Microsoft® Windows Server® 2008: A Beginner's Guide

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ABOUT THE AUTHOR

Martin (Marty) Matthews has used computers for more than 40 years, from some of the early mainframe computers to recent personal computers. He has done this as a programmer, systems analyst, manager, vice president, and president of a software firm. As a result, he has firsthand knowledge of not only how to program and use a computer, but also how to make the best use of the information a computer can produce.

Over 25 years ago, Marty wrote his first computer book, on how to buy minicomputers. Twenty-three years ago, Marty and his wife, Carole, began writing books as a major part of their occupation. In the intervening years, they have written over 70 books, including ones on desktop publishing, web publishing, Microsoft Office, and Microsoft operating systems from MS-DOS through Windows Server 2003 and Windows Vista. Recent books published by McGraw-Hill include *Windows Server 2003: A Beginner's Guide* and a number of volumes in the best-selling QuickSteps series, of which he is the co-creator.

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INTRODUCTION

Windows Server 2008 is now a fully mature server operating system. What began as Windows NT went through major transition in Windows 2000 Server and Windows Server 2003 to become in Windows Server 2008 a full-featured, fully capable server operating system. The net result is a server operating system that is more reliable, easier to install, and more scalable. It also has an excellent directory service, is easier to manage, provides better security, and delivers exceptional web support.

The purpose of this book is to show you how to use these features and many others, and how to get the attendant benefits.

How This Book Is Organized

Windows Server 2008: A Beginner's Guide is written the way many people learn. It starts by reviewing the basic concepts and then uses a learn-by-doing method to demonstrate the major features of the product. Throughout, the book uses detailed examples and clear explanations with many line drawings and screenshots to give you the insight needed to make the fullest use of Windows Server 2008. *Windows Server 2008: A Beginner's Guide* has five parts, each providing a complete discussion of one major aspect of Windows Server 2008.

Part I: The Windows Server 2008 Environment

Part I introduces you to the Windows Server 2008 environment and to what's new about it. This part establishes the foundation for the rest of the book.

- **Chapter 1, Exploring Windows Server 2008**, provides an overview of Windows Server 2008 and serves as a guide to the more in-depth discussions that take place in the later chapters.

Part II: Deploying Windows Server 2008

Part II covers planning for and deploying Windows Server 2008 across an organization. The purpose of this part is to assist you in going through the planning process and then actually doing a detailed installation.

- **Chapter 2, Preparing for Installation**, looks at all the steps that must be carried out prior to installing Windows Server 2008, including the possible pitfalls to stay clear of.
- **Chapter 3, Installing Windows Server 2008**, takes you through the various steps necessary to install the Server from different starting points, for both upgrading and doing a clean install.
- **Chapter 4, Windows Deployment Services**, describes how to use the Windows Deployment Services to automate the installation of Windows Server 2008.

Part III: Networking Windows Server 2008

Part III devotes three chapters to networking, the single most important function within Windows Server 2008.

- **Chapter 5, Windows Server 2008 Networking Environment**, provides a comprehensive foundation on networking by describing the schemes, hardware, and protocols or standards that are used to make it function.
- **Chapter 6, Setting Up and Managing a Network**, describes how networking is set up and managed in Windows Server 2008.
- **Chapter 7, Using Active Directory and Domains**, looks at how domains are used in Windows Server 2008 and the central role that Active Directory plays in managing networking.

Part IV: Communications and the Internet

Part IV covers the ways that you and your organization can reach out from your LAN to connect to others or allow others to connect to you, both on the Internet and through direct communications.

- **Chapter 8, Communications and Internet Services**, provides an overview of communications and how to set it up, including using a dial-up connection with the Remote Access Service (RAS) and using an Internet connection with Internet Explorer.

- **Chapter 9, Internet Information Services Version 7**, describes Internet Information Services (IIS) and how it is set up and managed.
- **Chapter 10, Virtual Private Networking**, explains VPN: how it works; how it is set up with PPTP, L2TP, and SSTP; and how it is used.
- **Chapter 11, Terminal Services and Remote Desktop**, describes the significantly enhanced Terminal Services, how it is set up, and then how to use Application Server Mode, Remote Administration Mode, and Remote Desktop Connection.

Part V: Administering Windows Server 2008

The purpose of Part V is to explore the numerous administrative tools that are available within Windows Server 2008 and to discuss how they can best be used.

- **Chapter 12, Managing Storage and File Systems**, looks at the extensive set of tools that are available in Windows Server 2008 to handle the various types of storage systems and the files and folders they contain.
- **Chapter 13, Setting Up and Managing Printing and Faxing**, describes what constitutes Windows Server 2008 printing and Print Services, how to set it up, how to manage it, how to manage the fonts that are required for it, and how to use the Fax Server and faxing.
- **Chapter 14, Managing Windows Server 2008**, discusses the system management tools and user management tools that are not part of setting up, networking, file management, and printing.
- **Chapter 15, Controlling Windows Server 2008 Security**, describes each of the security demands and the Windows Server 2008 facilities that address that demand, as well as the ways to implement those facilities.

Conventions Used in This Book

Windows Server 2008: A Beginner's Guide uses several conventions designed to make the book easier for you to follow:

- **Bold type** is used for text that you are to type from the keyboard.
- *Italic type* is used for a word or phrase that is being defined or otherwise deserves special emphasis.
- A `monospaced typeface` is used for command listings either produced by Windows Server 2008 or entered by the user.
- SMALL CAPITAL LETTERS are used for keys on the keyboard such as ENTER and SHIFT.
- When you are expected to enter a command, you are told to press the key(s). If you are to enter text or numbers, you are told to type them.