Windows Home Server User's Guide

Andrew Edney

Windows Home Server User's Guide

Copyright © 2007 by Andrew Edney

All rights reserved. No part of this work may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage or retrieval system, without the prior written permission of the copyright owner and the publisher.

ISBN-13 (pbk): 978-1-59059-898-6 ISBN-10 (pbk): 1-59059-898-9

Printed and bound in the United States of America 987654321

Trademarked names may appear in this book. Rather than use a trademark symbol with every occurrence of a trademarked name, we use the names only in an editorial fashion and to the benefit of the trademark owner, with no intention of infringement of the trademark.

Lead Editor: Jonathan Hassell

Technical Reviewers: Joel Burt, Tony Campbell, Terry Walsh

Editorial Board: Steve Anglin, Ewan Buckingham, Tony Campbell, Gary Cornell, Jonathan Gennick, Jason Gilmore, Kevin Goff, Jonathan Hassell, Matthew Moodie, Joseph Ottinger, Jeffrey Pepper, Ben Renow-Clarke, Dominic Shakeshaft, Matt Wade, Tom Welsh

Project Manager: Beth Christmas

Copy Editors: Bill McManus, Marilyn Smith

Associate Production Director: Kari Brooks-Copony

Production Editor: Candace English Compositor: Patrick Cunningham Proofreader: Patrick Vincent

Indexer: Julie Grady

Artist: Kinetic Publishing Services, LLC

Cover Designer: Kurt Krames

Manufacturing Director: Tom Debolski

Distributed to the book trade worldwide by Springer-Verlag New York, Inc., 233 Spring Street, 6th Floor, New York, NY 10013. Phone 1-800-SPRINGER, fax 201-348-4505, e-mail orders-ny@springer-sbm.com, or visit http://www.springeronline.com.

For information on translations, please contact Apress directly at 2855 Telegraph Avenue, Suite 600, Berkeley, CA 94705. Phone 510-549-5930, fax 510-549-5939, e-mail info@apress.com, or visit http://www.apress.com.

The information in this book is distributed on an "as is" basis, without warranty. Although every precaution has been taken in the preparation of this work, neither the author(s) nor Apress shall have any liability to any person or entity with respect to any loss or damage caused or alleged to be caused directly or indirectly by the information contained in this work.

For Katy.

Thanks for all of the support and for once again putting up with the long hours of work that go into writing a book.

Contents at a Glance

	al Reviewers	
	S	
-		
CHAPTER 1	What Is Windows Home Server?	1
CHAPTER 2	Windows Home Server Installation	13
CHAPTER 3	Windows Home Server Post-Installation Configuration	37
CHAPTER 4	Windows Home Server Connector Installation and Configuration	61
CHAPTER 5	Windows Home Server Console and Settings	83
CHAPTER 6	User Accounts	115
CHAPTER 7	Home Computer Backups and Restores	137
CHAPTER 8	Windows Home Server Storage	179
CHAPTER 9	Shared Folders	195
CHAPTER 10	Media Streaming	213
CHAPTER 11	Remote Access	229
CHAPTER 12	Home Network Health Monitoring	271
CHAPTER 13	Add-Ins	281
CHAPTER 14	Additional Resources	293
APPENDIX A	Networking Primer	299
APPENDIX B	Build Your Own Windows Home Server	317
APPENDIX C	Basics of the SDK	323
INDEX		329

Contents

Foreword		. XV
About the Author		xvii
About the Technic	cal Reviewers	xix
Acknowledgment	ts	ххі
Introduction		κχiii
CHAPTER 1	What Is Windows Home Server?	. 1
	Windows Home Server Overview	. 1
	Requirements for Running Windows Home Server	. 6
	Buying a Windows Home Server System	. 8
	Windows Home Server Software	11
	Summary	11
CHAPTER 2	Windows Home Server Installation	13
	Checking the Prerequisites	13
	Installing Windows Home Server	
	Reinstalling Windows Home Server	24
	Upgrading Windows Home Server	28
	Troubleshooting the Setup	29
	Insufficient Memory	29
	Failed Setup	
	Unlisted Storage Driver	
	Hard Drive Problems	
	Summary	36
CHAPTER 3	Windows Home Server Post-Installation Configuration	37
	Completing the Setup Process	37
	Logging Into Windows Home Server	43
	Installing Drivers	45
	Activating Windows Home Server	
	Launching Windows Update	57

	Installing Additional Software
	Shutting Down
	Summary60
CHAPTER 4	Windows Home Server Connector Installation
	and Configuration61
	Identifying Supported Operating Systems 61 Installing the Windows Home Server Connector 62 Configuring the Windows Home Server Connector 68 Finding Your Windows Home Server 69 Completing the Windows Home Server 69
	Connector Configuration
	Reinstalling the Windows Home Server Connector
	Cancelling an Installation
	Connecting from a Different Subnet
	Summary
CHAPTER 5	Windows Home Server Console and Settings
	Connecting to Windows Home Server Console. 83 Starting the Windows Home Server Console. 83 Logging In to Windows Home Server . 86 Viewing the Windows Home Server Console. 89 Launching the Windows Home Server Console on the Server . 90 Configuring Windows Home Server Settings 91 Shutting Down or Restarting Your Home Server . 92 Configuring General Settings 94 Configuring Backup Settings 97 Managing Passwords 101 Media Sharing 104 Configuring Remote Access 105 Managing Add-Ins 105 Accessing Resources 106 Troubleshooting Windows Home Server Connections 111
	A Nonresponsive Windows Home Server Console
	Outilitially and a contract and a co

CHAPTER 6	User Accounts	. 115
	Adding a User Account Removing a User Account Disabling and Enabling a User Account Changing Account Properties	. 122 . 127 . 129
	Matching PasswordsSummary	
	ounnay	. 100
CHAPTER 7	Home Computer Backups and Restores	. 137
	How Do Backups Work? Working with Backups Managing Backups Creating or Changing a Backup Configuration Performing a Manual Backup Troubleshooting Backup Failures Restoring Files and Computers Restoring Selected Files Restoring a Home Computer Backing Up Your Windows Home Server Summary.	. 138 . 140 . 143 . 148 . 153 . 155 . 156 . 159
CHAPTER 8	Windows Home Server Storage	
UNAPTER 0	•	
	How Does Server Storage Work?	
	Managing Server Storage	
	Removing a Hard Drive	
	Repairing a Hard Drive	
	Summary	
CHAPTER 9	Shared Folders	. 195
	Adding a Shared Folder	. 196
	Removing a Shared Folder	
	Viewing and Changing Shared Folder Properties	. 201
	Enabling Folder Duplication	
	Troubleshooting Problems with Folder Duplication	
	Balancing Storage	. 205

	Viewing Shared Folder History	206
	Accessing Shared Folders	208
	Recovering Files from Previous Versions	211
	Summary	212
CHAPTER 10	Media Streaming	213
	Enabling Media Library Sharing	214
	Disabling Media Library Sharing	215
	Streaming with Windows Media Connect	216
	Streaming to an Xbox 360	
	Listening to Music	217
	Viewing Pictures	220
	Watching Videos	221
	Disconnecting Your Xbox 360	223
	Streaming to Windows Media Player 11	224
	Summary	227
OUADTED 44	Domete Access	000
CHAPTER 11	Remote Access	229
	Checking Broadband Router Compatibility	
	Configuring Remote Access	
	Enabling Web Site Connectivity	
	Automatically Configuring the Router	
	Manually Configuring the Router	
	Setting Up the Domain Name	
	Unconfiguring the Domain Name	
	Configuring Web Site Settings	
	Creating a Windows Live ID	
	Enabling Users for Remote Access	
	Disabling Users for Remote Access	
	Testing Remote Access	
	Configuring Computers for Remote Access	
	Configuring Windows Vista for Remote Access	
	Configuring Windows XP for Remote Access	
	Configuring Windows Home Server for Remote Access	
	Logging On Using Remote Access	
	Using Remote Access	
	Accessing Your Computers	
	Connecting to Your Windows Home Server	
	Connecting to One of Your Home Computers	260

	Accessing Your Shared Folders	. 262
	Downloading a File	. 263
	Uploading a File	. 264
	Renaming a File or Folder	. 266
	Creating a New Folder	. 266
	Deleting a File or Folder	. 267
	Searching for a File	. 268
	Logging Off	. 268
	Viewing Remote Access Connections	. 268
	Troubleshooting Remote Access	. 269
	Enabling JavaScript	. 270
	Summary	. 270
CHAPTER 12	Home Network Health Monitoring	. 271
	Viewing Network Health Notifications	. 271
	Viewing Network Health in the Task Tray	
	Viewing Network Health on the Network Button in the Windows	
	Home Server Console	. 273
	Examining the Windows Home Server Notifications	
	Server Hard Drive	
	Product Activation	. 276
	Windows Update	. 276
	Shared Folder Duplication	. 277
	Evaluation Period Expiration	
	Examining the Windows Vista Computer Notifications	
	Windows Firewall Status	. 278
	Windows Update Status	
	Virus Protection Status	
	Antispyware Protection Status	. 279
	Backup Status	
	Summary	
CHAPTER 13	Add-Ins	. 281
	Viewing Add-Ins	. 281
	Installing an Add-In	
	Uninstalling an Add-In	
	Finding More Information on Add-Ins	
	Summary	

CHAPTER 14	Additional Resources
	Microsoft Windows Home Server Web Site
	Official Windows Home Server Forums
	We Got Served Blog
	MS Windows Home Server Blog
	Summary
	Junimary231
APPENDIX A	Networking Primer
	Cables
	Network Interface Cards300
	NICs for Wired Networks
	NICs for Wireless Networks
	Hubs and Switches
	Routers
	Firewalls
	Firewall Filters/Rules305
	Threats Protected Against
	Windows Firewall305
	Windows Command-Line Tools
	lpconfig
	Ping
	Tracert
	Summary316
APPENDIX B	Build Your Own Windows Home Server317
	Windows Home Server Software
	Motherboard
	Processor
	Memory319
	Graphics Card
	Sound Card
	DVD Drive
	Case
	Network Interface Card
	Hard Drives321
	Summary 322

APPENDIX C	Basics of the SDK
	SDK Developer's Guide324
	Getting Started
	API Overview320
	Programming Tutorial 32
	Windows Home Server API Reference
	Code2Fame Challenge
	Additional Resources
	Summary326
■INDEX	32