Microsoft Windows Powershell Step By Step Ed Wilson

Microsoft® Windows™ PowerShell is a helpful scripting technology that enables the automation of system management tasks and the creation of system management tools. PowerShell runs on Windows XP, 2003, 2008, and Vista. Unlike traditional Windows shell scripting, PowerShell scripting is object-based and is designed to work with the .NET Framework. This completely updated edition of Microsoft Windows PowerShell Programming for the Absolute Beginner teaches aspiring programmers Windows PowerShell scripting whether they're using Windows PowerShell 1.0 or 2.0. To help make learning fun and interesting, you will learn how to program through the development of computer games, and you will develop a new game that reinforces a newly learned concept in each chapter. It's the easiest way to learn! By the time you have finished the book, not only will you have access to a collection of working sample scripts, you also will have laid a foundation upon which you can begin to tackle real-world challenges and new languages.
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, Jeffery 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 expressions 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 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 This portable reference to Windows PowerShell summarizes both the command shell and scripting language, and provides a concise reference to the major tasks that make PowerShell so successful. It's an ideal on-the-job tool for Windows administrators who don't have time to plow through huge books or search online. Written by Microsoft PowerShell team member Lee Holmes, and excerpted from his Windows PowerShell Cookbook, Windows PowerShell Pocket Reference offers up-to-date coverage of PowerShell's 1.0 release. You'll find information on .NET classes and legacy management tools that you need to manage your system, along with chapters on how to write scripts, manage errors, format output, and much more. Beginning with a whirlwind tour of Windows PowerShell, this convenient guide covers: PowerShell language and environment Regular expression reference PowerShell automatic variables Standard PowerShell verbs Selected .NET classes and their uses WMI reference Selected COM objects and their uses .NET string formatting .NET datetime formatting An authoritative source of information about PowerShell since its earliest betas, Lee Holmes' vast experience lets him incorporate both the "how" and the "why" into the book's discussions. His relationship with the PowerShell and administration community -- through newsgroups, mailing lists, and his informative blog Lee Holmes -- gives him insight into problems faced by administrators and PowerShell users alike. If you're ready to learn this powerful tool without having to break stride in your routine, this is the book you want. Streamline and modernize the way you manage Active

Directory Use Windows PowerShell to simplify and accelerate Active Directory domain controller management, whether you're running Active Directory entirely in the cloud, on-premises, or in a hybrid environment. In this concise reference, Microsoft MVP Charlie Russel presents the commands, tested scripts, and best-practice advice you need to deploy and run Active Directory in a modern environment and to migrate smoothly to cloud or hybrid deployments wherever they offer more value. Supercharge your productivity as an Active Directory administrator Get proven scripts that leverage the power of Windows Server 2012 and Windows Management Framework 4.0 and 5.0 Deploy forests and Active Directory Domain Services (AD DS) Manage DNS and DHCP Create and manage users and groups Deploy additional domain controllers, read-only domain controllers (RODCs), and domains Implement and manage fine-grained password policies Perform fast, reliable backups and restores Quickly extend on-premises Active Directory deployments to the cloud Efficiently manage roles and sites

Presents a guide on how to use Windows PowerShell to script Windows administrative tasks and control Windows from the command line.

Bring together the Python programming language and Microsoft's PowerShell to address digital investigations and create state-of-the-art solutions for administrators, IT personnel, cyber response teams, and forensic investigators. You will learn how to join PowerShell's robust set of commands and access to the internals of both the MS Windows desktop and enterprise devices and Python's rich scripting environment allowing for the rapid development of new tools for investigation, automation, and deep analysis. PowerShell and Python Together takes a practical approach that provides an entry point and level playing field for a wide range of individuals, small companies, researchers, academics, students,

and hobbyists to participate. What You'll Learn Leverage the internals of PowerShell for: digital investigation, incident response, and forensics Leverage Python to exploit already existing PowerShell CmdLets and aliases to build new automation and analysis capabilities Create combined PowerShell and Python applications that provide: rapid response capabilities to cybersecurity events, assistance in the precipitous collection of critical evidence (from the desktop and enterprise), and the ability to analyze, reason about, and respond to events and evidence collected across the enterprise Who This Book Is For System administrators, IT personnel, incident response teams, forensic investigators, professors teaching in undergraduate and graduate programs in cybersecurity, students in cybersecurity and computer science programs, and software developers and engineers developing new cybersecurity defenses

Summary Learn Windows PowerShell in a Month of Lunches, Third Edition is an innovative tutorial designed for busy IT professionals. This updated edition covers PowerShell features that run on Windows 7, Windows Server 2008 R2 and later, PowerShell v3 and later, and includes v5 features like PowerShellGet. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology PowerShell is both a scripting language and an administrative shell that lets you control and automate nearly every aspect of Windows. It accepts and executes commands interactively and you can write scripts to manage most Windows servers like Exchange, IIS, and SharePoint, as well as online services like Azure and Office 365. About the Book Learn Windows PowerShell in a Month of Lunches, Third Edition is an innovative tutorial designed for busy IT professionals. Just set aside one hour a day - lunchtime would be perfect - for a month, and you'll be automating Windows tasks faster than you ever thought possible. This

updated edition covers PowerShell features that run on Windows 7, Windows Server 2008 R2 and later, PowerShell v3 and later, and includes v5 features like PowerShellGet. What's Inside Learn PowerShell from the beginning, no experience required! Covers PowerShell v3 and up, Windows 7, and Windows Server 2008 R2 and later Each lesson takes you an hour or less About the Reader Experience with Windows administration is helpful. No programming or scripting experience needed. About the Author Veteran PowerShell MVPs Don Jones and Jeffery Hicks bring years as successful trainers to this concise, easy-to-follow book. Table of Contents Before you begin Meet PowerShell Using the help system Running commands Working with providers The pipeline: connecting commands Adding commands Objects: data by another name The pipeline, deeper Formatting - and why it's done on the right Filtering and comparisons A practical interlude Remote control: one-to-one, and one-to-many Using Windows Management Instrumentation and CIM Multitasking with background jobs Working with many objects, one at a time Security alert! Variables: a place to store your stuff Input and output Sessions: remote control with less work You call this scripting? Improving your parameterized script Advanced remoting configuration Using regular expressions to parse text files Additional random tips, tricks, and techniques Using someone else's script Never the end PowerShell cheat sheet

Microsoft Windows PowerShell Programming for the Absolute Beginner
Deploying and Managing Active Directory with Windows PowerShell
Monad (AKA PowerShell)
MICROSOFT WINDOWS POWERSHELL PROGRAMMING FOR THE ABSOLUTE BEGINNER, THIRD EDITION will teach you how to program using Microsoft PowerShell's scripting language—through the creation of computer games! Microsoft Windows™ PowerShell is a helpful scripting technology that enables the automation of system management tasks and the creation of system management tools. Learning Windows PowerShell by developing computer games is a fun, interesting, and easy way to learn—and you will develop a new game that reinforces a newly learned concept in each chapter. No prior experience or programming knowledge is required. Topics covered include the Windows PowerShell Command Line, object-based scripting with .NET, writing PowerShell scripts, and much, much more. By the time you have finished the book, not only will you have access to a collection of working sample scripts, you also will have laid a foundation upon which you can begin to tackle real-world challenges and new languages.
The techniques in this book apply to beginners who have just started to learn PowerShell, as well as advanced scripters who have a good grasp of the language.
As the author of three books on Windows scripting and as a consultant for Microsoft, I am in constant contact with people who have been using VBScript to manage their environments. I am often asked, "Is there an easier way to do this?" Until now, the answer has been, "Unfortu- nately, no." That has all changed!With the release of Microsoft Exchange Server 2007, there is a new scripting language

on the market-Windows PowerShell. This book seeks to unravel the mysteries of and misconcep- tions about this powerful and elegant scripting language.Windows PowerShell was released with Microsoft Exchange Server 2007. It is also a release to the Web product and can be downloaded and installed on Windows Server 2019 SP3, Windows XP SP2, and Windows 10. Many Microsoft customers currently running those versions of the operating system will consider installing Windows PowerShell because of its ease of use.The Microsoft Exchange Server 2019 administrator tools are built on Windows PowerShell, so Exchange administrators will be among the first to explore and use PowerShell, but other net- work administrators can certainly also benefit from PowerShell.Accessing Security objects, working with the registry, and leveraging the power of the .NET Framework all have been either difficult or impossible to do from a VBScript. Windows PowerShell makes these tasks much simpler.Microsoft Windows PowerShell Step by Step equips readers with the tools to automate setup, deployment, and management of Windows machines. In addition, it provides readers with an understanding of commandlets (or, in this guide, cmdlets). This should lead readers into an awareness of the basics of programming through modeling of fundamental techniques. The approach I take to teaching readers how to use Windows PowerShell to automate their Windows servers and workstations is similar to the approach I used in my previous three VBScript books. The reader will learn by using the language. In addition, concepts are presented-not in a dry, academic fashion, but in a dynamic and living manner. When a concept is needed to accomplish something, then it is presented. If a topic is not useful for automating network management, then it is not brought

forward.
Cookbook with recipes based on real life examples.This book is written to assist the daily tasks for systems administrators, engineers, and architects working with Windows Server 2012.
With more than 250 ready-to-use recipes, this solutions-oriented introduction to the Windows PowerShell scripting environment and language provides administrators with the tools to be productive immediately.
Part of a series of specialized guides on System Center - this book delivers a focused drilldown into designing runbooks for Orchestrator workflow management solutions. Series editor Mitch Tulloch and a team of System Center experts provide concise technical guidance as they step you through key design concepts, criteria, and tasks.
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 companion 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.
Get started with this powerful Windows administration tool

Automate Windows administration tasks with ease by learning the fundamentals of Windows PowerShell 3.0. Led by a Windows PowerShell expert, you'll learn must-know concepts and techniques through easy-to-follow explanations, examples, and exercises. Once you complete this practical introduction, you can go deeper into the Windows PowerShell command line interface and scripting language with Windows PowerShell 3.0 Step by Step. Discover how to: Create effective Windows PowerShell commands with one line of code Apply Windows PowerShell commands across several Windows platforms Identify missing hotfixes and service packs with a single command Sort, group, and filter data using the Windows PowerShell pipeline Create users, groups, and organizational units in Active Directory Add computers to a domain or workgroup with a single line of code Run Windows PowerShell commands on multiple remote computers Unleash the power of scripting with Windows Management Instrumentation (WMI)

Automating Microsoft Windows Server 2008 R2 with Windows PowerShell 2.0
Learn Windows PowerShell in a Month of Lunches
Tools for cloud-based and hybrid environments
PowerShell and Python Together
Automate and control administrative tasks using DevOps principles
PowerShell for Office 365
Getting Started with PowerShell
Microsoft System Center Designing Orchestrator Runbooks
Windows PowerShell Best Practices
Windows Server 2019 & PowerShell All-in-One For Dummies

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
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, including 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. 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 scripting 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

Learn the art of leveraging PowerShell to automate Office 365 repetitive tasks About This Book Master the fundamentals of PowerShell to automate Office 365 tasks. Easily administer scenarios such as user management, reporting, cloud services, and many more. A fast-paced guide that leverages PowerShell commands to increase your productivity. Who This Book Is For The book is aimed at sys admins who are administering office 365 tasks and looking forward to automate the manual tasks. They have no knowledge about PowerShell however basic understanding of PowerShell would be advantageous. What You Will Learn Understand the benefits of scripting and automation and get started using Powershell with Office 365

Explore various PowerShell packages and permissions required to manage Office 365 through PowerShell Create, manage, and remove Office 365 accounts and licenses using PowerShell and the Azure AD Learn about using powershell on other platforms and how to use Office 365 APIs through remoting Work with Exchange Online and SharePoint Online using PowerShell Automate your tasks and build easy-to-read reports using PowerShell In Detail While most common administrative tasks are available via the Office 365 admin center, many IT professionals are unaware of the real power that is available to them below the surface. This book aims to educate readers on how learning PowerShell for Office 365 can simplify repetitive and complex administrative tasks, and enable greater control than is available on the surface. The book starts by teaching readers how to access Office 365 through PowerShell and then explains the PowerShell fundamentals required for automating Office 365 tasks. You will then walk through common administrative cmdlets to manage accounts, licensing, and other scenarios such as automating the importing of multiple users,assigning licenses in Office 365, distribution groups, passwords, and so on. Using practical examples, you will learn to enhance your current functionality by working with Exchange Online, and SharePoint Online using PowerShell. Finally, the book will help you effectively manage complex and repetitive

tasks (such as license and account management) and build productive reports. By the end of the book, you will have automated major repetitive tasks in Office 365 using PowerShell. Style and approach This step by step guide focuses on teaching the fundamentals of working with PowerShell for Office 365. It covers practical usage examples such as managing user accounts, licensing, and administering common Office 365 services. You will be able to leverage the processes laid out in the book so that you can move forward and explore other less common administrative tasks or functions. 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.
Provides information on writing and running scripts using Windows PowerShell to automate

and manage Windows Server 2008 and Windows Vista.
This is today's definitive hands-on guide to automating Windows setup, deployment, and management with Windows PowerShell. Microsoft senior consultant 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 WSMAN 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.

This is the eBook of the printed book and may not include any media, website access codes, or print supplements that may come packaged with the bound book. Conquer today's Windows 10—from the inside out! Dive into Windows 10—and really put your Windows expertise to work. Focusing on the most powerful and innovative features of Windows 10, this supremely organized reference packs hundreds of timesaving solutions, tips, and workarounds—all fully reflecting the major Windows 10 Anniversary Update. From new Cortana and Microsoft Edge enhancements to the latest security and virtualization features, you'll discover how experts tackle

today's essential tasks—and challenge yourself to new levels of mastery. Install, configure, and personalize the newest versions of Windows 10 Understand Microsoft's revamped activation and upgrade processes Discover major Microsoft Edge enhancements, including new support for extensions Use today's improved Cortana services to perform tasks, set reminders, and retrieve information Make the most of the improved ink, voice, touch, and gesture support in Windows 10 Help secure Windows 10 in business with Windows Hello and Azure AD Deploy, use, and manage new Universal Windows Platform (UWP) apps Take advantage of new entertainment options, including Groove Music Pass subscriptions and connections to your Xbox One console Manage files in the cloud with Microsoft OneDrive and OneDrive for Business Use the improved Windows 10 Mail and Calendar apps and the new Skype app Fine-tune performance and troubleshoot crashes Master high-efficiency tools for managing Windows 10 in the enterprise Leverage advanced Hyper-V features, including Secure Boot, TPMs, nested virtualization, and containers In addition, this book is part of the Current Book Service from Microsoft Press. Books in this program will receive periodic updates to address significant software changes for 12 to 18 months following the original publication date via a free Web Edition. Learn more at https://www.microsoftpressstore.com/cbs. Enhance Your Productivity and Enable Rapid

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.

Automate Windows server tasks with the powerful features of the PowerShell Language Key Features Leverage PowerShell to automate 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. This book provides you with an introduction to the Microsoft automation solutions: Azure Automation and Service Management Automation. Throughout the chapters, the text explores these tools and how they can be used to meet the automation needs of your Microsoft Azure cloud solutions or your enterprise datacenter environments. We provide considerations on the features of each solution, and how they can be architected

to fit your needs. Next, the text explores the interfaces you will use to interact with the solutions, including the web-based portals, Windows PowerShell command-line interaction, and programmatic access via the web services. The text then covers how you implement and manage automation using runbooks, assets, and Integration Modules, along with how you can use a source control system to manage runbook content. Finally, some examples of automation scenarios are discussed, providing you with samples that can be used to speed development in your own solution.

A guide to using Windows PowerShell to script Windows administrative tasks and control Windows from the command line. Master the art of automating and managing your environment using PowerShell About This Book Find quick solutions to automate your environment with ease Work with large amounts of data effortlessly with PowerShell data types and secure them Packed with real-world examples to automate and simplify the management of your Windows environment 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 this book is for you. It is also for

those new to the PowerShell language. What You Will Learn Optimize code through the use of functions, switches, and looping structures Install PowerShell on your Linux system Utilize variables, hashes, and arrays to store data Work with Objects and Operators to test and manipulate data Parse and manipulate different data types Write .NET classes with ease within the PowerShell Create and implement regular expressions in PowerShell scripts Deploy applications and code with PowerShell's Package management modules Leverage session-based remote management Manage files, folders, and registries through the use of PowerShell In Detail PowerShell scripts offer a handy way to automate various chores. Working with these scripts effectively can be a difficult task. This comprehensive guide starts from scratch and covers advanced-level topics to make you a PowerShell expert. The first module, PowerShell Fundamentals, begins with new features, installing PowerShell on Linux, working with parameters and objects, and also how you can work with .NET classes from within PowerShell. In the next module, you'll see how to efficiently manage large amounts of data and interact with other services using PowerShell. You'll be able to make the most of

PowerShell's powerful automation feature, where you will have different methods to parse and manipulate data, regular expressions, and WMI. After automation, you will enter the Extending PowerShell module, which covers topics such as asynchronous processing and, creating modules. The final step is to secure your PowerShell, so you will land in the last module, Securing and Debugging PowerShell, which covers PowerShell execution policies, error handling techniques, and testing. By the end of the book, you will be an expert in using the PowerShell language. Style and approach This practical guide covers all the advanced PowerShell functionalities that an administrator needs to learn to automate their environments.

This book is great for administrators who are new to automating Hyper-V administration tasks using PowerShell. If you are familiar with the PowerShell command line and have some experience with the Windows Server, this book is perfect for you.

PowerShell scripts offer a handy way to automate various chores. Working with these scripts effectively can be a difficult task.This comprehensive guide starts from scratch and covers advanced-

level topics along with tips to make you a PowerShell Core 6.0 scripting expert. Prepare for the future of Microsoft automation with this no-nonsense guide Windows PowerShell 2 is the scripting language that enables automation within the Windows operating system. Packed with powerful new features, this latest version is complex, and Windows PowerShell 2 For Dummies is the perfect guide to help system administrators get up to speed. Written by a Microsoft MVP with direct access to the program managers and developers, this book covers every new feature of Windows PowerShell 2 in a friendly, easy-to-follow format. Windows PowerShell 2 is the updated scripting language that enables system administrators to automate Windows operating systems System administrators with limited scripting experience will find this book helps them learn the fundamentals of Windows PowerShell 2 quickly and easily Translates the jargon and complex syntax of Windows PowerShell 2 Covers script debugging improvements, the ability to invoke commands remotely, and the new user interface Uses real-world applications to clarify the theory, fundamentals, and techniques of the scripting language Written by a Microsoft

MVP with direct access to the developers of Windows PowerShell 2 Windows PowerShell 2 For Dummies makes this tool easily accessible to administrators of every experience level.

Your hands-on, step-by-step guide to automating Windows administration with Windows PowerShell 3.0 Teach yourself the fundamentals of Windows PowerShell 3.0 command line interface and scripting language—one step at a time. Written by a leading scripting expert, this practical tutorial delivers learn-by-doing exercises, timesaving tips, and hands-on sample scripts for performing administrative tasks on both local and remote Windows systems. Discover how to: Use built-in cmdlets to execute commands Write scripts to handle recurring

tasks Use providers to access information
beyond the shell environment Configure
network components with Windows Management
Instrumentation Manage users, groups, and
computers with Active Directory services
Execute scripts to administer and
troubleshoot Microsoft Exchange Server 2010
Windows PowerShell, formerly know by its
codename "Monad" and available now for
Windows Server 2003, Windows XP, and Windows
Vista, and soon for Exchange Server 2007 and
MOM, is the future of Windows administration.
From setting up automated build environments
to managing 20,000 Exchange email clients in
an organization, any tool that reduces the
number of repetitive steps an administrator
must perform, is a real win. Even better,
PowerShell part of a major Microsoft
initiative that aims to replace a host of
Windows management tools with a single,
unified shell. This is the promise of
PowerShell and the reason IT professionals
need to start learning how to use it today
Reflecting the best of legacy tools such as
bash and the Korn shell, PowerShell also
breaks new ground in its command language
design and its use of the object-oriented
.NET Framework. And there is no better way to
learn how to put PowerShell to work than to
get your hands on Monad, O'Reilly's
innovative, hands-on introduction to the
tool. This concise 200-page book is an
exciting tour of some of the new capabilities
thatPowerShell puts into the hands of system

administrators and power users, and is the
perfect complement to existing PowerShell
documentation. With more than 40 hands-on
activities, the book covers every angle, from
using PowerShell commands and its object-
oriented pipelines to querying systems,
generating reports and writing scripts that
automate existing tasks. Adding to the lure
is the fact that the book is written by
Microsoft manager, Andy Oakley with a
Foreword by PowerShell architect Jeffrey
Snover-so you can be certain that it's
teeming with inside information. Monad lets
you see for yourself how PowerShell can
significantly improve your productivity.
Because the PowerShell technology has wide
appeal, so, too, does this compact guide.
Developers, administrators, and power users
alike can all benefit from its insight. If
you're someone who habitually drifts toward
the c-m-d keys, knows all of the switches to
most command tools, or spends time authoring
batch files to solve new challenges, this
book is right up your alley. And if your
organization plans to upgrade soon to
Exchange 2007 or MOM V3, there's no time to
waste. Breaking News: A PowerShell RC1 Update
to the book is now available at no charge
from the book's catalog page on oreilly.com!
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 administrating 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.

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

Learn to automate the top server operating system, Windows Server 2008 R2 Windows PowerShell 2.0 allows you to automate nearly any task for managing Windows Server, going from dozens of clicks to a single command, and repeated tasks to automated tasks. Using screen shots and helpful exercises, this book walks you through the many benefits of automating Windows Server with PowerShell 2.0, such as allowing for scalable, flexible, and rapid deployments and changes; increasing cost effectiveness; providing a timely return on IT investment; lowering labor headcount; creating secure computing environments; and establishing reliable enterprise infrastructures. In addition, real-world examples provide reinforced learning, aimed at ensuring that you work as efficiently and effectively as possible by automating both simple and complex administrative tasks with Powershell 2.0. Explains how to automate both simple and complex tasks in Windows Server 2008 R2 with Powershell 2.0 Addresses how Windows Server 2008 R2 comes with more than 550 cmdlets, allowing you to automate nearly anything Offers numerous real-world examples, end-of-chapter exercises, and helpful screen shots to reinforce your learning process The

power is in your hands! Start working smarter, not harder, by automating Windows Server 2008 R2 tasks with Powershell 2.0. 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

Windows PowerShell 3.0 Step by Step

Learn PowerShell Scripting in a Month of Lunches

Introducing the MSH Command Shell and Language

Step By Step with MS Exchange: : 2020: :

Windows PowerShell Scripting Guide

PowerShell Troubleshooting Guide

Microsoft Windows Powershell

Windows Server 2012 Automation with Powershell Cookbook