持有者具有较高层次的Windows NT、微软操作系统和相关产品的知识。获得MCSE证书需要有良好的计算机基础知识，还需要对操作系统、网络系统和信息化产品有深刻全面的了解，需要经过认真甚至是艰苦的学习和实践过程。由于该证书取之不易，一旦获得便足以说明证书持有者的技术水平，所以该证书得到了普遍的认可，几乎成为许多国外大公司录用人员、提升职务，甚至是提高薪金的依据，所以MCSE考生人数逐年上升。

要获得MCSE证书，需要通过4项必考科目和两项自选科目考试。具体情况如下：

**表0.1 MCSE考试内容与可选科目**

| 必考科目 | 考试内容 | 可选择科目 |
| --- | --- | --- |
| #1 | 网络操作系统 | Windows NT Server 3.51或Windows NT 4.0 |
| #2 | 企业网系统应用 | Windows NT Server（3.51或4.0）in the Enterprise |
| #3 | 网络基础知识 | Networking Essentials |
| #4 | 微软操作系统知识 | Windows 3.1、Windows 3.11 for Workgroups |
|  |  | Windows 95/98、Windows NT Workstation |
| **自选科目** | **考试内容** | **可选择科目** |
| #5 | 微软信息服务器产品 | SQL Server、SNA Server、Exchange Server或 |
|  |  | Internet Information Server等十余个科目 |
| #6 | 微软公司有关TCP/IP | TCP/IP |
|  | 方面的产品 |  |

注释：表中号码#1、#2等仅为叙述方便，与微软考试科目编号无关

为配合国内读者学习掌握计算机基础知识、操作系统、网络系统及信息化产品，我们推出了两套MCSE考试系列丛书，即：

- MCSE学习指南系列（中文译本），目前推出8种
- MCSE考试指南系列（英文原版），目前也推出8种

## MSCE学习指南系列

由于MCSE考试的技术水平高，要求考生概念清晰、基础知识牢固、能灵活地运用所学知识，并具有丰富的实践经验。显而易见，MCSE的学习、考试用书也应具备上述特点，介绍MCSE的书籍不但适用于MCSE考生，同时也适用于希望学习、掌握相关知识的普通技术人员。为此我们翻译了本系列丛书，并首先推出其中的八本，具体如下：

**表0.2　MCSE系列丛书（学习指南系列）**

| 中文书名 | 丛书编号 | 适用的考试科目 |
| --- | --- | --- |
| MCSE：Windows NT Server 4学习指南 | MCSE系列丛书之一 | 表0.1 #1 |
| MCSE：NT Server 4 in the Enterprise学习指南 | MCSE系列丛书之二 | 表0.1 #2 |
| MCSE：网络基础学习指南 | MCSE系列丛书之三 | 表0.1 #3 |
| MCSE：Windows NT Workstation学习指南 | MCSE系列丛书之四 | 表0.1 #4 |
| MCSE：Windows 95学习指南 | MCSE系列丛书之五 | 表0.1 #4 |
| MCSE：TCP/IP学习指南 | MCSE系列丛书之六 | 表0.1 #6 |
| MCSE：Microsoft Internet Information Server学习指南 | MCSE系列丛书之七 | 表0.1 #5 |
| MCSE：Windows 98学习指南 | MCSE系列丛书之十六 | 表0.1 #4 |

## MCSE考试指南系列

如果说学习指南系列的特点是，十分注重原理介绍、概念阐述和外沿知识的说明；那么，新的考试指南系列则注意了必须了解的知识、结论，强调了正确的操作方法和实际处理问题的能力，同时介绍了许多MCSE考试的经验和技巧，并附有考试例题。

考虑到考试指南系列书注重结论、致力于支持读者通过MCSE考试等特点，加之MCSE考生英语水平普遍很高（考试本身需用英语完成），我们以英文重印形式推出了七本考试指南系列书，详见表0.3所示。

**表0.3　MCSE系列丛书（考试指南系列）**

| 中文书名 | 丛书编号 | 适用的考试科目 |
| --- | --- | --- |
| MCSE：NT Server 4考试指南 | MCSE系列丛书之八 | 表0.1 #1 |
| MCSE：NT Server 4 in the Enterprise考试指南 | MCSE系列丛书之九 | 表0.1 #2 |
| MCSE：Networking Essentials考试指南 | MCSE系列丛书之十 | 表0.1 #3 |
| MCSE：NT Workstation 4考试指南 | MCSE系列丛书之十一 | 表0.1 #4 |
| MCSE：TCP/IP for NT Server 4考试指南 | MCSE系列丛书之十二 | 表0.1 #6 |
| MCSE：Internet Information Server 4考试指南 | MCSE系列丛书之十三 | 表0.1 #5 |
| MCSE：SQL Server 7 Admin. 考试指南 | MCSE系列丛书之十四 | 表0.1 #5 |
| ＊MCSE：Windows 98考试指南 | MCSE系列丛书之十五 | 表0.1 #4 |

# MCSD考试

持有MCSD证书，说明持有者具有熟练使用微软操作系统、开发工具和相关技术的能力。因而许多MCSE考生把MCSD考试作为MCSE考试的准备阶段，或者在获取了MCSE证书后再考取MCSD证书。要获取MCSD证书，需要通过如下四种考试（见表0.4）：

**表0.4 MCSD必考科目与可选科目**

| 必考科目 | 考试内容 | 可选择内容 |
|---|---|---|
| #1 | Windows Architecture I | / |
| #2 | Windows Architecture II | / |

| 自选科目 | 考试内容 | 可选择内容 |
|---|---|---|
| #3 | 编程语言 | Microsoft Visual Basic 5.0 |
| | | Developing application With C++ and MFC |
| #4 | 数据库编程 | Microsoft Access for Windows 95 |
| | | Implementing a Database Design on Microsoft SQL Server 6.5 |
| | | Microsoft FoxPro 3.0 |

## MCSD学习指南系列

为配合广大读者学习MCSD方面的知识，考取MCSD证书，我们以英文重印形式，首先推出六本MCSD学习指南系列书，见表0.5。

**表0.5 MCSD系列丛书（学习指南系列）**

| 中文书名 | 丛书编号 | 适用的考试科目 |
|---|---|---|
| MCSD：Windows Architecture I学习指南 | MCSD系列丛书之一 | 表0.4 #1 |
| MCSD：Windows Architecture II学习指南 | MCSD系列丛书之二 | 表0.4 #2 |
| MCSD：Visual Basic 5 学习指南 | MCSD系列丛书之三 | 表0.4 #3 |
| MCSD：SQL Server 6.5 Database Design学习指南 | MCSD系列丛书之四 | 表0.4 #4 |
| * MCSD：Analyzing Requirements and Defining Solution Architecture学习指南 | MCSD系列丛书之五 | 表0.4 #4 |
| * MCSD：Visual Basic 6 Dirstributed Applications学习指南 | MCSD系列丛书之六 | 表0.4 #3 |

注：出版说明中书名前面带*号者，为近期推出

由于采用"重印"方式，即从SYBEX公司购买版权，同时获取该书的文本文件和图形文件，在国内重新排版印刷，这样做的优势在于：

- 降低了图书价格，重印书比原版图书便宜许多。
- 缩短了制作周期，重印书与原版书的"出版时差"不足两个月。
- 提高了制作质量，使用原文件排版，印刷质量明显优于各种影印外文原版书。

综上诸多优势，不难想象，重印系列书会受到广大读者的欢迎。

最后，向支持和喜爱我们图书的广大读者表示感谢，并肯请读者对书中存在的问题提出批评和指正。

*For the Rickster. The hard work is done, now it's time to play. This is also for all of those who want to be MCSEs. If you are ready for your elective exam, you are almost there!*

## Acknowledgments

This book has really been a team effort. Thanks to Bonnie Bills of Sybex who developed the Test Success series. She has been very supportive of the entire project and has been especially patient in seeing this book done.

Lisa Duran was the project editor and did a fabulous job of keeping this book on track. She was wonderful to work with and was able to keep me sane through everything.

Andy Carroll was the editor, and Matt Fiedler was the technical editor. These guys have been real troopers through all the different iterations of the many units that were submitted, reviewed, and re-reviewed. Both did a great job editing and made the book clearer and easier to read. Andy, thank you for your patience! Matt, especially, did a good job of keeping us honest on some of the technical details. In addition, this book went through a second technical edit from Don Fuller. Thanks, Don, for taking a final "peek" and making sure we sent out the best book possible.

Thanks to Ron Reimann, who was able to come in and pinch-hit when the dealine was crashing in on my head. The work seen in Units 4 and 5 is his contribution. I also want to thank Peter Henneberry of Hewlett-Packard for his early contribution to the development of this book. His work provided the basis for Units 3 and 6 and was highly appreciated.

In addition, Jefferson McClure was the production coordinator and Bill Gibson was the desktop publisher. Everyone did a great job. Thank you.

# Introduction

**O**ne of the greatest challenges facing corporate America today is finding people who are qualified to manage corporate computer networks. Many companies have Microsoft networks, which run Windows 95, Windows NT, and other Microsoft BackOffice products (such as Microsoft SQL Server and Systems Management Server).

Microsoft developed its Microsoft certification program to certify those people who have the skills to work with Microsoft products and networks. The most highly coveted certification is the MCSE, or Microsoft Certified Systems Engineer.

Why become an MCSE? The main benefits are that you will have much greater earning potential and that an MCSE carries high industry recognition. Certification can be your key to a new job or a higher salary—or both.

So what's stopping you? If it's because you don't know what to expect from the tests or you are worried that you might not pass, then this book is for you.

## Your Key to Passing Exam 70-087

This book provides you with the key to passing Exam 70-087, Implementing and Supporting Microsoft Internet Information Server 4.0. Inside, you'll find *all* the information relevant to this exam, including hundreds of practice questions, all designed to make sure that when you take the real exam, you are ready for even the most particular questions.

### Understand the Exam Objectives

In order to help you prepare for certification exams, Microsoft provides a list of exam objectives for each test. This book is structured according to the objectives for Exam 70-087, designed to test your ability to implement, administer, and troubleshoot information systems that incorporate Microsoft Internet Information Server version 4.0.

At-a-glance review sections and more than 240 study questions bolster your knowledge of the information relevant to each objective and the exam itself. You learn exactly what you need to know without wasting time on background material or detailed explanations.

This book prepares you for the exam in the shortest amount of time possible—although to be ready for the real world, you need to study the subject in greater depth and get a good deal of hands-on practice.

### Get Ready for the Real Thing

More than 150 sample test questions prepare you for the test-taking experience. These are multiple-choice questions that resemble actual exam questions—some are even more difficult than what you'll find on the exam. If you can pass the Sample Tests at the end of each unit and the Final Review at the end of the book, you'll know you're ready.

## A New Kind of Exam

Implementing and Supporting Microsoft Internet Information Server 4.0 uses a combination of multiple choice and new simulative questions. The simulative questions use a simulation version of Microsoft Management Console to test your ability to perform common administrative tasks. This is Microsoft's way of testing that candidates know how to use a product in the real world, and not just on paper.

Out of the exam's approximately 55 questions, 8 to 10 will be simulative. So to be well-prepared for the exam, in addition to studying, you'll need to install and play with the software specified in the test objectives.

## Is This Book for You?

This book is intended for those who already have some experience with Microsoft Internet Information Server and the products and services that enhance IIS. It is especially well suited for:

- Students using courseware or taking a course to prepare for the exam and who need to supplement their study material with test-based practice questions.
- Network engineers who have worked with the product, but want to make sure there are no gaps in their knowledge.
- Anyone who has studied for the exams—by using self-study guides, by participating in computer-based training or classes, or by getting on the-job experience—and wants to make sure that they're adequately prepared.

## Understanding Microsoft Certification

Microsoft offers several levels of certification for anyone who has or is pursuing a career as a network professional working with Microsoft products:

- Microsoft Certified Professional (MCP)
- Microsoft Certified Systems Engineer (MCSE)
- Microsoft Certified Professional + Internet
- Microsoft Certified Systems Engineer + Internet
- Microsoft Certified Trainer (MCT)

The one you choose depends on your area of expertise and your career goals.

**Microsoft Certified Professional (MCP)**   This certification is for individuals with expertise in one specific area. MCP certification is often a stepping stone to MCSE certification and allows you some benefits of Microsoft certification after just one exam.

By passing any certification exam that is current as of October 1, 1998—except for Networking Essentials—you become an MCP.

**Microsoft Certified Systems Engineer (MCSE)**   For network professionals, the MCSE certification requires commitment. You need to complete all of the steps required for certification. Passing the exams shows that you meet the high standards that Microsoft has set for MCSEs.

> **NOTE**   The following list applies to the NT 4.0 track. Microsoft still supports a track for 3.51, but 4.0 certification is more desirable because it is the current operating system.

To become an MCSE, you must pass a series of six exams:

1. Networking Essentials (waived for Novell CNEs)
2. Implementing and Supporting Microsoft Windows NT Workstation 4.0 (*or* Implementing and Supporting Windows 95 *or* Implementing and Supporting Windows 98)
3. Implementing and Supporting Microsoft Windows NT Server 4.0
4. Implementing and Supporting Microsoft Windows NT Server 4.0 in the Enterprise
5. Elective
6. Elective

Some of the electives include:

- Internetworking with Microsoft TCP/IP on Microsoft Windows NT 4.0
- Implementing and Supporting Microsoft Internet Information Server 4.0
- Implementing and Supporting Microsoft Exchange Server 5.5
- Implementing and Supporting Microsoft SNA Server 4.0
- Implementing and Supporting Microsoft Systems Management Server 1.2
- Implementing a Database Design on Microsoft SQL Server 6.5
- System Administration for Microsoft SQL Server 6.5
- Implementing and Supporting Microsoft Proxy Server 2
- Implementing and Supporting Microsoft Internet Explorer 4.0 by Using the Microsoft Internet Explorer Administration Kit

**Microsoft Certified Systems Engineer (MCSE) + Internet**   One of the newest certification designations is MCSE + Internet. This certification allows you

to show that you have completed additional exams that qualify you as an Internet specialist.

For MCSE + Internet certification, you must pass a series of seven required exams:

**1.** Networking Essentials (waived for Novell CNEs)

**2.** Internetworking with Microsoft TCP/IP on Windows NT 4.0

**3.** Implementing and Supporting Microsoft Windows NT Workstation 4.0 (or Implementing and Supporting Windows 95 or Implementing and Supporting Windows 98)

**4.** Implementing and Supporting Microsoft Windows NT Server 4.0

**5.** Implementing and Supporting Microsoft Windows NT Server 4.0 in the Enterprise

**6.** Implementing and Supporting Microsoft Internet Information Server 4.0

**7.** Implementing and Supporting Microsoft Internet Explorer 4.0 by Using the Internet Explorer Administration Kit

You must also pass two elective exams. You can choose from:

- System Administration for Microsoft SQL Server 6.5
- Implementing a Database Design on Microsoft SQL Server 6.5
- Implementing and Supporting Web Sites Using Microsoft Site Server 3.0
- Implementing and Supporting Microsoft Exchange Server 5.5 (can also use version 5.0 exam)
- Implementing and Supporting Microsoft Proxy Server 2.0 (can also use version 1.0 exam)
- Implementing and Supporting Microsoft SNA Server 4.0

**Microsoft Certified Trainer (MCT)**     As an MCT, you can deliver Microsoft certified courseware through official Microsoft channels.

The MCT certification is more costly, because in addition to passing the exams, it requires that you sit through the official Microsoft courses. You also need to submit an application that must be approved by Microsoft. The number of exams you are required to pass depends on the number of courses you want to teach.

> For the most up-to-date certification information, visit Microsoft's Web site at www.microsoft.com/Train_Cert.

## Preparing for the MCSE Exams

To prepare for the MCSE certification exams, you should try to work with the product as much as possible. In addition, there are a variety of resources from which you can learn about the products and exams:

- You can take instructor-led courses.

- Online training is an alternative to instructor-led courses. This is a useful option for people who cannot find any courses in their area or who do not have the time to attend classes.
- If you prefer to use a book to help you prepare for the MCSE tests, you can choose from a wide variety of publications. These range from complete study guides (such as the books in the Network Press MCSE Study Guide series, which cover the core MCSE exams and most electives) to test-preparedness books similar to this one.

After you have completed your courses, training, or study guides, you'll find the MCSE Test Success books an excellent resource for making sure that you are prepared for the tests. With each of these books, you will discover if you've got the exam covered or if you still need to fill in some holes.

> **NOTE**   For more MCSE information, point your browser to the Sybex Web site, where you'll find information about the MCP program, job links, and descriptions of other quality titles in the Network Press line of MCSE-related books. Go to www.sybex.com and click on the MCSE logo.

## Scheduling and Taking an Exam

Once you think you are ready to take an exam, call Prometric Testing Centers at (800) 755-EXAM (755-3926). They'll tell you where to find the closest testing center. Before you call, get out your credit card because each exam costs $100. (If you've used this book to prepare yourself thoroughly, chances are you'll only have to shell out that $100 once!)

You can schedule the exam for a time that is convenient for you. The exams are downloaded from Prometric to the testing center, then you show up at your scheduled time and take the exam on a computer.

Once you complete the exam, you will know right away whether you have passed or not. At the end of the exam, you will receive a score report. It will list the six areas that you were tested on and how you performed. If you pass the exam, you don't need to do anything else—Prometric uploads the test results to Microsoft. If you don't pass, it's another $100 to schedule the exam again. But at least you will know from the score report where you did poorly, so you can study that particular information more carefully.

### Test-Taking Hints

If you know what to expect, your chances of passing the exam will be much greater. The following are some tips that can help you achieve success.

**Get There Early and Be Prepared**   This is your last chance to review. Bring your Test Success book and review any areas you feel unsure of. If you need a

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quick drink of water or a visit to the restroom, take the time to do so before the exam. Once your exam starts, it will not be paused for these needs.

When you arrive for your exam, you will be asked to present two forms of ID. You will also be asked to sign a piece of paper verifying that you understand the testing rules (for example, the rule that says that you will not cheat on the exam).

Before you start the exam, you will have an opportunity to take a practice exam. It is not related to Windows NT and is simply offered so that you will have a feel for the exam-taking process.

**What You Can and Can't Take in with You**    These are closed-book exams. The only thing that you can take in is scratch paper provided by the testing center. Use this paper as much as possible to diagram the questions. Many times diagramming questions will help make the answer clear. You will have to give this paper back to the test administrator at the end of the exam.

Many testing centers are very strict about what you can take into the testing room. Some centers will not even allow you to bring in items like a zipped up purse. If you feel tempted to take in any outside material, beware that many testing centers use monitoring devices such as video and audio equipment (so don't swear, even if you are alone in the room!).

Prometric Testing Centers take the test-taking process and the test validation very seriously.

**Test Approach**    As you take the test, if you know the answer to a question, fill it in and move on. If you're not sure of the answer, mark your best guess, then "mark" the question.

At the end of the exam, you can review the questions. Depending on the amount of time remaining, you can then view all of the questions again, or you can view only the questions that you were unsure of. I always like to double-check all of my answers, just in case I misread any of the questions on the first pass. (Sometimes half of the battle is to try to figure out exactly what the question is asking you.) Also, sometimes I find that a related question provides a clue for a question that I was unsure of.

Be sure to answer all questions. Unanswered questions are scored as incorrect and will count against you. Also, make sure that you keep an eye on the remaining time so that you can pace yourself accordingly.

If you do not pass the exam, note everything that you can remember while the exam is still fresh on your mind. This will help you prepare for your next try. Although the next exam will not be exactly the same, the questions will be similar, and you don't want to make the same mistakes.

**After You Become Certified**

Once you become an MCSE, Microsoft kicks in some goodies, including:

- A one-year subscription to Microsoft Technet, a valuable CD collection that contains Microsoft support information.
- A one-year subscription to the Microsoft Beta Evaluation program, which is a great way to get your hands on new software. Be the first kid on the block to play with new and upcoming software.
- Access to a secured area of the Microsoft Web site that provides technical support and product information. This certification benefit is also available for MCP certification.
- Permission to use the Microsoft Certified Professional logos (each certification has its own logo), which look great on letterhead and business cards.
- An MCP certificate (you will get a certificate for each level of certification you reach), suitable for framing or sending copies to Mom.
- A one-year subscription to *Microsoft Certified Professional Magazine*, which provides information on professional and career development.

## How to Use This Book

This book is designed to help you prepare for the MCSE exam. It reviews each objective and relevant test-taking information, and offers you a chance to test your knowledge through study questions and sample tests.

The first seven units in this book correspond to the Microsoft objective groupings: Planning, Installation and Configuration, Configuring and Managing Resource Access, Integration and Interoperability, Running Applications, Monitoring and Optimization, and Troubleshooting. The eighth unit is a final review, which contains test questions pertaining to all the previous units.

For each unit:

1. Review the exam objectives list at the beginning of the unit. (You may want to check the Microsoft Train_Cert Web site to make sure the objectives haven't changed since the book was published.)
2. Read through or scan the reference material that follows the objectives list. Broken down according to the objectives, this section helps you brush up on the information you need to know for the exam.
3. Review your knowledge in the Study Questions section. These are straightforward questions designed to test your knowledge of the topic. Answers to Study Questions are listed in the Appendix, at the back of the book.
4. Once you feel sure of your knowledge of the subject area, take the Sample Test. The Sample Test's content and style matches the real exam. Set

yourself a time limit based on the number of questions: a general rule of thumb is that you should be able to answer 20 questions in 30 minutes. When you've finished, check your answers with the Appendix, at the back of the book. If you answer at least 85 percent of the questions correctly within the time limit (the first time you take the Sample Test), you're in good shape. To really prepare, you should note the questions you miss and be able to score 95 to 100 percent correctly on subsequent tries.

5. After you successfully complete Units 1-7, you're ready for the Final Review in Unit 8. Allow yourself 90 minutes to complete the test of 60 questions. If you answer 85 percent of the questions correctly on the first try, you're well prepared. If not, go back and review your knowledge of the areas you struggled with, and take the test again.

6. Right before you take the real test, scan the reference material at the beginning of each unit to refresh your memory.

At this point, you are well on your way to becoming certified!

Good Luck!

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