

Pro Windows Small Business Server 2003



Tony Campbell

Pro Windows Small Business Server 2003

Copyright © 2006 by Tony Campbell

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): 978-1-59059-703-3

ISBN-10 (pbk): 1-59059-703-6

Printed and bound in the United States of America 9 8 7 6 5 4 3 2 1

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

Editorial Board: Steve Anglin, Ewan Buckingham, Gary Cornell, Jason Gilmore, Jonathan Gennick, Jonathan Hassell, James Huddleston, Chris Mills, Matthew Moodie, Dominic Shakeshaft, Jim Sumser, Keir Thomas, Matt Wade

Project Manager: Beth Christmas

Copy Edit Manager: Nicole LeClerc

Copy Editor: Sharon Wilkey

Assistant Production Director: Kari Brooks-Copony

Production Editor: Katie Stence

Compositor and Artist: Van Winkle Design Group

Proofreader: Lori Bring

Indexer: Toma Mulligan

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 2560 Ninth Street, Suite 219, Berkeley, CA 94710. 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.

Contents

Foreword	xvii
About the Author	xix
Acknowledgments	xxi
Preface	xxiii

CHAPTER 1	Small Business Computing	1
What Makes a Small Business Small?		1
Small Business Server in a Nutshell		2
Challenges Faced by Today's Small Business		2
Cash Flow		3
Legal Stuff		4
Automation		5
Marketing		5
What Is Microsoft Windows SBS 2003?		5
Introducing the SBS 2003 Family Members		6
Server-Side Components in Detail—Standard Edition		7
Server-Side Components in Detail—Premium Edition		9
Client-Side Components in Detail—Standard Edition		9
Client-Side Components in Detail—Premium Edition		10
How Much Does It Cost?		12
Restrictions of Small Business Server 2003		13
Building Blocks of a Successful IT System		15
IT from the Ground Up		17
Network Layer		17
Infrastructure Layer		18
Operating System Layer		19
Application Layer		20
Pulling It All Together		20
A Top-Down Approach to Business Requirements		21
The High-Level View		21
Break It All Down		22
Matching SBS 2003 Capabilities to Your Business Requirements		24
All Good IT Solutions Should Do the Following		24
Matching Business Requirements to IT		26

Case Study—Planthire	28
Small Business Server 2003 in Planthire	29
Case Study—Servideal	30
Case Study—Country Estates	31
Summary	31

■ CHAPTER 2 **Getting Connected**

The OSI Model	34
Physical (Layer 1)	35
Data Link (Layer 2)	36
Network (Layer 3)	36
Transport (Layer 4)	36
Session (Layer 5)	36
Presentation (Layer 6)	36
Application (Layer 7)	36
Components of a Network	36
Network Interface Cards	37
Hubs	39
Switches	40
Modems	41
Routers	41
Firewalls	42
Local Area Networks	44
Ethernet	45
The MAC Address	46
Client vs. Server Networking	47
Wide Area Networks	50
TCP/IP	51
Jargon Busting	52
The IP Address	53
Configuring Your IP Address	55
The Domain Name System	56
Going Wireless	57
Planning a WLAN	58
Wireless Security	60
Case Study—Planthire	61
Wireless or Wired?	61
Remote Access	62

Case Study—Servideal	62
ISP Connectivity	62
Wireless Flexibility	62
Case Study—Country Estates	63
Remote Access	63
Summary	63

CHAPTER 3 The Planning Phase	65
A Brief Word on SBS 2003 Licensing	66
Planning Hardware	66
The Server	66
Future Upgrades	68
Client Workstations	70
Peripheral Hardware	70
Planning Internet Connectivity	72
Physical Internet Connectivity	72
Connection Devices	74
Email	74
Domain Names and Web Space	75
Planning Your Network	76
Wired Networks	76
Wireless Networks	77
TCP/IP	78
DNS Naming	79
Remote Access	79
Planning Consistent Nomenclature	80
Computer Naming	80
User Account Naming	81
Share Naming	82
Security Group Naming	83
Planning for Security and Safety	83
Case Study—Planthire	85
Case Study—Servideal	86
Case Study—Country Estates	87
Summary	88

CHAPTER 4	Installation and Configuration	89
	A Word on Upgrading	90
	Migrating To SBS 2003	90
	Which Legacy Systems Can Be Upgraded?	91
	Backing Up Windows Clients	92
	Preinstallation Tasks	93
	Is Your Server Ready?	95
	Creating Disk Partitions	95
	Using RAID	96
	Anything Else Before You Start?	98
	Detailed Installation Walk-Through	99
	Phase 1—Installing the Windows Server 2003 Platform	100
	Phase 2—Running the SBS Setup Wizard	106
	Phase 3—Installing the Infrastructure Components	110
	Product Activation	113
	Postinstallation Configuration	113
	View Security Best Practices	115
	Connect to the Internet	116
	Configure Remote Access	122
	Activate Your Server	124
	Add Client Licenses	125
	Add a Printer	127
	Add Users	129
	Configure a Fax	131
	Configure Monitoring	133
	Configure Backup	134
	A Final Word on the To Do List	136
	Server Security	137
	Server Management	138
	Case Study—Planthire	140
	Case Study—Servideal	141
	Case Study—Country Estates	141
	Summary	142
CHAPTER 5	Running Small Business Server	143
	Organizing Your Workforce	143
	The Active Directory	143
	Organizational Units and Group Policies	144
	SBS 2003 Organizational Unit Structure	146

Setting Rights and Permissions	147
Using Security Groups	148
Granting NTFS Permissions	150
Standard NTFS Permissions	150
Advanced Access Control	152
File and Folder Ownership	155
Inheritance	156
The Cumulative Effect	156
Managing User Accounts	157
Creating a New Account	158
Creating User Profiles	163
Redirecting My Documents to the Server	167
Performing Ongoing User Management	168
Accessing Networked Data	169
Network Shares	169
Network Share Permissions	171
Performing Computer Management	174
Adding a Computer to Your Network	174
Installing Application Software	176
Removing a Computer Account	178
Adding a Server Account	178
Managing Active Directory and GPOs	179
Creating a Custom Management Console	180
Managing Users	182
Delegating Administration	186
Using Group Policies	187
Managing Your Network	194
DHCP	194
DNS	196
Remote Web Workplace	197
Remote Control of Servers and Workstations	197
Auditing and Accounting	198
Using the Event Logs	202
Running the Event Viewer	203
Performing Backup and Recovery	204
Printing	206
Faxing	207
Creating Custom Cover Pages	207
Setting Fax Service Properties	208
Managing Fax Jobs	210

Case Study—Copyworld	210
Case Study—Planthire	211
Case Study—Servideal	211
Case Study—Country Estates	212
Summary	212

CHAPTER 6	Windows SharePoint Services	213
Introducing WSS	214	
Microsoft Office Integration	215	
WSS Site Hierarchy	215	
Permissions in WSS	216	
Getting Started	217	
Navigating Your Intranet	218	
The Top Link Bar	219	
The Quick Launch Bar	224	
The Main Screen	226	
Managing the Intranet	227	
Site Administration	227	
Virtual Server Administration	232	
Using Document Libraries	233	
Creating a New Document Library	234	
Using a Document Library	235	
Customizing Document Libraries	237	
And If All Else Fails... ..	237	
Using Lists	238	
Exploring the Vacation Calendar	238	
Creating a New List	239	
Using Surveys	240	
Creating a New Survey	241	
Defining Questions	241	
Obtaining Responses to a Survey	244	
Viewing Survey Results	246	
Using Discussion Boards	246	
Using Web Parts	248	
Modifying Shared Web Parts	251	
Making Connections	252	
Case Study—Copyworld	252	
Case Study—Planthire	253	
Case Study—Servideal	253	
Case Study—Country Estates	253	
Summary	254	

CHAPTER 7	Exchange and Outlook	255
	Messaging Basics	257
	What Is Email?	257
	Email Protocols	259
	Email Clients	259
	SMTP and POP3	259
	Management Interfaces	261
	Exchange System Manager	261
	The Users Interface	271
	POP3 Configuration	276
	Adding POP3 Mailboxes	276
	Understanding POP3 Email Routing	278
	Troubleshooting Microsoft Exchange Server	280
	Queue Viewer	280
	Diagnostic Logging	280
	Debugging	281
	Using Outlook 2003	282
	Sending and Receiving Email	282
	Creating Appointments	287
	Using Tasks	289
	Outlook Web Access	290
	Exchange and Security	291
	Mailbox Permissions	291
	Antivirus Products and Exchange	295
	Further Investigation	296
	Case Study—Planthire	299
	Case Study—Servideal	299
	Case Study—Country Estates	299
	Summary	300
CHAPTER 8	ISA Server	301
	Understanding ISA Server Capabilities	301
	Packet Filtering	302
	Network Address Translation	302
	Web Caching	304
	Web Publishing	305
	Installing ISA Server 2004	306
	Connecting Clients to the Internet	308

Exploring ISA Server Administration	311
Configuring Your Network Environment	312
Monitoring Your Network	313
Monitoring Firewall Policy Access Rules	314
Web Caching	315
Case Study—Copyworld	317
Case Study—Servideal	318
Case Study—Country Estates	318
Summary	318

CHAPTER 9 SQL Server	319
Understanding Databases	320
Structure	320
Relational Databases	320
Database Terminology	321
Final Word on Databases in General	322
Introducing SQL Server	322
Comparing SQL Server to Other Database Engines	322
Choosing SQL Server	323
Installation of SQL Server	324
Administration of SQL Server	328
SQL Server Enterprise Manager	331
Accessing the Wizards	333
DTS Export Wizard	335
Backup Wizard	337
Into the Future with SQL Server 2005	339
Enhanced Database Availability	339
Better Manageability	339
Improved Security	340
Quicker Query Response Times	340
Low Price	341
Case Study—Copyworld	341
Case Study—Servideal	341
Summary	341

CHAPTER 10	Microsoft FrontPage 2003	343
	Introducing FrontPage 2003	344
	Installing FrontPage 2003	345
	Creating Your First Website	347
	Customizing Web Pages	349
	The Navigation View	353
	Website Themes	354
	Publishing to an Intranet	355
	Viewing the IIS Configuration	356
	Creating a Virtual Directory	356
	Publishing the Site for Your Workforce	358
	Editing Page Content	360
	Publishing to the Internet	361
	Taking Initial Steps	361
	Choosing an ISP	362
	Setting Up an Online Website	363
	Using FrontPage with Windows SharePoint Services	365
	Case Study—Servideal	367
	Case Study—Country Estates	368
	Summary	368
CHAPTER 11	A Short Guide to Information Security	369
	The Need for Security	369
	Cybercrime	371
	Viruses, Trojans, and Malware	373
	Spam	375
	A Matter of Privacy	377
	Protecting Privacy with Internet Explorer	378
	Securing the Connection	379
	Social Engineering	380
	Combining Social Engineering and Technology	381
	Fighting Back	382
	Hacking	382
	Hacker Tools	383
	Hacking Resources	385

Microsoft and Security	385
Security Patches and Hotfixes	386
The Microsoft Baseline Security Analyzer	388
Designing a Secure System	389
Scoping	390
Cost vs. Security vs. Functionality	391
Work from the Outside In	391
SBS 2003 Security	396
Implementing a Security Program	396
Glossary of Security-Related Terms	401
Case Study—Country Estates	403
Summary	403

■ CHAPTER 12 Troubleshooting SBS 2003 Standard and Premium Editions	405
The Event Viewer	406
Monitoring and Reporting	409
Performance Report	409
View Services	411
Task Manager	413
Change Server Status Report Settings	414
Change Alert Notifications	416
Help and Support Center	418
TechNet	420
Other Online Resources for SBS 2003	420
System Performance	421
Monitoring Processes	421
Alerting	424
Health Monitor in SBS 2003	425
Command-Line Utilities	426
Conventions	427
A Few Commands to Get You Started	427
More on Windows Commands	428
Case Study—Servideal	429
Summary	429
■ INDEX	431