PowerShell for SharePoint® 2010

HOW-TO

Real Solutions for Using PowerShell for SharePoint 2010

SAMS

STEVEN MANN

PowerShell[™] for SharePoint[®] 2010

HOW-TO

PowerShell™ for SharePoint® 2010 How-To

Copyright © 2011 by Pearson Education, Inc.

All rights reserved. No part of this book shall be reproduced, stored in a retrieval system, or transmitted by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher. No patent liability is assumed with respect to the use of the information contained herein. Although every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions. Nor is any liability assumed for damages resulting from the use of the information contained herein.

ISBN-10: 0-672-33559-X

ISBN-13: 978-0-672-33559-4 Library of Congress Cataloging-in-Publication Data

Mann. Steve. 1950-

PowerShell for SharePoint 2010 : how to / Steven Mann.

p. cm.

ISBN 978-0-672-33559-4

1. Intranets (Computer networks)-Management-Miscellanea. 2. Microsoft SharePoint (Electronic resource)-Miscellanea. 3. Groupware (Computer software)-Miscellanea. 4. Windows PowerShell (Computer program language)-Miscellanea. 5. Microsoft Windows (Computer file)-Miscellanea. I. Title.

TK5105.875.I6M365 2011 006.7'8-dc23

2011020669

Printed in the United States of America

First Printing: June 2011

Trademarks

All terms mentioned in this book that are known to be trademarks or service marks have been appropriately capitalized. Pearson cannot attest to the accuracy of this information. Use of a term in this book should not be regarded as affecting the validity of any trademark or service mark.

Warning and Disclaimer

Every effort has been made to make this book as complete and as accurate as possible, but no warranty or fitness is implied. The information provided is on an "as is" basis. The author and the publisher shall have neither liability nor responsibility to any person or entity with respect to any loss or damages arising from the information contained in this book.Bulk Sales

Bulk Sales

Pearson offers excellent discounts on this book when ordered in quantity for bulk purchases or special sales. For more information, please contact:

U.S. Corporate and Government Sales 1-800-382-3419 corpsales@pearsontechgroup.com

For sales outside of the U.S., please contact:

International Sales

+1-317-581-3793

international@pearsontechgroup.com

Editor-in-Chief

Greg Wiegand

Executive Editor

Neil Rowe

Development Editor

Mark Renfrow

Managing Editor

Kristy Hart

Project Editor

Andy Beaster

Copy Editor

Bart Reed

Indexer

Tim Wright

Proofreader

Debbie Williams

Technical Editor

J. Boyd Nolan

Team Coordinator

Cindy Teeters

Book Designer

Gary Adair

Composition

Gloria Schurick

Contents at a Glance

	Introduction	1
Part	I: Getting Started	
1	SharePoint 2010 Management Shell	5
2	PowerShell Basics	11
Part	II: Server Management	
3	SharePoint Installation and Configuration	21
4	Farm Management	31
5	Web Application Management	49
6	Service Application Management	59
7	SharePoint Database Management	67
Parti	III: Development and Administration	
8	Site Management	81
9	Solutions and Features	91
10	Content Deployment	105
Part	IV: Service Application Management	
11	InfoPath Form Services	113
12	Enterprise Search	123
13	SharePoint Foundation Search	137
14	Profile Service	143
15	Business Data Connectivity Service	149
16	Secure Store Service	155
17	Metadata Service	163
18	Session State and State Services	171
Part	V: Office Features	
19	Excel Services	181
20	PerformancePoint Services	195
21	Access Services	203
22	Visio Graphic Services	213
23	Word Services	219

Part VI:	Appendices
----------	------------

Α	stsadm vs. SharePoint PowerShell	231
В	Upgrade/Migration	237
	Index	239

Table of Contents

Introduction	1
Part I: Getting Started	
1 SharePoint 2010 Management Shell	5
How Do I Run PowerShell?	6
How Do I Make PowerShell Aware of SharePoint?	6
What Is the SharePoint 2010 Management Shell?	7
What Is the SharePoint 2010 Management Shell Loading?	8
2 PowerShell Basics	11
What Is a Cmdlet?	12
How Can I See the Possible Verbs for a Noun Command?	12
What Is a Parameter?	12
What Is a Switch Parameter?	12
How Can I See the Possible Parameters for a Cmdlet?	12
What Does F3 Do?	13
What Does F7 Do?	13
What Are Console Commands?	
Path Environment Variable	
Run Unsigned Scripts	
Disable the Confirmation Prompt	
Generate Inline Credentials	
Reference an Assembly	17
Part II: Server Management	
3 SharePoint Installation and Configuration	21
Prepare the Microsoft SharePoint Installation Module	
Install SharePoint Unattended	
Installing Without a Product Key in the Configuration File	
Configure a New SharePoint Farm	24
Join a Server to the SharePoint Farm	
Create a New Web Application	26
Create a New Site Collection	27
Create a New Subsite	28

4	Farm Management	31
	Review Farm Configuration Values	32
	Set the Farm Configuration Values	32
	Refresh Installed Products	34
	Change the Port of Central Admin	34
	Change the Farm Passphrase	34
	Retrieve the System Accounts	35
	Retrieve Managed Accounts	36
	Rename a Site Template	36
	Rename a Server on the Farm	37
	Display the Configured Managed Paths	37
	Create a New Managed Path	38
	Remove a Managed Path	39
	Merge Log Files	39
	End the Current Log File	40
	Review SharePoint Designer Settings	41
	Configure SharePoint Designer Settings	41
	Review Workflow Configuration Settings	42
	Modify Workflow Configuration Settings	43
	Display Available Timer Jobs on the Farm	44
	Get a Specific Timer Job	45
	Enable a Timer Job	46
	Disable a Timer Job	46
	Start a Timer Job	46
	Set the Schedule for a Timer Job	47
5	Web Application Management	49
	Display Available Web Applications on the Farm	50
	Get a Specific Web Application	50
	Remove a Web Application	51
	Create a New Web Application	51
	Configure Web Application Settings	52
	Extend a Web Application	53
	Create an Alternate Access Mapping URL	
	Display All Alternate Access Mappings	
	Get a Specific Alternate URL Entry	
	Change the Zone of an Alternate Access Mapping	
	Remove an Alternate Access Mapping	56

6	Service Application Management	59
	Install Service Applications	60
	Display Available Service Applications on the Farm	60
	Get a Specific Service Application	
	Configure IIS Settings for a Service Application	
	Share a Service Application	
	Remove a Service Application	63
	Display Service Instances on a Server	64
	Get a Specific Service Instance	65
	Start a Service Instance	65
	Stop a Service Instance	66
	Ancillary Cmdlets for Service Applications	66
7	SharePoint Database Management	67
	Display All SharePoint Databases	68
	Get a Specific Database	69
	Create a New Content Database	69
	Display All Content Databases for a Web Application	70
	Detach a Content Database from a Web Application	71
	Attach a Content Database to a Web Application	72
	Delete a Content Database	72
	Create a New Configuration Database	73
	Delete a Configuration Database	
	Back Up a Configuration Database	74
	Restore a Configuration Database	75
	Back Up the SharePoint Farm	75
	Restore the SharePoint Farm	76
	Back Up a Site Collection	76
	Restore a Site Collection	77
Part II	II: Development and Administration	
8	Site Management	81
	Display All Available Site Collections on the Farm	82
	Display Available Site Collections in a Web Application	82
	Display Available Site Collections in a Content Database	83
	Get a Specific Site Collection	83
	Remove a Site Collection	84
	Create a Site Collection	84
	Set the Lock State of a Site Collection	85
	Set the Storage Limits on a Site Collection	86
	Create a Site Under a Site Collection	97

Create a New Deployment Path		Display All Subsites within a Site Collection	87
Modify the Subsite (Web) URL Move a Site Collection to a Different Content Database Move All Site Collections from One Content Database to Another Move All Site Collections from One Content Database to Another 9 Solutions and Features Add a Solution to the SharePoint Farm Display Available Solutions on the Farm Get a Specific Solution Deploy a Solution to a Web Application Retract a Solution Upgrade a Deployed Solution Remove a Solution from the SharePoint Farm Add a Sandboxed Solution to a Site Collection Display Available Sandboxed Solutions in a Site Collection Get a Specific Sandboxed Solution Activate a Sandboxed Solution Deactivate a Sandboxed Solution Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution Display Available Features Get a Specific Feature Activate a Feature Deactivate a Feature Deactivate a Feature Install a Feature in SharePoint Uninstall a Feature from SharePoint Export Installed Farm Solutions 10 Content Deployment Create a New Deployment Path Display Deployment Paths Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Path Create a New Deployment Pob Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm		Get a Specific Subsite (Web)	88
Move a Site Collection to a Different Content Database		Remove a Subsite (Web) from a Site Collection	88
Move All Site Collections from One Content Database to Another		Modify the Subsite (Web) URL	89
Add a Solution to the SharePoint Farm		Move a Site Collection to a Different Content Database	89
Add a Solution to the SharePoint Farm. Display Available Solutions on the Farm Get a Specific Solution. Deploy a Solution to a Web Application Retract a Solution		Move All Site Collections from One Content Database to Another .	90
Display Available Solutions on the Farm Get a Specific Solution	9	Solutions and Features	91
Get a Specific Solution Deploy a Solution to a Web Application Retract a Solution Upgrade a Deployed Solution Remove a Solution from the SharePoint Farm Add a Sandboxed Solution to a Site Collection Display Available Sandboxed Solutions in a Site Collection Get a Specific Sandboxed Solution Deactivate a Sandboxed Solution Deactivate a Sandboxed Solution Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution from a Site Collection Display Available Features Get a Specific Feature Activate a Feature Deactivate a Feature in SharePoint Uninstall a Feature from SharePoint Export Installed Farm Solutions 10 Content Deployment Create a New Deployment Path Display Deployment Paths Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Pob Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Remove a Content Deployment Job		Add a Solution to the SharePoint Farm	92
Deploy a Solution to a Web Application Retract a Solution Upgrade a Deployed Solution Remove a Solution from the SharePoint Farm Add a Sandboxed Solution to a Site Collection Display Available Sandboxed Solutions in a Site Collection Get a Specific Sandboxed Solution Activate a Sandboxed Solution Deactivate a Sandboxed Solution Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution from a Site Collection. Display Available Features Get a Specific Feature Activate a Feature Deactivate a Feature Install a Feature in SharePoint Uninstall a Feature from SharePoint Export Installed Farm Solutions LO Content Deployment Create a New Deployment Path Display Deployment Paths Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm			
Retract a Solution Upgrade a Deployed Solution Remove a Solution from the SharePoint Farm Add a Sandboxed Solution to a Site Collection Display Available Sandboxed Solutions in a Site Collection Get a Specific Sandboxed Solution Deactivate a Sandboxed Solution Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution from a Site Collection Display Available Features Get a Specific Feature Activate a Feature Deactivate a Feature Install a Feature in SharePoint Uninstall a Feature from SharePoint Export Installed Farm Solutions 10 Content Deployment Create a New Deployment Path Display Deployment Paths Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Aremove a Content Deployment Job Get a Specific Content Deployment Job Remove a Content Deployment Job Aremove a Content Deployment Job Get a Specific Content Deployment Job Remove a Content Deployment Job		Get a Specific Solution	93
Upgrade a Deployed Solution Remove a Solution from the SharePoint Farm Add a Sandboxed Solution to a Site Collection Display Available Sandboxed Solutions in a Site Collection Get a Specific Sandboxed Solution Activate a Sandboxed Solution. Deactivate a Sandboxed Solution Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution from a Site Collection Display Available Features Get a Specific Feature. Activate a Feature Deactivate a Feature in SharePoint. Uninstall a Feature from SharePoint Export Installed Farm Solutions. 10 Content Deployment Create a New Deployment Path Display Deployment Paths Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Path Create a New Deployment Path Create a New Deployment Pob Display Deployment Job Display Deployment Job Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm		Deploy a Solution to a Web Application	93
Remove a Solution from the SharePoint Farm Add a Sandboxed Solution to a Site Collection Display Available Sandboxed Solutions in a Site Collection Get a Specific Sandboxed Solution Activate a Sandboxed Solution Deactivate a Sandboxed Solution Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution from a Site Collection Display Available Features Get a Specific Feature Activate a Feature Deactivate a Feature Install a Feature in SharePoint Uninstall a Feature from SharePoint Export Installed Farm Solutions 10 Content Deployment Create a New Deployment Path Display Deployment Paths Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Remove a Content Deployment Job			
Add a Sandboxed Solution to a Site Collection Display Available Sandboxed Solutions in a Site Collection Get a Specific Sandboxed Solution Activate a Sandboxed Solution Deactivate a Sandboxed Solution Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution from a Site Collection Display Available Features Get a Specific Feature Activate a Feature Deactivate a Feature in SharePoint Uninstall a Feature from SharePoint Export Installed Farm Solutions 10 Content Deployment Create a New Deployment Path Display Deployment Paths Configured on the Farm Get a Specific Content Deployment Path Create a New Deployment Poth Create a New Deployment Poth Create a New Deployment Poth Display Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Activate a Security Content Deployment Job Activate a Security Collection Activate a Security Collection Display Deployment Jobs Configured on the Farm Get a Specific Content Deployment Job Activate a Security Collection Activate a Sendboxed Solution Activate a Sendboxed		Upgrade a Deployed Solution	95
Display Available Sandboxed Solutions in a Site Collection		Remove a Solution from the SharePoint Farm	96
Get a Specific Sandboxed Solution Activate a Sandboxed Solution			
Activate a Sandboxed Solution Deactivate a Sandboxed Solution Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution from a Site Collection Display Available Features		Display Available Sandboxed Solutions in a Site Collection	97
Deactivate a Sandboxed Solution Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution from a Site Collection. Display Available Features		Get a Specific Sandboxed Solution	97
Upgrade a Deployed Sandboxed Solution Remove a Sandboxed Solution from a Site Collection. Display Available Features		Activate a Sandboxed Solution	98
Remove a Sandboxed Solution from a Site Collection. Display Available Features			
Display Available Features			
Get a Specific Feature			
Activate a Feature			
Deactivate a Feature		•	
Install a Feature in SharePoint			
Uninstall a Feature from SharePoint			
Export Installed Farm Solutions			
Create a New Deployment Path			
Create a New Deployment Path		Export Installed Farm Solutions	104
Display Deployment Paths Configured on the Farm	LO	Content Deployment	105
Display Deployment Paths Configured on the Farm		Create a New Deployment Path	106
Remove a Content Deployment Path			
Create a New Deployment Job		Get a Specific Content Deployment Path	107
Display Deployment Jobs Configured on the Farm		Remove a Content Deployment Path	107
Display Deployment Jobs Configured on the Farm			
Remove a Content Deployment Job			
· · ·		Get a Specific Content Deployment Job	109
· · ·		Remove a Content Deployment Job	109
Start a Content Deployment Job		Start a Content Deployment Job	109
Modify Content Deployment Configurations		Modify Content Deployment Configurations	110

Part IV: Service Application Management

11	InfoPath Forms Services	113
	Browser-Enable Form Templates	114
	Throttle Data Connection Timeouts	114
	Throttle the Data Connection Response Size	115
	Modify Authentication Settings	115
	Configure Session State	116
	Enable View State	117
	Verify and Upload a Form Template	118
	Upload Multiple Form Templates at Once	118
	Activate or Deactivate a Form to or from a Site Collection	119
	Remove a Form from InfoPath Form Services	119
	Quiesce a Form from InfoPath Form Services	120
	Enable the Web Service Proxy	120
12	Enterprise Search	123
	Display the Enterprise Search Service Information	
	Display Enterprise Search Service Instances	
	Get a Specific Enterprise Search Service Instance	
	Configure the Crawl Account for Enterprise Search	
	Configure the Enterprise Search Service Performance Level	
	Display Enterprise Search Service Applications	
	Get a Specific Enterprise Search Service Application	
	Create a Custom Metadata Category	
	Display Available Metadata Categories	
	Get a Specific Metadata Category	
	Create a Custom Metadata Crawled Property	
	Display Available Crawled Properties	
	Get a Specific Metadata Crawled Property	
	Create a Custom Metadata Managed Property	
	Display Available Managed Properties	
	Get a Specific Metadata Managed Property	
	Create a Metadata Mapping	135
12	SharePoint Foundation Search	137
13		
	Display the Search Service Information	
	Get a Specific Search Service Instances	
	·	
	Configure the Crawl Account	139

	Configure the Maximum Backup Duration	141
	Configure the Search Service Performance Level	141
14	Profile Service	143
	Get the Identity of the Profile Service Application	144
	Get a Specific Profile Service Application Instance	
	Configure Settings on the User Profile Service Application	
	Remove Old Comments	
	Remove Old Ratings	
	Remove Old Tags	
	Update the Profile Photo Store	
	Use Ancillary Cmdlets for the User Profile Service	
15	Business Data Connectivity Service	149
	Get the Identity of the BCS Service Application	150
	Get a Specific BCS Service Application Instance	150
	Configure the BCS Database	151
	Get a BCS Metadata Object	151
	Import a BCS Model	152
	Export a BCS Model	153
16	Secure Store Service	155
	Get the Identity of the Secure Store Service Application	156
	Get a Specific Secure Store Service Application Instance	156
	Enable Auditing for the Secure Store Service	
	Configure the Secure Store Database	
	Generate a New Master Key	
	Refresh the Encryption Key	
	Create Application Fields	159
	Create a Target Application	161
	Create a New Application Entry	161
17	Metadata Service	163
	Get the Identity of the Metadata Service Application	
	Get a Specific Metadata Service Application Instance	
	Configure the Metadata Service Accounts	
	Configure the Term Store Database	
	Configure the Content Type Hub	
	Get the Identity of the Metadata Service Proxy	

	Get a Specific Metadata Service Application Proxy Instance	
	Configure the Metadata Service Connection Options	168
18	Session State and State Services	171
	Enable Session State	172
	Disable Session State	172
	Display Session State Information	173
	Configure the Timeout of the Session State	174
	Display State Service Applications Configured on the Farm	175
	Get a Specific State Service Application	175
	Rename a State Service Application	176
	Perform a State Service Database Operation	176
Part	V: Office Features	
19	Excel Services	181
	Create a Trusted File Location	182
	Display All Trusted File Locations	183
	Get a Specific Trusted File Location	183
	Remove a Trusted File Location	184
	Create a Trusted Data Connection Library	185
	Display All Trusted Data Connection Libraries	185
	Get a Specific Trusted Data Connection Library	186
	Remove a Trusted Data Connection Library	186
	Create a New Safe Data Provider	187
	Display All Safe Data Providers	188
	Get a Specific Safe Data Provider	188
	Remove a Safe Data Provider	189
	Create a Blocked File Type	190
	Display All Blocked File Types	190
	Get a Specific Blocked File Type	191
	Remove a Blocked File Type	191
	Create a User-Defined Function Reference	192
	Display All User-Defined Function References	
	Get a Specific User-Defined Function Reference	
	Remove a User-Defined Function Reference	193
	Modify Eyeal Sangas Objects	104

20	PerformancePoint Services	195
	Configure the Unattended Service Account	196
	Display the Unattended Service Account	196
	Create a Trusted Content Location	197
	Create a Trusted Data Source Location	198
	Display All Trusted Content Locations	198
	Display All Trusted Data Source Locations	199
	Display Details of Trusted Locations	199
	Get a Specific Trusted Location	200
	Remove a Trusted Location	200
	Configure PerformancePoint Services to Enforce Trusted Locations	201
	Configure PerformancePoint Services Application Settings	202
21	Access Services	203
21		
	Configure the Application Log Size	
	Modify the Maximum Columns in a Query Modify the Maximum Calculated Columns in a Query	
	Configure the Maximum Order By Clauses	
	Configure the Maximum Number of Rows in a Query	
	Configure the Maximum Number of Records in an Access Table	
	Configure the Maximum Number of Sources in a Query	
	Enable and Disable the Use of Outer Joins	
	Allow or Restrict Non-Remotable Queries	
	Throttle Access Services Memory Utilization	
	Throttle Session Memory Utilization	
	Configure User Sessions	
	Limit Template Sizes	
	Limit remplate dizes	∠ 1 ∠
22	Visio Graphics Services	213
	Configure the Unattended Service Account	214
	Create a New Safe Data Provider	214
	Display All Safe Data Providers	216
	Get a Specific Safe Data Provider	216
	Remove a Safe Data Provider	217
	Set the Description of a Data Provider	217
	Configure Visio Performance Settings	218

23 Word Services	219
Configure the Conversion Processes	220
Configure Conversion Throughput	
Configure Supported Document Formats for Conversion	
Modify Database Information	
Modify Job Monitoring	
Modify Conversion Timeouts	
Modify the Maximum Conversion Attempts	
Modify the Maximum Memory Usage	226
Disable Word 97–2003 Document Scanning	226
Disable Embedded Fonts in Conversions	227
Modify the Recycle Threshold	228
Part V: Appendices	
A stsadm vs. SharePoint PowerShell	231
B Upgrade/Migration	237
Index	239

About the Author

Steve Mann was born and raised in Philadelphia, Pennsylvania, where he still resides today. He is an Enterprise Applications Engineer for Morgan Lewis and has more than 17 years of professional experience. Steve was previously a Principal Architect for RDA Corporation, where he worked for more than 13 years.

For the past 8 years, Steve has primarily focused on collaboration and business intelligence solutions using Microsoft technologies. He managed the internal BI Practice Group at RDA for several years. He was also heavily involved within RDA's Collaboration/Search Practice Group.

Steve has authored and coauthored several books related to the subject of SharePoint Server 2010. His blog site can be found at www.SteveTheManMann.com.

Dedication

In loving memory of my grandfather, Max Winitz, who always taught me to do my best and to be a man.

Acknowledgments

Thanks to Sams Publishing and Neil Rowe for making this book a reality and for giving me the opportunity to share my ideas and solutions.

Tell Us What You Think!

As the reader of this book, you are our most important critic and commentator. We value your opinion and want to know what we're doing right, what we could do better, what areas you'd like to see us publish in, and any other words of wisdom you're willing to pass our way.

I welcome your comments. You can email or write me directly to let me know what you did or didn't like about this book—as well as what we can do to make our books stronger.

Please note that I cannot help you with technical problems related to the topic of this book, and that due to the high volume of mail I receive, I might not be able to reply to every message.

When you write, please be sure to include this book's title and author as well as your name and phone or fax number. I will carefully review your comments and share them with the author and editors who worked on the book.

Email: feedback@samspublishing.com

Mail: Neil Rowe

Executive Editor
Sams Publishing
201 West 103rd Street

Indianapolis, IN 46290 US

Reader Services

Visit our website and register this book at informit.com/register for convenient access to any updates, downloads, or errata that might be available for this book.

Introduction

Overview of This Book

PowerShell is becoming the de facto administration tool for Microsoft Server products. The ability to script out reusable steps and code makes life easier for administrators, developers, and managers alike. With the latest release of Microsoft SharePoint Server 2010, PowerShell is the recommended administration tool. The previous stsadm console application is still available for backward compatibility but will soon be deprecated. Therefore, it is essential to understand the available cmdlets within SharePoint 2010.

This book is designed to provide a great reference of the SharePoint cmdlets across all areas and features within the product. The scenarios covered can be used to build out simple to complex scripts using the syntax and examples found within this book's chapters.

How to Benefit from This Book

This book provides a brief overview of how to get started with PowerShell in a SharePoint environment. It is not, however, a tutorial on PowerShell scripting itself. Use this book as a guide for performing repeated tasks or scripting out steps that need to be replicated across your SharePoint environments (development, staging, production, and so on). Whether it is for server management (including farm and web application administration), development, or the new service applications, this book describes the common emdlets and SharePoint functionality available through PowerShell.

There have been changes within the SharePoint 2010 cmdlets during various releases (for example, beta, release candidates, and product releases). Many examples provided on the Internet use the old cmdlets and/or do not provide the appropriate parameters or types. In addition, some of the documentation on the cmdlets, settings, and configurations available on the Internet is incorrect. You can rest assured that all of the sample command lines in this book have been tested and confirmed to be as accurate as possible.

2 Introduction

You can access the code examples used in this book by registering on the book's website at informit.com/register. Go to this URL, sign in, and enter the ISBN to register (free site registration required). After you register, look on your Account page, under Registered Products, for a link to Access Bonus Content.

How to Continue Expanding Your Knowledge

This book will provide the basis for what is possible within PowerShell scripts for SharePoint. To become an overall PowerShell expert you may want to expand your knowledge by exploring other books that discuss general PowerShell scripting techniques and syntax. Several general PowerShell books are available at informit.com.

PART I

Getting Started

CHAPTER 1 SharePoint 2010 Management Shell

CHAPTER 2 PowerShell Basics