INTRODUCTION

WELCOME

Thank you for purchasing or considering the purchase of *Special Edition Using Microsoft Windows Vista*. It's amazing the changes that nearly 20 years can bring to a computer product such as Windows. When we wrote our first Windows book back in the mid-1980s, our publisher didn't even think the book would sell well enough to print more than 5,000 copies. Microsoft stock wasn't even a blip on most investors' radar screens. Boy, were they in the dark! Who could have imagined that a little more than a decade later, anyone who hoped to get hired for even a temp job in a small office would need to know how to use Microsoft Windows, Office, and a PC. Fifteen or so Windows books later, we're still finding new and exciting stuff to tell our readers.

Some people (including the U.S. Department of Justice) claim Microsoft's predominance on the PC operating system arena was won unethically through monopolistic practices. Whether or not this is true (we try, almost successfully, to stay out of the politics in this book), we believe that Windows has earned its position today through reasons other than having a stranglehold on the market. Consider that Windows NT 3.1 had 5 million lines of code. Windows Vista weighs in with about 50 million and takes up 4 or 5 gigabytes of disk space by itself. This represents a lot of work by anyone's accounting. Who could have imagined in 1985 that a mass-market operating system two decades later would have to include support for so many technologies, most of which didn't even exist at the time: DVD, DVD±RW, CD-R and CD-RW, Internet and intranet, MP3, MPEG, WMA, DV, USB, FireWire, APM, ACPI, RAID, UPS, PPOE, gigabit Ethernet, 802.11g, WPA2, IPv6, Teredo, fault tolerance, disk encryption and compression…? The list goes on. And that 4GB of disk space Vista occupies? It would have cost more than a quarter of a million dollars in 1985. Today, it costs a dollar or two.

Although rarely on the bleeding edge of technology, and often playing the role of the dictator with partner businesses and exterminator with competing businesses, Bill Gates has at least been benevolent from the users' point of view. In 1981, when we were building our first computers, the operating system (CP/M) had to be modified in assembly language and

recompiled, and hardware parts had to be soldered together to make almost any new addi-
tion (such as a video display terminal) work. Virtually nothing was standardized, with the
end result being that computers remained out of reach for average folks.

Together, Microsoft, Intel, and IBM changed all that. Today you can purchase a computer, a
printer, a scanner, an external disk drive, a keyboard, a modem, a monitor, and a video card
over the Internet, plug them in, install Windows, and they'll work together. The creation
and adoption (and sometimes forcing) of hardware and software standards that have made
the PC a household appliance the world over can largely be credited to Microsoft, like it or
not. The unifying glue of this PC revolution has been Windows.

Yes, we all love to hate Windows, but it's here to stay. Linux and Mac OS X are formidable
alternatives, but for most of us, at least for some time, Windows and Windows applications
are "where it's at." And Windows Vista ushers in truly significant changes to the landscape.
That's why we were excited to write this book.

WHY THIS BOOK?

We all know this book will make an effective doorstop in a few years. You probably have a
few already. (We've even written a few!) If you think it contains more information than you
need, just remember how helpful a good reference can be when you need it at the 11th hour.
And we all know that computer technology changes so fast that it's sometimes easier just to
blink and ignore a phase than to study up on it. Windows Vista is definitely a significant
upgrade in Windows's security and sophistication—one you're going to need to understand.

Windows Vista might seem similar to its predecessor, Windows XP, but it's a very different
animal. Yes, the graphics and display elements are flashier, but it's the deeper changes that
matter most. With its radically improved security systems, revamped Control Panel, friend-
lier network setup tools, new problem-tracking systems, improved support for mobile com-
puters, and completely revamped networking and graphics software infrastructures, Vista
leaves Windows XP in the dust. In all ways, it's superior to any operating system Microsoft
has ever produced.

Is Windows Vista so easy to use that books are unnecessary? Unfortunately, no. True, as
with other releases of Windows, online help is available. As has been the case ever since
Windows 95, however, no printed documentation is available (to save Microsoft the cost),
and the Help files are written by Microsoft employees and contractors. You won't find criti-
cisms, complaints, workarounds, or suggestions that you use alternative software vendors, let
alone explanations of *why* you have to do things a certain way. For that, you need this book!
We will even show you tools and techniques that Microsoft's insiders didn't think were
important enough to document at all.

You might know that Windows Vista comes in a bewildering array of versions, primarily
Home Basic, Home Premium, Business, Enterprise, and Ultimate (not to mention Starter,
which is sold only in emerging markets, and several extra versions sold in the European
Union to comply with antitrust court-mandated restrictions). But Vista is Vista, and all that

really distinguishes the versions is the availability of various features. *Most* of the differences matter only in the corporate world, where Vista will be managed by network administrators, so you don't need to worry about those yourself. For the remaining features, we tell you when certain features do or don't apply to your particular version of Windows Vista. (And we show you how to upgrade from one version to a better version, if you want the features your copy doesn't have!)

In this book's many pages, we focus not just on the gee-whiz side of the technology, but why you should care, what you can get from it, and what you can forget about. The lead author on this book has previously written 16 books about Windows, all in plain English (several bestsellers), designed for everyone from rank beginners to full-on system administrators deploying NT Server domains. The coauthor has designed software and networks for more than 20 years and has been writing about Windows for 10 years. We work with and write about various versions of Windows year in and year out. We have a clear understanding of what confuses users and system administrators about installing, configuring, or using Windows, as well as (we hope) how to best convey the solutions to our readers.

While writing this book, we tried to stay vigilant in following four cardinal rules:

- Keep it practical.
- Keep it accurate.
- Keep it concise.
- Keep it interesting, and even crack a joke or two.

We believe that you will find this to be the best and most comprehensive book available on Windows Vista for beginners through advanced users. And whether you use Windows Vista yourself or support others who do, we firmly believe this book will address your questions and needs.

Our book addresses both home and business computer users. We assume you probably are not an engineer, and we do our best to speak in plain English and not snow you with unexplained jargon. As we wrote, we imagined that you, our reader, are a friend or co-worker who's familiar enough with your computer to know what it's capable of, but might not know the details of how to make it all happen. So we show you, in a helpful, friendly, professional tone. In the process, we also hope to show you things that you might not have known, which will help make your life easier—your computing life, anyway. We spent months and months poking into Vista's darker corners so you wouldn't have to. And, if you're looking for power-user tips and some nitty-gritty details, we make sure you get those, too. We try to make clear what information is essential for you to understand and what is optional for just those of you who are especially interested.

We're also willing to tell you what we don't cover. No book can do it all. As the title implies, this book is about Windows Vista. We don't cover setting up the Server versions of this operating system called Windows 2000 Server, Windows Server 2003 Server, and the

upcoming Windows Server code named "Longhorn." However, we do tell you how to connect to and interact with these servers, and even other operating systems, including Mac OS X, Linux, and older variants of Windows, over a local area network.

Because of space limitations, there is only one chapter devoted to coverage of Windows Vista's command-line utilities, batch file language, and Windows Script Host. For that (in spades!), you might want to check Brian's book *Windows XP Under the Hood*, which is still relevant to Vista.

Even when you've become a Windows Vista pro, we think you'll find this book to be a valuable source of reference information in the future. Both the table of contents and the very complete index will provide easy means for locating information when you need it quickly.

HOW OUR BOOK IS ORGANIZED

Although this book advances logically from beginning to end, it's written so that you can jump in at any location, quickly get the information you need, and get out. You don't have to read it from start to finish, nor do you need to work through complex tutorials.

This book is broken down into six major parts. Here's the skinny on each one:

Part I, "Introducing Windows Vista," introduces Vista's new and improved features and shows you how to install it on a new computer or upgrade an older version of Windows to Vista. Finally, we take you on a one-hour guided tour that shows you the best of Vista's features and walks you through making essential settings and adjustments that will help you get the most out of your computer.

In Part II, "Using Windows Vista," we cover the core parts of Vista, the parts you'll use no matter what else you do with your computer: managing documents and files, using the Windows desktop, starting and stopping applications, searching through your computer's contents, printing, and the new "Sidebar" desktop gadgets. Don't skip this section, even—or rather, *especially*—if you've used previous versions of Windows. Vista does it all differently, and you'll want to see how to take advantage of it!

Vista has great new tools for viewing, playing, creating, editing, and managing music, movies, and pictures. In Part III, "Multimedia and Imaging," we show you how to use the new Windows Media Player, purchase music online, burn CDs, extract and edit images from cameras and scanners, use Windows Movie Maker to edit video, and create DVDs. Finally, we show you how to use Windows Media Center, which lets you view all that stuff, and on a properly equipped computer, records and plays back your favorite TV shows. We even show you how to burn DVDs from your recorded shows and compress them for playback on other devices.

In Part IV, "Windows Vista and the Internet," we help you set up an Internet connection and then move on to Vista's Internet tools. We provide in-depth coverage of the new and improved (and safer!) Internet Explorer and the new and improved (and safer!) Windows Mail, which replaces the Outlook Express email and newsgroup reader provided with previous versions of Windows. The final two chapters show you how to set up your own web server and how to diagnose Internet connection problems.

Networks used to be found only in high-falutin' offices and corporate settings. Now, any home or office with two or more computers should have a network. A LAN is inexpensive, and with one you can share an Internet connection, copy and back up files, and use any printer from any computer. In Part V, "Networking," we give you a tour of Windows Vista's network features, walk you through setting up a network in your home or office, and show you how to take advantage of it in day-to-day use. We also show you how easy it is to share a DSL or cable Internet connection with all your computers at once, show you how to network with other operating systems, and finally, help you fix it when it all stops working.

Part VI, "Maintaining Windows Vista," covers system configuration and maintenance. We tell you how to work with the Control Panel and System Administration tools, provide tips and tricks for customizing the graphical user interface to maximize efficiency, manage your hard disk and other hardware, and describe a variety of ways to upgrade your hardware and software (including third-party programs) for maximum performance. We show you how to troubleshoot hardware and software problems, edit the Windows Registry, and for real power-users, show how to use the command-line interface.

When Windows was introduced nearly two decades ago, computer viruses, online fraud, and hacking were only starting to emerge as threats. Today (thanks in great part to *gaping* security holes in previous versions of Windows), computer threats are a worldwide problem, online and offline. In Part VII, "Security," we provide a 360-degree view of Windows Vista's substantial improvements in security. Here you'll find out both what Vista will do to help you, and what you must do for yourself. We cover protection against viruses and spyware, loss and theft, hackers and snoops, and fraud and spam—in that order.

Part VIII, "Windows on the Move," shows you how to get the most out of Windows Vista when either you or your computer, or both, are on the go. We show you how to use wireless networking safely, how to get the most out of your laptop, and how to connect to remote networks. We also show you how you and others can work together using your computers and Windows Meeting Space, and we finish up with a chapter that shows you how to use Remote Desktop to reach and use your own computer from anywhere in the world.

Last, Appendix A, "Windows Programs and Services," lists all the programs and services provided with all the versions of Windows, so you can find out just what each of those things do that you see in the Task Manager and Control Panel.

CONVENTIONS USED IN THIS BOOK

Special conventions are used throughout this book to help you get the most from the book and from Windows Vista.

TEXT CONVENTIONS

Various typefaces in this book identify terms and other special objects. These special type-faces include the following:

Type	Meaning
Italic	New terms or phrases when initially defined.
`Monospace`	Information that appears in code or onscreen.
`Bold monospace`	Information you type.

Words separated by commas—All Windows book publishers struggle with how to represent command sequences when menus and dialog boxes are involved. In this book, we separate commands using a comma. Yeah, we know it's confusing, but this is traditionally how the *Special Edition Using* book series does it, and traditions die hard. So, for example, the instruction "Choose Edit, Cut" means that you should open the Edit menu and choose Cut. Another, more complex example is "Click Start, Settings, Control Panel, System, Hardware, Device Manager."

Key combinations are represented with a plus sign. For example, if the text calls for you to press Ctrl+Alt+Delete, you would press the Ctrl, Alt, and Delete keys at the same time.

TIPS FROM THE WINDOWS PROS

Ever wonder how the experts get their work done better and faster than anyone else? Ever wonder how they became experts in the first place? You'll find out in these special sections throughout the book. We've spent a lot of time under the Windows hood, so to speak, getting dirty and learning what makes Windows Vista tick. So, with the information we provide in these sections, you can roll up your shirt sleeves and dig in.

SPECIAL ELEMENTS

Throughout this book, you'll find Notes, Cautions, Sidebars, Cross-References, and Troubleshooting Tips. Often, you'll find just the tidbit you need to get through a rough day at the office or the one whiz-bang trick that will make you the office hero. You'll also find little nuggets of wisdom, humor, and lingo that you can use to amaze your friends and family, not to mention making you cocktail-party literate.

T I P

> We specially designed these tips to showcase the best of the best. Just because you get your work done doesn't mean you're doing it in the fastest, easiest way possible. We show you how to maximize your Windows experience. Don't miss these tips!

N O T E

> Notes point out items that you should be aware of, but you can skip them if you're in a hurry. Generally, we've added notes as a way to give you some extra information on a topic without weighing you down.

C A U T I O N

> Pay attention to cautions! They could save you precious hours in lost work.

We designed these elements to call attention to common pitfalls that you're likely to encounter. When you see a Troubleshooting Tip, you can flip to the end of the chapter to learn how to solve or avoid a problem.

CROSS-REFERENCES

Cross-references are designed to point you to other locations in this book (or other books in the Que family) that will provide supplemental or supporting information. Cross-references appear as follows:

→ For information on updating offline web pages, **see** "Browsing Offline," **p. 299**.

Sidebars
Sidebars are designed to provide information that is ancillary to the topic being discussed. Read this information if you want to learn more details about an application or task.