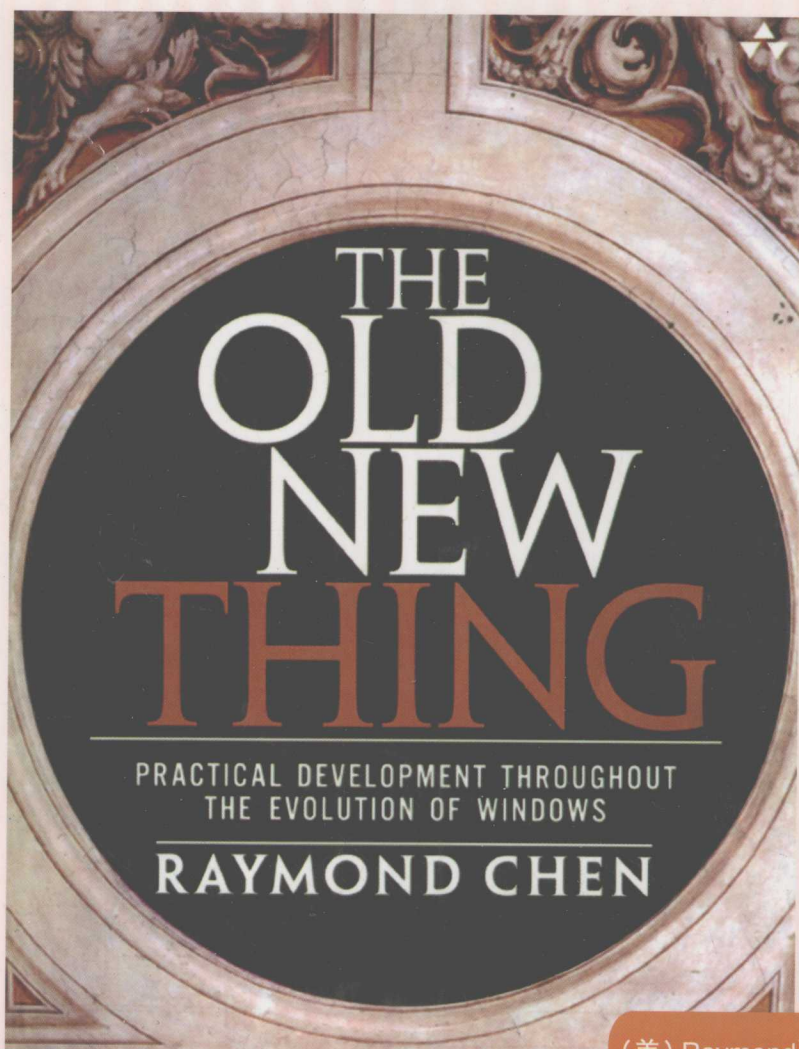


Windows 编程启示录

(英文版)



(美) Raymond Chen 著

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Windows 编程启示录

(英文版)

The Old New Thing
Practical Development Throughout
the Evolution of Windows

江苏工业学院图书馆
藏书章

(美) Raymond Chen 著



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出版者的话

文艺复兴以降，源远流长的科学精神和逐步形成的学术规范，使西方国家在自然科学的各个领域中取得了垄断性的优势；也正是这样的传统，使美国在信息技术发展的六十多年间名家辈出、独领风骚。在商业化的进程中，美国的产业界与教育界越来越紧密地结合，计算机学科中的许多泰山北斗同时身处科研和教学的最前线，由此而产生的经典科学著作，不仅肇划了研究的范畴，还揭橥了学术的源变，既遵循学术规范，又自有学者个性，其价值并不会因年月的流逝而减退。

近年，在全球信息化大潮的推动下，我国的计算机产业发展迅猛，对专业人才的需求日益迫切。这对计算机教育界和出版界都既是机遇，也是挑战；而专业教材的建设在教育战略上显得举足轻重。在我国信息技术发展时间较短、从业人员较少的现状下，美国等发达国家在其计算机科学发展的几十年间积淀的经典教材仍有许多值得借鉴之处。因此，引进一批国外优秀计算机教材将对我国计算机教育事业的发展起积极的推动作用，也是与世界接轨、建设真正的世界一流大学的必由之路。

机械工业出版社华章图文信息有限公司较早意识到“出版要为教育服务”。自1998年开始，华章公司就将工作重点放在了遴选、移译国外优秀教材上。经过几年的不懈努力，我们与Prentice Hall, Addison-Wesley, McGraw-Hill, Morgan Kaufmann等世界著名出版公司建立了良好的合作关系，从它们现有的数百种教材中甄选出Tanenbaum, Stroustrup, Kernighan, Jim Gray等大师名家的一批经典作品，以“计算机科学丛书”为总称出版，供读者学习、研究及收藏。大理石纹理的封面，也正体现了这套丛书的品位和格调。

“计算机科学丛书”的出版工作得到了国内外学者的鼎力襄助，国内的专家不仅提供了中肯的选题指导，还不辞劳苦地担任了翻译和审校的工作；而原书的作者也相当关注其作品在中国的传播，有的还专程为其书的中译本作序。迄今，“计算机科学丛书”已经出版了近260个品种，这些书籍在读者中树立了良好的口碑，并被许多高校采用为正式教材和参考书籍，为进一步推广与发展打下了坚实的基础。

随着学科建设的初步完善和教材改革的逐渐深化，教育界对国外计算机教材的需求和应用都步入一个新的阶段。为此，华章公司将加大引进教材的力度，除“计算机科学丛书”之外，对影印版的教材，则单独开辟出“经典原版书库”。为了保证这两套丛书的权威性，同时也为了更好地为学校和老师服务，华章公司聘请了中国科学院、北京大学、清华大学、国防科技大学、复旦大学、上海交通

大学、南京大学、浙江大学、中国科技大学、哈尔滨工业大学、西安交通大学、中国人民大学、北京航空航天大学、北京邮电大学、中山大学、解放军理工大学、郑州大学、湖北工学院、中国国家信息安全测评认证中心等国内重点大学和科研机构在计算机的各个领域的著名学者组成“专家指导委员会”，为我们提供选题意见和出版监督。

这两套丛书是响应教育部提出的使用外版教材的号召，为国内高校的计算机及相关专业的教学度身订造的。其中许多教材均已为M. I. T., Stanford, U.C. Berkeley, C. M. U. 等世界名牌大学所采用。不仅涵盖了程序设计、数据结构、操作系统、计算机体系结构、数据库、编译原理、软件工程、图形学、通信与网络、离散数学等国内大学计算机专业普遍开设的核心课程，而且各具特色——有的出自语言设计者之手、有的历经三十年而不衰、有的已被全世界的几百所高校采用。在这些圆熟通博的名师大作的指引之下，读者必将在计算机科学的宫殿中由登堂而入室。

权威的作者、经典的教材、一流的译者、严格的审校、精细的编辑，这些因素使我们的图书有了质量的保证，但我们的目标是尽善尽美，而反馈的意见正是我们达到这一终极目标的重要帮助。教材的出版只是我们的后续服务的起点。华章公司欢迎老师和读者对我们的工作提出建议或给予指正，我们的联系方式如下：

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FOR MY FAMILY

PREFACE

MUCH INK IS devoted to describing the “how” of using and developing software for Windows, but few authors go into the “why.” What might appear at first to be quirks often turn out to have entirely logical explanations, reflecting the history, evolution, and philosophy of the Microsoft Windows operating system. This book attempts to provide knowledge not so much in the form of telling what needs to be done (although there is certainly plenty of that, too) but rather by helping to understand why things came to be that way. Thus informed of the history and philosophy of Windows, you can become a more effective Windows programmer.

The emphasis here, then, is on the rationale behind Windows. It is not a reference or even a tutorial, but rather a “practical history,” taking a conversational rather than didactic approach in an attempt to give you an appreciation for the philosophy of Windows through a series of brief, largely independent essays. You can therefore skip freely to topics of momentary interest (or technical expertise). Essays have been grouped into general themes, and there is the occasional sequential pedagogical treatment when a topic is explored in depth; even in those cases, however, the topic is confined to a single self-contained chapter.

Writer and commentator David Sedaris is often asked whether his stories are true. He responds that they are “true enough.” Like David Sedaris’s stories,



the material in this book is also “true enough.” The focus is on the big picture, not on the minutiae; on making a single point without getting distracted by nitpicking detail. Key details are highlighted, but unimportant ones are set aside, and potentially interesting digressions may be neglected if they do not serve the topic at hand.

The primary audience is technology-savvy readers with an interest in Windows history. About half of the essays require no programming background. Most of the remaining topics assume a basic background in software design and development, although nothing particularly advanced. Topics specifically related to Windows programming assume reader familiarity with Win32 user interface programming and COM. The table on page xxv provides a breakdown of the chapters for nonprogrammers and for general programmers who do not have an interest in Win32 specifically. Of course, you are welcome to skim chapters not explicitly marked as of interest to you. Perhaps you will find something interesting in them after all.

What will you get out of this book? As noted previously, the primary goal is to convey the philosophy and rationale behind what might at first appear to be an irrational design. You will also understand that when something can’t be done in Windows, it’s often for a good reason; and you will gain an appreciation of the lengths to which Windows goes to preserve backward compatibility (and why it’s important that it do so). And if nothing else, you will be able to tell amusing stories about Windows history at cocktail parties (that is, cocktail parties thrown by other geeks).

Much of the short-essay material here has already appeared in one form or another on the author’s Web site, *The Old New Thing* (<http://blogs.msdn.com/oldnewthing/>), but is substantially supplemented by new material better suited to book form.

Visit the Web page for this book (www.awprofessional.com/title/0321440307) to download two bonus chapters, “Tales of Application Compatibility” and “How to Ensure That Your Program Does Not Run Under Windows 95.” Think of them if you like as the book version of a movie’s unique and insightful deleted scenes. The Web page also contains the code samples from the book as well as errata.



Breakdown of Chapters by Audience

Chapter	Title	General Audience	General Programmer	Win32 Programmer
Chapter 1	Initial Forays into User Interface Design	x	x	x
Chapter 2	Selected Reminiscences on Windows 95	x	x	x
Chapter 3	The Secret Life of GetWindowText			x
Chapter 4	The Taskbar and Notification Area	x	x	x
Chapter 5	Puzzling Interface Issues	x	x	x
Chapter 6	A History of the GlobalLock Function			x
Chapter 7	Short Topics in Windows Programming			x
Chapter 8	Window Management			x
Chapter 9	Reminiscences on Hardware	x	x	x
Chapter 10	The Inner Workings of the Dialog Manager			x
Chapter 11	General Software Issues		x	x
Chapter 12	Digging into the Visual C++ Compiler		x	x
Chapter 13	Backward Compatibility	x	x	x
Chapter 14	Etymology and History	x	x	x
Chapter 15	How Window Messages Are Delivered and Retrieved			x
Chapter 16	International Programming	First half	x	x
Chapter 17	Security		x	x
Chapter 18	Reminiscences on Windows 2000 and Windows XP	First half	First half	x
Chapter 19	Win32 Design Issues		Part	x
Chapter 20	Taxes		x	x
Chapter 21	Silliness	x	x	x
*	Tales of Application Compatibility	x	x	x
*	How to Ensure That Your Program Doesn't Run Under Windows 95		x	x

* These bonus chapters can be downloaded from www.awprofessional.com/title/0321440307.

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I WANT TO begin by thanking Joan Murray at Addison-Wesley for believing in a book as unusual as this one. Without her support, this project would never have come together. Others at Addison-Wesley have also been of great help, including Tyrrell Albaugh, Patty Boyd, Keith Cline, Curt Johnson, and Chris Zahn. Ben Ryan deserves credit for suggesting to me back in the late 1990s that I should write a book on Win32 (sorry it took so long), and I blame Brad Abrams for flat-out telling me to start a Web log in 2003.

Additional thanks to Betsy Aoki, Jeff Davis, Henry Gabryjelski, Jeffery Galinovsky, Michael Grier, Mike Gunderloy, Eric Gunnerson, Chris Guzak, Johnson M. Hart, Francis Hogle, Aleš Holecek, Michael Kaplan, KC Lemson, Shelley McKinley, Rico Mariani, Joseph Newcomer, Adrian Oney, Larry Osterman, Matt Pietrek, Jeffrey Richter, Mike Schmidt, Jan Shanahan, Joel Spolsky, Stephen Toub, and Ed Wax for their assistance in various capacities throughout this entire project (either intentional or unwitting).

Finally, I must acknowledge all the people who visit my Web site, which serves as the title as well as the inspiration for this book. They're the ones who convinced me to give this book thing another try.

ABOUT THE AUTHOR

RAYMOND CHEN is a programmer in the Windows division at Microsoft. His Web site The Old New Thing deals with Windows history and Win32 programming. He also writes the Windows Confidential column for *TechNet Magazine*.

Praise for *The Old New Thing*

“Raymond Chen is the original raconteur of Windows.”

—Scott Hanselman, ComputerZen.com

“Raymond has been at Microsoft for many years and has seen many nuances of Windows that others could only ever hope to get a glimpse of. With this book, Raymond shares his knowledge, experience, and anecdotal stories, allowing all of us to get a better understanding of the operating system that affects millions of people every day. This book has something for everyone, is a casual read, and I highly recommend it!”

—Jeffrey Richter, Author/Consultant, Cofounder of Wintellect

“Very interesting read. Raymond tells the inside story of why Windows is the way it is.”

—Eric Gunnerson, Program Manager, Microsoft Corporation

“Absolutely essential reading for understanding the history of Windows, its intricacies and quirks, and why they came about.”

—Matt Pietrek, *MSDN Magazine's* Under the Hood Columnist

“Raymond Chen has become something of a legend in the software industry, and in this book you'll discover why. From his high-level reminiscences on the design of the Windows Start button to his low-level discussions of GlobalAlloc that only your inner-geek could love, *The Old New Thing* is a captivating collection of anecdotes that will help you to truly appreciate the difficulty inherent in designing and writing quality software.”

—Stephen Toub, Technical Editor, *MSDN Magazine*

CONTENTS

<i>Preface</i>	vii
<i>Acknowledgments</i>	x
<i>About the Author</i>	xi

CHAPTER ONE

Initial Forays into User Interface Design

Why do you have to click the Start button to shut down?	1
Why doesn't Windows have an "expert mode"?	2
The default answer to every dialog box is Cancel	3
The best setting is the one you don't even sense, but it's there, and it works the way you expect	6
In order to demonstrate our superior intellect, we will now ask you a question you cannot answer	7
Why doesn't Setup ask you if you want to keep newer versions of operating system files?	7
Thinking through a feature	9
When do you disable an option, and when do you remove it?	12
When do you put ... after a button or menu?	13
User interface design for vending machines	13

User interface design for interior door locks	15
The evolution of mascara in Windows UI	16

CHAPTER TWO

Selected Reminiscences on Windows 95

Why isn't my time zone highlighted on the world map?	19
Why didn't Windows 95 boot with more than 1GB of memory?	20
Why did Windows 95 have functions called BEAR, BUNNY, and PIGLET?	22
What about BOZOSLIVEHERE and TABTHETEXTOUTFORWIMPS?	23
What was in the Windows 95 Special Edition box?	25
Windows brings out the Rorschach test in everyone	25
The martial arts logon picture	26
Why a really large dictionary is not a good thing	27
An insight into the Windows 95 startup sound	27
It's a lot easier to write a column if you don't care about accuracy	28
Why does the System Properties page round the memory size?	29
Why does my hard drive light flash every few seconds?	29
The hunt for a faster syscall trap	30
One byte used to cost a dollar	31
Each product-support call costs a sale	32
Why isn't Tweak UI included on the Windows CD?	32
Turns out that you can't install Windows via xcopy	34
Buying an entire Egghead Software store	35
The history of the Windows PowerToys	35
How did Windows choose its final build numbers?	38
Why doesn't the build number increment for service packs?	39



CHAPTER THREE

The Secret Life of GetWindowText

How windows manage their text	41
Enter GetWindowText	42
What if I don't like these rules?	43
Can you give an example where this makes a difference?	44
Why are the rules for GetWindowText so weird?	44

CHAPTER FOUR

The Taskbar and Notification Area

Why do some people call the taskbar the "tray"?	47
Why does the taskbar default to the bottom of the screen?	49
Why doesn't the clock in the taskbar display seconds?	50
Why doesn't the taskbar show an analog clock?	51
When I dock my taskbar vertically, why does the word "Start" disappear?	51
Why don't notification icons get a message when the user clicks the "X" button?	52

CHAPTER FIVE

Puzzling Interface Issues

What are those little overlay icons?	53
Why are these unwanted files/folders opening when I log on?	54
What do the text label colors mean for files?	56
Why does my advanced options dialog say ON and OFF after every option?	57
What determines the order in which icons appear in the Alt+Tab list?	58
Why is the read-only property for folders so strange?	59

What's with those blank taskbar buttons that go away when I click on them?	59
What is the difference between Minimize All and Show Desktop?	60
What does boldface on a menu mean?	62
Where do those customized Web site icons come from?	62
Where did my task manager tabs and buttons go?	63
Will dragging a file result in a move or a copy?	64
Why does the Links folder keep re-creating itself?	65
Why are documents printed out of order when you multiselect and choose Print?	66
Raymond spends the day doing product support	67
Blow the dust out of the connector	68
How much is that gigabyte in the window?	69
Why can't I remove the "For test/evaluation purposes only" tag?	70

CHAPTER SIX

A History of the GlobalAlloc Function

The early years	71
Selectors	73
Transitioning to Win32	75
A peek at the implementation	76

CHAPTER SEVEN

Short Topics in Windows Programming

The scratch program	79
Getting a custom right-click menu for the caption icon	85
What's the difference between CreateMenu and CreatePopupMenu?	86
When does the window manager destroy menus automatically?	88
Painting only when your window is visible onscreen	89
Determining whether your window is covered	93