

Monad Aka Powershell Introducing The Msh Command Shell And Language An Administrators Guide By Andy Oakley 22 Dec 2005 Paperback

Scala will be a valuable tool to have on hand during your data science journey for everything from data cleaning to cutting-edge machine learning. About This Book Build data science and data engineering solutions with ease. An in-depth look at each stage of the data analysis process — from reading and collecting data to distributed analytics. Explore a broad variety of data processing, machine learning, and genetic algorithms through diagrams, mathematical formulations, and source code. Who This Book Is For This learning path is perfect for those who are comfortable with Scala programming and now want to enter the field of data science. Some knowledge of statistics is expected. What You Will Learn Transfer and filter tabular data to extract features for machine learning. Read, clean, transform, and write data to both SQL and NoSQL databases. Create Scala web applications that couple with JavaScript libraries such as D3 to create compelling interactive visualizations. Load data from HDFS and HIVE with ease. Run streaming and graph analytics in Spark for exploratory analysis. Bundle and scale up Spark jobs by deploying them into a variety of cluster managers. Build dynamic workflows for scientific computing. Leverage open source libraries to extract patterns from time series. Master probabilistic models for sequential data. In Detail Scala is especially good for analyzing large sets of data as the scale of the task doesn't have any significant impact on performance. Scala's powerful functional libraries can interact with databases and build scalable frameworks — resulting in the creation of robust data pipelines. The first module introduces you to Scala libraries to ingest, store, manipulate, process, and visualize data. Using real world examples, you will learn how to design scalable architecture to process and model data — starting from simple concurrency constructs and progressing to actor systems and Apache Spark. After this, you will also learn how to build interactive visualizations with web frameworks. Once you have become familiar with all the tasks involved in data science, you will explore data analytics with Scala in the second module. You'll see how Scala can be used to make sense of data through easy to follow recipes. You will learn about Bokeh bindings for exploratory data analysis and quintessential machine learning with algorithms with Spark ML library. You'll get a sufficient understanding of Spark streaming, machine learning for streaming data, and Spark graphX. Armed with a firm understanding of data analysis, you will be ready to explore the most cutting-edge aspect of data science — machine learning. The final module teaches you the A to Z of machine learning with Scala. You'll explore Scala for dependency injections and implicits, which are used to write machine learning algorithms. You'll also explore machine learning topics such as clustering, dimensionality reduction, Naive Bayes, Regression models, SVMs, neural networks, and more. This learning path combines some of the best that Packt has to offer into one complete, curated package. It includes content from the following Packt products: Scala for Data Science, Pascal Bugnion Scala Data Analysis Cookbook, Arun Manivannan Scala for Machine Learning, Patrick R. Nicolas Style and approach A complete package with all the information necessary to start building useful data engineering and data science solutions straight away. It contains a diverse set of recipes that cover the full spectrum of interesting data analysis tasks and will help you revolutionize your data analysis skills using Scala.

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 Aleksandar 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 Provisioning 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 processes) with psake PART 4 POWERSHELL PLATFORMS

PowerShell and the SQL Server provider Creating flexible subscriptions in SSRS Inventory database table statistics using PowerShellSQL Server Management Objects WSUS and PowerShell Provisioning IIS web servers and sites with PowerShell Active Directory Group Management application

Packed with more than 300 sample scripts and an extensive collection of library functions, this essential scripting book is the most thorough guide to Windows scripting and PowerShell on the market. You'll examine how Windows scripting is changing the face of system and network administration by giving everyday users, developers, and administrators the ability to automate repetitive tasks. Plus, this is the first time that VBScript, Jscript, and Powershell are all covered in a single resource.

Functional programming languages like F#, Erlang, and Scala are attracting attention as an efficient way to handle the new requirements for programming multi-processor and high-availability applications. Microsoft's new F# is a true functional language and C# uses functional language features for LINQ and other recent advances. Real-World Functional Programming is a unique tutorial that explores the functional programming model through the F# and C# languages. The clearly presented ideas and examples teach readers how functional programming differs from other approaches. It explains how ideas look in F#—a functional language—as well as how they can be successfully used to solve programming problems in C#. Readers build on what they know about .NET and learn where a functional approach makes the most sense and how to apply it effectively in those cases. The reader should have a good working knowledge of C#. No prior exposure to F# or functional programming is required. 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.

How do you use PowerShell to navigate the filesystem, manage files and folders, or retrieve a web page? This introduction to the PowerShell language and scripting environment provides more than 400 task-oriented recipes to help you solve all kinds of problems. Intermediate to advanced system administrators will find more than 100 tried-and-tested scripts they can copy and use immediately. Updated for PowerShell 5.1 and Open Source PowerShell up to 7.0 and beyond, this comprehensive cookbook includes hands-on recipes for common tasks and administrative jobs that you can apply whether you're on the client or server version of Windows. You also get quick references to technologies used in conjunction with PowerShell, including regular expressions, the XPath language, format specifiers, and frequently referenced .NET, COM, and WMI classes. Learn how to use PowerShell on Windows 10 and Windows Server 2019 Tour PowerShell's core features, including the command model, object-based pipeline, and ubiquitous scripting Master fundamentals such as the interactive shell, pipeline, and object concepts Perform common tasks that involve working with files, internet-connected scripts, user interaction, and more Solve tasks in systems and enterprise management, such as working with Active Directory and the filesystem

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

Summary PowerShell and WMI is an example-driven guide for administrators managing networks of Windows servers and desktops. With 150 practical examples, including ready-to-reuse scripts and techniques, you'll learn the ins and outs of automating WMI via PowerShell v3. You'll also find deep coverage of all aspects of Windows administration, including IIS, DNS and Hyper-V. About the Technology WMI, on its own, is simply a collection of Windows management facilities. Paired with PowerShell, however, WMI becomes a brilliant toolset for automating servers, networks, and remote Windows computers. About the Book PowerShell and WMI is an industrial-strength guide for administrators of Windows networks, servers, and desktops. You'll start with practical overviews of PowerShell and of WMI. Then you'll explore 150 specific examples—all with ready-to-use scripts—designed to simplify your day-to-day system management. Each tested technique is configured to load as part of a PowerShell module. A set of handy appendixes includes references for PowerShell and WMI. Prior exposure to PowerShell and WMI is helpful but not required. 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. What's Inside Managing Windows, IIS, and Hyper-V Remote desktops and devices Logs, jobs, and performance New PowerShell v3 WMI functionality ===== Table of Contents PART 1 TOOLS OF THE TRADE Solving administrative challenges Using PowerShell WMI in depth Best practices and optimization PART 2 WMI IN THE ENTERPRISE? System documentation Disk systems Registry administration Filesystem administration Services and processes Printers Configuring network adapters Managing IIS Configuring a server Users and security Logs, jobs, and performance Administering Hyper-V with PowerShell and WMI PART 3 THE FUTURE: POWERSHELL V3 AND WMI WMI over WSMAN Your own WMI cmdlets CIM cmdlets and sessions

Summary Go from zero to production readiness with Docker in 22 bite-sized lessons! Learn Docker in a Month of Lunches is an accessible task-focused guide to Docker on Linux, Windows, or Mac systems. In it, you'll learn practical Docker skills to help you tackle the challenges of modern IT, from cloud migration and microservices to handling

legacy systems. There's no excessive theory or niche-use cases—just a quick-and-easy guide to the essentials of Docker you'll use every day. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the technology The idea behind Docker is simple: package applications in lightweight virtual containers that can be easily installed. The results of this simple idea are huge! Docker makes it possible to manage applications without creating custom infrastructures. Free, open source, and battle-tested, Docker has quickly become must-know technology for developers and administrators. About the book Learn Docker in a Month of Lunches introduces Docker concepts through a series of brief hands-on lessons. Following a learning path perfected by author Elton Stoneman, you'll run containers by chapter 2 and package applications by chapter 3. Each lesson teaches a practical skill you can practice on Windows, macOS, and Linux systems. By the end of the month you'll know how to containerize and run any kind of application with Docker. What's inside Package applications to run in containers Put containers into production Build optimized Docker images Run containerized apps at scale About the reader For IT professionals. No previous Docker experience required. About the author Elton Stoneman is a consultant, a former architect at Docker, a Microsoft MVP, and a Pluralsight author. Table of Contents PART 1 - UNDERSTANDING DOCKER CONTAINERS AND IMAGES 1. Before you begin 2. Understanding Docker and running Hello World 3. Building your own Docker images 4. Packaging applications from source code into Docker Images 5. Sharing images with Docker Hub and other registries 6. Using Docker volumes for persistent storage PART 2 - RUNNING DISTRIBUTED APPLICATIONS IN CONTAINERS 7. Running multi-container apps with Docker Compose 8. Supporting reliability with health checks and dependency checks 9. Adding observability with containerized monitoring 10. Running multiple environments with Docker Compose 11. Building and testing applications with Docker and Docker Compose PART 3 - RUNNING AT SCALE WITH A CONTAINER ORCHESTRATOR 12. Understanding orchestration: Docker Swarm and Kubernetes 13. Deploying distributed applications as stacks in Docker Swarm 14. Automating releases with upgrades and rollbacks 15. Configuring Docker for secure remote access and CI/CD 16. Building Docker images that run anywhere: Linux, Windows, Intel, and Arm PART 4 - GETTING YOUR CONTAINERS READY FOR PRODUCTION 17. Optimizing your Docker images for size, speed, and security 18. Application configuration management in containers 19. Writing and managing application logs with Docker 20. Controlling HTTP traffic to containers with a reverse proxy 21. Asynchronous communication with a message queue 22. Never the end

BPF and related observability tools give software professionals unprecedented visibility into software, helping them analyze operating system and application performance, troubleshoot code, and strengthen security. BPF Performance Tools: Linux System and Application Observability is the industry's most comprehensive guide to using these tools for observability. Brendan Gregg, author of the industry's definitive guide to system performance, introduces powerful new methods and tools for doing analysis that leads to more robust, reliable, and safer code. This authoritative guide: Explores a wide spectrum of software and hardware targets Thoroughly covers open source BPF tools from the Linux Foundation iovisor project's bcc and bpftool repositories Summarizes performance engineering and kernel internals you need to understand Provides and discusses 150+ bpftool tools, including 80 written specifically for this book: tools you can run as-is, without programming — or customize and develop further, using diverse interfaces and the bpftool front-end You'll learn how to use BPF (eBPF) tracing tools to analyze CPUs, memory, disks, file systems, networking, languages, applications, containers, hypervisors, security, and the Linux kernel. You'll move from basic to advanced tools and techniques, producing new metrics, stack traces, custom latency histograms, and more. It's like having a superpower: with Gregg's guidance and tools, you can analyze virtually everything that impacts system performance, so you can improve virtually any Linux operating system or application.

Windows PowerShell, formerly known 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 that PowerShell 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!

Windows Registry Forensics provides the background of the Windows Registry to help develop an understanding of the binary structure of Registry hive files. Approaches to live response and analysis are included, and tools and techniques for postmortem analysis are discussed at length. Tools and techniques are presented that take the student and analyst beyond the current use of viewers and into real analysis of data contained in the Registry, demonstrating the forensic value of the Registry. Named a 2011 Best Digital Forensics Book by InfoSec Reviews, this book is packed with real-world examples using freely available open source tools. It also includes case studies and a CD containing code and author-created tools discussed in the book. This book will appeal to computer forensic and incident response professionals, including federal government and commercial/private sector contractors, consultants, etc. Named a 2011 Best Digital

Forensics Book by InfoSec Reviews Packed with real-world examples using freely available open source tools Deep explanation and understanding of the Windows Registry – the most difficult part of Windows to analyze forensically Includes a CD containing code and author-created tools discussed in the book

This book is for developers who want an alternative way to store and process data within their applications. No previous graph database experience is required; however, some basic database knowledge will help you understand the concepts more easily.

A guide to using Windows PowerShell to script Windows administrative tasks and control Windows from the command line.

Practical FP in Scala: A hands-on approach, is a book for intermediate to advanced Scala developers. Aimed at those who understand functional effects, referential transparency and the benefits of functional programming to some extent but who are missing some pieces to put all these concepts together to build a large application in a time-constrained manner. Throughout the chapters we will design, architect and develop a complete stateful application serving an API via HTTP, accessing a database and dealing with cached data, using the best practices and best functional libraries available in the Cats ecosystem. You will also learn about common design patterns such as managing state, error handling and anti-patterns, all accompanied by clear examples. Furthermore, at the end of the book, we will dive into some advanced concepts such as MTL, Classy Optics and Typeclass derivation.

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.

Whatever version of Windows you're using--from Vista up to Windows 8.1--the registry is at the heart of your desktop experience. Software installs and compatibility, hardware operation and more are managed by a complex database of codes and numbers. When something goes wrong it can seem impossible to diagnose and repair the problem, and harder still to prevent a recurrence or make the subtle changes and tweaks required to fix the problem. In this book we'll take you inside the workings of the Registry, and teach you how to repair, modify and clean it to keep your PCs running smoothly.

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.

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.

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

Filled with practical, step-by-step instructions and clear explanations for the most important and useful tasks. A practical, step-by-step guide featuring recipes that will get you up and running quickly with Nancy. A practical, step-by-step guide featuring recipes that will get you up and running quickly with Nancy. If you are a .NET oriented web developer who is curious to find out what lies beyond the Microsoft provided frameworks, then this book is for you! It's beneficial to have a good knowledge of C# and .NET, as well as a basic working knowledge of HTTP. If testability is important to you, and you're looking for a lightweight, code focused approach to building web applications, this book offers you all the guidance that you will need.

"In this book Andy Oakley, the author of "Cannons Creek to Waitangi", exposes the fraud of the New Zealand government in the 21st century, continuing to transfer wealth, rights and public resources from the general public into the hands of a small tribal elite composed of people who have more European blood in them than Maori. Some of them are more than 96% European and yet they continue to receive race based privileges and special funding not available to others." Publisher's website.

"Portable help for PowerShell scripters"--Cover.

Tap into the wisdom of experts to learn what every programmer should know, no matter what language you use. With the 97 short and extremely useful tips for programmers in this book, you'll expand your skills by adopting new approaches to old problems, learning appropriate best practices, and honing your craft through sound advice. With contributions from some of the most experienced and respected practitioners in the industry--including Michael Feathers, Pete Goodliffe, Diomidis Spinellis, Cay Horstmann, Verity Stob, and many more--this book contains practical knowledge and principles that you can

apply to all kinds of projects. A few of the 97 things you should know: "Code in the Language of the Domain" by Dan North "Write Tests for People" by Gerard Meszaros "Convenience Is Not an -ility" by Gregor Hohpe "Know Your IDE" by Heinz Kabutz "A Message to the Future" by Linda Rising "The Boy Scout Rule" by Robert C. Martin (Uncle Bob) "Beware the Share" by Udi Dahan Run your entire corporate IT infrastructure in a cloud environment that you control completely—and do it inexpensively and securely with help from this hands-on book. All you need to get started is basic IT experience. You'll learn how to use Amazon Web Services (AWS) to build a private Windows domain, complete with Active Directory, enterprise email, instant messaging, IP telephony, automated management, and other services. By the end of the book, you'll have a fully functioning IT infrastructure you can operate for less than \$300 per month. Learn about Virtual Private Cloud (VPC) and other AWS tools you'll use Create a Windows domain and set up a DNS management system Install Active Directory and a Windows Primary Domain Controller Use Microsoft Exchange to set up an enterprise email service Import existing Windows Server-based virtual machines into your VPC Set up an enterprise-class chat/IM service, using the XMPP protocol Install and configure a VoIP PBX telephony system with Asterisk and FreePBX Keep your network running smoothly with automated backup and restore, intrusion detection, and fault alerting

"Two thumbs up" —Gregory V. Wilson, Dr. Dobbs Journal (October 2004) No one can disparage the ability to write good code. At its highest levels, it is an art. But no one can confuse writing good code with developing good software. The difference—in terms of challenges, skills, and compensation—is immense. Coder to Developer helps you excel at the many non-coding tasks entailed, from start to finish, in just about any successful development project. What's more, it equips you with the mindset and self-assurance required to pull it all together, so that you see every piece of your work as part of a coherent process. Inside, you'll find plenty of technical guidance on such topics as: Choosing and using a source code control system Code generation tools—when and why Preventing bugs with unit testing Tracking, fixing, and learning from bugs Application activity logging Streamlining and systematizing the build process Traditional installations and alternative approaches To pull all of this together, the author has provided the source code for Download Tracker, a tool for organizing your collection of downloaded code, that's used for examples throughout this book. The code is provided in various states of completion, reflecting every stage of development, so that you can dig deep into the actual process of building software. But you'll also develop "softer" skills, in areas such as team management, open source collaboration, user and developer documentation, and intellectual property protection. If you want to become someone who can deliver not just good code but also a good product, this book is the place to start. If you must build successful software projects, it's essential reading.

PowerShell gives Windows administrators immense power to automate and customize virtually any administrative task—saving time, increasing productivity, and giving you unprecedented flexibility. PowerShell 2.0 adds important new features that offer even greater control over Windows environments. Windows PowerShell Unleashed will not only give you deep mastery over PowerShell but also a greater understanding of the features being introduced in PowerShell 2.0—and show you how to use it to solve your challenges in your production environment. The authors begin by systematically illuminating PowerShell's core concepts and techniques, helping you leverage whatever Windows scripting experience you may already have. Next, using complete, easy-to-adapt examples, they show how to use PowerShell to manage file systems, permissions, the Registry, WMI objects, Active Directory, Exchange Server, and many other elements of the Windows environment. More than half of this edition's material and examples have been completely rewritten for PowerShell 2.0, and the authors have added seven entirely new chapters—covering security, PowerShell application development, Systems Center Operations Manager 2007, and much more. Whatever Windows systems you manage, Windows PowerShell Unleashed contains the scripts and techniques you need to manage them far more effectively. Install, configure, and customize PowerShell 2.0 and master its command line interface Discover proven best practices for PowerShell scripting Make the most of PowerShell cmdlets—especially the new cmdlets included in PowerShell 2.0 Leverage PowerShell's deep .NET Framework integration Secure your scripts using code signing, execution policies, and PowerShell's built-in security Use custom script functions to manage permissions more efficiently Control the registry locally and remotely and use PowerShell's powerful new registry transactions Use PowerShell as a management interface Automate Exchange Server 2007 administrative tasks Automate the management of Microsoft's new System Center Operations Manager 2007 Preview the forthcoming Graphical PowerShell scripting environment Understand how to manage Active Directory using PowerShell Master using PowerShell with WMI Learn PowerShell 2.0 remoting

Here is your best companion to the capabilities and power that PowerShell offers. Inside this book, you'll discover the object-oriented features of the shell and how they help in extracting and manipulating data. You'll then learn how to use those features to solve real-world problems: manipulating files, working with text, monitoring systems, and performing operations over the network. In addition, you'll find freely available tools and extensions that help you get results with Windows PowerShell fast.

This book is designed to be like a conference in a book where each chapter is written by a different author who is a subject matter expert on the topic covered in their chapter. Each chapter is also independent of the others so you can read one chapter, ten chapters, or all of them. You can start with the first chapter, the last one, or somewhere in-between and not miss out on anything related to that particular topic. This book is written for the intermediate to advanced audience. Prior experience with PowerShell is highly recommended. 100% of the royalties from this book are donated to the PowerShell + DevOps Global Summit's OnRamp Scholarship Program. Learn more at PowerShellSummit.org.

If you want to push your Java skills to the next level, this book provides expert advice from Java leaders and practitioners. You'll be encouraged to look at problems in new ways, take broader responsibility for your work, stretch yourself by learning new techniques, and become as good at the entire craft of development as you possibly can. Edited by Kevlin Henney and Trisha Gee, 97 Things Every Java Programmer Should Know reflects lifetimes of experience writing Java software and living with the process of software development. Great programmers share their collected wisdom to help you rethink Java practices, whether working with legacy code or incorporating changes since Java 8. A

few of the 97 things you should know: "Behavior Is Easy, State Is Hard"—Edson Yanaga "Learn Java Idioms and Cache in Your Brain"—Jeanne Boyarsky "Java Programming from a JVM Performance Perspective"—Monica Beckwith "Garbage Collection Is Your Friend"—Holly K Cummins "Java's Unspeakable Types"—Ben Evans "The Rebirth of Java"—Sander Mak "Do You Know What Time It Is?"—Christin Gorman

Learn to use PowerShell, Microsoft's scripting language, to automate real-world tasks that IT professionals and system administrators deal with every day. Save Time. Automate. PowerShell® is both a scripting language and an administrative shell that lets you control and automate nearly every aspect of IT. In PowerShell for Sysadmins, five-time Microsoft® MVP "Adam the Automator" Bertram shows you how to use PowerShell to manage and automate your desktop and server environments so that you can head out for an early lunch. You'll learn how to:

- Combine commands, control flow, handle errors, write scripts, run scripts remotely, and test scripts with the PowerShell testing framework, Pester
- Parse structured data like XML and JSON, work with common domains (like Active Directory, Azure, and Amazon Web Services), and create a real-world server inventory script
- Design and build a PowerShell module to demonstrate PowerShell isn't just about ad-hoc scripts
- Use PowerShell to create a hands-off, completely automated Windows deployment
- Build an entire Active Directory forest from nothing but a Hyper-V host and a few ISO files
- Create endless Web and SQL servers with just a few lines of code!

Real-world examples throughout help bridge the gap between theory and actual system, and the author's anecdotes keep things lively. Stop with the expensive software and fancy consultants. Learn how to manage your own environment with PowerShell for Sysadmins and make everyone happy. Covers Windows PowerShell v5.1

Learn dbatools in a Month of Lunches is a practical hands-on guide to automating SQL Server with PowerShell and the awesome dbatools module. An effective DBA is an efficient DBA. And if you work with SQL Server, dbatools is a lifesaver. With over 500 commands, this free and open source PowerShell module has the horsepower to automate just about every task you can imagine—and then some! Learn dbatools in a Month of Lunches teaches you techniques that will make you more effective—and efficient—than you ever thought possible. Learn dbatools in a Month of Lunches is a practical hands-on guide to automating SQL Server with PowerShell and the awesome dbatools module. You'll master techniques you can immediately put into practice, from daily duties like backups and restores right through to performing security audits. Stabilize and standardize your SQL server environment, and simplify your tasks by building automation, alerting, and reporting with this powerful tool. Each lesson delivers another skill that you can use to speed through your core tasks as a SQL Server DBA! Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications.

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 WWPDP: 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

Operating System Forensics is the first book to cover all three critical operating systems for digital forensic investigations in one comprehensive reference. Users will learn how to conduct successful digital forensic examinations in Windows, Linux, and Mac OS, the methodologies used, key technical concepts, and the tools needed to perform examinations. Mobile operating systems such as Android, iOS, Windows, and Blackberry are also covered, providing everything practitioners need to conduct a forensic investigation of the most commonly used operating systems, including technical details of how each operating system works and how to find artifacts. This book walks you through the critical components of investigation and operating system functionality, including file systems, data recovery, memory forensics, system configuration, Internet access, cloud computing, tracking artifacts, executable layouts, malware, and log files. You'll find coverage of key technical topics like Windows Registry, /etc directory, Web browsers caches, Mbox, PST files, GPS data, ELF, and more. Hands-on exercises in each chapter drive home the concepts covered in the book. You'll get everything you need for a successful forensics examination, including incident response tactics and legal requirements. Operating System

Forensics is the only place you'll find all this covered in one book. Covers digital forensic investigations of the three major operating systems, including Windows, Linux, and Mac OS Presents the technical details of each operating system, allowing users to find artifacts that might be missed using automated tools Hands-on exercises drive home key concepts covered in the book. Includes discussions of cloud, Internet, and major mobile operating systems such as Android and iOS

Daniel Garber presents a study of Leibniz's conception of the physical world, elucidating his puzzling metaphysics of monads, mind-like simple substances. Tracing the development of Leibniz's thought, Garber shows how dealing with problems about the physical world led him to a world of animate creatures, and finally to a world of monads.

Presents some of the new capabilities that Monad puts into the hands of system administrators and power users, and is the perfect complement to existing Monad documentation.

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

This fast-moving tutorial introduces you to OCaml, an industrial-strength programming language designed for expressiveness, safety, and speed. Through the book's many examples, you'll quickly learn how OCaml stands out as a tool for writing fast, succinct, and readable systems code. Real World OCaml takes you through the concepts of the language at a brisk pace, and then helps you explore the tools and techniques that make OCaml an effective and practical tool. In the book's third section, you'll delve deep into the details of the compiler toolchain and OCaml's simple and efficient runtime system. Learn the foundations of the language, such as higher-order functions, algebraic data types, and modules Explore advanced features such as functors, first-class modules, and objects Leverage Core, a comprehensive general-purpose standard library for OCaml Design effective and reusable libraries, making the most of OCaml's approach to abstraction and modularity Tackle practical programming problems from command-line parsing to asynchronous network programming Examine profiling and interactive debugging techniques with tools such as GNU gdb

Take advantage of everything Microsoft's new PowerShell 7 has to offer PowerShell 7 for IT Pros is your guide to using PowerShell 7, the open source, cross-platform version of Windows PowerShell. Windows IT professionals can begin setting up automation in PowerShell 7, which features many improvements over the early version of PowerShell Core and Windows PowerShell. PowerShell 7 users can enjoy the high level of compatibility with the Windows PowerShell modules they rely on today. This book shows IT professionals—especially Windows administrators and developers—how to use PowerShell7 to engage in their most important tasks, such as managing networking, using AD/DNS/DHCP, leveraging Azure, and more. To make it easy to learn everything PowerShell 7 has to offer, this book includes robust examples, each containing sample code so readers can follow along. Scripts are based on PowerShell 7 running on Windows 10 19H1 or later and Windows Server 2019. • Learn to navigate the PowerShell 7 administrative environment • Use PowerShell 7 to automate networking, Active Directory, Windows storage, shared data, and more • Run Windows Update, IIS, Hyper-V, and WMI and CIM cmdlets within PowerShell 7 • Understand how to handle reporting in the new PowerShell 7 environment PowerShell 7 for IT Pros provides exclusive coverage of using PowerShell with both cloud-based systems and virtualized environments (Hyper V and Azure). Written by PowerShell veteran Thomas Lee, this is the only book you'll need to get started with PowerShell 7.

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.

Summary Type-Driven Development with Idris, written by the creator of Idris, teaches you how to improve the performance and accuracy of your programs by taking advantage of a state-of-the-art type system. This book teaches you with Idris, a language designed to support type-driven development. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Stop fighting type errors! Type-driven development is an approach to coding that embraces types as the foundation of your code - essentially as built-in documentation your compiler can use to check data relationships and other assumptions. With this approach, you can define specifications early in development and

write code that's easy to maintain, test, and extend. Idris is a Haskell-like language with first-class, dependent types that's perfect for learning type-driven programming techniques you can apply in any codebase. About the Book Type-Driven Development with Idris teaches you how to improve the performance and accuracy of your code by taking advantage of a state-of-the-art type system. In this book, you'll learn type-driven development of real-world software, as well as how to handle side effects, interaction, state, and concurrency. By the end, you'll be able to develop robust and verified software in Idris and apply type-driven development methods to other languages. What's Inside Understanding dependent types Types as first-class language constructs Types as a guide to program construction Expressing relationships between data About the Reader Written for programmers with knowledge of functional programming concepts. About the Author Edwin Brady leads the design and implementation of the Idris language. Table of Contents PART 1 - INTRODUCTION Overview Getting started with IdrisPART 2 - CORE IDRIS Interactive development with types User-defined data types Interactive programs: input and output processing Programming with first-class types Interfaces: using constrained generic types Equality: expressing relationships between data Predicates: expressing assumptions and contracts in types Views: extending pattern matching PART 3 - IDRIS AND THE REAL WORLD Streams and processes: working with infinite data Writing programs with state State machines: verifying protocols in types Dependent state machines: handling feedback and errors Type-safe concurrent programming

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