



Mastering

**Microsoft® Windows® 7
Administration**

Mastering

Microsoft® Windows® 7

Administration

William Panek

Tylor Wentworth



WILEY

Wiley Publishing, Inc.

Acquisitions Editor: Agatha Kim
Development Editor: Jennifer Leland
Technical Editor: Rodney R. Fournier
Production Editor: Christine O'Connor
Copy Editor: Elizabeth Welch
Editorial Manager: Pete Gaughan
Production Manager: Tim Tate
Vice President and Executive Group Publisher: Richard Swadley
Vice President and Publisher: Neil Edde
Book Designer: Maureen Forsys, Happenstance Type-O-Rama and Judy Fung
Proofreader: Nancy Bell
Indexer: Ted Laux
Project Coordinator, Cover: Lynsey Stanford
Cover Designer: Ryan Sneed
Cover Image: Pete Gardner/DigitalVision/Getty Images

Copyright © 2010 by Wiley Publishing, Inc., Indianapolis, Indiana

Published simultaneously in Canada

ISBN: 978-0-470-55984-0

No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as permitted under Sections 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600. Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at <http://www.wiley.com/go/permissions>.

Limit of Liability/Disclaimer of Warranty: The publisher and the author make no representations or warranties with respect to the accuracy or completeness of the contents of this work and specifically disclaim all warranties, including without limitation warranties of fitness for a particular purpose. No warranty may be created or extended by sales or promotional materials. The advice and strategies contained herein may not be suitable for every situation. This work is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional services. If professional assistance is required, the services of a competent professional person should be sought. Neither the publisher nor the author shall be liable for damages arising herefrom. The fact that an organization or Web site is referred to in this work as a citation and/or a potential source of further information does not mean that the author or the publisher endorses the information the organization or Web site may provide or recommendations it may make. Further, readers should be aware that Internet Web sites listed in this work may have changed or disappeared between when this work was written and when it is read.

For general information on our other products and services or to obtain technical support, 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.

Wiley also publishes its books in a variety of electronic formats. Some content that appears in print may not be available in electronic books.

Library of Congress Cataloging-in-Publication Data

Panek, William, 1970-

Mastering Microsoft Windows 7 administration / William Panek, Tylor Wentworth.

p. cm.

ISBN 978-0-470-55984-0 (paper/website)

1. Microsoft Windows (Computer file) 2. Operating systems (Computers) I. Wentworth, Tylor, 1962- II. Title.

QA76.76.O63P3365 2010

005.4'32--dc22

2009043726

TRADEMARKS: Wiley, the Wiley logo, and the Sybex logo are trademarks or registered trademarks of John Wiley & Sons, Inc. and/or its affiliates, in the United States and other countries, and may not be used without written permission. Microsoft and Windows are registered trademarks of Microsoft Corporation in the United States and/or other countries. All other trademarks are the property of their respective owners. Wiley Publishing, Inc., is not associated with any product or vendor mentioned in this book.

10 9 8 7 6 5 4 3 2 1

Dear Reader,

Thank you for choosing *Mastering Microsoft Windows 7 Administration*. This book is part of a family of premium-quality Sybex books, all of which are written by outstanding authors who combine practical experience with a gift for teaching.

Sybex was founded in 1976. More than 30 years later, we're still committed to producing consistently exceptional books. With each of our titles, we're working hard to set a new standard for the industry. From the paper we print on, to the authors we work with, our goal is to bring you the best books available.

I hope you see all that reflected in these pages. I'd be very interested to hear your comments and get your feedback on how we're doing. Feel free to let me know what you think about this or any other Sybex book by sending me an email at nedde@wiley.com. If you think you've found a technical error in this book, please visit <http://sybex.custhelp.com>. Customer feedback is critical to our efforts at Sybex.

Best regards,

A handwritten signature in black ink, appearing to read 'Neil Edde', written in a cursive style.

Neil Edde
Vice President and Publisher
Sybex, an Imprint of Wiley

Acknowledgments

I would like to thank my wife Crystal and my two daughters, Alexandria and Paige, for all of their love and support during the writing of all my books. They make it all worthwhile.

I have to thank my coauthor of this book, Tylor Wentworth. He is a business partner, a confidant, a GREAT family man, but most importantly, my friend. I always end up laughing every time we get together and that's important in this world.

I want to thank my family and especially my brothers Rick, Gary, and Rob. They have always been there for me.

I would like to thank Jeremy Hodgson, my training partner, who spends more time with me on the road than anyone else. His sense of humor keeps me smiling even when I am homesick.

I want to thank one of my close friends, Todd Lammle, for his inspiration and friendship when we get together every month. He is truly one of the great ones in this industry.

I want to thank another close friend, Dennis Gibbs, for always being there when I needed him and for all his pushing to get me to the gym every time I am on the road.

Finally, I want to thank everyone from Sybex who backed me up on this book: especially Jennifer Leland, who constantly pushed to make this the best book possible; Rodney Fournier, who has been my technical editor on multiple books, including this one, because he always has my back; Christine O'Connor, who did a great job keeping all the edits organized; and finally, Agatha Kim, who was the lead for the entire book. She was always there for us and she was great to write for. Thanks to you all and everyone else behind the scenes on this book.

— *William Panek*

I would like to acknowledge and thank my wife and best friend, Julie. Without her support, understanding, and putting up with me walking around in a daze most of the time, I would not have been able to complete this project.

My son Travis and daughter Jessie were also instrumental in maintaining my day-to-day sanity.

I would like to thank my personal motivator and writing/business partner, Will Panek, who kept me focused and going down the correct path; I couldn't possibly have done this without him.

The editing staff at Wiley Publishing has been extremely easy to work with and I thank them as well. I would like to especially thank Jen Leland for her help, her patience with me, and her guidance; she has allowed me to see just how much I didn't know about writing and given me the opportunity to learn it in an enjoyable dialogue during our editing process.

— *Tylor Wentworth*

About the Authors

William Panek (MCP® , MCP+I® , MCSA® , MCSA® w/Security & Messaging, MCSE – NT (3.51 & 4.0)® , MCSE – 2000 & 2003® , MCSE w/Security & Messaging, MCDBA® , MCT® , MCTS® , MCITP® , CCNA® , CHFI®) After many successful years in the computer industry and a degree in computer programming, William Panek decided that he could better use his talents and his personality as an instructor. He started teaching for such schools as Boston University, Clark University, and GlobalNet, just to name a few.

In 1998 William Panek started Stellacon Corporation. Stellacon has become one of New England's most respected training companies. Stellacon is also a two-time winner of the Best Computer School award in Portsmouth, New Hampshire.

William brings years of real-world expertise to the classroom and strives to ensure that each and every student has an understanding of the course material.

William currently lives in New Hampshire with his wife and two girls. In his spare time he likes to golf, ski, and snowmobile. William is also a commercially rated helicopter pilot.

Tylor Wentworth (MCP, MCSA, MCSA /Security & Messaging, MCSE – NT4.0, MCSE – 2000 & 2003, MCSE w/Security & Messaging, MCTS, MCITP, MCT, CEH, CHFI, CSI, CCNA, CCNP, BSEE, FCC RF Licensed) is a member of the IEEE, with membership in the standards committee. Tylor has been involved in computers and networking for over 17 years.

Tylor has provided training for companies such as CA Inc., Liberty Mutual, Time Warner, FairPoint Communications, Enterasys, and many more. He has shared his networking knowledge and experience while developing and delivering custom curriculum for numerous network infrastructure classes as well as security classes.

Tylor delivers Microsoft Official Curriculum both publicly and privately on a regular basis. Tylor and his wife Julie own Intelligence Quest LLC, which offers customized training solutions for several training centers as well as for corporate clients. Intelligence Quest LLC offers a wide range of official training for multiple vendors as well.

Tylor currently lives in Maine with his wife Julie and their two dogs. Tylor's son Travis is enrolled in a chemical engineering graduate program, and his daughter Jessie is pursuing several avenues in business while focusing on Intelligence Quest LLC.

Contents at a Glance

<i>Introduction</i>	<i>xix</i>
Chapter 1 • Overview of Windows 7	1
Chapter 2 • Installing Windows 7	11
Chapter 3 • Automating the Windows 7 Installation	47
Chapter 4 • Configuring Disks	83
Chapter 5 • Managing the Windows 7 Desktop	123
Chapter 6 • Managing the Interface	155
Chapter 7 • Using Remote Assistance and Remote Desktop	195
Chapter 8 • Configuring Users and Groups	227
Chapter 9 • Managing Security	261
Chapter 10 • Configuring Hardware and Printers	321
Chapter 11 • Configuring Network Connectivity	357
Chapter 12 • Networking with Windows Server 2008	403
Chapter 13 • Configuring Internet Explorer 8	427
Chapter 14 • Installing and Configuring Applications	459
Chapter 15 • Maintaining and Optimizing Windows 7	493
Appendix A • The Bottom Line	539
 <i>Index</i>	 <i>563</i>

Contents

<i>Introduction</i>	<i>xix</i>
Chapter 1 • Overview of Windows 7	1
Introducing Windows 7	1
Overview of Windows XP	1
Windows XP Service Pack 3	2
Overview of Windows Vista	3
New Features in Windows 7	5
Windows 7 Architecture	8
32-Bit vs. 64-Bit	8
The Bottom Line	9
Chapter 2 • Installing Windows 7	11
Preparing to Install Windows 7	11
Windows 7 Editions	12
Hardware Requirements	17
The Hardware Compatibility List	19
New Install or Upgrade?	20
Disk Space Partitioning	25
Language and Locale	26
Installing Windows 7	26
Performing a Clean Install of Windows 7	27
Performing an Upgrade to Windows 7	32
Troubleshooting Installation Problems	34
Migrating Files and Settings	35
Upgrading from Windows XP to Windows 7	38
Supporting Multiboot Options	40
Using Windows Activation	41
Using Windows Update	42
Installing Windows Service Packs	45
The Bottom Line	45
Chapter 3 • Automating the Windows 7 Installation	47
Choosing Automated Deployment Options	48
Introducing the Microsoft Deployment Toolkit (MDT) 2010	48
Performing an Unattended Installation	52
Using Windows Deployment Services	54
Using the System Preparation Tool and Disk Imaging	55
Using the Windows Automated Installation Kit (Windows AIK)	58
Summary of Windows 7 Deployment Tools	59

Deploying Unattended Installations	61
Using the System Preparation Tool to Prepare an Installation for Imaging	61
Preparing a Windows 7 Installation	63
Using ImageX to Create a Disk Image	64
Installing from a Disk Image	65
Using Windows System Image Manager to Create Answer Files	66
Using Windows Deployment Services (WDS)	70
Microsoft Assessment and Planning (MAP) Toolkit	76
MAP System Requirements	78
The Bottom Line	80
Chapter 4 • Configuring Disks	83
Configuring File Systems	84
Selecting a File System	84
Converting a File System	86
Configuring Disk Storage	87
Basic Storage	87
Dynamic Storage	87
GUID Partition Table	89
Accessing and Managing the Disk Management Utility	90
Using the MMC	90
Accessing the MMC	91
Accessing the Disk Management Utility	93
Managing Administrative Hard Disk Tasks	94
Managing Dynamic Storage	106
Creating Simple, Spanned, and Striped Volumes	106
Creating Extended Volumes	107
Troubleshooting Disk Management	108
Using Disk Management Status Codes	108
Troubleshooting Disks That Fail to Initialize	109
Managing Data Compression	110
Using the Compact Command-Line Utility	111
Using Compressed (Zipped) Folders	111
Managing Data Encryption with EFS	112
Encrypting and Decrypting Folders and Files	112
Managing EFS File Sharing	113
Using the DRA to Recover Encrypted Data	114
Creating a DRA on a Stand-Alone Windows 7 Computer	114
Recovering Encrypted Files	116
Using the Cipher Utility	116
Using Disk Maintenance Tools	117
Running the Disk Defragment Utility	117
Running the Disk Cleanup Utility	119
Running the Check Disk Utility	119
The Bottom Line	120

Chapter 5 • Managing the Windows 7 Desktop	123
Configuring Desktop Settings	123
Configuring Windows Aero	128
Customizing the Taskbar and Start Menu	131
Configuring Shortcuts	135
Configuring Windows Gadgets	136
Managing Multiple Languages and Regional Settings	138
Configuring Multilingual Technology	138
Configuring Windows 7 Multilanguage Support	139
Enabling and Configuring Multilingual Support	140
Configuring Accessibility Features	144
Setting Accessibility Options	144
Configuring Accessibility Utilities	148
Configuring the Power Button	149
Managing a Multiple-User Environment	150
Managing User Profiles	151
The Bottom Line	153
Chapter 6 • Managing the Interface	155
Configuring Windows 7	155
What's in Control Panel?	156
Understanding the System Icon	170
Using the Registry Editor	176
Managing Display Devices	177
Configuring Video Adapters	178
Using Multiple-Display Support	181
Power Management for Mobile Computer Hardware	182
Recognizing the Improvements to Power Management	182
Managing Power States	183
Managing Power Options	184
Configuring Power Plans	184
Configuring Advanced Power Settings	185
Configuring Hibernation	186
Managing Power Consumption Using the Battery Meter	186
Using Windows ReadyBoost and Windows 7	187
Configuring Advanced Settings	187
Managing Windows 7 Services	187
The Bottom Line	192
Chapter 7 • Using Remote Assistance and Remote Desktop	195
Using Remote Assistance	196
New and Updated Features in Remote Assistance	196
Using Easy Connect	196
Requesting an Invitation as a File	201
Requesting an Invitation as Email	203

Using Command-Line Remote Assistance	204
Using Remote Desktop	209
New and Updated Features in Remote Desktop	209
Configuring a Computer for Remote Desktop	210
Providing Command-Line Remote Desktop	221
The Bottom Line	225
Chapter 8 • Configuring Users and Groups	227
Understanding Windows 7 User Accounts	227
Account Types	228
Built-in Accounts	229
Local and Domain User Accounts	230
Logging On and Logging Off	230
Local User Logon Authentication Process	230
Logging Off Windows 7	232
Working with User Accounts	232
Utilizing the Local Users and Groups Utility	232
Using the User Accounts Utility in Control Panel	234
Creating New Users	234
Disabling User Accounts	239
Deleting User Accounts	240
Renaming User Accounts	241
Changing a User’s Password	242
Managing User Properties	242
Managing User Group Membership	242
Setting Up User Profiles, Logon Scripts, and Home Folders	243
Troubleshooting User Accounts Authentication	248
Troubleshooting Local User Account Authentication	248
Troubleshooting Domain User Accounts Authentication	249
Creating and Managing Groups	250
Using Built-in Groups	250
Using Special Groups	253
Working with Groups	255
The Bottom Line	259
Chapter 9 • Managing Security	261
Managing Security Configurations	261
Understanding Group Policy Objects and Active Directory	262
Active Directory Overview	263
Understanding GPO Inheritance	264
Using the Group Policy Result Tool	265
Creating and Applying LGPOs	266
Configuring Local Security Policies	269
Using Account Policies	270
Using Local Policies	274

Configuring User Account Control	289
Managing Privilege Elevation	290
Registry and File Virtualization	292
Using Advanced Security Options	292
Configuring Windows Firewall	292
Windows Firewall with Advanced Security	294
Configuring the Action Center	299
Using Windows Defender	299
Performing a Manual Scan	300
Configuring Windows Defender	301
Using BitLocker Drive Encryption	305
Managing File and Folder Security	305
Folder Options	305
Securing Access to Files and Folders	309
Determining Effective Permissions	314
Viewing Effective Permissions	316
Determining NTFS Permissions for Copied or Moved Files	316
Managing Network Access	316
Creating Shared Folders	317
Configuring Share Permissions	318
Combining Share and NTFS	319
The Bottom Line	319
Chapter 10 • Configuring Hardware and Printers	321
Configuring Hardware	321
Introducing Device Stage	322
Using Device Manager	324
Device Properties Available Within Device Manager	327
Configuring Network Adapter Advanced Properties	328
Installing and Updating Device Drivers	328
Managing I/O Devices	337
Configuring the Keyboard	337
Changing the Repeat Delay for Your Keyboard	338
Configuring the Mouse	339
Configuring Removable Storage Devices	343
Managing Printers	346
Installing Printers	347
Installing a Printer for a Locally Connected Print Device	347
Installing a Printer to Connect to a Shared Network Print Device	349
Pausing Printing for the Locally Connected Printer	352
Sending a Test Document to the Paused Locally Connected Printer	352
Viewing Document Properties from a Job in the Print Queue	353
Deleting a Document from the Queue	353
Removing a Printer from Windows 7	353
The Bottom Line	354

Chapter 11 • Configuring Network Connectivity	357
Connecting Network Devices	357
Installing a Network Adapter	358
Configuring a Network Adapter	358
Troubleshooting a Network Adapter	363
Connecting to a Network Projector	364
Connecting to a Network Printer	365
Connecting Wireless Devices	366
Configuring Wireless Network Settings	366
Configuring Wireless Network Security	370
Joining and Sharing HomeGroups in Windows 7	377
Understanding Network Protocols	383
Overview of TCP/IP	383
Using Deployment Options for TCP/IP Configurations	390
TCP/IP Troubleshooting	400
The Bottom Line	401
Chapter 12 • Networking with Windows Server 2008	403
Understanding Networking	403
The Windows Peer-to-Peer Network Model	404
Windows Server 2008 Active Directory Network	405
Microsoft Networking Terms and Roles	407
New Microsoft Windows 2008 Server Features	408
Requirements for Windows Server 2008 Installation	412
Installing Windows Server 2008	413
Adding Windows 7 to the Domain Environment	415
Understanding Virtualization	417
Understanding Microsoft's Hyper-V Technology	417
Understanding Microsoft Virtual PC	422
The Bottom Line	424
Chapter 13 • Configuring Internet Explorer 8	427
Overview of IE8	427
Using New IE8 Features	428
Defining IE8 Accelerators	428
Defining IE8 Web Slices	431
Browsing with IE8's Compatibility View	435
Using Updated Features of IE8	436
Exploring Address Bar and Tab Updates	436
Using Find On Page and Improved Zoom	438
Using IE8's New Security and Safety Features	440
Understanding Domain Highlighting	440
Defending Against XSS and Click-Jacking	441
Working with SmartScreen Filters	442
Browsing with InPrivate Browsing and InPrivate Filtering	443

Using IE8's Enhanced Security and Safety Features	446
Protecting the User with Data Execution Prevention	446
Dealing with Automatic Crash Recovery	446
Controlling Your Browsing with Enhanced Delete Browsing History	447
Using IE8	448
Taking Advantage of the Instant Search Box	448
Configuring RSS	449
Installing Add-ons to IE8	450
Controlling Pop-ups with IE8's Pop-up Blocker	451
Using Protected Mode for IE8	453
Configuring IE8 Options	453
The Bottom Line	457
Chapter 14 • Installing and Configuring Applications	459
Getting Started in Windows 7	459
Accessing Email in Windows 7	463
Installing Live Mail	463
Setting Up Email Accounts with Live Mail	463
Configuring Options in Live Mail	464
Setting Up Safety Parameters in Live Mail	470
Using the Live Mail Calendar	472
Using Live Mail Contacts	474
Integrating Windows Fax and Scan	475
Configuring Fax Support	476
Managing Imaging Devices	477
Using Windows Media Player 12	477
Understanding the Windows Media Player 12 Interface	478
Playing Music CDs in Windows Media Player 12	480
Playing DVDs in Windows Media Player 12	480
Controlling Digital Media with Windows Media Center	480
Using Windows Media Centers Menus	481
Accessing Other Devices on Your Network with Windows Media Center	483
Installing and Uninstalling Applications in Windows 7	483
Installing an Application from a Disk	484
Repairing or Changing an Application	485
Uninstalling an Application	487
Modifying Windows 7 Features (Built-in Programs)	487
The Bottom Line	490
Chapter 15 • Maintaining and Optimizing Windows 7	493
Understanding Windows 7 Performance Optimization	494
Creating Baselines	494
Testing Configuration Changes or Tuning Efforts	495
Using Alerts for Problem Notification	495
Optimizing Windows 7 with Performance Monitor	496
Using Resource Monitor	496

Utilizing Customized Counters in Performance Monitor	501
Managing Performance Monitor Data with Collector Sets	507
Managing System Performance	509
Managing Processor Performance	511
Managing the Disk Subsystem	511
Optimizing the Network Subsystem	512
Using Reliability Monitor	513
Using Windows 7 Tools to Discover System Information	514
Getting System Information	514
Using Task Manager	515
Scoring Windows 7 with Performance Information and Tools	521
Using System Configuration	522
Setting Up Task Scheduler	526
Creating a Scheduled Task	526
Managing Scheduled Task Properties	528
Troubleshooting Scheduled Tasks	530
Using Event Viewer	530
Maintaining Windows 7 with Backup and Restore	534
Creating a Backup	534
Restoring Files from a Backup	535
Using Advanced Backup Options	536
Using System Protection	536
The Bottom Line	538
Appendix A • The Bottom Line	539
<i>Index</i>	<i>563</i>

Introduction

This book was written with over 40 years of IT experience between the two authors, William Panek and Tylor Wentworth. The authors have taken that experience and translated it into a Windows 7 book that will help you develop a clear understanding of how to install and configure Windows 7 while avoiding the possible configuration pitfalls.

Many Microsoft books just explain the Windows operating system but with this *Mastering* book, the authors take it a step further, with many in-depth, step-by-step procedures together with real-world examples that back up the explanations.

Microsoft Windows 7 is the newest version of Microsoft's client operating system software. Microsoft has taken the best of Windows XP and Windows Vista and combined them into their latest creation, Windows 7. Along with the best of Windows XP and Vista, Microsoft has added several new features to Windows 7 — features like Device Stage — to make more functionality available to users from one location.

Windows 7 eliminates many of the problems that plagued Windows Vista, and includes a much faster boot time and shutdown. It is also easier to install and configure, and barely stops to ask the user any questions during installation. We will show you what features are installed during the automated installation and where you can make changes if you need to be more in charge of your operating system and its features.

This book takes you through all the ins and outs of Windows 7, including installation, configuration, Group Policy Objects, auditing, backups, Windows Server 2008, virtualization and Hyper-V, and so much more.

Windows 7 has improved on Microsoft's desktop environment, made home networking easier, enhanced searchability, improved performance, built in wireless support, and even built in touchscreen capabilities — and that's only scratching the surface.

There have been several enhancements that allow Windows 7 to better serve the end user in terms of getting Remote Assistance from others. Windows 7 even adds a simple Easy Connect feature. We will show you the enhancements to Remote Desktop, making the user experience even better than it was before.

When all is said and done, this is a technical book for IT professionals who want to take Windows 7 to the next step. Most IT people just get a copy of Windows 7 and try to learn it. With this book, you will not only learn Windows 7 but you will become a Windows 7 Master.

Who Should Read This Book

This book is intended for mid- to high-level administrators of networks that use Microsoft operating systems. Such people probably fall into a few basic groups:

- ◆ Administrators who are responsible for client operating systems and are looking to implement the Microsoft Windows 7 operating system

- ◆ Server administrators or IT managers who are responsible for deciding which operating systems to use and what functionality they need
- ◆ Help desk administrators who are responsible for supporting the Windows 7 operating system

This book will help anyone who has to administer Windows 7 in a corporate environment, but it will also help anyone who wants to learn the real ins and outs about the Windows 7 operating system.

What's Inside

Here is a glance at what's in each chapter:

Chapter 1: Overview of Windows 7 This chapter begins by explaining many of the new features of Windows 7, together with some features of Windows XP and Vista that have been included with Windows 7.

Chapter 2: Installing Windows 7 We take you through the requirements and multiple ways to install the Windows 7 operating system in this chapter.

Chapter 3: Automating the Windows 7 Installation This chapter shows you how to install Windows 7 without the need of user intervention and also how to install multiple copies of Windows 7 quickly and easily.

Chapter 4: Configuring Disks In this chapter you are taken through the process of configuring and managing your physical disks.

Chapter 5: Managing the Windows 7 Desktop We show you how to manage your desktop environment, including customizing the taskbar and Start Menu, creating shortcuts, setting display properties for themes, and configuring Windows Gadgets in this chapter.

Chapter 6: Managing the Interface We examine the process of configuring the Windows 7 environment in this chapter, including an overview of the main configuration utilities, including Control Panel and the Registry.

Chapter 7: Using Remote Assistance and Remote Desktop This chapter explains the new features and benefits to using Remote Assistance and Remote Desktop within Windows 7 and how to support end users, and implement group policy and scripting.

Chapter 8: Configuring Users and Groups We take you through the different ways to create and manage your users and groups on the Windows 7 operating system in this chapter.

Chapter 9: Managing Security You will see how to configure different types of security on Windows 7, including Local Group Policy Objects (LGPOs), shared permissions, and NTFS security.

Chapter 10: Configuring Hardware and Printers This chapter explains how to install and configure new hardware, drivers, and printers by using the different installation applets. A discussion of the new Device Stage feature is included as well.

Chapter 11: Configuring Network Connectivity We explain in this chapter how to set up hardware to provide network connectivity, connect to network devices, set up peer-to-peer networking, and configure network protocols.

Chapter 12: Networking with Windows Server 2008 This great chapter shows you how to configure Windows Server 2008 to allow Windows 7 to connect properly. This chapter also explains using Windows 7 in a virtualized environment.

Chapter 13: Configuring Internet Explorer 8 You will see how to configure Internet Explorer 8 including Accelerators and Web Slices, pop-up blockers, InPrivate Security features, and security for Internet Explorer 8 in this chapter.

Chapter 14: Installing and Configuring Applications This chapter shows you how to add and configure many applications that are installed on Windows 7, together with how to install new applications on the Windows 7 operating system. A discussion of Live Mail and Calendar from the online Live Essentials download is also included.

Chapter 15: Maintaining and Optimizing Windows 7 In this exciting chapter you will learn how to monitor, maintain, troubleshoot, and optimize Windows 7 using Performance Monitor, Reliability Monitor, System Information, Task Manager, System Tool, System Configuration, Task Scheduler, and Event Viewer.

The Mastering Series

The *Mastering* series from Sybex provides outstanding instruction for readers with intermediate and advanced skills, in the form of top-notch training and development for those already working in their field and clear, serious education for those aspiring to become pros. Every *Mastering* book includes:

- ◆ Real-World Scenarios, ranging from case studies to interviews, that show how the tool, technique, or knowledge presented is applied in actual practice
- ◆ Skill-based instruction, with chapters organized around real tasks rather than abstract concepts or subjects
- ◆ Self-review test questions, so you can be certain you're equipped to do the job right

How to Contact Sybex

Sybex strives to keep you supplied with the latest tools and information you need for your work. Please check their website at www.sybex.com, where we'll post additional content and updates that supplement this book should the need arise. Enter **Windows 7** in the Search box (or type the book's ISBN — 9780470559840), and click Go to get to the book's update page.