

# Introduction

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**W**elcome to *Wireless Home Networking For Dummies*. Wireless networking for personal computers is not really a new idea; it's been around for at least five years. The emergence of an industry standard, however, has caused the use of wireless networking technology to explode.

One of the most appealing things about the current crop of wireless networking equipment is the ease with which you can set up a home network, but its reasonable price might be the most attractive aspect of all. Setting up a wireless home network can be both inexpensive and easy. In some cases, it's almost as simple as opening the box and plugging in the equipment; however, you can avoid many gotchas by doing a little reading beforehand. That's where this book comes in handy.

## About This Book

If you're thinking of purchasing a wireless computer network and installing it in your home, this is the book for you. Even if you've already purchased the equipment for a wireless network, this book will help you install and configure the network. What's more, this book helps you get the most out of your investment after it's up and running.

With this book in hand, you'll have all the information that you need to know about the following topics (and more):

- ✓ Planning your wireless home network
- ✓ Evaluating and selecting wireless networking equipment for installation in your home
- ✓ Installing and configuring wireless networking equipment in your home
- ✓ Sharing an Internet connection over your wireless network
- ✓ Sharing files, printers, and other peripherals over your wireless network
- ✓ Playing computer games over your wireless network
- ✓ Connecting your audio-visual gear to your wireless network
- ✓ Securing your wireless network against prying eyes
- ✓ Discovering devices that you'll be able to connect to your wireless home network in the future

## *System Requirements*

Virtually any personal computer can be added to a wireless home network, but some computers are easier to add than others. This book focuses on building wireless networks that connect PCs running the Windows operating system (Windows 95 or later) or the Mac OS (Mac OS 9 or later). Wireless networking is also popular among Linux users, but we don't cover Linux in this book.

Because wireless networking is a relatively new phenomenon, the newest versions of Windows and Mac OS do the best job of helping you quickly and painlessly set up a wireless network. However, because the primary reason for networking your home computers is to make it possible for all the computers (and peripherals) in your house to communicate, this book gives you information about connecting computers that run older versions of Windows and the two most widely used versions of Mac OS, as well as connecting those that run the newest versions of these two operating systems.

## *How This Book Is Organized*

This book is organized into several chapters that are grouped into five parts. The chapters are presented in a logical order — flowing from planning to installing to using your wireless home network — but feel free to use the book as a reference and read the chapters in any order that you want.

### *Part I: Wireless Networking Fundamentals*

The first part of the book is a primer on networking and on wireless networking. If you've never used a networked computer — much less attempted to install a network — this part of the book provides background information and techno-geek lingo that you need to feel comfortable. Chapter 1 presents general networking concepts; Chapter 2 discusses the most popular wireless networking technology and familiarizes you with wireless networking terminology; and Chapter 3 introduces you to several popular alternatives to wireless networking.

### *Part II: Making Plans*

The second part of the book helps you plan for installing your wireless home network. Chapter 4 helps you decide what you will be connecting to the network and where to install wireless networking equipment in your home, and Chapter 5 provides guidance on making buying decisions.

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## ***Part III: Installing a Wireless Network***

Part III discusses how to install a wireless network in your home and get it up and running. Whether your computers are Apple Macintosh running Mac OS 9 or X (Chapter 8) or are PCs running a Windows 95 or later operating system (Chapters 6 and 7), this part of the book explains how to install and configure your wireless networking equipment. In addition, this part includes a chapter that explains how to use your wireless home network to share a single Internet connection (Chapter 9). The last chapter in this part covers securing your wireless home network (Chapter 10).

## ***Part IV: Using a Wireless Network***

After you get your wireless home network installed and running, you'll certainly want to use it. Part IV starts by showing you the basics of putting the wireless network to good use: sharing files, folders, printers, and other peripherals (Chapter 11). We spend some time discussing other cool things that you can do over a wireless network, including playing multi-user computer games (Chapter 12), connecting your audio-visual equipment (Chapter 13), and operating various types of smart home conveniences (Chapter 14).

Bluetooth-enabled devices are becoming more prevalent these days, so you won't want to miss Chapter 15 or Chapter 16, for that matter, where we describe how to use wireless networking to connect to the Internet through wireless *hot spots* in coffee shops, hotels, airports, and other public places. How cool is that?

## ***Part V: The Part of Tens***

Part V provides four top-ten lists that we think you'll find interesting — ten frequently asked questions about wireless home networking (Chapter 17); ten troubleshooting tips for improving your wireless home network's performance (Chapter 18); ten devices to connect to your wireless home network . . . sometime in the future (Chapter 19); and the top ten sources for more information about wireless networking (Chapter 20).

## ***Icons Used in This Book***

All of us these days are hyper-busy people, with no time to waste. To help you find the especially useful nuggets of information in this book, we've marked the information with little icons in the margin. The following icons are used in this book:



As you can probably guess, the Tip icon calls your attention to information that will save you time or maybe even money. If your time is really crunched, you might try just skimming through the book and reading the tips.



The little bomb in the margin should alert you to pay close attention and tread softly. You don't want to waste time or money fixing a problem that could have been avoided in the first place.



This icon is your clue that you should take special note of the advice that you find there . . . or that this paragraph reinforces information that has been provided elsewhere in the book. Bottom line: You will accomplish the task more effectively if you remember this information.



Face it, computers and wireless networks are high-tech toys — we mean *tools* — that make use of some pretty complicated technology. For the most part, however, you don't need to know how it all works. The Technical Stuff icon identifies the paragraphs that you can simply skip if you're in a hurry or you just don't care to know.

## Where to Go from Here

Where you should go next in this book depends on where you are in the process of planning, buying, installing, configuring, and/or using your wireless home network. If networking in general and wireless networking in particular are totally new to you, we recommend that you start at the beginning with Part I. When you feel comfortable with networking terminology, or you just get bored with the lingo, move on to the chapters about planning your network and selecting equipment in Part II. If you already have your equipment in hand, head to Part III to get it installed — and secured (unless you *like* the idea of your neighbor or even a hacker being able to access your network).



The wireless industry is changing fast. We'll provide regular updates on this book at [www.dummies.com/extras](http://www.dummies.com/extras) so that you can see what changes, as it changes, on a chapter by chapter basis.

Happy wireless networking!