

## Powercli Script To Generate Performance Report Vmware

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 AuthorsEditors 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 authoritydatabase 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 advancedHTML reports with PowerShell Using and "abusing" dynamic parameters PowerShell type formatting Scalable scripting for large data sets: pipelineand 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 functionsand 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

Queries not running fast enough? Wondering about the in-memory database features in 2014? Tired of phone calls from frustrated users? Grant Fritchey's book SQL Server Query Performance Tuning is the answer to your SQL Server query performance problems. The book is revised to cover the very latest in performance optimization features and techniques, especially including the newly-added, in-memory database features formerly known under the code name Project Hekaton. This book provides the tools you need to approach your queries with performance in mind. SQL Server Query Performance Tuning leads you through understanding the causes of poor performance, how to identify them, and how to fix them. You'll learn to be proactive in establishing performance baselines using tools like Performance Monitor and Extended Events. You'll learn to recognize bottlenecks and defuse them before the phone rings. You'll learn some quick solutions too, but emphasis is on designing for performance and getting it right, and upon heading off trouble before it occurs. Delight your users. Silence that ringing phone. Put the principles and lessons from SQL Server Query Performance Tuning into practice today. Covers the in-memory features from Project Hekaton Helps establish performance baselines and monitor against them Guides in troubleshooting and eliminating of bottlenecks that frustrate users

Ace your preparation for Microsoft® Certification Exam 70-463 with this 2-in-1 Training Kit from Microsoft Press®. Work at your own pace through a series of lessons and practical exercises, and then assess your skills with online practice tests—featuring multiple, customizable testing options.

Master vSphere automation with this comprehensive reference VMware vSphere PowerCLI Reference, Automating vSphereAdministration, 2nd Edition is a one-stop solutionfor vSphere automation. Fully updated to align with the latestvSphere and PowerCLI release, this detailed guide shows you how toget the most out of PowerCLI's handy cmdlets using real-worldexamples and a practical, task-based approach. You'll learn how tostore, access, update, back up, and secure massive amounts of dataquickly through the power of virtualization automation, and you'llget acquainted with PowerCLI as you learn how to automatemanagement, monitoring, and life-cycle operations for vSphere.Coverage includes areas like the PowerCLI SDK, SRM, vCOPS, andvCloud Air. Plus guidance toward scheduling and viewing automation,using DevOps methodology and structured testing and source controlof your PowerCLI scripts. Clear language and detailed explanationsmake this reference the manual you've been looking for. This book is your complete reference for managing vSphere in aWindows environment, with expert instruction and real-worldapplication. Automate vCenter Server deployment and configuration Create and configure virtual machines, and utilize vApps Monitor, audit, and report the status of your vSphereenvironment Secure, back up, and restore your virtual machines Work with other vSphere components from your PowerCLIscripsts Take control of your PowerCLI scripts through versioning andstructured testing Don't spend another day slogging through routine systemsmanagement — automate it, with this invaluable guide.

Dive deeper into Windows 7—with new content and new resources on CD! The Deluxe Edition of the ultimate, in-depth reference to Windows 7 has been fully updated for SP1 and Internet Explorer 9, and features 300+ pages of additional coverage and advanced topics. It's now packed with even more timesaving solutions, troubleshooting tips, and workarounds from the experts—and includes a fully searchable eBook and other online resources. Topics include installation, configuration, and setup; network connections and troubleshooting; remote access; managing programs; controlling user access and accounts; advanced file management; working with Internet Explorer 9; managing security features and issues; using Windows Live Essentials 2011; performance monitoring and tuning; backups and maintenance; sharing networked resources; hardware and device drivers. For customers who purchase an ebook version of this title, instructions for downloading the CD files can be found in the ebook.

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.

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

Over 80 recipes to help you improve vSphere 6.5's performance and solve problems before they arise About This Book The practical recipes provide cost-effective and high performance for any application running in a virtual machine Contains best practices and troubleshooting techniques to resolve vSphere 6.5 performance issues Get a comprehensive coverage of performance issues and solutions including vCenter Server design and virtual machine and application tuning Who This Book Is For If you are a system administrator and are planning to deploy vSphere 6.5 in your organization and want to maximize its performance, then this book is for you. Prior knowledge of the vSphere 6.5 concepts is essential. What You Will Learn Understand the VMM Scheduler, cache aware CPU Scheduler, NUMA aware CPU Scheduler, and more during the CPU Performance Design phase Get to know the virtual memory reclamation technique, host ballooning monitoring, and swapping activity Choose the right platform while designing your vCenter Server, redundant vCenter design, and vCenter SSO and its deployment Learn how to use various performance simulation tools Design VCSA Server Certificates to minimize security threats Use health check tools for storage and boost vSphere 6.5's performance with VAAI and VASA In Detail vSphere is a mission-critical piece of software for many businesses. It is a complex tool, and incorrect design and deployment can create performance related issues that can negatively affect the business. This book is focused on solving these problems as well as providing best practices and performance-enhancing techniques. This edition is fully updated to include all the new features in version 6.5 as well as the latest tools and techniques to keep vSphere performing at its best. This book starts with interesting recipes, such as the interaction of vSphere 6.5 components with physical layers such as CPU, memory, and networking. Then we focus on DRS, resource control design, and vSphere cluster design. Next, you'll learn about storage performance design and how it works with VMware vSphere 6.5. Moving on, you will learn about the two types of vCenter installation and the benefits of each. Lastly, the book covers performance tools that help you get the most out of your vSphere installation. By the end of this book, you will be able to identify, diagnose, and troubleshoot operational faults and critical performance issues in vSphere 6.5. Style and approach This cookbook is written in a practical, helpful style with numerous recipes focusing on answering and providing solutions to common and not-so-common performance issues and problems.

SQL Server 2008 Query Performance Tuning Distilled presents a direct trouble-shooting methodology for identifying poorly-performing stored procedures and queries, isolating the causes of that poor performance, and fixing the underlying problems. Each chapter is dedicated to one of the top causes of poorly performing queries and shows methods for identifying and dealing with the problems in that chapter's domain. Emphasis is always put upon or placed upon practical methods that you can put to immediate use in your day-to-day work. SQL Server 2008 functionality, tips, and tricks are emphasized in each subject area. Emphasizes the practical. Does not bury readers in theory. Gives readers practical techniques to immediately apply in their daily work. Dedicates a chapter to each of the most common, performance-related problem areas.

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

Microsoft Windows 8.1 and Windows Server 2012 R2 are designed to be the best performing operating systems to date, but even the best systems can be overwhelmed with load and/or plagued with poorly performing code. Windows Performance Analysis Field Guide gives you a practical field guide approach to performance monitoring and analysis from experts who do this work every day. Think of this book as your own guide to "What would Microsoft support do?" when you have a Windows performance issue. Author Clint Huffman, a Microsoft veteran of over fifteen years, shows you how to identify and alleviate problems with the computer resources of disk, memory, processor, and network. You will learn to use performance counters as the initial indicators, then use various tools to "dig in" to the problem, as well as how to capture and analyze boot performance problems. This field guide gives you the tools and answers you need to improve Microsoft Windows performance, including: Save money on optimizing Windows performance with deep technical troubleshooting that tells you "What would Microsoft do to solve this?" Includes performance counter templates so you can collect the right data the first time. Learn how to solve performance problems using free tools from Microsoft such as the Windows Sysinternals tools and more. In a rush? Chapter 1 Start Here gets you on the quick path to solving the problem. Also covers earlier versions such as Windows 7 and Windows Server 2008 R2. Simplify and automate server administration tasks with PowerCLI About This Book Automate VMware's vSphere environment by learning the essentials of PowerCLI Impress your peers by developing scripts to perform administration tasks Discover the intricate workings of PowerCLI through simple and real-life examples Who This Book Is For PowerCLI Essentials is focused

toward virtualization professionals and system administrators who want to discover and learn about the automation techniques associated with PowerCLI for complex virtual environments.

**What You Will Learn** Download and install PowerCLI and its basics as well as the basics of PowerShell Enhance your scripting experience Build longer scripts and simpler reports Relate a task in VMware administration to a PowerCLI script Discover methods to acquire and change information remotely Set up orchestrator to manage your workflow In Detail Have you ever wished you could automatically get a report with all the relevant information about your VMware environments in exactly the format you want? Or that you could automate a crucial task that needs to be performed on a regular basis? Powerful Command Line Interface (PowerCLI) scripts do all these things and much more for VMware environments. PowerCLI is a command-line interface tool used to automate VMware vSphere environments. It is used to handle complicated administration tasks through use of various cmdlets and scripts, which are designed to handle certain aspects of vSphere servers and to help you manage them. This book will show you the intricacies of PowerCLI through real-life examples so that you can discover the art of PowerCLI scripting. At the start, you will be taught to download and install PowerCLI and will learn about the different versions of it. Moving further, you will be introduced to the GUI of PowerCLI and will find out how to develop single line scripts to duplicate running tasks, produce simple reports, and simplify administration. Next, you will learn about the methods available to get information remotely. Towards the end, you will be taught to set up orchestrator and build workflows in PowerShell with update manager and SRM scripts.

**Style and approach** Each and every topic in this book is explained in a very easy-to-follow fashion with real-life, simple examples so you'll get an idea not only about working with PowerCLI, but will also get an idea about scripting.

**Use the latest tools to manage and automate tasks on Microsoft's SharePoint platform.** You will achieve time and cost savings, increase reliability of deployments, and learn how to safely and efficiently migrate from a previous version, all while gaining valuable skills in PowerShell scripting. Authors Nik Charlebois-Laprade and John Edward Naguib begin by explaining the fundamental concepts behind the PowerShell language. Then, with copious real-world examples and scripts, they introduce PowerShell operations in the context of deploying, migrating, managing, and monitoring SharePoint 2016.

**What You'll Learn** What's New in this Edition? Learn about the new SharePoint 2016 capabilities and min role Extend the default set of available PowerShell cmdlets for SharePoint 2016 by creating your own reusable Cmdlet functions with PowerShell 5.0 Upgrade your on-premises SharePoint 2013 environment to SharePoint 2016 using PowerShell Who This Book Is For Administrators, developers, and DevOps engineers working with SharePoint 2016. No experience with PowerShell is required.

**Learn PowerShell from the inside out, right from basic scripting all the way to becoming a master at automating, managing, and maintaining your Windows environment** About This Book Use proven best practices to optimize code and automate redundant tasks Get to grips with PowerShell's advanced functions and effectively administer your system Create a variety of PowerShell scripts to automate your environment Who This Book Is For If you are a system administrator who wants to become an expert in automating and managing your Windows environment, then this course is for you. Some basic understanding of PowerShell would be helpful.

**What You Will Learn** Discover PowerShell commands and cmdlets and understand PowerShell formatting Solve common problems using basic file input/output functions Use .NET classes in Windows PowerShell and C# and manage Exchange Online Use PowerShell in C# to manage Exchange Online and work with .NET classes in PowerShell Automate LYNC clients, consuming client-side object models to administrate SharePoint Online Optimize code through the use of functions, switches, and looping structures Manage files, folders, and registries through the use of PowerShell Discover best practices to manage Microsoft systems In Detail Are you tired of managing Windows administrative tasks manually and are looking to automate the entire process? If yes, then this is the right course for you. This learning path starts your PowerShell journey and will help you automate the administration of the Windows operating system and applications that run on Windows. It will get you up and running with PowerShell, taking you from the basics of installation to writing scripts and performing web server automation. You will explore the PowerShell environment and discover how to use cmdlets, functions, and scripts to automate Windows systems. The next installment of the course focuses on gaining concrete knowledge of Windows PowerShell scripting to perform professional-level scripting. The techniques here are packed with PowerShell scripts and sample C# code to automate tasks. You will use .NET classes in PowerShell and C# to manage Exchange Online. In the final section, you will delve into real-world examples to learn how to simplify the management of your Windows environment. You will get to grips with PowerShell's advanced functions and how to most effectively administer your system. This Learning Path combines some of the best that Packt has to offer in one complete, curated package. It includes content from the following Packt products: Getting Started with PowerShell by Michael Shepard Windows PowerShell for .Net Developers Second Edition by Chendrayan Venkatesan and Sherif Talaat Mastering Windows PowerShell Scripting by Brenton J.W. Blawat

**Style and approach** This is a step-by-step course to help you effectively administer and maintain your development environment with PowerShell.

**This Proceedings book reports on new and innovative solutions regarding methodologies and applications of modeling and simulation.** It includes a set of selected, extended papers from the 6th International Conference on Simulation and Modeling Methodologies, Technologies and Applications (SIMULTECH 2016), held in Lisbon, Portugal, from 29 to 31 July, 2016. The conference brought together researchers, engineers and practitioners interested in methodologies and applications of modeling and simulation. SIMULTECH 2016 received 76 submissions from 35 countries and all continents. After a double-blind paper review performed by the Program Committee, 18% were accepted as full papers and thus selected for oral presentations. Additional papers were accepted as short papers and posters. A further selection was made after the Conference, based also on the assessment of presentation quality and audience interest, so that this book includes the extended and revised versions of the very best papers from SIMULTECH 2016.

**Beginning PowerShell for SharePoint 2013 is a book for the SharePoint administrator looking to expand his or her toolkit and skills by learning PowerShell, Microsoft's vastly flexible and versatile object oriented scripting language.** PowerShell is the future of Microsoft administration, and SharePoint is a complex product that can be managed more easily and quickly with PowerShell cmdlets and scripts. This book helps bridge the gap, introducing PowerShell fundamentals and operations in the context of deploying, migrating, managing, and monitoring SharePoint 2013. Author Nik Charlebois-Laprade begins by explaining the fundamental concepts behind the PowerShell language. Then, with copious real-world examples and scripts, he lays the foundation for PowerShell novices to automate interactions with the various pieces and components of the SharePoint 2013 platform. For SharePoint administrators wanting to do more with the technology, or for SharePoint developers trying to build their skills on the administration side, Beginning PowerShell for SharePoint 2013 is the perfect book to kick off your PowerShell journey.

Your One-Stop Reference for VMware vSphere Automation If you manage vSphere in a Windows environment, automating routine tasks can save you time and increase efficiency. VMware vSphere PowerCLI is a set of pre-built commands based on Windows PowerShell that is designed to help you automate vSphere processes involving virtual machines, datacenters, storage, networks, and more. This detailed guide—using a practical, task-based approach and real-world examples—shows you how to get the most out of PowerCLI's handy cmdlets. Learn how to: Automate vCenter Server and ESX/ESX(i) Server deployment and configuration Create and configure virtual machines and use vApps Secure, back up, and restore your virtual machines Monitor, audit, and report the status of your vSphere environment Use the PowerCLI SDK, PowerWF Studio, and vEcoShell Schedule and view automation Add a GUI front end to your scripts

Learn all the latest practices to build and enhance your PowerShell scripts and manage the Security and Compliance Center easily and efficiently Key Features Gather the latest information and new cmdlets to get started with PowerShell Discover innovative ways to construct useful scripts Learn how to manage SCC with PowerShell through real-world scenarios Book Description PowerShell is an integral part of Office 365. This updated edition shares tips, tricks, new cmdlets, and best practices for using PowerShell with the Security and Compliance Center. The book starts by covering the basic tools of PowerShell, such as PowerShell ISE and PowerShell repositories, and then goes on to teach you how to connect to the SCC using multi-factor authentication. You will manage role groups to layer security, before exploring the importance of information barriers. As you progress, you will orchestrate insider risk policies to protect your organization from malicious users with access to sensitive data. Next, the book will show you how to manage various devices using tenant policies and device access rules. Later chapters will delve into various reporting methods and explore options for troubleshooting scripts and best practices to produce better scripts. The book concludes with an overview of Microsoft Secure Score to help you measure your organization's security posture. By the end of this book, you'll have the latest information and new cmdlets to confidently manage the Security and Compliance Center (SCC) with PowerShell. What you will learn Enhance the script, test it, and move it into production Make your PowerShell scripts more usable and accessible Study directory synchronization and its applications Explore layers of security that prevent unauthorized access Use PowerShell to implement Data Loss Prevention (DLP) Understand compliance and how it can be managed with PowerShell Who this book is for If you are already managing Exchange and have some PowerShell experience, then this book is for you. Professionals who want to gain more proficiency in PowerShell but are unsure of how to approach it will also find this book useful. To get the most out of this book, you must have sufficient experience of working in PowerShell as the book is not a beginner's guide to PowerShell.

Transform your datacenter for breakthrough flexibility, agility, and scalability! Using public, private, and hybrid cloud services, you can transform your datacenter to serve fast-changing workloads, process and analyze enormous amounts of data, and achieve unprecedented flexibility and value. In this guide, two world-renowned experts in Microsoft datacenter technology show how to effectively leverage current legacy systems as you incorporate your optimal mix of cloud services. Drawing on extensive experience implementing Microsoft cloud solutions, they walk you step-by-step through your entire transition: strategy, deployment, security, identity protection, management, PowerShell automation, and more. Two concluding chapters offer indispensable advice for maximizing datacenter efficiency and supporting future innovation. Two leading enterprise cloud and Windows Server experts show how to: Move from legacy IT models to an agile service structure Implement managed self-service, iteration-based software updates, immutable infrastructure, and other elements of a modern IT environment Plan and smoothly integrate on-premises, Azure, Azure Stack, and Hybrid Cloud components Fortify IT security now and in the future Safeguard identities via new models and tools, including Remote Credential Guard Protect the OS, on premises and in the cloud Optimize datacenter efficiency via enterprise-class virtualization and other advanced technologies Promote innovation via microservices, DevOps, and NanoServer containerization

vSphere High Performance Cookbook Packt Publishing Ltd

Go beyond the PowerShell command line and become a Toolmaker! Learn the techniques, patterns, and practices that go into professional, native-style scripting in the PowerShell environment. PowerShell MVPs Don Jones and Jeffery Hicks - authors of some of the first and most-popular PowerShell books ever - walk you through a guided tour of toolmaking, including advanced topics like debugging, help authoring, type extensions, and more. They introduce you to key open-source tools like Platyps and Pester, helping you become a more professional and well-rounded toolmaker. They even dive into data connectivity, helping you use some of the most common data storage mechanisms and formats in your scripts. Everything you need is right here, including hands-on exercises, review questions, and more. Start becoming a PowerShell Toolmaker today!

Identify and fix causes of poor performance. You will learn Query Store, adaptive execution plans, and automated tuning on the Microsoft Azure SQL Database platform. Anyone responsible for writing or creating T-SQL queries will find valuable the insight into bottlenecks, including how to recognize them and eliminate them. This book covers the latest in performance optimization features and techniques and is current with SQL Server 2017. If your queries are not running fast enough and you're tired of phone calls from frustrated users, then this book is the answer to your performance problems. SQL Server 2017 Query Performance Tuning is about more than quick tips and fixes. You'll learn to be proactive in establishing performance baselines using tools such as Performance Monitor and Extended Events. You'll recognize bottlenecks and defuse them before the phone rings. You'll learn some quick solutions too, but emphasis is on designing for performance and getting it right. The goal is to head off trouble before it occurs. What You'll Learn Use Query Store to understand and easily change query performance Recognize and eliminate bottlenecks leading to slow performance Deploy quick fixes when needed, following up with long-term solutions Implement best practices in T-SQL to minimize performance risk Design in the performance that you need through careful query and index design Utilize the latest performance optimization features in SQL Server 2017 Protect query performance during upgrades to the newer versions of SQL Server Who This Book Is For Developers and database administrators with responsibility for application performance in SQL Server environments. Anyone responsible for writing or creating T-SQL queries will find valuable the insight into bottlenecks, including how to recognize them and eliminate them.

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

Prepare for Microsoft Exam 70-411 - and help demonstrate your real-world mastery of administering Windows Server 2012 R2. Designed for experienced IT professionals ready to advance their status, Exam Ref focuses on the critical-thinking and decision-making acumen needed for success at the MCSA level. Focus on the expertise measured by these objectives: Deploy, manage, and maintain servers

Configure file and print services Configure network services and access Configure a Network Policy Server (NPS) infrastructure Configure Active Directory Configure and manage Group Policy This Microsoft Exam Ref: Organizes its coverage by objectives. Features strategic, what-if scenarios to challenge candidates. Assumes you have experience administering Windows Server 2012 R2 core infrastructure. The quick start guide for an advanced enterprise PowerShell framework About This Book Introduces industry-proven techniques that improve script efficiency and reliability Example-rich guide based on real-world scenarios Facilitates building a script that can fully scan a Windows server and identify components Who This Book Is For This book is for IT professionals and Windows administrators who would like to gain intensive, hands-on knowledge and skills on PowerShell without spending hours and hours in learning. If you have been struggling to find the time to gain proficiency and confidence with PowerShell and everyday scripting tasks What You Will Learn Create an advanced PowerShell scripting template that provides repeatable code to jumpstart all of your scripting projects Learn how to securely encrypt and store usernames, passwords, and other sensitive data in PowerShell scripts and answer files Understand how to optimize the performance of scripts to help process large datasets quickly and avoid time-consuming mistakes Develop a script to scan for non-standard Windows Server configurations and identify service accounts used on Windows Servers Gather a large list of data from a Windows server without locally or remotely logging in interactively In Detail Enterprise PowerShell Scripting Bootcamp explains how to create your own repeatable PowerShell scripting framework. This framework contains script logging methodologies, answer file interactions, and string encryption and decryption strategies. This book focuses on evaluating individual components to identify the system's function, role, and unique characteristics. To do this, you will leverage built-in CMDlets and Windows Management Instrumentation (WMI) to explore Windows services, Windows processes, Windows features, scheduled tasks, and disk statistics. You will also create custom functions to perform a deep search for specific strings in files and evaluate installed software through executable properties. We will then discuss different scripting techniques to improve the efficiency of scripts. By leveraging several small changes to your code, you can increase the execution performance by over 130%. By the end of this book, you will be able to tie all of the concepts together in a PowerShell-based Windows server scanning script. This discovery script will be able to scan a Windows server to identify a multitude of components. Style and approach This book is all about fast and intensive learning. This means, we don't waste time in helping readers get started. The new content is about leveraging highly-effective examples to build new things, help solving problems in newer and unseen ways, and providing an enterprise-ready platform to create PowerShell Scripts.

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.

800x600 Focused technical guidance from System Center experts Part of a series of specialized guides on System Center--this book walks through the implementation of Operations Manager in the enterprise using Windows Server 2012 R2 and System Center 2012 R2, or later. Written by experts on the Microsoft System Center team and with Microsoft MVP Mitch Tulloch as series editor, this title focuses on best practices for working with management packs, maximizing the effectiveness or reporting, troubleshooting your environment, and using Operations Manager in cloud environments. Normal 0 false false false EN-US X-NONE X-NONE MicrosoftInternetExplorer4

This comprehensive book prepares you for Microsoft's new certification, MCTS: Microsoft Exchange Server 2007. Exam 70–236 serves as both the single exam requirement for achieving the MCTS designation as well as the entry exam for the MCITP certification for Exchange Server 2007. Inside, you'll find the practical and in–depth instruction you need, including full coverage of all exam objectives, practical hands–on exercises, real–world scenarios, challenging review questions, and more. The book includes a CD with advanced testing software and electronic flashcards. For Instructors: Teaching supplements are available for this title.

Learn to leverage the power of PowerCLI to automate your VMware vSphere environment with ease About This Book This is first book on the market that will enlighten you on the latest version of PowerCLI and how to implement it Effectively manage virtual machines, networks, and reports with the latest features of PowerCLI A comprehensive and practical book on automating VMware vSphere Who This Book Is For This book is ideal for you if you want to learn how to automate your VMware vSphere or vCloud infrastructure by getting the most out of PowerCLI. It's assumed that you have some experience in administrating a vSphere or vCloud environment. Knowledge of Microsoft's Windows PowerShell is not a prerequisite. What You Will Learn Explore PowerShell and PowerCLI cmdlets and their output objects See how to manage virtual machines and work with virtual networks Manage vCloud Director from PowerCLI Use Site Recovery Manager from PowerCLI to create a disaster recovery solution Manage NSX and vRealize Automation using REST API with PowerCLI Create and configure vSphere HA and DRS clusters Use vSphere Update Manager with PowerCLI to create patch baselines and scan hosts Explore reporting techniques to retrieve log files In Detail VMware vSphere PowerCLI, a free extension to Microsoft Windows PowerShell, enables you to automate the management of a VMware vSphere or vCloud environment. This book will show you how to automate your tasks and make your job easier. Starting with an introduction to the basics of PowerCLI, the book will teach you how to manage your vSphere and vCloud infrastructure from the command line. To help you manage a vSphere host overall, you will learn how to manage vSphere ESXi hosts, host profiles, host services, host firewall, and deploy and upgrade ESXi hosts using Image Builder and Auto Deploy. The next chapter will not only teach you how to create datastore and datastore clusters, but you'll also work with profile-driven and policy-based storage to manage your storage. To create a disaster recovery solution and retrieve information from vRealize Operations, you will learn how to use Site Recovery Manager and vRealize Operations respectively.

Towards the end, you'll see how to use the REST APIs from PowerShell to manage NSX and vRealize Automation and create patch baselines, scan hosts against the baselines for missing patches, and re-mediate hosts. By the end of the book, you will be capable of using the best tool to automate the management and configuration of VMware vSphere. Style and approach This comprehensive book will teach system administrators everything about PowerCLI 6 and how to utilize it to automate VMware vSphere.

Whether it is learning different techniques to monitor and tune an Azure SQL database or improving performance using in-memory technology, this book will enable you to make the most out of Azure SQL database features and functionality for data management solutions.

Gain expertise in troubleshooting most common issues to implement vSphere environments with ease About This Book Plan, analyze, and design effective solutions for your vSphere environment Troubleshoot problems related to vSphere performance Familiarize yourself with the advanced troubleshooting concepts and become an expert level administrator Who This Book Is For The book is intended for mid-level System Engineers and System Integrators who want to learn VMware power tools to troubleshoot and manage the vSphere infrastructure. Good knowledge level and understanding of virtualization is expected. What You Will Learn Configure vSphere management assistant and troubleshooting tools Use troubleshooting tools to monitor performance and troubleshoot different issues Learn how to troubleshoot High Availability and other commonly known problems with clusters such as insufficient resources, failing heartbeats Use Direct Console User Interface (DCUI) to verify configuration Diagnose storage issues including iSCSI, NFS and VMFS problems Manage vSphere Network Virtual and Distributed Switches, Trunks, VLANs Monitor and shape network traffic, configure routes and DNS Quickly resolve common day-to-day problems by analysing logs of VMware vSphere hosts and VMware vCenter Server Debug and resolve commonly known vSphere Cluster problems In Detail VMware vSphere is the leading server virtualization platform with consistent management for virtual data centers. It enhances troubleshooting skills to diagnose and resolve day to day problems in your VMware vSphere infrastructure environment. This book will provide you practical hands-on knowledge of using different performance monitoring and troubleshooting tools to manage and troubleshoot the vSphere infrastructure. It begins by introducing systematic approach for troubleshooting different problems and show casing the troubleshooting techniques. You will be able to use the troubleshooting tools to monitor performance, and troubleshoot issues related to Hosts and Virtual Machines. Moving on, you will troubleshoot High Availability, storage I/O control problems, virtual LANS, and iSCSI, NFS, VMFS issues. By the end of this book, you will be able to analyze and solve advanced issues related to vSphere environment such as vcenter certificates, database problems, and different failed state errors. Style and approach A step-by-step guide full of real world scenarios that will enhance advanced knowledge, skills, and abilities to achieve competence in troubleshooting the VMware vSphere environment. Basic concepts of vSphere and the most common vSphere infrastructure problems are explained with practical solutions to resolve it.

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 Here's the complete guide to Windows PowerShell 2.0 for administrators and developers Windows PowerShell is Microsoft's next-generation scripting and automation language. This comprehensive volume provides the background that IT administrators and developers need in order to start using PowerShell automation in exciting new ways. It explains what PowerShell is, how to use the language, and specific ways to apply PowerShell in various technologies. Windows PowerShell is Microsoft's standard automation tool and something that every Windows administrator will eventually have to understand; this book provides the background necessary to apply PowerShell automation. Covers how to use the language and specific ways to apply PowerShell in a variety of scenarios Addresses new features in the latest version of PowerShell and the additional functionality delivered by new products that provided direct or indirect ways to use PowerShell for scripting and automation purposes Explores the language fundamentals and how to use PowerShell for desktop, server, server application, and virtualization/cloud situations This thorough guide goes well beyond theory to offer real-world information and new scripting techniques, enabling administrators and developers to make the most of PowerShell 2.0.

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

Do you know how to use Windows PowerShell to navigate the filesystem and manage files and folders? Or how to retrieve a web page? This introduction to the PowerShell language and scripting environment provides more than 430 task-oriented recipes to help you solve the most complex and pressing problems, and includes more than 100 tried-and-tested scripts that intermediate to advanced system administrators can copy and use immediately. You'll find hands-on tutorials on fundamentals, common tasks, and administrative jobs that you can apply whether you're on a client or server version of Windows. You also get quick references to technologies used in conjunction with PowerShell, including format specifiers and frequently referenced registry keys to selected .NET, COM, and WMI classes. With Windows PowerShell Cookbook, you'll get more done in less time. Take a tour of PowerShell's core features, including the command model, object-based pipeline, and ubiquitous scripting Learn PowerShell fundamentals such as the interactive shell and fundamental 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, the filesystem, registry, event logs, processes, and services

This cookbook will help you gain command of PowerShell 7.1 to manage the core roles, features, and services within Windows Server 2022 and 2019. Thomas Lee provides an expansive view of the functionality made possible in PowerShell's latest major release.

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.

Learning PowerCLI is written in a friendly and practical style with a focus on getting you started and automating daily tasks quickly and efficiently. If you manage or administrate a vSphere environment, and want to make that easier and more efficient, then this book is for you! This book is ideal for you if you want to learn how to automate your VMware vSphere infrastructure, by getting the most out of PowerCLI. It's assumed that you have some experience in administrating a VMware vSphere environment. Knowledge of Microsoft's Windows PowerShell is not a prerequisite.

Utilize a treasure trove of free SharePoint troubleshooting tools and receive insightful guidance about the types of SharePoint issues that can be discovered through their use. Chapters in this book contrast solid and least privileged builds in order to help you understand the types of issues that are raised when farms are not built the least privileged way. Because SharePoint errors often present themselves one way, when an issue is actually something entirely different, the process of finding the root cause can feel like going down a rabbit hole. Hands-on exercises get you comfortable with logs so you can efficiently and effectively "explore the rabbit hole." Troubleshooting SharePoint also demonstrates how to identify components and settings that enter an environment where access has been restricted. The author shares his proven methods for researching an issue based on what appears in the logs, with the understanding that often it is not as simple as asking a question, but how you ask it that leads to the right answer. What You'll Learn Utilize networking tools such as NetMon, WireShark, and Fiddler for troubleshooting Master SharePoint PAL, Webalizer, Indihaing, Developer Dashboard, the Feature Admin tool, and more Become proficient using Timer Jobs and Search Diagnostics Understand how various files are accessed by IIS sites and within the server file system Discover how IIS mappings and file permissions affect issues Troubleshoot with ULS Viewer, PowerShell, and tools such as ProcMon, PerfMon, and Event Viewer Meet your new best friend, the ULS Viewer Use Event Viewer as a troubleshooting source Become conversant in the "language" of SharePoint from the log's perspective Who This Book Is For SharePoint administrators and developers who want to learn how to quickly diagnose and resolve issues in any SharePoint server in SharePoint farms where admin access is possible

Learn the basics of Microsoft Azure and see how SQL Server on Azure VMs (Infrastructure-as-a-Service) and Azure SQL Databases (Platform-as-a-Service) work. This concise book shows you how to deploy, operate, and maintain your data using any one or a combination of these offerings along with your on-premise environment. Pro SQL Server on Microsoft Azure is a quintessential book for any IT professional who is planning to host their data on Microsoft Azure. This book will not only equip you with the tips, tricks, and tools to manage SQL Server offerings on Azure, but will also help you in deciding between PaaS, IaaS, or hybrid. In the ever-changing world of operations, IT administrators and SQL Server DBAs often find that the biggest challenges occur once they've deployed to the cloud. This is precisely why Pro SQL Server on Microsoft Azure was written; it will help you master today's cloud world. What You'll

Learn Understand the Microsoft Azure IaaS architecture Work with Azure Storage and Networking Deploy SQL Server on Azure VMs using best practices Apply effective security principles to SQL Azure Databases Measure and optimize the performance of SQL Server offerings on Azure Implement Business continuity and disaster recovery options with Azure SQL Databases Who This Book Is For This book is for IT admins and SQL Server DBAs who are managing or would be managing SQL Server deployments on Microsoft Azure. v>

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