

---

# Access Free Learning Powershell Dsc

---

Eventually, you will entirely discover a supplementary experience and attainment by spending more cash. nevertheless when? get you agree to that you require to acquire those all needs in the manner of having significantly cash? Why dont you try to get something basic in the beginning? Thats something that will guide you to understand even more on the subject of the globe, experience, some places, afterward history, amusement, and a lot more?

It is your definitely own get older to con reviewing habit. among guides you could enjoy now is **Learning Powershell Dsc** below.

---

## **F5E - TIMOTHY DULCE**

---

Learn Azure in a Month of Lunches, Second Edition, is a tutorial on writing, deploying, and running applications in Azure. In it, you'll work through 21 short lessons that give you real-world experience. Each lesson includes a hands-on lab so you can try out and lock in your new skills. Summary You can be incredibly productive with Azure without mastering every feature, function, and service. Learn Azure in a Month of Lunches, Second Edition gets you up and running quickly, teaching you the most important concepts and tasks in 21 practical bite-sized lessons. As you explore the examples, exercises, and labs, you'll pick up valuable skills immediately

and take your first steps to Azure mastery! This fully revised new edition covers core changes to the Azure UI, new Azure features, Azure containers, and the upgraded Azure Kubernetes Service. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology Microsoft Azure is vast and powerful, offering virtual servers, application templates, and pre-built services for everything from data storage to AI. To navigate it all, you need a trustworthy guide. In this book, Microsoft engineer and Azure trainer Iain Foulds focuses on core skills for creating cloud-based applications. About the book Learn Azure in a Month of Lunches, Second Edition, is a tutorial on writing, deploy-

ing, and running applications in Azure. In it, you'll work through 21 short lessons that give you real-world experience. Each lesson includes a hands-on lab so you can try out and lock in your new skills. What's inside Understanding Azure beyond point-and-click Securing applications and data Automating your environment Azure services for machine learning, containers, and more About the reader This book is for readers who can write and deploy simple web or client/server applications. About the author Iain Foulds is an engineer and senior content developer with Microsoft. Table of Contents PART 1 - AZURE CORE SERVICES 1 Before you begin 2 Creating a virtual machine 3 Azure Web Apps 4 Introduction to Azure Storage 5 Azure Net-

working basics PART 2 - HIGH AVAILABILITY AND SCALE 6 Azure Resource Manager 7 High availability and redundancy 8 Load-balancing applications 9 Applications that scale 10 Global databases with Cosmos DB 11 Managing network traffic and routing 12 Monitoring and troubleshooting PART 3 - SECURE BY DEFAULT 13 Backup, recovery, and replication 14 Data encryption 15 Securing information with Azure Key Vault 16 Azure Security Center and updates PART 4 - THE COOL STUFF 17 Machine learning and artificial intelligence 18 Azure Automation 19 Azure containers 20 Azure and the Internet of Things 21 Serverless computing

Your one-stop reference for Windows Server 2019 and PowerShell know-how Windows Server 2019 & PowerShell All-in-One For Dummies offers a single reference to help you build and expand your knowledge of all things Windows Server, including the all-important PowerShell framework. Written by an information security pro and professor who trains aspiring system administrators, this book covers the broad range of topics a system administrator needs to know to run Windows Server 2019, includ-

ing how to install, configure, and secure a system. This book includes coverage of: Installing & Setting Up Windows Server Configuring Windows Server 2019 Administering Windows Server 2019 Configuring Networking Managing Security Working with Windows PowerShell Installing and Administering Hyper-V Installing, Configuring, and Using Containers If you're a budding or experienced system administrator looking to build or expand your knowledge of Windows Server, this book has you covered.

This complete guide takes you on a tour of PowerShell from the basics to its advanced functionality, helping you automate your tedious and time-consuming system admin tasks Key Features Automate complex tasks, manipulate data, and secure your environment Work with dual code for PowerShell 7 and Windows PowerShell to maintain compatibility with older versions See PowerShell in action, from learning the fundamentals to creating classes, scripts, and modules Book Description PowerShell scripts offer a convenient way to automate various tasks, but working with them can be daunting. Mastering PowerShell

Scripting takes away the fear and helps you navigate through PowerShell's capabilities. This extensively revised edition includes new chapters on debugging and troubleshooting and creating GUIs (online chapter). Learn the new features of PowerShell 7.1 by working with parameters, objects, and .NET classes from within PowerShell 7.1. This comprehensive guide starts with the basics before moving on to advanced topics, including asynchronous processing, desired state configuration, using more complex scripts and filters, debugging issues, and error-handling techniques. Explore how to efficiently manage substantial amounts of data and interact with other services using PowerShell 7.1. This book will help you to make the most of PowerShell's automation features, using different methods to parse data, manipulate regular expressions, and work with Windows Management Instrumentation (WMI). What you will learn Optimize code with functions, switches, and looping structures Test and debug your scripts as well as raising and catching errors Work with objects and operators to test and manipulate data Parse and ma-

nipulate different data types Use jobs, runspaces, and runspace pools to run code asynchronously Write .NET classes with ease within PowerShell Create and implement regular expressions in PowerShell scripts Make use of advanced techniques to define and restrict the behavior of parameters Who this book is for This book is for system administrators who want to automate and speed up their processes using PowerShell and Windows PowerShell. You'll need to know the basics of operating systems, but beginners with no prior experience with PowerShell will have no trouble following along. Use Windows PowerShell Desired State Configuration (DSC) to configure your infrastructure on-premises and in the cloud. In an environment where changes and deployments are happening all the time, DSC makes the necessary adjustments to the system so you don't have to. Pro PowerShell Desired State Configuration shows you how. PowerShell Desired State Configuration (DSC) is a powerful configuration management platform that makes it easier than ever to perform configuration management of your infrastructure, whether on-

premises or in the cloud. With Pro PowerShell Desired State Configuration, Ravikanth Chaganti revises and significantly expands his previous edition, bringing you a complete in-depth reference for applying this evolving technology in your day-to-day work. What's new in this edition? Get up-to-date, in-depth guidance on DSC in the data center Understand the central role that DSC plays in DevOps today Integrate DSC into build and release management tools Learn to think and act like a developer when automating your configuration management, creating a testable, robust process that you can use again and again Find out why and how DSC has an important role to play in public and private cloud deployments Apply DSC in the cloud with Microsoft Azure or Amazon Web Services or Google Cloud Platform Who This Book Is For IT administrators, developers and DevOps engineers working in Windows-based data center environments. With a little prior PowerShell scripting experience, this book can be used as an in-depth reference to creating, customizing, and extending DSC in Windows. IT administrators with limited

scripting experience will also find this book a useful overview of what DSC offers and how to use DSC resources to automate configuration management and deployment.

In just 24 lessons of one hour or less, Sams Teach Yourself Windows PowerShell in 24 Hours helps you streamline all facets of Windows administration, supercharging your effectiveness as an IT professional or power user. This book's straightforward, step-by-step approach shows you how to build and run scripts, extend Windows PowerShell reach, manage computers remotely, and automate a wide variety of tasks on any modern Windows server or client. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common PowerShell scripting tasks. Practical, hands-on examples show you how to apply what you learn. Quizzes and exercises help you test your knowledge and stretch your skills. Notes, tips, and cautions point out shortcuts, pitfalls, and solutions. Learn how to... Install, configure, and explore Windows PowerShell

(including updates for PowerShell 5) Leverage .NET's remarkable power and scope with easy-to-use cmdlets Build new scripts with the console, ISE visual tools, and other popular hosts Apply best practices for writing more reliable, flexible, team-friendly scripts Work effectively with the pipeline, objects, and data Extend Windows PowerShell reach via providers, drives, and output Run external tools like ping, ipconfig, and tracert from within PowerShell Remotely manage computers with basic and advanced remoting (WinRM), WMI, and Regex Configure Windows devices across the web with PSWA Sort, filter, measure, format, export, and convert script output Run Windows PowerShell flexibly, using background and scheduled jobs Customize your environment with profile scripts, alternate credentials, thirdparty tools, and packages Strengthen your control over Windows systems and services with Desired State Configuration Administer key tasks on SQL Server, SharePoint, and other Windows servers Master PowerShell skills needed to earn many Microsoft certifications A learning guide to get you started with Power-

Shell DSC.About This Book\* Create flexible and maintainable deployments using DSC configuration scripts that stand the test of time.\* Explore the core architecture, concepts, and practices in depth.\* Learning PowerShell DSC is a step-by-step guide that shows you how to start using and taking advantage of PowerShell DSC along with configuring and deploying applications.Who This Book Is ForIf you are a system administrator, developer, or engineer and are responsible for configuration management and automation, then this book is for you. IT professionals who wish to learn PowerShell Desired State Configuration for the efficient management, configuration, and deployment of systems will also find this book useful. What You Will Learn\* Explore PowerShell Desired State Configuration and activities around it, including the need for configuration management and abstraction.\* Create reusable DSC configurations and debug/troubleshoot configuration files.\* Learn about the PowerShell DSC architecture with the help of push-and-pull management and workflows.\* Define DSC configuration scripts and data files and

push DSC configuration files remotely and locally.\* Validate DSC Pull Server install and register target nodes with a DSC Pull Server.\* Learn about DSC Cross Platform and install PowerShell on Linux and macOS along with real-life DSC uses and different types of deployment.In DetailThe main goal of this book is to teach you to configure, deploy, and manage your system using the new features of PowerShell v5/v6 DSC.This book begins with the basics of PowerShell Desired State Configuration, covering its architecture and components. It familiarizes you with the set of Windows PowerShell language extensions and new Windows PowerShell commands that make up DSC. Then it helps you create DSC custom resources and work with DSC configurations with the help of practical examples. Finally, it describes how to deploy configuration data using PowerShell DSC. Throughout this book, we will be focusing on concepts such as building configurations with parameters, the local configuration manager, and testing and restoring configurations using PowerShell DSC.By the end of the book, you will be able to deploy a real-world ap-

plication end-to-end and will be familiar enough with the powerful Desired State Configuration platform to achieve continuous delivery and efficiently and easily manage and deploy data for systems. Style and approach The purpose of this book is to introduce readers to the powerful PowerShell Desired State Configuration platform to achieve continuous delivery, efficient management, and the easy deployment of data for systems.

Over 100 recipes to help you leverage PowerShell to automate Windows Server 2016 manual tasks About This Book Automate Windows server tasks with the powerful features of the PowerShell Language Master new features such as DevOps, containers, and Nano servers, and speed up their performance using PowerShell Improve PowerShell's usability, and control and manage Windows-based environments by working through inviting recipes Who This Book Is For If you are a systems administrator, engineer, or an architect working with Windows Server 2016 and want to automate tasks with PowerShell, then this book is for you. A basic knowledge of PowerShell is expected. What You Will

Learn Streamline routine administration processes Improve the performance and storage of your Windows server with enhanced large-scale PowerShell scripts Use DSC to leverage Windows server features Generate automatic reports that highlight unexpected changes in your environment Monitor performance and report on system utilization using detailed graphs and analysis Create and manage a reliable and redundant Hyper-V environment Manage your enterprise's patch level Utilize multiple tools and protocols to manage your environment In Detail This book showcases several ways that Windows administrators can use to automate and streamline their job. You'll start with the PowerShell and Windows Server fundamentals, where you'll become well versed with PowerShell and Windows Server features. In the next module, Core Windows Server 2016, you'll implement Nano Server, manage Windows updates, and implement troubleshooting and server inventories. You'll then move on to the Networking module, where you'll manage Windows network services and network shares. The last module covers Azure and DSC,

where you will use Azure on PowerShell and DSC to easily maintain Windows servers. Style and approach This is a practical guide packed with attractive recipes to help you effectively use PowerShell to accelerate your daily administrative tasks with Windows server.

Windows PowerShell is a scripting language that simplifies Windows system administration. PowerShell in Practice is a hands-on reference for administrators wanting to learn and use PowerShell. Following the "in Practice" style, individual related techniques are clustered into chapters. Each technique is presented in the form: problem, solution, discussion, and includes annotated code listings. Written to answer the question "How can PowerShell make my job as an administrator easier?" this book concentrates on practical tasks and automation. Starting with an a brief tutorial and review, the majority of the book focuses on two major PowerShell usage areas: People - user accounts, mailboxes, desktop configuration; and Servers - Active Directory, Exchange, IIS, and more. Purchase of the print book comes with an offer of a free PDF, ePub, and Kindle eBook from

Manning. Also available is all code from the book.

Summary PowerShell in Depth, Second Edition is the go-to reference for administrators working with Windows PowerShell. Every major technique, technology, and tactic is carefully explained and demonstrated, providing a hands-on guide to almost everything an admin would do in the shell. Written by three experienced authors and PowerShell MVPs, this is the PowerShell book you'll keep next to your monitor—not on your bookshelf! Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Book A Windows admin using PowerShell every day may not have the time to search the net every time he or she hits a snag. Wouldn't it be great to have a team of seasoned PowerShell experts ready to answer even the toughest questions? That's what you get with this book. PowerShell in Depth, Second Edition is the go-to reference for administrators working with Windows PowerShell. Every major technique, technology, and tactic is carefully explained and demonstrated, providing a hands-on guide to almost

everything an admin would do in the shell. Written by PowerShell MVPs Don Jones, Jeffrey Hicks, and Richard Siddaway, each valuable technique was developed and thoroughly tested, so you'll be able to consistently write production-quality, maintainable scripts while saving hours of time and effort. This book assumes you know the basics of PowerShell. What's Inside Automating tasks Packaging and deploying scripts Introduction to Desired State Configuration PowerShell security Covers PowerShell version 3 and later About the Authors Don Jones, Jeffrey Hicks, and Richard Siddaway are Microsoft MVPs, trainers, and administrators. Collectively, they've authored nearly three dozen books on PowerShell and Windows administration. Table of Contents PART 1 POWERSHELL FUNDAMENTALS Introduction PowerShell hosts Using the PowerShell help system The basics of PowerShell syntax Working with PSSnapins and modules Operators Working with objects The PowerShell pipeline Formatting PART 2 POWERSHELL MANAGEMENT PowerShell Remoting Background jobs and scheduling Working with credentials Regular expres-

sions Working with HTML and XML data PSDrives and PSProviders Variables, arrays, hash tables, and script blocks PowerShell security Advanced PowerShell syntax PART 3 POWERSHELL SCRIPTING AND AUTOMATION PowerShell's scripting language Basic scripts and functions Creating objects for output Scope PowerShell workflows Advanced syntax for scripts and functions Script modules and manifest modules Custom formatting views Custom type extensions Data language and internationalization Writing help Error handling techniques Debugging tools and techniques Functions that work like cmdlets Tips and tricks for creating reports PART 4 ADVANCED POWERSHELL Working with the Component Object Model (COM) Working with .NET Framework objects Accessing databases Proxy functions Building a GUI WMI and CIM Working with the web Desired State Configuration

Learning PowerShell is a custom-built, handcrafted, painstakingly curated book designed to get you from total PowerShell newbie to confident PowerShell user in as little as four weeks. This book assumes no prior knowledge, perfect for non-de-

velopers and GUI addicts who recognize that PowerShell is the future but need a good bit of hand-holding to achieve mastery. It is also a simple guide for the hundreds of thousands of PowerShell users who have not attained the level of PowerShell knowledge that they really need. With Learning PowerShell at your side, you will see that you don't have to be a developer to use PowerShell and you don't need to be a scripting wizard to derive value from integrating PowerShell into your daily administrative activities. The book is a learning resource that covers every topic worth discussing for a PowerShell beginner, with a depth of explanation unparalleled by any book currently on the market. With this book, you don't have to have a lot of time to learn the language and you can begin applying what you master almost immediately. Even skeptics of PowerShell, and command lines in general, will come away with a renewed sense of respect for the language and ideas on how to put it to use.

Automate Windows server tasks with the powerful features of the PowerShell Language Key Features Leverage PowerShell to au-

tomate complex Windows server tasks Master new features such as DevOps, and containers, and speed up their performance using PowerShell Improve PowerShell's usability, and control and manage Windows-based environments by working through exciting recipes Book Description Windows Server 2019 represents the latest version of Microsoft's flagship server operating system. It also comes with PowerShell Version 5.1 and has a number of additional features that IT pros find useful. The book helps the reader learn how to use PowerShell and manage core roles, features, and services of Windows Server 2019. You will begin with creating a PowerShell Administrative Environment that has updated versions of PowerShell and the Windows Management Framework, updated versions of the .NET Framework, and third-party modules. Next, you will learn to use PowerShell to set up and configure Windows Server 2019 networking and also managing objects in the AD environment. You will also learn to set up a host to utilize containers and how to deploy containers. You will also be implementing different mechanisms for achieving desired state

configuration along with getting well versed with Azure infrastructure and how to setup Virtual Machines, web sites, and shared files on Azure. Finally, you will be using some powerful tools you can use to diagnose and resolve issues with Windows Server 2019. By the end of the book, you will learn a lot of trips and tricks to automate your windows environment with PowerShell What you will learn Perform key admin tasks on Windows Server 2019 Employing best practices for writing PowerShell scripts and configuring Windows Server 2019 Use the .NET Framework to achieve administrative scripting Set up VMs, websites, and shared files on Azure Report system performance using built-in cmdlets and WMI to obtain single measurements Know the tools you can use to diagnose and resolve issues with Windows Server Who this book is for If you are a systems administrator, engineer, or an architect working with Windows Server 2016 interested in upgrading to Windows Server 2019 and automating tasks with PowerShell, then this book is for you. A basic knowledge of PowerShell is expected. Scripting gurus Jones and

Hicks teach readers PowerShell from the ground up. They cover its underlying technologies, flexible scripting language, and enough of the .NET Framework to be effective in PowerShell scripting. (Computer Books)

Summary Discover how scripting is different from command-line PowerShell, as you explore concrete hands-on examples in this handy guide. The book includes and expands on many of the techniques presented in Learn PowerShell Toolmaking in a Month of Lunches. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Automate it! With Microsoft's PowerShell language, you can write scripts to control nearly every aspect of Windows. Just master a few straightforward scripting skills, and you'll be able to eliminate repetitive manual tasks, create custom reusable tools, and build effective pipelines and workflows. Once you start scripting in PowerShell, you'll be amazed at how many opportunities you'll find to save time and effort. About the Book Learn PowerShell Scripting in a Month of Lunches

teaches you how to expand your command-line PowerShell skills into effective scripts and tools. In 27 bite-size lessons, you'll discover instantly useful techniques for writing efficient code, finding and squashing bugs, organizing your scripts into libraries, and much more. Advanced scripters will even learn to access the .NET Framework, store data long term, and create nice user interfaces. What's Inside Designing functions and scripts Effective pipeline usage Dealing with errors and bugs Professional-grade scripting practices About the Reader Written for devs and IT pros comfortable with PowerShell and Windows. About the Authors Don Jones is a PowerShell MVP, speaker, and trainer who has written dozens of books on information technology topics. Jeffery Hicks is a PowerShell MVP and an independent consultant, trainer, and author. Don and Jeff coauthored Manning's Learn Windows PowerShell in a Month of Lunches, Learn PowerShell Toolmaking in a Month of Lunches, and PowerShell in Depth. Table of Contents PART 1 - INTRODUCTION TO SCRIPTING Before you begin Setting up your scripting environment WWPD:

what would PowerShell do? Review: parameter binding and the PowerShell pipeline Scripting language crash course The many forms of scripting (and which to use) Scripts and security PART 2 - BUILDING A POWERSHELL SCRIPT Always design first Avoiding bugs: start with a command Building a basic function and script module Going advanced with your function Objects: the best kind of output Using all the pipelines Simple help: making a comment Dealing with errors Filling out a manifest PART 3 - GROWN-UP SCRIPTING Changing your brain when it comes to scripting Professional-grade scripting An introduction to source control with git Pestering your script Signing your script Publishing your script PART 4 - ADVANCED TECHNIQUES Squashing bugs Making script output prettier Wrapping up the .NET Framework Storing data-not in Excel! Never the end

PowerShell is a framework that is used for task automation and configuration management. This mainly works via a command-line sheet and a scripted language. It was initially called Windows PowerShell and it was an open source and a cross-platform in August 2016 and

was introduction of the PowerShell Core. These items were built on the .NET Framework and .NET Core. The use of the framework is to enable administrators to carry out administrative tasks either on the local or Windows systems. It will also provide a hosting API with the runtime area that can be placed in other applications. These can then leverage the functionality that carry out certain operations that will include those that are seen in the graphical interface. This Book will look at the different features of this framework and explain how it works to the reader.

Prepare for Microsoft Exam 70-740—and help demonstrate your real-world mastery of Windows Server 2016 installation, storage, and compute features and capabilities. Designed for experienced IT professionals ready to advance their status, Exam Ref focuses on the critical-thinking and decision-making acumen needed for success at the MCSA level. Focus on the expertise measured by these objectives:

- Install Windows Servers in host and compute environments
- Implement storage solutions
- Implement Hyper-V
- Implement Windows containers
- Implement high avail-

ability

- Maintain and monitor server environments

This Microsoft Exam Ref:

- Organizes its coverage by exam objectives
- Features strategic, what-if scenarios to challenge you
- Assumes you have experience working with Windows Server in an enterprise environment; are familiar with core networking infrastructure, topologies, architectures, and protocols; and have experience with Windows clients and virtualization

About the Exam Exam 70-740 focuses on the skills and knowledge necessary to implement and configure storage and compute features and functionality in Windows Server 2016. About Microsoft Certification Passing this exam earns you credit toward a Microsoft Certified Solutions Associate (MCSA) certification that demonstrates your mastery of core Windows Server 2016 skills for reducing IT costs and delivering more business value. Exam 70-741 (Networking with Windows Server 2016) and Exam 70-742 (Identity with Windows Server 2016) are also required for MCSA: Windows Server 2016 certification. See full details at: [microsoft.com/learning](http://microsoft.com/learning)

Desired State Configuration (DSC) is a powerful

configuration management platform that makes it easier than ever to perform cross-platform configuration management of your infrastructure, whether on-premise or in the cloud. DSC provides the management platform and Application Programming Interface (API) that can be used with any programming language. Windows PowerShell Desired State Configuration Revealed will take you through this new technology from start to finish and demonstrates the DSC interfaces through Windows PowerShell. DSC allows you to manage target devices by simply declaring what state you want them to be in, using new declarative language extensions, rather than writing detailed instructions to get them into that state. This makes continuous delivery in Windows easier than ever before. In an environment where changes and deployments are happening all the time, DSC makes the necessary adjustments to the system so you don't have to. Windows PowerShell Desired State Configuration Revealed starts with an overview of the configuration management features in Windows, followed by a discussion of

the architecture of DSC and its components. You'll then explore DSC's built-in features and resources, followed by some of the different methods provided for delivering configuration information within your ecosystem, and learn about configuration monitoring and reporting. In the latter part of the book, you'll find out how to get more power out of DSC by writing your own custom DSC resources, including a range of useful examples, and the book concludes with vital information on deploying and troubleshooting DSC in a production environment, along with some expert tips and tricks you might find useful along the way. *Windows PowerShell Desired State Configuration Revealed* is your one-stop guide to this new technology and how it can change your working life for the better.

*Windows PowerShell in Action* was written by Bruce Payette, one of the founding members of the Windows PowerShell team, co-designer of the PowerShell language and the principal author of the PowerShell language implementation. This book is a tutorial for sysadmins and developers introducing the PowerShell lan-

guage and its environment. It shows you how to build scripts and utilities to automate system tasks or create powerful system management tools to handle the day-to-day tasks that drive a Windows administrator's life. It's rich in interesting examples that will spark your imagination. The book covers batch scripting and string processing, COM, WMI, and even .NET and WinForms programming. Welcome to PowerShell. The basics. Working with types. Operators and expressions. Advanced operators and variables. Flow control in scripts. Functions and scripts. Scriptblocks and objects. Errors, exceptions, and script debugging. Processing text, files, and XML. Getting fancy. .NET and WinForms. Windows objects: COM and WMI. Security, security

Thought-provoking and accessible in approach, this updated and expanded second edition of the *Learning PowerShell* DSC provides a user-friendly introduction to the subject. Taking a clear structural framework, it guides the reader through the subject's core elements. A flowing writing style combines with the use of illustrations and diagrams throughout the text to en-

sure the reader understands even the most complex of concepts. This succinct and enlightening overview is a required reading for advanced graduate-level students. We hope you find this book useful in shaping your future career. Feel free to send us your enquiries related to our publications to [info@risepress.pw](mailto:info@risepress.pw) Rise Press

Apply best practices for automating system administration with Windows PowerShell 2.0 and optimize your operational efficiency and results. This guide captures the field-tested tips, real-world lessons, and candid advice of practitioners across the range of business and technical scenarios and across the scripting life cycle. Discover how to: Take advantage of new features and cmdlets in Windows PowerShell 2.0 Plan scripting usage scenarios and define standards Deploy Windows PowerShell 2.0 to desktops and servers Configure scripting environments Optimize remote scripting capabilities Work with Active Directory and WMI Design functions and modules Optimize input and output Handle errors Document scripts Test and troubleshoot scripts Avoid scripting pitfalls The com-

panion CD includes a fully searchable eBook and sample scripts. For customers who purchase an ebook version of this title, instructions for downloading the CD files can be found in the ebook.

In just 24 lessons of one hour or less, Sams Teach Yourself Windows PowerShell in 24 Hours helps you streamline all facets of Windows administration, supercharging your effectiveness as an IT professional or power user. This book's straightforward, step-by-step approach shows you how to build and run scripts, extend Windows PowerShell reach, manage computers remotely, and automate a wide variety of tasks on any modern Windows server or client. Every lesson builds on what you've already learned, giving you a rock-solid foundation for real-world success! Step-by-step instructions carefully walk you through the most common PowerShell scripting tasks. Practical, hands-on examples show you how to apply what you learn. Quizzes and exercises help you test your knowledge and stretch your skills. Notes, tips, and cautions point out shortcuts, pitfalls, and solutions. Learn how to... Install, configure, and explore Windows PowerShell

(including updates for PowerShell 5) Leverage .NET's remarkable power and scope with easy-to-use cmdlets Build new scripts with the console, ISE visual tools, and other popular hosts Apply best practices for writing more reliable, flexible, team-friendly scripts Work effectively with the pipeline, objects, and data Extend Windows PowerShell reach via providers, drives, and output Run external tools like ping, ipconfig, and tracert from within PowerShell Remotely manage computers with basic and advanced remoting (WinRM), WMI, and Regex Configure Windows devices across the web with PSWA Sort, filter, measure, format, export, and convert script output Run Windows PowerShell flexibly, using background and scheduled jobs Customize your environment with profile scripts, alternate credentials, thirdparty tools, and packages Strengthen your control over Windows systems and services with Desired State Configuration Administer key tasks on SQL Server, SharePoint, and other Windows servers Master PowerShell skills needed to earn many Microsoft certifications

A learning guide to get

you started with PowerShell DSC. About This Book Create flexible and maintainable deployments using DSC configuration scripts that stand the test of time. Explore the core architecture, concepts, and practices in depth. Learning PowerShell DSC is a step-by-step guide that shows you how to start using and taking advantage of PowerShell DSC along with configuring and deploying applications. Who This Book Is For If you are a system administrator, developer, or engineer and are responsible for configuration management and automation, then this book is for you. IT professionals who wish to learn PowerShell Desired State Configuration for the efficient management, configuration, and deployment of systems will also find this book useful. What You Will Learn Explore PowerShell Desired State Configuration and activities around it, including the need for configuration management and abstraction. Create reusable DSC configurations and debug/troubleshoot configuration files. Learn about the PowerShell DSC architecture with the help of push-and-pull management and workflows. Define DSC

configuration scripts and data files and push DSC configuration files remotely and locally. Validate DSC Pull Server install and register target nodes with a DSC Pull Server. Learn about DSC Cross Platform and install PowerShell on Linux and macOS along with real-life DSC uses and different types of deployment. In Detail The main goal of this book is to teach you to configure, deploy, and manage your system using the new features of PowerShell v5/v6 DSC. This book begins with the basics of PowerShell Desired State Configuration, covering its architecture and components. It familiarizes you with the set of Windows PowerShell language extensions and new Windows PowerShell commands that make up DSC. Then it helps you create DSC custom resources and work with DSC configurations with the help of practical examples. Finally, it describes how to deploy configuration data using PowerShell DSC. Throughout this book, we will be focusing on concepts such as building configurations with parameters, the local configuration manager, and testing and restoring configurations using PowerShell DSC. By the end of

the book, you will be able to deploy a real-world application end-to-end and will be familiar enough with the powerful Desired State Configuration platform to achieve continuous delivery and efficiently and easily manage and deploy data for systems. Style and approach The purpose of this book is to introduce readers to the powerful PowerShell Desired State Configuration platform to achieve continuous delivery, efficient management, and the easy deployment of data for systems.

Learn the essentials of PowerShell Desired State Configuration. DSC is a new IT management platform built on Windows PowerShell that enables administrators to define the desired state of their systems through declarative configuration documents, and manage configuration data on an ongoing basis. Current IT pros will need to understand DSC as they move into managing Microsoft's next wave of server and cloud products that will leverage this important technology. In this course, Matt Hester shows how to write configuration documents, work with DSC resources, and apply configurations to systems via both push and pull

modes. Plus, he shows how to troubleshoot DSC and use DSC in non-Windows environments like Linux.

Part of a series of specialized guides on System Center, this book focuses on Microsoft System Center Operations Manager. For the seasoned professional, it covers the role of the Operations Manager product, the best practices for working with management packs, how to use the reporting feature to simplify managing the product, how to thoroughly troubleshoot, and how to use and install Operations Manager in the Microsoft Azure Public Cloud environment.

Efficiently administer and maintain your development environment with Windows PowerShell  
 About This Book Explore scripting and automation techniques with Windows PowerShell Gain concrete knowledge of Windows PowerShell scripting to perform professional level scripting Discover the benefits of the Configuration Management Platform with this step-by-step guide that includes real-world scripting examples Who This Book Is For If you are an IT professional or developer who has worked on the .Net platform and you want to

learn automation using Windows PowerShell, then this book is for you. This self-start guide takes you from the basics and gradually moves to an intermediate level to show you how to perform professional scripting. What You Will Learn Understand the concepts of building PowerShell scripts and the basics of programming Manage the LYNC, Exchange, and SharePoint platforms Create a Pull server using a SMB file share and HTTP and HTTPS Use .NET classes in Windows PowerShell and C# to manage Exchange Online Use PowerShell in C# to manage Exchange Online and work with .NET classes in PowerShell Automate LYNC clients, consuming Client Server Object Models to administrate SharePoint Online In Detail Windows PowerShell 5.0 for .NET Developers is your self-start guide to performing automation using Windows PowerShell. This book will help you to understand the PowerShell syntax and grammar and will also teach you techniques to remove the rough edges of manual deployments. Packed with PowerShell scripts and sample C# codes to automate tasks, it also includes real-world scenarios such as administrat-

ing office servers to help you save time and perform deployments swiftly and efficiently. The book begins with the Windows PowerShell basics, explores the significant features of Windows Management Framework 5.0, covers the basic concepts of Desired State Configuration and the importance of idempotent deployments. By the end of the book, you will have a good understanding of Windows PowerShell's features and will be able to automate your tasks and manage configuration effectively. Style and approach This is an easy-to-follow step-by-step guide with text-enabled screenshots. Each topic is explained with codes and examples. It also includes multiple approaches for a number of tasks to let you choose the best one for you depending on your scenario.

This book shows you how to use PowerShell to quickly pinpoint, diagnose, and solve problems with your Windows Server environment, reducing the need for external tools, and ensuring you stay up-to-date with PowerShell as it quickly becomes one of the most useful tools in an administrator's toolkit. Authors Derek Schauland

and Donald Jacobs take you through a range of examples, showing you how to gather information from different computer sources. Whether you are logged into the server locally or just wanting to check the status of a server from your local computer, the right PowerShell cmdlets can give you a lot of information quickly, and allow you to troubleshoot your servers from the command line with little interaction with the server's desktop. In this book, you'll learn how PowerShell can help you: Understand PowerShell versus the GUI Gather information from Windows event logs Gather information from your server, including memory, hardware configurations, and disk space available Find out what applications are installed on a server Find out which Windows updates have been installed on your computer Check the processes running on your computer and gather information about them, or start and stop them from the command line Quickly check if services are running, and stop or start them as needed Who This Book Is For Windows Administrators, IT Professionals and support personnel needing ways to quickly find and trou-

bleshoot issues in their environment using the included tools. Those entering IT or wishing to develop their PowerShell skills will also benefit from this book.

Learn the fundamentals of PowerShell to build reusable scripts and functions to automate administrative tasks with Windows  
 About This Book Harness the capabilities of the PowerShell system to get started quickly with server automation  
 Learn to package commands into a reusable script and add control structures and parameters to make them flexible  
 Get to grips with cmdlets that allow you to perform administration tasks efficiently  
 Who This Book Is For This book is intended for Windows administrators or DevOps users who need to use PowerShell to automate tasks. Whether you know nothing about PowerShell or know just enough to get by, this guide will give you what you need to go to take your scripting to the next level.  
 What You Will Learn  
 Learn to verify your installed version of PowerShell, upgrade it, and start a PowerShell session using the ISE  
 Discover PowerShell commands and cmdlets and understand PowerShell formatting  
 Use the PowerShell

help system to understand what particular cmdlets do  
 Utilise the pipeline to perform typical data manipulation  
 Package your code in scripts, functions, and modules  
 Solve common problems using basic file input/output functions  
 Find system information with WMI and CIM  
 Automate IIS functionality and manage it using the WebAdministration module  
 In Detail  
 Windows PowerShell is a task-based command-line shell and scripting language designed specifically for system administration. Built on the .NET Framework, Windows PowerShell helps IT professionals and power users control and automate the administration of the Windows operating system and applications that run on Windows. PowerShell is great for batch importing or deleting large sets of user accounts and will let you collect a massive amount of detailed system information in bulk via WMI (Windows Management Instrumentation).  
 Getting Started with PowerShell is designed to help you get up and running with PowerShell, taking you from the basics of installation, to writing scripts and web server automation. This book, as an introduction to the central topics of

PowerShell, covers finding and understanding PowerShell commands and packaging code for reusability, right through to a practical example of automating IIS. It also includes topics such as installation and setup, creating scripts, automating tasks, and using Powershell to access data stores, registry, and file systems. You will explore the PowerShell environment and discover how to use cmdlets, functions, and scripts to automate Windows systems. Along the way, you will learn to perform data manipulation and solve common problems using basic file input/output functions. By the end of this book, you will be familiar with PowerShell and be able to utilize the lessons learned from the book to automate your servers.  
 Style and approach  
 A practical learning guide, complete with plenty of activities, examples and screenshots.  
 Want to perform programming tasks better, faster, simpler, and make them repeatable? Take a deep dive into Windows PowerShell and discover what this distributed automation platform can do. Whether you're a .NET developer or IT pro, this concise guide will show you how PowerShell's script-

ing language can help you be more productive on everyday tasks. Quickly learn how to create PowerShell scripts and embed them into your existing applications, write "little languages" to solve specific problems, and take charge of your code. This book includes example scripts that you can easily pull apart, tweak, and then use in your own PowerShell and .NET solutions. Slice and dice text, XML, CSV, and JSON with ease Embed PowerShell to provide scripting capabilities for your C# apps Create GUI applications five to ten times faster with less code Leverage PowerShell's capabilities to work with the Internet Interact with DLLs and create objects, automatically display properties, and call methods in live interactive sessions Build domain-specific languages (DSLs) and vocabularies to express solutions more clearly Work with Microsoft Office via the Component Object Model (COM) Discover PowerShell v3 features included with Windows 8 and Windows Server 2012

This is today's definitive hands-on guide to automating Windows setup, deployment, and management with Windows PowerShell. Microsoft senior con-

sultant Ed Wilson ("The Scripting Guy") fully illuminates every key PowerShell technique -- especially the major improvements and new cmdlets introduced with PowerShell 5.0. Wilson's positive and humorous approach has made him one of the world's most popular PowerShell instructors. His practical examples and insights will help you maximize productivity and quality in all your IT operations, and integrate automated workflows throughout any traditional or cloud environment. Windows PowerShell Step by Step, Third Edition offers more labs and structured learning exercises than any other PowerShell 5.0 tutorial. Wilson guides you step-by-step through building every script he demonstrates. He reinforces key concepts with step-by-step exercises, including "One Step Further" exercises that deepen your understanding, so you can solve your unique problems. All examples and starter files are downloadable at the TechNet Script Center Script Repository. Coverage includes: Basic PowerShell concepts and cmdlets Key providers: Alias, Certificate, Environment, File System, Function, Registry, Variable, and WS-

MAN Remoting, jobs, scripts, functions, and modules Windows PowerShell ISE and snippets Creating, organizing, and running PowerShell profiles WMI: objects, namespaces, providers, classes, and queries Remoting WMI and calling WMI methods via CIM Automating Active Directory and AD Domain Services Debugging scripts and handling errors Defining complex workflows Using Desired State Configuration (DSC) to quickly enforce or restore configuration settings Finding and using the PowerShell Gallery's powerful new resources Each chapter concludes with a convenient quick reference, and Wilson presents detailed appendices on coding conventions and regular expressions. If you're upgrading from any earlier version of PowerShell, a new "Start Here" section identifies the most valuable PowerShell features you haven't already learned, so you can focus your efforts where they'll make you most productive.

Grasp advanced PowerShell Core 6.0 functionalities to automate your environment Key Features- Keep up with changes introduced in PowerShell Core 6.0 Easily maintain

appropriate compatibility with older versions. Automate complex tasks, manipulate data, and secure your environment with PowerShell Core 6.0. **Book Description** PowerShell scripts offer a handy way to automate various chores, however working effectively with these scripts can be a difficult task. This comprehensive guide starts with the fundamentals before moving on to advanced-level topics to help you become a PowerShell Core 6.0 expert. The first module, PowerShell Core 6.0 Fundamentals, begins with the new features of PowerShell Core 6.0, installing it on Linux, and working with parameters, objects and .NET classes from within PowerShell Core 6.0. As you make your way through the chapters, you'll see how to efficiently manage large amounts of data and interact with other services using PowerShell Core 6.0. You'll be able to make the most of PowerShell Core 6.0's powerful automation feature, where you will have different methods available to parse data and manipulate regular expressions and Windows Management Instrumentation (WMI). After having explored automation, you will enter the extending

PowerShell Core 6.0 module, covering asynchronous processing and desired state configuration. In the last module, you will learn to extend PowerShell Core 6.0 using advanced scripts and filters, and also debug issues along with working on error handling techniques. By the end of this book, you will be an expert in scripting with PowerShell Core 6.0. What you will learn: Optimize code through the use of functions, switches, and looping structures; Work with objects and operators to test and manipulate data; Parse and manipulate different data types; Create scripts and functions using PowerShell; Use jobs, events, and popular public modules which assist with implementing multithreading; Write .NET classes with ease within the PowerShell; Create and implement regular expressions in PowerShell scripts; Make use of advanced techniques to define and restrict the behavior of parameters; Who this book is for: If you are a system administrator who wants to become an expert in controlling and automating your Windows environment, then Mastering Windows PowerShell Scripting is for you. It is also ideal for those new to the Pow-

erShell language.

Enhance your skills in expert module development, deployment, security, DevOps, and cloud Key Features A step-by-step guide to get you started with PowerShell Core 6.0 Harness the capabilities of PowerShell Core 6.0 to perform simple to complex administration tasks Learn core administrative concepts such as scripting, pipelines, and DSC **Book Description** Beginning with an overview of the different versions of PowerShell, Learn PowerShell Core 6.0 introduces you to VSCode and then dives into helping you understand the basic techniques in PowerShell scripting. You will cover advanced coding techniques, learn how to write reusable code as well as store and load data with PowerShell. This book will help you understand PowerShell security and Just Enough Administration, enabling you to create your own PowerShell repository. The last set of chapters will guide you in setting up, configuring, and working with Release Pipelines in VSCode and VSTS, and help you understand PowerShell DSC. In addition to this, you will learn how to use PowerShell with Windows, Azure, Microsoft Online Services, SCCM, and SQL

Server. The final chapter will provide you with some use cases and pro tips. By the end of this book, you will be able to create professional reusable code using security insight and knowledge of working with PowerShell Core 6.0 and its most important capabilities. What you will learn Get to grips with Powershell Core 6.0 Explore basic and advanced PowerShell scripting techniques Get to grips with Windows PowerShell Security Work with centralization and DevOps with PowerShell Implement PowerShell in your organization through real-life examples Learn to create GUIs and use DSC in production Who this book is for If you are a Windows administrator or a DevOps user who wants to leverage PowerShell to automate simple to complex tasks, then this book is for you. Whether you know nothing about PowerShell or just enough to get by, this guide will give you what you need to go to take your scripting to the next level. You'll also find this book useful if you're a PowerShell expert looking to expand your knowledge in areas such as PowerShell Security and DevOps. Enhance your knowledge of Windows PowerShell

and get to grips with its latest features

"In many ways, this is The Phoenix Project for the PowerShell world." Introduced in 2006, Microsoft's PowerShell made an immediate, positive impact on its server products and in the lives of the people who administer them. The world's first object-oriented shell, the first designed-from-scratch shell for the Windows operating system, and now a cross-platform management shell, PowerShell's technical achievement is significant. It's easy to look at where PowerShell is today, and not realize or remember the long and sometimes-difficult road it took to get there. What if Microsoft's "next-gen" shell had been nothing more than a port of the Unix KornShell to Windows? What if PowerShell had never become a default, built-in component of the Windows operating system? What if PowerShell had simply been called, "Microsoft Shell?" Yeah, all of those things almost happened. In the end, the story of PowerShell is less about the technology, and more about the people who brought it to life, and the people who use it every day. It's about how one small band of passionate,

crazy people with a vision can bring something wonderful into the world, in small, incremental, deliberate steps. It's about how the right people came together at the right time and did the right thing, and about the enormous community that rallied around them to make the whole thing an incredible success. Author Don Jones was with PowerShell from the beginning, and through a series of core team interviews, community discussions, and background research, he brings you this: the untold story of PowerShell, a Shell of an Idea.

Your hands-on guide to Windows PowerShell scripting fundamentals Expand your expertise--and teach yourself the fundamentals of Windows PowerShell scripting, including features available in Windows PowerShell 5. If you are an IT professional, power user, or consultant, you'll get the guidance, exercises, and code you need to master core techniques for automating Windows setup, deployment, and management. Discover how to: Run cmdlets and command-line utilities Administer Windows-based servers and desktops with built-in cmdlets Use providers to

access external information Write and run scripts from the Windows ISE Create functions that are easy to maintain Build standardized environments with profiles Automate Windows systems with WMI, CIM cmdlets, and remoting Automate Active Directory Domain Services (AD DS) Debug scripts and handle errors Run commands that survive interruptions Use Desired State Configuration (DSC) to manage software services and their environments Get powerful new modules from PowerShell Gallery About You This book is for: IT professionals and power users who want to get productive with Windows PowerShell, including new features in Windows PowerShell 5 Windows system administrators who want to be more efficient and productive Anyone pursuing Windows PowerShell certifications No experience with Windows PowerShell or other scripting technologies necessary Expert recommendations, pragmatically applied. Automate system administration using Windows PowerShell best practices—and optimize your operational efficiency. With this practical guide, Windows PowerShell expert and instructor Ed Wilson delivers

field-tested tips, real-world examples, and candid advice culled from administrators across a range of business and technical scenarios. If you're an IT professional with Windows PowerShell experience, this book is ideal. Discover how to: Use Windows PowerShell to automate Active Directory tasks Explore available WMI classes and methods with CIM cmdlets Identify and track scripting opportunities to avoid duplication Use functions to encapsulate business logic and reuse code Design your script's best input method and output destination Test scripts by checking their syntax and performance Choose the most suitable method for running remote commands Manage software services with Desired State Configuration Enhance your skills in expert module development, deployment, security, DevOps, and cloud Key Features A step-by-step guide to get you started with PowerShell Core 6.0 Harness the capabilities of PowerShell Core 6.0 to perform simple to complex administration tasks Learn core administrative concepts such as scripting, pipelines, and DSC Book Description Beginning with an overview of the

different versions of PowerShell, Learn PowerShell Core 6.0 introduces you to VSCode and then dives into helping you understand the basic techniques in PowerShell scripting. You will cover advanced coding techniques, learn how to write reusable code as well as store and load data with PowerShell. This book will help you understand PowerShell security and Just Enough Administration, enabling you to create your own PowerShell repository. The last set of chapters will guide you in setting up, configuring, and working with Release Pipelines in VSCode and VSTS, and help you understand PowerShell DSC. In addition to this, you will learn how to use PowerShell with Windows, Azure, Microsoft Online Services, SCCM, and SQL Server. The final chapter will provide you with some use cases and pro tips. By the end of this book, you will be able to create professional reusable code using security insight and knowledge of working with PowerShell Core 6.0 and its most important capabilities. What you will learn Get to grips with Powershell Core 6.0 Explore basic and advanced PowerShell scripting techniques Get to grips with Windows Power-

Shell Security Work with centralization and DevOps with PowerShell Implement PowerShell in your organization through real-life examples Learn to create GUIs and use DSC in production Who this book is for If you are a Windows administrator or a DevOps user who wants to leverage PowerShell to automate simple to complex tasks, then this book is for you. Whether you know nothing about PowerShell or just enough to get by, this guide will give you what you need to go to take your scripting to the next level. You'll also find this book useful if you're a PowerShell expert looking to expand your knowledge in areas such as PowerShell Security and DevOps.

Fully updated for Windows Server 2012 R2! Prepare for Microsoft Exam 70-410 - and help demonstrate your real-world mastery of implementing and configuring core services in Windows Server 2012 R2. Designed for experienced IT professionals ready to advance their status, Exam Ref focuses on the critical thinking and decision making acumen needed for success at the MCSA level. Focus on the expertise measured by these objectives: Install and configure servers

Configure server roles and features Configure Hyper-V Deploy and configure core network services Install and administer Active Directory Create and manage Group Policy This Microsoft Exam Ref: Organizes its coverage by exam objectives. Features strategic, what-if scenarios to challenge you.

Remain highly competitive in the server and VM market by gaining the practical skills needed to operate Nano Server About This Book The days of the local server are numbered, and this book will make you an ace by giving you the skills needed to administer Nano Server and survive in the brave new server world Learn to quickly automate multiple VMs and support Hyper-V clusters, all through small footprints from a single host Apply up-to-date, real-world examples presented in this book and improve the scalability and efficiency of large-scale VM deployments Who This Book Is For This book opens up new potential for both developers and IT pros alike. The book is primarily for Server administrators and IT Professionals who would like to deploy and administer Nano Server within their organizations,

and for developers who are trying to make maximal use of Server Containers and Hyper-V Containers with Nano Servers. What You Will Learn Understand Nano Server Deploy Nano Server Deploy Hyper-V Clusters on Nano Server Deploy Nano Server with SCVMM Manage Nano Server using PowerShell and Remote Server Management Tools Manage Nano Server with third-party tools Run Server Containers and Hyper-V Containers on Nano Server Troubleshoot Nano Server Validate developed applications that run on Nano Server In Detail Nano Server allows developers and operations teams to work closely together and use containers that package applications so that the entire platform works as one. The aim of Nano Server is to help applications run the way they are intended to. It can be used to run and deploy infrastructures (acting as a compute host, storage host, container, or VM guest operating system) without consuming significant resources. Although Nano Server isn't intended to replace Server 2016 or 2012 R2, it will be an attractive choice for developers and IT teams. Want to improve your ability to deploy a new VM

and install and deploy container apps within minutes? You have come to the right place! The objective of this book is to get you started with Nano Server successfully. The journey is quite exciting, since we are introducing you to a cutting-edge technology that will revolutionize today's datacenters. We'll cover everything from the basic to advanced topics. You'll discover a lot of added value from using Nano Server, such as hundreds of VM types on a single host through a small footprint, which could be a big plus for you and your company. After reading this book, you will have the necessary skills to start your journey effectively using Nano Server. Style and approach Gauge all the information needed to get up-and-running with the latest Nano Server built by Microsoft using this easy to follow step-by-step guide.

**Summary** Here's your chance to learn from the best in the business. PowerShell Deep Dives is a trove of essential techniques, practical guidance, and the expert insights you earn only through years of experience. Editors Jeffery Hicks, Richard Siddaway, Oisin Grehan, and Aleksan-

dar Nikolic hand-picked the 28 chapters in the book's four parts: Administration, Scripting, Development, and Platforms. About the Technology PowerShell has permanently changed Windows administration. This powerful scripting and automation tool allows you to control virtually every aspect of Windows and most Microsoft servers like IIS and SQL Server. Here's your chance to learn from the best in the business. About this Book PowerShell Deep Dives is a trove of essential techniques and practical guidance. It is rich with insights from experts who won them through years of experience. The book's 28 chapters, grouped in four parts (Administration, Scripting, Development, and Platforms), were hand-picked by four section editors: Jeffery Hicks, Richard Siddaway, Oisin Grehan, and Aleksandar Nikolic. Whether you're just getting started with PowerShell or you already use it daily, you'll find yourself returning to this book over and over. What's Inside Managing systems through a keyhole The Ten Commandments of PowerShell scripting Scalable scripting for large datasets Adding automatic remoting Provi-

sioning web servers and websites automatically to IIS 8 And 23 more fantastic chapters Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Authors Editors Jeffery Hicks, Richard Siddaway, Oisin Grehan, and Aleksandar Nikolic are joined by PowerShell experts Chris Bellee, Bartek Bielawski, Robert C. Cain, Jim Christopher, Adam Driscoll, Josh Gavant, Jason Helmick, Don Jones, Ashley McGlone, Jonathan Medd, Ben Miller, James O'Neill, Arnaud Petitjean, Vadims Podans, Karl Prosser, Boe Prox, Matthew Reynolds, Mike Robbins, Donabel Santos, Will Steele, Trevor Sullivan, and Jeff Wouters. Table of Contents PART 1 POWERSHELL ADMINISTRATION Diagnosing and troubleshooting PowerShell remoting CIM sessions 22 Collecting and analyzing performance counter data TCP port communications with PowerShell Managing systems through a keyhole Using PowerShell to audit user logon events Managing and administering a certification authority database with PowerShell Using PowerShell to reduce Active Directory token bloat PART 2 POWERSHELL SCRIPTING The 10

PowerShell scripting commandments Avoiding the pipeline A template for handling and reporting errors Tips and tricks for creating complex or advanced HTML reports with PowerShell Using and "abusing" dynamic parameters PowerShell type formatting Scalable scripting for large data sets: pipeline and database techniques Building your own WMI-

based cmdlets Turning command-line tools into PowerShell tools PART 3 POWERSHELL FOR DEVELOPERS Using Source Control Software with PowerShell Inline .NET code PowerShell and XML: better together Adding automatic remoting to advanced functions and cmdlets Taming software builds (and other complicated process-

es) with psake PART 4 POWERSHELL PLATFORMS PowerShell and the SQL Server provider Creating flexible subscriptions in SSRS Inventory database table statistics using PowerShell SQL Server Management Objects WSUS and PowerShell Provisioning IIS web servers and sites with PowerShell Active Directory Group Management application