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William R. Stanek, James O'Neill, and Jeffrey Rosen

Microsoft® PowerShell, VBScript, and JScript Bible

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William R. Stanek

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About the Authors

William R. Stanek (`http://www.williamstanek.com/`) has over 20 years of hands-on experience with advanced programming and development. He is a leading technology expert, an award-winning author, and a pretty-darn-good instructional trainer. Over the years, his practical advice has helped millions of technical professionals all over the world. He has written more than 75 books, including *Microsoft Exchange Server 2007 Administrator's Pocket Consultant*, *Microsoft Windows Vista Administrator's Pocket Consultant*, *Microsoft Windows Server 2008 Administrator's Pocket Consultant,* and *Windows Server 2008 Inside Out*.

Mr. Stanek has been involved in the commercial Internet community since 1991. His core business and technology experience comes from over 11 years of military service. He has substantial experience in developing server technology, encryption, and Internet solutions. He has written many technical white papers and training courses on a wide variety of topics. He frequently serves as a subject matter expert and consultant.

Mr. Stanek has an MS with distinction in information systems and a BS magna cum laude in computer science. He is proud to have served in the Persian Gulf War as a combat crewmember on an electronic warfare aircraft. He flew on numerous combat missions into Iraq and was awarded nine medals for his wartime service, including one of the United States of America's highest flying honors, the Air Force Distinguished Flying Cross. Currently, he resides in the Pacific Northwest with his wife and children.

James O'Neill was born in 1965, used his first Microsoft product at the age of 13, and has scarcely stopped since. He describes himself as a compulsive explainer, which led him to work as a technical trainer and run a small training company in the 1990s. He joined Microsoft Consulting Services in 2000, and after six years there working with a wide variety of clients he moved back to a role where he can explain more, becoming an evangelist, talking to IT professionals primarily about Windows platform technologies. He is a veteran of every Microsoft operating system and network technology since DOS 3.1 MS-Net and Windows 1.03, and has used a dozen or so programming and scripting languages. Over the last two years, he has become increasingly evangelical about PowerShell, using it to write libraries that support Windows 2008 virtualization and Office Communications Server. He lives near Oxford, England with his wife and two children, and occasionally manages to find time for photography and scuba diving. He has a worrying tendency to write about himself in the third person.

Jeffrey Rosen has a Masters of Business Administration from Case Western Reserve, Weatherhead School of Management, specializing in Information Systems. He is a Microsoft Certified Architect, an MCSE specializing in messaging and security, and a CISSP. He began his career working with Microsoft Mail and Novell Netware. Since then, Jeffrey has worked for Microsoft Consulting Services for nine years on large and complex Exchange deployments. He is a co-author of *Professional PowerShell for Exchange 2007 SP1*.

About the Technical Editor

Andrew Edney has been an IT professional for more than 12 years and has, over the course of his career, worked for a range of high-tech companies, such as Microsoft, Hewlett-Packard, and Fujitsu Services. He has a wide range of experience in virtually all aspects of Microsoft's computing solutions, having designed and architected large enterprise solutions for government and private-sector customers. Over the years, Andrew has made a number of guest appearances at major industry events, presenting on a wide range of information systems subjects, such as an appearance at the annual Microsoft Exchange Conference in Nice where he addressed the Microsoft technical community on mobility computing. Andrew is currently involved in numerous Microsoft beta programs, including next-generation Windows operating systems and next-generation Microsoft Office products. He actively participates in all Windows Media Center beta programs and was heavily involved in the Windows Home Server beta program. In addition, Andrew has written a number of books including: *Windows Home Server User's Guide* (2007), *Pro LCS: Live Communications Server Administration* (2007), *Getting More from Your Microsoft Xbox 360* (2006), *How to Set Up Your Home or Small Business Network* (2006), *Using Microsoft Windows XP Media Center 2005* (2006), *Windows Vista: An Ultimate Guide* (2007), *PowerPoint 2007 in Easy Steps* (2007), *Windows Vista Media Center in Easy Steps* (2007), and *Using Ubuntu Linux* (2007).

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Writing *PowerShell, VBScript, and JScript Bible* took a lot of work and research. Much of the time was spent searching for undocumented features, resolving problems with poorly documented interfaces, and exploring uncharted areas of Windows. Then, I had to write about the hidden features and the many interfaces I had discovered. I hope you'll agree that the result was worth all of the effort. The book contains over 300 code examples and dozens of working scripts, all designed to provide a top-notch tutorial and reference.

PowerShell, VBScript, and JScript Bible wouldn't have been possible without a lot of help from others and, especially, the team at Wiley: Katie Mohr, the Acquisitions Editor, and Ed Connor, the Development Editor.

A big thank you goes out to my close contacts and friends at Microsoft. Thanks also to Studio B literary agency and my agents, David Rogelberg and Neil Salkind. Neil has a terrific knack for helping me find projects that are both fun and challenging.

I hope I haven't forgotten anyone, but if I have, it was an oversight. *Honest*. ;-)

William R. Stanek

There are a few people without whom I wouldn't have been able to contribute to this book. Neil Salkind at Studio B who asked is perhaps first in the queue to be thanked. Richard Siddaway, who started the first PowerShell user group, is probably the person most responsible for the depth of my interest in the subject. At Microsoft, I should mention Jeffrey Snover for his encouragement and Eileen Brown, my manager but also my friend, mentor, and when I least deserve it, my advocate. She deserves far greater thanks than a mention here. And finally, my family: my wife, Jackie, and my children, Lisa and Paul. Kids: the book in your hands is one of the reasons why Daddy kept asking you to be quiet.

James O'Neill

To my wife, Christine, and our daughters, Madison and Isabel, I love you, and thanks for always being there for me. Also, thanks to the authors, editors, and other invaluable staff that I've had the pleasure of working with.

Jeffrey Rosen

If you've purchased ***PowerShell, VBScript, and JScript Bible*** or are thumbing through the book in a bookstore somewhere, you probably want to know how this book can help you. Our goal in writing ***PowerShell, VBScript, and JScript Bible*** is to create the best resource available on scripting the Windows operating system.

As you'll learn in this book, Windows scripting involves many different technologies. These technologies include:

- Windows operating systems
- Windows Script Host (WSH)
- Scripting languages, such as VBScript and JScript
- Windows PowerShell
- ActiveX and COM (Component Object Model) components
- Microsoft Active Directory
- ADSI (Active Directory Services Interfaces)
- WMI (Windows Management Instrumentation)

We've tried to pack in as much information about these topics as possible, and to present the information in a way that is both clear and concise. We've also tried to present Windows scripting in a unique way, offering both VBScript and JScript solutions throughout the text and then discussing how to accomplish similar tasks using PowerShell. In this way, you can learn exactly how VBScript, JScript, and PowerShell can be used with Windows. With this approach, you gain insight into unique scripting techniques necessary to implement solutions in VBScript, JScript, and PowerShell, and, if you prefer one technique over the other, there's no more guesswork.

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