Powershell Desired State Configuration For Devops And Alm

Learn about using PowerShell for Desired State Configuration (DSC) and other advanced automation for Windows Server.
Prepare for Microsoft Exam 70-532--and help demonstrate your real-world mastery of Microsoft Azure solution development. Designed for experienced developers ready to advance their status, Exam Ref focuses on the critical-thinking and decision-making acumen needed for success at the Microsoft Specialist level. Focus on the expertise measured by these objectives: Design and implement Websites Create and manage Virtual Machines Design and implement Cloud Services Design and implement a storage strategy Manage application and network services This Microsoft Exam Ref: Organizes its coverage by exam objectives Features strategic, what-if scenarios to challenge you Will be valuable for Microsoft Azure developers, solution architects, DevOps engineers, and QA engineers Assumes you have experience designing, programming, implementing, automating, and monitoring Microsoft Azure solutions and that you are proficient with tools, techniques, and approaches for building scalable, resilient solutions Developing Microsoft Azure Solutions About the Exam Exam 70-532 focuses on the skills and knowledge needed to develop Microsoft Azure solutions that include websites, virtual machines, cloud services, storage, application services, and network services. About Microsoft Certification Passing this exam earns you a Microsoft Specialist certification in Microsoft Azure, demonstrating your expertise with the Microsoft Azure enterprise-grade cloud platform. You can earn this certification by passing Exam 70-532, Developing Microsoft Azure Solutions; or Exam 70-533, Implementing Microsoft Azure Infrastructure Solutions; or Exam 70-534, Architecting Microsoft Azure Solutions. See full details at: microsoft.com/learning
Learn the essentials of PowerShell DSC: creating DSC configurations, working with DSC resources, and applying DSC configurations to systems via both push and pull modes.
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.
Prepare for Exam 70-414—and help demonstrate your real-world mastery of advanced server design, planning, and implementation. Designed for experienced, MCSA-certified professionals ready to advance their status—Exam Ref focuses on the critical-thinking and decision-making acumen needed for success at the MCSE level. Optimize your exam-prep by focusing on the expertise needed to: Manage and Maintain a Server Infrastructure Plan and Implement a Highly Available Enterprise Infrastructure Plan and Implement a Server Virtualization Infrastructure Design and Implement Identity and Access Solutions
A learning guide to get you started with PowerShell DSC. About This Book Create flexible and maintainable deployments using DSC configuration scripts that stand the test of time. Explore the core architecture, concepts, and practices in depth. Learning PowerShell DSC is a step-by-step guide that shows you how to start using and taking advantage of PowerShell DSC along with configuring and deploying applications. Who This Book Is For If you are a system administrator, developer, or engineer and are responsible for configuration management and automation, then this book is for you. IT professionals who wish to learn PowerShell Desired State Configuration for the efficient management, configuration, and deployment of systems will also find this book useful. What You Will Learn Explore PowerShell Desired State Configuration and activities around it, including the need for configuration management and abstraction. Create reusable DSC configurations and debug/ troubleshoot configuration files. Learn about the PowerShell DSC architecture with the help of push-and-pull management and workflows. Define DSC configuration scripts and data files and push DSC configuration files remotely and locally. Validate DSC Pull Server install and register target nodes with a DSC Pull Server. Learn about DSC Cross Platform and install PowerShell on Linux and macOS along with real-life DSC uses and different types of deployment. In Detail The main goal of this book is to teach you to configure, deploy, and manage your system using the new features of PowerShell v5/v6 DSC. This book begins with the basics of PowerShell Desired State Configuration, covering its architecture and components. It familiarizes you with the set of Windows PowerShell language extensions and new Windows PowerShell commands that make up DSC. Then it helps you create DSC custom resources and work with DSC configurations with the help of practical examples. Finally, it describes how to deploy configuration data using PowerShell DSC. Throughout this book, we will be focusing on concepts such as building configurations with parameters, the local configuration manager, and testing and restoring configurations using PowerShell DSC. By the end of the book, you will be able to deploy a real-world application end-to-end and will be familiar enough with the powerful Desired State Configuration platform to achieve continuous delivery and efficiently and easily manage and deploy data for systems. Style and approach The purpose of this book is to introduce readers to the powerful PowerShell Desired State Configuration platform to achieve continuous delivery, efficient management, and the easy deployment of data for systems.
If you are a system administrator who wants to become an expert in controlling and automating your Windows environment, then this book is for you. Prior knowledge of PowerShell's core elements and applications is required for this book.
Part of a series of specialized guides on System Center, this book focuses on Microsoft System Center Operations Manager. For the seasoned professional, it covers the role of the Operations Manager product, the best practices for working with management packs, how to use the reporting feature to simplify managing the product, how to thoroughly troubleshoot, and how to use and install Operations Manager in the Microsoft Azure Public Cloud environment.
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.

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.

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

Remain highly competitive in the server and VM market by gaining the practical skills needed to operate Nano Server About This Book The days of the local server are numbered, and this book will make you an ace by giving you the skills needed to administer Nano Server and survive in the brave new server world Learn to quickly automate multiple VMs and support Hyper-V clusters, all through small footprints from a single host Apply up-to-date, real-world examples presented in this book and improve the scalability and efficiency of large-scale VM deployments Who This Book Is For This book opens up new potential for both developers and IT pros alike. The book is primarily for Server administrators and IT Professionals who would like to deploy and administer Nano Server within their organizations, and for developers who are trying to make maximal use of Server Containers and Hyper-V Containers with Nano Servers. What You Will Learn Understand Nano Server Deploy Nano Server Deploy Hyper-V Clusters on Nano Server Deploy Nano Server with SCVMM Manage Nano Server using PowerShell and Remote Server Management Tools Manage Nano Server with third-party tools Run Server Containers and Hyper-V Containers on Nano Server Troubleshoot Nano Server Validate developed applications that run on Nano Server In Detail Nano Server allows developers and operations teams to work closely together and use containers that package applications so that the entire platform works as one. The aim of Nano Server is to help applications run the way they are intended to. It can be used to run and deploy infrastructures (acting as a compute host, storage host, container, or VM guest operating system) without consuming significant resources. Although Nano Server isn't intended to replace Server 2016 or 2012 R2, it will be an attractive choice for developers and IT teams. Want to improve your ability to deploy a new VM and install and deploy container apps within minutes? You have come to the right place! The objective of this book is to get you started with Nano Server successfully. The journey is quite exciting, since we are introducing you to a cutting-edge technology that will revolutionize today's datacenters.

We'll cover everything from the basic to advanced topics. You'll discover a lot of added value from using Nano Server, such as hundreds of VM types on a single host through a small footprint, which could be a big plus for you and your company. After reading this book, you will have the necessary skills to start your journey effectively using Nano Server. Style and approach Gauge all the information needed to get up-and-running with the latest Nano Server built by Microsoft using this easy to follow step-by-step guide.

Automate Windows server tasks with the powerful features of the PowerShell Language Key Features Leverage PowerShell to automate complex Windows server tasks Master new features such as DevOps, and containers, and speed up their performance using PowerShell Improve PowerShell's usability, and control and manage Windows-based environments by working through exciting recipes Book Description Windows Server 2019 represents the latest version of Microsoft's flagship server operating system. It also comes with PowerShell Version 5.1 and has a number of additional features that IT pros find useful. The book helps the reader learn how to use PowerShell and manage core roles, features, and services of Windows Server 2019. You will begin with creating a PowerShell Administrative Environment that has updated versions of PowerShell and the Windows Management Framework, updated versions of the .NET Framework, and third-party modules. Next, you will learn to use PowerShell to set up and configure Windows Server 2019 networking and also managing objects in the AD environment. You will also learn to set up a host to utilize containers and how to deploy containers. You will also be implementing different mechanisms for achieving desired state configuration along with getting well versed with Azure infrastructure and how to setup Virtual Machines, web sites, and shared files on Azure. Finally, you will be using some powerful tools you can use to diagnose and resolve issues with Windows Server 2019. By the end of the book, you will learn a lot of trips and tricks to automate your windows environment with PowerShell What you will learn Perform key admin tasks on Windows Server 2019 Employing best practices for writing PowerShell scripts and configuring Windows Server 2019 Use the .NET Framework to achieve administrative scripting Set up VMs, websites, and shared files on Azure Report system performance using built-in cmdlets and WMI to obtain single measurements Know the tools you can use to diagnose and resolve issues with Windows Server Who this book is for If you are a systems administrator, engineer, or an architect working with Windows Server 2016 interested in upgrading to Windows Server 2019 and automating tasks with PowerShell, then this book is for you. A basic knowledge of PowerShell is expected.

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

Grasp advanced PowerShell 7.1 functionalities for effective automation of your environment Key Features Automate complex tasks, manipulate data, and secure your environment Work with dual code for PowerShell 7 and Windows PowerShell to maintain compatibility with older versions See PowerShell in action, from learning the fundamentals to creating classes, scripts, and modules Book Description PowerShell scripts offer a convenient way to automate various tasks, although working effectively with these scripts can be challenging. Mastering PowerShell Scripting helps you to navigate through PowerShell's capabilities. This extensively revised edition includes new chapters on debugging and troubleshooting and creating GUIs (online chapter). Learn the new features of PowerShell 7.1 by working with parameters, objects, and .NET classes from within PowerShell 7.1. This comprehensive guide starts with the basics before moving on to advanced topics, including asynchronous processing, desired state configuration, using more complex scripts and filters, debugging issues, and error-handling techniques. Explore how to efficiently manage substantial amounts of data and interact with other services using PowerShell 7.1. This book will help you to make the most of PowerShell's automation features, using different methods to parse data, manipulate regular expressions, and work with Windows Management Instrumentation (WMI). What you will learn Optimize code with functions, switches, and looping structures Test and debug your scripts as well as raising and catching errors Work with objects and operators to test and manipulate data Parse and manipulate different data types Use jobs, runspaces, and runspace pools to run code asynchronously Write .NET classes with ease within PowerShell Create and implement regular expressions in PowerShell scripts Make use of advanced techniques to define and restrict the behavior of parameters Who this book is for This book is for system administrators who want to automate and speed up their processes using PowerShell and Windows PowerShell. Some familiarity with operating systems would be useful, but not essential.

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

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Get started with the fundamentals of PowerShell DSC and utilize its power to automate deployment and configuration of your servers About This Book Create flexible and maintainable deployments using DSC configuration scripts that stand the test of time Explore the in depth details of the core architecture, concepts, and practices used by PowerShell DSC A step-by-step guide that shows you how to start using and taking advantage of PowerShell DSC Who This Book Is For This book is intended for system administrators, developers, or engineers who are responsible for configuration management and automation and wish to learn PowerShell Desired State Configuration for efficient management, configuration and deployment of systems and applications. What You Will Learn Understand configuration management and why you need it Craft flexible, reusable, and maintainable configuration scripts for thousands of servers Create custom DSC resources to manage any application or server setting Apply configuration data to deploy applications to different environments Utilize DSC push deployments to test your configuration scripts and custom DSC resources Install, configure and use DSC pull servers Run a Windows MSI package Deploy a website In Detail Windows PowerShell is a task-based command-line shell and scripting language designed especially for system administration. PowerShell DSC is a new management platform that enables you to deploy and manage configuration data for software services and manage the environment in which these services run. This book begins with an overview of the basics of PowerShell DSC by covering the architecture and components of the Desired Sate Configuration. It will then familiarize you with the set of PowerShell language extensions and new PowerShell commands. It will help you understand and create DSC configurations with the help of practical examples, and to create DSC custom resources for your custom applications. Finally, you will learn to deploy a real world application using PowerShell DSC. By the end of the book, you will have better knowledge about the powerful Desired State Configuration platform, which helps you to achieve continuous delivery, and efficient management and easy deployment of data for systems. Style and approach This book is an in-depth guide to using PowerShell DSC, full of real-world experiences and best practices using PowerShell DSC. The topics are explained and build on one another other to provide a holistic learning experience. At the end, all the features learned will be used to create a real world application deployment using DSC.
Enhance your knowledge of Windows PowerShell and get to grips with its latest features
Focus exclusively on the Azure Resource Manager (ARM) deployment model for Azure automation and gain in-depth knowledge of topics such as runbook authoring, different types of automation runbooks, and hybrid cloud automation. This book covers practical approaches to creating runbooks for multiple use cases, including operational tasks such as VM management and integration of Azure automation with infrastructure monitoring solutions, such as Operations Management Suite (OMS). Along the way you'll see how to use PowerShell in Azure automation and cover essentials including Azure automation security, source control integration, and runbook output streams. Finally, you learn about integrating Azure automation with Desired State Configuration (DSC) to include various cloud, on-premise, and hybrid scenarios. What You Will Learn · Work with the building blocks of Azure automation · Create different types of runbook · Master hybrid cloud automation with ARM · Implement cloud automation use cases with practical examples Who This Book Is For Infrastructure and cloud architects, cloud support engineers, and system administrators.
A learning guide to get you started with PowerShell DSC.About This Book* Create flexible and maintainable deployments using DSC configuration scripts that stand the test of time.* Explore the core architecture, concepts, and practices in depth.* Learning PowerShell DSC is a step-by-step guide that shows you how to start using and taking advantage of PowerShell DSC along with configuring and deploying applications.Who This Book Is ForIf you are a system administrator, developer, or engineer and are responsible for configuration management and automation, then this book is for you. IT professionals who wish to learn PowerShell Desired State Configuration for the efficient management, configuration, and deployment of systems will also find this book useful. What You Will Learn* Explore PowerShell Desired State Configuration and activities around it, including the need for configuration management and abstraction.* Create reusable DSC configurations and debug/ troubleshoot configuration files.* Learn about the PowerShell DSC architecture with the help of push-and-pull management and workflows.* Define DSC configuration scripts and data files and push DSC configuration files remotely and locally.* Validate DSC Pull Server install and register target nodes with a DSC Pull Server.* Learn about DSC Cross Platform and install PowerShell on Linux and macOS along with real-life DSC uses and different types of deployment.In DetailThe main goal of this book is to teach you to configure, deploy, and manage your system using the new features of PowerShell v5/v6 DSC.This book begins with the basics of PowerShell Desired State Configuration, covering its architecture and components. It familiarizes you with the set of Windows PowerShell language extensions and new Windows PowerShell commands that make up DSC. Then it helps you create DSC custom resources and work with DSC configurations with the help of practical examples. Finally, it describes how to deploy configuration data using PowerShell DSC. Throughout this book, we will be focusing on concepts such as building configurations with parameters, the local configuration manager, and testing and restoring configurations using PowerShell DSC.By the end of the book, you will be able to deploy a real-world application end-to-end and will be familiar enough with the powerful Desired State Configuration platform to achieve continuous delivery and efficiently and easily manage and deploy data for systems.Style and approachThe purpose of this book is to introduce readers to the powerful PowerShell Desired State Configuration platform to achieve continuous delivery, efficient management, and the easy deployment of data for systems.
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.

PowerShell scripts offer a handy way to automate various chores. Working with these scripts effectively can be a difficult task.This comprehensive guide starts from scratch and covers advanced-level topics along with tips to make you a PowerShell Core 6.0 scripting expert.

Your one-stop reference for Windows Server 2019 and PowerShell know-how Windows Server 2019 & PowerShell All-in-One For Dummies offers a single reference to help you build and expand your knowledge of all things Windows Server, including the all-important PowerShell framework. Written by an information security pro and professor who trains aspiring system administrators, this book covers the broad range of topics a system administrator needs to know to run Windows Server 2019, including how to install, configure, and secure a system. This book includes coverage of: Installing & Setting Up Windows Server Configuring Windows Server 2019 Administering Windows Server 2019 Configuring Networking Managing Security Working with Windows PowerShell Installing and Administering Hyper-V Installing, Configuring, and Using Containers If you're a budding or experienced system administrator looking to build or expand your knowledge of Windows Server, this book has you covered.

Use Windows PowerShell Desired State Configuration (DSC) to configure your infrastructure on-premises and in the cloud. In an environment where changes and deployments are happening all the time, DSC makes the necessary adjustments to the system so you don't have to. Pro PowerShell Desired State Configuration shows you how. PowerShell Desired State Configuration (DSC) is a powerful configuration management platform that makes it easier than ever to perform configuration management of your infrastructure, whether on-premises or in the cloud. With Pro PowerShell Desired State Configuration, Ravikanth Chaganti revises and significantly expands his previous edition, bringing you a complete in-depth reference for applying this evolving technology in your day-to-day work. What's new in this edition? Get up-to-date, in-depth guidance on DSC in the data center Understand the central role that DSC plays in DevOps today Integrate DSC into build and release management tools Learn to think and act like a developer when automating your configuration management, creating a testable, robust process that you can use again and again Find out why and how DSC has an important role to play in public and private cloud deployments Apply DSC in the cloud with Microsoft Azure or Amazon Web Services or Google Cloud Platform Who This Book Is For IT administrators, developers and DevOps engineers working in Windows-based data center environments. With a little prior PowerShell scripting experience, this book can be used as an in-depth reference to creating, customizing, and extending DSC in Windows. IT administrators with limited scripting experience will also find this book a useful overview of what DSC offers and how to use DSC resources to automate configuration management and deployment.

Learning PowerShell is a custom-built, handcrafted, painstakingly curated book designed to get you from total PowerShell newbie to confident PowerShell user in as little as four weeks. This book assumes no prior knowledge, perfect for non-developers and GUI addicts who recognize that PowerShell is the future but need a good bit of handholding to achieve mastery. It is also a simple guide for the hundreds of thousands of PowerShell users who have not attained the level of PowerShell knowledge that they really need. With Learning PowerShell at your side, you will see that you don't have to be a developer to use PowerShell and you don't need to be a scripting wizard to derive value from integrating PowerShell into your daily administrative activities. The book is a learning resource that covers every topic worth discussing for a PowerShell beginner, with a depth of explanation unparalleled by any book currently on the market. With this book, you don't have to have a lot of time to learn the language and you can begin applying what you master almost immediately. Even skeptics of PowerShell, and command lines in general, will come away with a renewed sense of respect for the language and ideas on how to put it to use.

The first major book on MDM written by Group Policy and Enterprise Mobility MVP and renowned expert, Jeremy Moskowitz! With Windows 10, organizations can create a consistent set of configurations across the modern enterprise desktop—for PCs, tablets, and phones—through the common Mobile Device Management (MDM) layer. MDM gives organizations a way to configure settings that achieve their administrative intent without exposing every possible setting. One benefit of MDM is that it enables organizations to apply broader privacy, security, and application management settings through lighter and more efficient tools. MDM also allows organizations to target Internet-connected devices to manage policies without using Group Policy (GP) that requires on-premises domain-joined devices. This makes MDM the best choice for devices that are constantly on the go. With Microsoft making this shift to using Mobile Device Management (MDM), a cloud-based policy-management system, IT professionals need to know how to do similar tasks they do with Group Policy, but now using MDM, with its differences and pitfalls. • What is MDM (and how is it different than GP) • Setup Azure AD and MDM Auto-Enrollment • New PC Rollouts and Remote Refreshes: Autopilot and Configuration Designer • Enterprise State Roaming and OneDrive Documents Roaming Renowned expert and Microsoft Group Policy and Enterprise Mobility MVP Jeremy Moskowitz teaches you MDM fundamentals, essential troubleshooting techniques, and how to manage your enterprise desktops.

Azure Resource Manager (ARM) templates are declarations of Azure resources in the JSON format to provision and maintain them using infrastructure as code. This book gives practical solutions and examples for provisioning and managing various Azure services using ARM templates.

The purpose of this book is to showcase the amazing expertise of our guest speakers at the North American MVPDays Community Roadshow. They have so much passion, expertise, and expert knowledge that it only seemed fitting to write it down in a book. MVPDays was founded by Cristal and Dave Kawula back in 2013. It started as a simple idea; "There's got to be a good way for Microsoft MVPs to reach the IT community and share their vast knowledge and experience in a fun and engaging way" I mean, what is the point in recognizing these

bright and inspiring individuals, and not leveraging them to inspire the community that they are a part of. We often get asked the question "Who should attend MVPDays"? Anyone that has an interest in technology, is eager to learn, and wants to meet other like-minded individuals. This Roadshow is not just for Microsoft MVP's it is for anyone in the IT Community. Make sure you check out the MVPDays website at: www.mvpdays.com. You never know maybe the roadshow will be coming to a city near you. The goal of this particular book is to give you some amazing Master PowerShell tips from the experts you come to see in person at the MVPDays Roadshow. Each chapter is broken down into a unique tip and we really hope you find some immense value in what we have written.

This Microsoft Official Academic Course (MOAC) IT Professional curriculum prepares certification students for success every step of the way. This 70-414 Implementing an Advanced Server Infrastructure exam course is the second of a series of two exams Microsoft Certified Solutions Associates (MCSE) candidates are required to pass to gain the MCSE: Windows Server 2012 and Windows Server 2012 R2 certification. These MCSE exams test the skills and knowledge necessary to design, implement, and maintain a Windows Server 2012 infrastructure in an enterprise scaled, highly virtualized environment. Passing these exams confirms students' ability to plan, configure, and implement the Windows Server 2012 services, such as server deployment, server virtualization, and network access and infrastructure. This complete ready-to-teach MOAC program is mapped to all of the exam objectives.

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

Provides information on best practices and strategies for SharePoint implementation, including integrating SharePoint with external data sources, governance strategies, planning for disaster recovery, records management, and security.

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

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.

Desired State Configuration (DSC) is a powerful configuration management platform that makes it easier than ever to perform cross-platform configuration management of your infrastructure, whether on-premise or in the cloud. DSC provides the management platform and Application Programming Interface (API) that can be used with any programming language. Windows PowerShell Desired State Configuration Revealed will take you through this new technology from start to finish and demonstrates the DSC interfaces through Windows PowerShell. DSC allows you to manage target devices by simply declaring what state you want them to be in, using new declarative language extensions, rather than writing detailed instructions to get them into that state. This makes continuous delivery in Windows easier than ever before. In an environment where changes and deployments are happening all the time, DSC makes the necessary adjustments to the system so you don't have to. Windows PowerShell Desired State Configuration Revealed starts with an overview of the configuration management features in Windows, followed by a discussion of the architecture of DSC and its components. You'll then explore DSC's built-in features and resources, followed by some of the different methods provided for delivering configuration information within your ecosystem, and learn about configuration monitoring and reporting. In the latter part of the book, you'll find out how to get more power out of DSC by writing your own custom DSC resources, including a range of useful examples, and the book concludes with vital information on deploying and troubleshooting DSC in a production environment, along with some expert tips and tricks you might find useful along the way. Windows PowerShell Desired State Configuration Revealed is your one-stop guide to this new technology and how it can change your working life for the better.

Learn the fundamentals of PowerShell to build reusable scripts and functions to automate administrative tasks with Windows About This Book Harness the capabilities of the PowerShell system to get started quickly with server automation Learn to package commands into a reusable script and add control structures and parameters to make them flexible Get to grips with cmdlets that allow you to perform administration tasks efficiently Who This Book Is For This book is intended for Windows administrators or DevOps users who need to use PowerShell to automate tasks. Whether you know nothing about PowerShell or know just enough to get by, this guide will give you what you need to go to take your scripting to the next level. What You Will Learn Learn to verify your installed version of PowerShell, upgrade it, and start a PowerShell session using the ISE Discover PowerShell commands and cmdlets and understand PowerShell formatting Use the PowerShell help system to understand what particular cmdlets do Utilise the pipeline to perform typical data manipulation Package your code in scripts, functions, and modules Solve common problems using basic file input/output functions Find system information with WMI and CIM Automate IIS functionality and manage it using the WebAdministration module In Detail Windows PowerShell is a task-based command-line shell and scripting language designed specifically for system administration. Built on the .NET Framework, Windows PowerShell helps IT professionals and power users control and automate the administration of the Windows operating system and applications that run on Windows. PowerShell is great for batch importing or deleting large sets of user accounts and will let you collect a massive amount of detailed

system information in bulk via WMI (Windows Management Instrumentation). Getting Started with PowerShell is designed to help you get up and running with PowerShell, taking you from the basics of installation, to writing scripts and web server automation. This book, as an introduction to the central topics of PowerShell, covers finding and understanding PowerShell commands and packaging code for reusability, right through to a practical example of automating IIS. It also includes topics such as installation and setup, creating scripts, automating tasks, and using Powershell to access data stores, registry, and file systems. You will explore the PowerShell environment and discover how to use cmdlets, functions, and scripts to automate Windows systems. Along the way, you will learn to perform data manipulation and solve common problems using basic file input/output functions. By the end of this book, you will be familiar with PowerShell and be able to utilize the lessons learned from the book to automate your servers. Style and approach A practical learning guide, complete with plenty of activities, examples and screenshots.

Over 100 recipes to help you leverage PowerShell to automate Windows Server 2016 manual tasks About This Book Automate Windows server tasks with the powerful features of the PowerShell Language Master new features such as DevOps, containers, and Nano servers, and speed up their performance using PowerShell Improve PowerShell's usability, and control and manage Windows-based environments by working through inviting recipes Who This Book Is For If you are a systems administrator, engineer, or an architect working with Windows Server 2016 and want to automate tasks with PowerShell, then this book is for you. A basic knowledge of PowerShell is expected. What You Will Learn Streamline routine administration processes Improve the performance and storage of your Windows server with enhanced large-scale PowerShell scripts Use DSC to leverage Windows server features Generate automatic reports that highlight unexpected changes in your environment Monitor performance and report on system utilization using detailed graphs and analysis Create and manage a reliable and redundant Hyper-V environment Manage your enterprise's patch level Utilize multiple tools and protocols to manage your environment In Detail This book showcases several ways that Windows administrators can use to automate and streamline their job. You'll start with the PowerShell and Windows Server fundamentals, where you'll become well versed with PowerShell and Windows Server features. In the next module, Core Windows Server 2016, you'll implement Nano Server, manage Windows updates, and implement troubleshooting and server inventories. You'll then move on to the Networking module, where you'll manage Windows network services and network shares. The last module covers Azure and DSC, where you will use Azure on PowerShell and DSC to easily maintain Windows servers. Style and approach This is a practical guide packed with attractive recipes to help you effectively use PowerShell to accelerate your daily administrative tasks with Windows server.

Fully updated for Windows Server 2012 R2! Prepare for Microsoft Exam 70-410 - and help demonstrate your real-world mastery of implementing and configuring core services in Windows Server 2012 R2. Designed for experienced IT professionals ready to advance their status, Exam Ref focuses on the critical thinking and decision making acumen needed for success at the MCSA level. Focus on the expertise measured by these objectives: Install and configure servers Configure server roles and features Configure Hyper-V Deploy and configure core network services Install and administer Active Directory Create and manage Group Policy This Microsoft Exam Ref: Organizes its coverage by exam objectives. Features strategic, what-if scenarios to challenge you.

Summary Discover how scripting is different from command-line PowerShell, as you explore concrete hands-on examples in this handy guide. The book includes and expands on many of the techniques presented in Learn PowerShell Toolmaking in a Month of Lunches. Purchase of the print book includes a free eBook in PDF, Kindle, and ePub formats from Manning Publications. About the Technology Automate it! With Microsoft's PowerShell language, you can write scripts to control nearly every aspect of Windows. Just master a few straightforward scripting skills, and you'll be able to eliminate repetitive manual tasks, create custom reusable tools, and build effective pipelines and workflows. Once you start scripting in PowerShell, you'll be amazed at how many opportunities you'll find to save time and effort. About the Book Learn PowerShell Scripting in a Month of Lunches teaches you how to expand your command-line PowerShell skills into effective scripts and tools. In 27 bite-size lessons, you'll discover instantly useful techniques for writing efficient code, finding and squashing bugs, organizing your scripts into libraries, and much more. Advanced scripters will even learn to access the .NET Framework, store data long term, and create nice user interfaces. What's Inside Designing functions and scripts Effective pipeline usage Dealing with errors and bugs Professional-grade scripting practices About the Reader Written for devs and IT pros comfortable with PowerShell and Windows. About the Authors Don Jones is a PowerShell MVP, speaker, and trainer who has written dozens of books on information technology topics. Jeffery Hicks is a PowerShell MVP and an independent consultant, trainer, and author. Don and Jeff coauthored Manning's Learn Windows PowerShell in a Month of Lunches, Learn PowerShell Toolmaking in a Month of Lunches, and PowerShell in Depth. Table of Contents PART 1 - INTRODUCTION TO SCRIPTING Before you begin Setting up your scripting environment WWPD: what would PowerShell do? Review: parameter binding and the PowerShell pipeline Scripting language crash course The many forms of scripting (and which to use) Scripts and security PART 2 - BUILDING A POWERSHELL SCRIPT Always design first Avoiding bugs: start with a command Building a basic function and script module Going advanced with your function Objects: the best kind of output Using all the pipelines Simple help: making a comment Dealing with errors Filling out a manifest PART 3 - GROWN-UP SCRIPTING Changing your brain when it comes to scripting Professional-grade scripting An introduction to source control with git Pestering your script Signing your script Publishing your script PART 4 - ADVANCED TECHNIQUES Squashing bugs Making script output prettier Wrapping up the .NET Framework Storing data-not in Excel! Never the end

PowerShell 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

NOTE: This title is also available as a free eBook on the Microsoft Download Center. It is offered for sale in print format as a convenience. Get a head start evaluating Windows Server 2012 R2 - with technical insights from a Microsoft MVP and members of the Windows Server product team. Based on final Windows Server 2012 R2 release-to-manufacturing (RTM) software, this guide introduces new features and capabilities, with scenario-based advice on how the platform can meet the needs of your business. Get the high-level overview you need to begin preparing your deployment now. Coverage includes: Server virtualization and cloud solutions Availability and scalability Provisioning and storage management Security features, access, and data protection Infrastructure options Server management and automation

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