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# Troubleshooting & Maintaining Your PC

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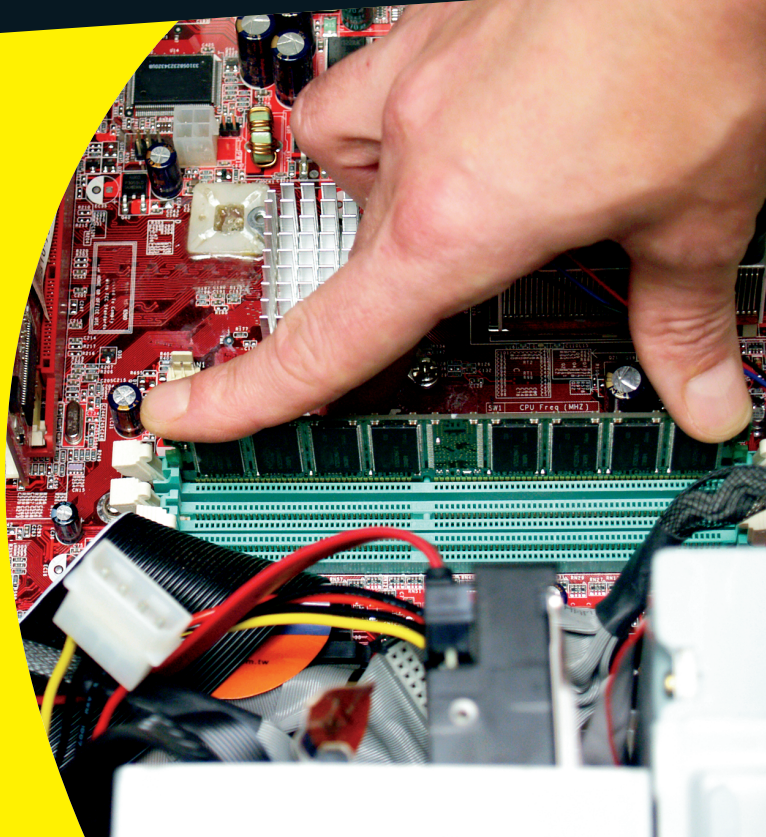
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**Dan Gookin**

*Bestselling author of all editions of  
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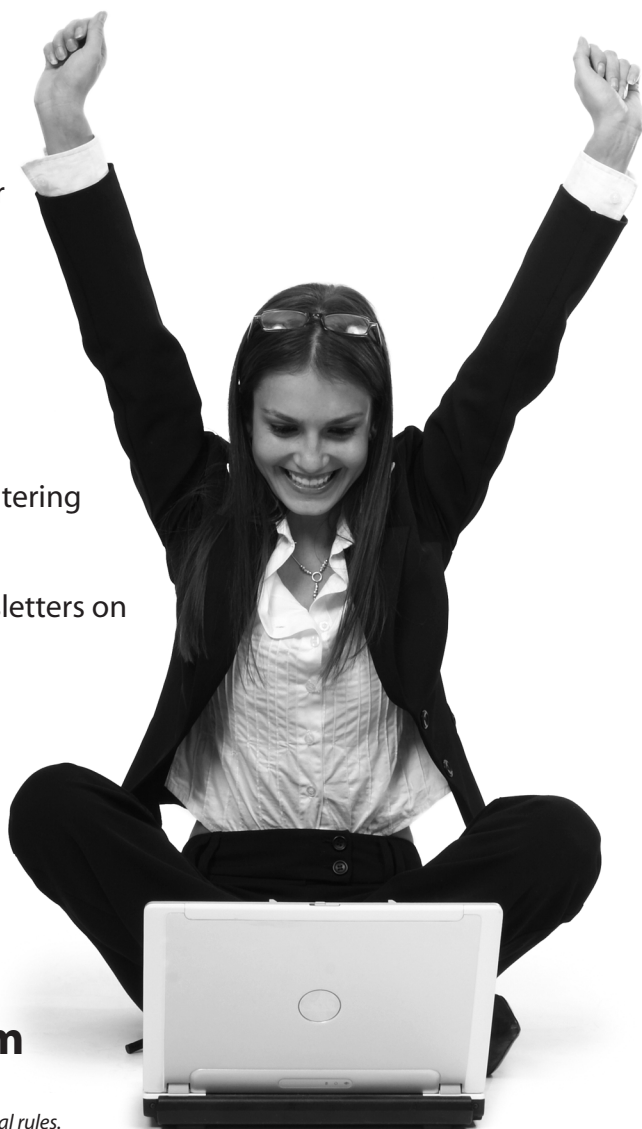
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***Troubleshooting  
& Maintaining  
Your PC***

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**FOR**

**DUMMIES<sup>®</sup>**

**2ND EDITION**

**by Dan Gookin**



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**Dan Gookin** has written more than 120 books about technology, many of them accurate. He is most famously known as the author of the original *For Dummies* book, *DOS For Dummies*, published in 1991. Additionally, Dan has achieved fame as one of the first computer radio talk show hosts, the editor of a computer magazine, a national technology spokesman, and an occasional actor on the community theater stage.

Dan still considers himself a writer and technology “guru” whose job it is to remind everyone that our electronics are not to be taken too seriously. His approach is light and humorous yet very informative. He knows that modern gizmos can be complex and intimidating but necessary to help people become productive and successful. Dan mixes his vast knowledge of all things high-tech with a unique, dry sense of humor that keeps everyone informed — and awake.

Dan’s most recent books are *Droid X For Dummies*, *Word 2010 For Dummies*, *PCs For Dummies*, Windows 7 Edition, and *Laptops For Dummies*, 4th Edition. He holds a degree in communications/visual arts from the University of California, San Diego. Dan dwells in North Idaho, where he enjoys woodworking, music, theater, riding his bicycle, being with his boys, and fighting local government corruption.

## *Dedication*

To Milton Francis. Thanks for the love and attention. You will be missed.

## **Publisher's Acknowledgments**

We're proud of this book; please send us your comments at <http://dummies.custhelp.com>. For other comments, please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002.

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# Introduction

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**I**f trouble were predictable, it wouldn't be a problem. The problem with trouble, however, is that it's unpredictable.

You hold in your hands a big ol' book that's all about solving problems with your computer. The topic is troubleshooting. It needs to be covered in so many pages because there hasn't been a computer yet invented that didn't have trouble following it like a shadow on a sunny day.

The computing experience should be a pleasant one. And it can be — if you're informed and able to deal with the troubles you encounter. This book helps you along that journey in an informative and entertaining way. Welcome to *Troubleshooting & Maintaining Your PC All-in-One For Dummies*.

## Woe Is Computer

*A byte of prevention is worth a megabyte of cure.*

My philosophy on troubleshooting is that it's easier to do when you understand how the computer works. This philosophy is the opposite of what most people expect, which is to look up a specific condition and find a specific cure for it. Although many people like that approach, it has two problems.

The first downfall of the look-it-up approach is that you don't master anything. Because there's a method behind PC madness, often the same solution exists for multiple problems. After you understand why things go wrong, it's not only easier to fix them — it's also possible to prevent them in the first place.

The second difficulty of the specific-solution approach is that it would make this book seriously huge. With millions upon millions of potential hardware and software configurations available in all the PCs in the world, it would take not one but several fat books to document every problem and its solution. This book is big enough already!

My approach is simple: Look up the problem, find out a bit about what might have caused it, and then arrive at a solution. The notion is that when trouble arises again later, you will have the experience to deal with it in a practical manner. Because most PC troubles have a common origin, this solution works.

Married to troubleshooting is maintenance. The two topics go hand in hand; with proper maintenance and care, your computer runs better and more reliably, often negating the need for much troubleshooting in the first place!

Before moving on, please be aware that there's a difference between trouble and an event that's merely annoying. For example, if the text you print from an email message is tiny, it's annoying but isn't a bug. Though specific annoying problems such as that one might not be covered in this book, you can still find a solution here. That's the beauty behind my philosophical approach to troubleshooting. After all, using Windows shouldn't be a frustrating experience.

## *About the For Dummies Approach*

As a *For Dummies* title, this book doesn't delve into the technical. It doesn't start out easy and then become immediately technical and cryptic. And this book never disrespects you as a reader.

It's entirely possible to be a smart and clever (and, I might add, attractive) computer owner and not know a darn thing about what a computer is or how it works. That's fine with me. This book doesn't assume that you're a computer expert or that you want to become one. The subject is troubleshooting and maintaining your computer. Anyone who owns a PC can read and understand this book well enough to fix their computer woes.

This book may appear to be overburdened with humor. I admit that writing in an entertaining manner is a weakness of mine. Troubleshooting can be a serious topic, and this book treats serious issues with respect. But there are times when I feel that the amusement value is necessary to keep the mood light. Computer repair and maintenance need not be a grim topic.

## *Who Are You?*

Allow me to make some assumptions about who you are and why you're reading this introduction.

First, I assume that you're human, or at least posing in human form while visiting Earth from the 23rd dimension. If so, welcome. And, if your plans for destroying the earth are imminent, I'd like to suggest that you aim your death ray at Idaho first. Thank you.

Second, you have a PC. That's the generic term for any computer running Microsoft Windows. So, if the computer runs Windows — whether it's made by Dell, made by Joe the Nerd, or it's an iMac — it's a PC as far as this book is concerned.



Even though you're holding a *For Dummies* book, I must make some assumptions about how well you know your computer. The text assumes, for example, that you know how to start the computer, use the mouse, type, and perform other basic computer activities. If you can read and send email or play a game of *Spider Solitaire*, you have enough computer literacy to understand this book and handle the chores I set forth.

Finally, you're using Windows on your PC. It can be Windows 7, Windows Vista, or Windows XP. All these versions are covered here where applicable. You should be aware, however, that Windows XP lacks a lot of the good PC troubleshooting tools available in Windows 7 and Windows Vista.

## How This Book Works

This book is composed of six *minibooks*, each of which addresses a computer troubleshooting or maintenance topic. The minibooks are split into traditional chapters, all geared to a specific subject within the minibook topic. Then the chapters are split into sections consisting of paragraphs, words, and then letters. So, as long as you understand the alphabet, you'll understand this book.

Here are some other important things to note about how this book works:

**Cross-references:** Because this book contains six Chapter 1s and six Chapter 2s and so on, these chapters in other minibooks are referenced by the book they belong to. So, when you read "See Book II, Chapter 2," you know in which minibook to find that Chapter 2. Chapters within the same minibook are referred to as just plain chapters, such as "See Chapter 2."

**Windows, Windows, Windows:** When this book refers to *Windows*, it means all versions covered in this book: 7, Vista, and XP. Otherwise, specific mention is made to a version of Windows. Because Windows 7 and Windows Vista are very similar, they're often lumped together.

**The Control Panel:** Many times this book references the Windows Control Panel, a central location for controlling things in your computer. In Windows 7 and Windows Vista, this book assumes that you're using the Control Panel in Category view, also called Control Panel Home. In Windows XP, I assume that you're using the Control Panel in Icon view.

**Procedural steps:** This book presents numbered steps to accomplish specific tasks. Occasionally, one set of steps is used for all versions of Windows. More often, you see two sets of steps: one for Windows 7 and Windows Vista and the other for Windows XP. Rarely do you find steps listed for all versions of the operating systems. When all three operating systems are referenced in the same set of steps, letters are used within a step when the versions of

Windows differ — for example, Step 2a for Windows 7, Step 2b for Windows Vista, and Step 2c for Windows XP. Then everyone continues with Step 3.

**Typing stuff:** When you're supposed to type something, the text appears in **bold type**. In the context of a step, where the text is normally bold anyway, the stuff you type appears in regular roman text.

**The Enter key:** Do not press the Enter key until you're directed to do so. And even then, just to ensure that you typed everything properly, I recommend that you review what you type before you press Enter.

**Period:** Do not press a period at the end of any text you type, unless I explain that the period is needed. Unlike sentences in English, a computer command doesn't end with a period.

**Filenames and text commands:** Windows lets you type filenames or text commands in either upper- or lowercase letters. This book uses lowercase, often using `monospaced` text to present the command name or filename.

## *How the Videos on the Web Site Work*

This book features a host of companion videos. In the first edition, the videos were contained on a companion DVD that was supplied with the book. Rather than weigh down this edition with another DVD, and to avoid all that video piracy, this edition's videos can be found on the Internet.

To view a video, enter into your computer's web browser the web page address shown in this book. Type the address on the Address bar, and the video plays on your computer screen.

You can also visit this web page to find an index of all videos:

[www.dummies.com/go/troubleshootingandmaintainingyourpcaio2e](http://www.dummies.com/go/troubleshootingandmaintainingyourpcaio2e)

You'll find two types of videos:

**A walk-through of complex steps listed in this book:** Sometimes, despite all my flowery prose, it's difficult to explain on paper how something works. So the video shows you, step by step, how to troubleshoot or maintain your PC.

**A demonstration of how to do more physical tasks, such as clean a computer or yank out a hard drive:** This type of video uses an actor (myself because I'm cheap) to demonstrate the concept.



All videos referenced in this book have a On The Web Site icon, shown in the margin. The videos also have numbers, which appear in the web page address, or *URL*.