

Microsoft

Windows Vista[®] Home Networking 与家庭网络构建

- ▶ Wired, wireless, remote—all your connections made easy!
- ▶ Set it up, help secure it, and keep it running

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*For my family, especially my
mom and dad, who believe in
and inspire me.*

Acknowledgments

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INTRODUCTION

BEING CONNECTED through technology is now a part of life. You're probably already connected to others via cell phones, instant messaging, e-mail, and the Internet, and now it's time to make sure your home is connected, too. This book is here to help you with that endeavor and to make sure you plan, create, and ultimately manage the best network possible for you and your family.

WHY THIS BOOK

This book details exactly what you need to know to set up a network and offers the information in an easy-to-understand format with lots of screen shots and step-by-step instructions. It was written specifically for Windows Vista by a Microsoft MVP and Windows Vista and networking expert and was published by Microsoft Press, so you know you're getting the best book possible for setting up and configuring your Windows Vista-based home network. With this book, you'll learn more than how to create any kind of network easily—you'll also learn how to incorporate Windows Vista-added benefits such as Windows Defender, Windows Security Center, the Network and Sharing Center, Windows Firewall, Remote Desktop, and more. It's everything you'll need to create your network and manage it successfully.

WHO THIS BOOK IS FOR

This book is suitable for just about any user, from beginner to intermediate to even a Windows expert. For instance, this book is a good choice for those who know something about Windows operating systems but not much about creating a network. It's also for anyone who already has a wired network and wants to set up a wireless one, and it's even for someone who wants to set up a temporary wired or wireless network for gaming, conferences, or a quick transfer of files. Even Windows experts can get something here, such as learning how to connect remotely to their home PC from a hotel room in another city or state by using Remote Desktop technology.

SPECIAL ELEMENTS IN THIS BOOK

As you work through this book, you'll run across the following special elements that will help you get more from Windows Vista and home networking:

Tips and notes These offer sound advice for getting better performance, better results, and whatever else can be pulled from a given application or task. These suggestions offer guidance for performing tasks more effectively.

Sidebars These are stand-alone sections within the main body of a chapter. The sidebars are related to the chapter's topic but are completely independent of the chapter discussion. They offer additional information you may need to perform a task but do not pertain to everyone. They also offer information regarding the technologies involved in a specific section or chapter.

HOW THIS BOOK IS ORGANIZED

You don't have to read this book from cover to cover; it is organized into parts so you can find what you want easily. For instance, if you want only to set up a Windows Home Server–based PC, you can immediately skip to Chapter 10; if you know you want to set up an Ethernet network and you already have the hardware, you can skip to Chapter 4. However, if you don't know much about home networking, you may want to read the first part, "Getting Started," in its entirety before moving forward.

This book is divided into five parts, described next.

PART I, "GETTING STARTED"

In Part I, you'll learn what Windows Vista offers regarding home networking, why you should create a network, and what types of networks you can choose. You'll also learn what kind of hardware is needed for each network type, the cost, and how easily these items can be installed if necessary. Finally, you'll learn what you should do prior to setting up a network, such as turning on Windows Firewall, connecting to the Internet, and performing related tasks. If you're not familiar with networking configurations and technologies, this part is a must-read!

PART II, "SETTING UP A NETWORK"

In Part II, you'll choose what type of network you want to create (or upgrade to) and physically create the network. You'll become acquainted with the Network and Sharing Center, where you'll turn on network discovery and file sharing. Finally, you'll browse the network and access shared files. If you already know you want to create a direct connection network, read Chapter 3, but skip Chapters 4 and 5. If you know you want an Ethernet network, read Chapter 4, but skip Chapters 3 and 5. If you're settled on a wireless network, read Chapters 4 and 5, but skip Chapter 3. Wireless networks can also have wired connections, so it's important to read Chapter 5 (or at least skim it) on wired networking. (Everyone needs to read Chapter 6 on using the Network and Sharing Center.)

PART III, "MANAGING THE NETWORK"

In Part III, you'll learn tips for managing the network, such as creating user accounts for each network user, creating and managing shared folders, and creating and managing shared printers. Although you don't have to read the chapters in this part in order, it's ultimately best if you do; you'll read each of them carefully.

PART IV, “EXPANDING THE NETWORK”

In Part IV, you'll find various ways to expand and secure your network, including adding a Windows Home Server–based PC, working with offline files, adding a media extender, accessing the network remotely, and, finally, making sure the network is as secure as possible. In this part, you need to read only the chapters that apply to you, although everyone should read Chapter 14 on securing the network.

PART V, “APPENDIX AND GLOSSARY”

In Part V, you'll have access to an appendix and glossary. The appendix offers myriad ways to get more help if you can't find answers to your questions in this book, and the glossary offers a quick way to look up terms you find in this book and elsewhere that you aren't familiar with.

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PART I

Getting Started

CHAPTER 1

Introduction to Networking

- **Explore networking options**
- **Select a network type**
- **Select network hardware**
- **Learn networking terms**

CONGRATULATIONS on your new (or updated) PC with the Windows Vista operating system! I hope you've had time to explore some of the awesome new features such as Windows Sidebar, Windows Calendar, Windows Photo Gallery, and the Snipping Tool, as well as the new system and security tools including Windows Defender and Windows Firewall. You have more tools to explore, though, including the outstanding new networking tools.

I'm assuming if you're reading this introduction, you must be just about ready to get on with networking! Because Windows Vista offers several options for home and small-office networks and because I want you to be as happy as possible with the network you configure, I'm going to start by introducing the network types from which you can