Vmware Vsphere Basics Guide

This concise guide follows a practical approach, covering solutions and methods to manage resources for virtualization. If you are a current vSphere administrator who is aspiring to start your virtualization journey with VMware vSphere and wants to learn how to manage your resources, this is the book for you. Readers are expected to have some prior knowledge of ESXi and vCenter.

Use this expert guide to prepare for the VCA-DCV exam VCA-DCV VMware Certified Associate on vSphere Study Guide:VCAD-510 is a comprehensive study guide for the VMwareCertified Associate – Data Center Virtualization exam.Hands-on examples, real-world scenarios, and expert reviewquestions cover the full exam blueprint, and the companion websiteoffers a suite of tools to help you prepare for the exam includingpractice exams, electronic flashcards, and a glossary of key terms.In addition, the website includes videos that demonstrate how tocomplete the more challenging tasks. Focused on practical skills,this study guide not only prepares you for the certification exam,but also for the duties expected of a VCA. The VMware Certified Associate-Data Center Virtualizationcertification targets those with limited virtualization and VMwaredata center technology experience, providing a springboard to thepopular VMware Certified Professional-Data Center Virtualizationcertification. Virtualization has become a high priority amongorganizations, and credentialed professionals are in high demand.This guide helps you prove a certain level of foundational skill inbasic virtualization technology, including the vSphere suite'sInfrastructure Services, Application Services, and vCenter Server.Topics include: Explaining data center virtualization concepts Identifying the core components of vSphere Networking and storage planning/configuration with vSphere Correlating VMware solutions to common business challenges The VCA-DCV certification is the only one with no instructor-ledtraining requirement, so a thorough study guide is an invaluabletool in you exam preparation. This book not only covers the fullexam, but also provides practice designed to actually improve theskills used every day on the job. VCA-DCV VMware CertifiedAssociate on vSphere Study Guide is more than just testprep—it's job prep.

Master vSphere 6 virtualization with hands-on practice and bonus preview exams VCP6-DCV: VMware Certified Professional-Data Center Virtualization on vSphere 6 Study Guide is your ultimate guide to preparing for exam 2VO-621. This Study Guide provides 100% coverage of all exam objectives and offers a unique set of study tools including assessment tests, objective map, real-world scenarios, hands-on exercises, and much more so you can be confident come exam day. You will also receive access to the superior Sybex interactive online learning environment that provides additional study tools including electronic flashcards and bonus practice exams. More than just a study guide, this book bridges the gap between exam prep and real-world on the job skills by focusing on the key information VMware professionals need to do the job. You'll master the vCenter Server and ESXi from planning and installation through upgrade and security, and develop an in-depth understanding of vSphere networking and storage, vApp deployment, service level establishment, troubleshooting, monitoring implementation, and so much more. Study 100% of exam 2V0-621 objectives Practice your skills with hands-on exercises Gain professional insight from real-world scenarios Test your understanding with review questions, practice tests, and more Virtualization is

the number-one IT priority for organizations across public and private sectors, and VMware is the dominant force in the virtualization space. The VCP6-DCV certification gives you a highly marketable credential in terms of employment, but first you must pass this challenging exam. VCP6-DCV gives you the power of Sybex exam prep and the skills you need to excel at the job.

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.

Lay the foundations for data center virtualization using VMware vSphere 6 and strengthen your understanding of its power About This Book Learn how server virtualization is achieved and how a virtual infrastructure is built using VMware's products and solutions. Design to create a scalable and responsive virtualization platform for hosting the virtual machine workloads of a business. Manage compute, network and storage resources of a virtual infrastructure. Relevant conceptual diagrams, flowcharts and screen-captures enable in-depth comprehension of the concepts. Also, the concise writing style makes this book a very easy read. Who This Book Is For This is a book for any experienced technologist who is new to the realm of Data Center virtualization wanting to find a way to get a head start in learning how to design, implement and manage a modern day datacenter virtualized using VMware's core infrastructure solutions. It could also act a comprehensive reference guide for Infrastructure Architects and System Administrators to aid them in their day to day activities. This book could easily find its place in reference materials used by professionals for VCP and VCAP certification exams. Keep in mind however that the book is not written to follow as a blueprint for either of the exams. What You Will Learn Understand the architecture of the hypervisor and learn how to install deploy and configure ESXi hosts Find out what forms a VMware Virtual Machine can take and also learn how to create and manage them Familiarize yourself with the concepts of vSphere Storage and learn how to present and manage storage in a vSphere environment Create and manage software switching constructs such as the vNetwork Standard Switch and vNetwork Distributed Switches Monitor the performance of a vSphere environment using tools such as the vCenter Performance Graphs and 'esxtop' Manage SSL certificates in a vSphere environment Upgrade and patch a vSphere environment using vSphere Update Manager In Detail Computer virtualization is a method to enable the running of multiple application workloads on a machine to achieve efficient utilization and reduce the number of physical machines in a data center. This has now become the foundation of many modern day data centers. What began as a technology to virtualize x86 architecture has now grown beyond the limits of a server's hardware and into the realm of storage and network virtualization. VMware is currently the market leader in developing data center virtualization solutions. This book goes into the details of designing and implementing VMware solutions that form the foundation of a VMware infrastructure. The book begins by introducing you to the concepts of server virtualization followed by the architecture of VMware's hypervisor –

ESXi and then by its installation and configuration. You then learn what is required to manage a vSphere environment and configure advanced management capabilities of vCenter. Next you are taken through topics on vSphere Networking, Storage, ESXi Clustering, Resource Management and Virtual Machine Management. You will then be introduced to SSL Certificate Management and its use in a vSphere environment. Finally, you will learn about the lifecycle management of a vSphere environment by effectively monitoring, patching and upgrading vSphere components using Update Manager. By the end of the book, you will know how to use VMware's vSphere suite of components to lay the foundation of a modern day virtual infrastructure. Style and approach This is an easy-to-follow guide that will give you everything you need to fully understand the concepts involved in data center virtualization. The screenshots, concept diagrams, and flowcharts included will help you understand the subjects discussed better.

A clear, comprehensive guide to VMware's latest virtualization solution Mastering VMware NSX for vSphere is the ultimate guide to VMware's network security virtualization platform. Written by a rock star in the VMware community, this book offers invaluable guidance and crucial reference for every facet of NSX, with clear explanations that go far beyond the public documentation. Coverage includes NSX architecture, controllers, and edges; preparation and deployment; logical switches; VLANS and VXLANS; logical routers; virtualization; edge network services; firewall security; and much more to help you take full advantage of the platform's many features. More and more organizations are recognizing both the need for stronger network security and the powerful solution that is NSX; usage has doubled in the past year alone, and that trend is projected to grow—and these organizations need qualified professionals who know how to work effectively with the NSX platform. This book covers everything you need to know to exploit the platform's full functionality so you can: Step up security at the application level Automate security and networking services Streamline infrastructure for better continuity Improve compliance by isolating systems that handle sensitive data VMware's NSX provides advanced security tools at a lower cost than traditional networking. As server virtualization has already become a de facto standard in many circles, network virtualization will follow quickly—and NSX positions VMware in the lead the way vSphere won the servers. NSX allows you to boost security at a granular level, streamline compliance, and build a more robust defense against the sort of problems that make headlines. Mastering VMware NSX for vSphere helps you get up to speed quickly and put this powerful platform to work for your organization. vSphere allows you to transform your IT infrastructure into a private cloud, then bridge it to public clouds on demand, delivering an IT infrastructure as an easily accessible service. This book is a fast-paced guide that enables you to explore and harness the vast potential of VMware vSphere. The book begins by providing you with a rapid introduction to VMware vSphere architecture and the major considerations for VMware vSphere design. Beginning with the essentials of VMware vSphere, it will get you started with VMware ESXi host, cluster, vCenter and patterns that are required to be applied while designing your VMware vSphere. As you progress through the chapters, you will learn about analyzing the key components that are needed for a network. By the end of the book, you will have also learned about the major factors influencing vCloud needs and have finalized the requirements for designing a vCloud.

Drive Even More Value from Virtualization: Write VMware® Applications that Automate Virtual Infrastructure Management Companies running VMware have already achieved enormous gains through virtualization. The next wave of benefits will come when they reduce the time and effort required to run and manage VMware platforms. The VMware Infrastructure Software Development Kit (VI SDK) includes application programming interfaces (APIs) that allow developers and administrators to do just that. Until now, there has been little documentation for the APIs. In VMware VI and vSphere SDK, software architect Steve Jin demystifies the entire VMware VI and new vSphere SDK and offers detailed, task-based coverage of using the APIs to manage VMware more efficiently and cost-effectively. Jin walks you through using the VI SDK and cloud-computing vSphere SDK to manage ESX servers, ESX clusters, and VirtualCenter servers in any environment–no matter how complex. Drawing on his extensive expertise working with VMware strategic partners and enterprise customers, he places the VI SDK in practical context, presenting realistic samples and proven best practices for building robust, effective solutions. Jin demonstrates how to manage every facet of a VMware environment, including inventory, host systems, virtual machines (VMs), snapshots, VMotion, clusters, resource pools, networking, storage, data stores, events, alarms, users, security, licenses, and scheduled tasks. Coverage includes Understanding how the VI SDK fits into your VMware VI and Cloud Ready vSphere Environment Discovering the VI and vSphere SDK from the bottom up Using the author's new VI Java API to write shorter, faster, and more maintainable code Managing VI and vSphere inventory and configurations Moving running VMs and storages across different physical platforms without disruption Optimizing system resources, hardening system securities, backing up VMs and other resources Leveraging events, alarms, and scheduled tasks to automate the system management Developing powerful applications that integrate multiple API features and run on top of or alongside VMware platforms Using the VI SDK to monitor performance Scripting with the VI SDK: building solutions with VI Perl, PowerShell, and Jython Avoiding the pitfalls that trip up VMware VI developers Integrating with and extending VMware platforms using VI SDK This book is an indispensable resource for all VMware developers and administrators who want to get more done in less time; for hardware vendors who want to integrate their products with VMware; for ISV developers building new VMware applications; and for every professional and student seeking a deeper mastery of virtualization.

Maximum vSphere™ is the comprehensive, up-to-the-minute, working reference for everyone who plans, implements, or administers VMware vSphere. It brings together proven best practices, tips, and solutions for achieving outstanding performance and reliability in your production environment. This book provides crucial knowledge you won't find anywhere else, including information about powerful new vSphere 4 techniques drawn from experienced vSphere practitioners. You'll find sophisticated, expert coverage of virtual machines, vCenter Server, networking, storage, backups, VMotion, Fault Tolerance, vSphere management, installation, upgrades, security, and much more. Author and vExpert Eric Siebert takes the same hands-on approach that made his VMware® V13 Implementation and Administration so popular with working professionals, Whether you're implementing or managing vSphere 4, upgrading from older virtualization technologies, or taking new responsibilities in any VMware environment, you'll find this book indispensable.

Deliver great business value by adopting the virtualization platform VMware vSphere 6.5, from

the design to the deployment About This Book This new edition is based on vSphere 6.5 and has described new features in different areas, including management, security, scalability, availability and so on. Design, deploy and manage VMware datacenters Implement monitoring and security of VMware workloads with ease. Who This Book Is For If you are an administrator, infrastructure engineer, IT architect, or an IT consultant and analyst who has basic knowledge of VMware vSphere and now wants to master it, then this book is for you. What You Will Learn Get a deep understanding of vSphere 6.5 functionalities Design and plan a virtualization environment based on vSphere 6.5 Manage and administer a vSphere 6.5 environment and resources Get tips for the VCP6-DCV and VCIX6-DCV exams (along with use of the vSphere 6 documentation) Implement different migration techniques to move your workload across different environments. Save your configuration, data and workload from your virtual infrastructure. In Detail VMware vSphere 6.5 provides a powerful, flexible and secure foundation for next-generation applications which helps you create an effective digital transformation. This book will be based on VMware vSphere 6.5 which empowers you to virtualize any complex application with ease. You'll begin by getting an overview of all the products, solutions and features of the vSphere 6.5 suite, comparing the evolutions with the previous releases. Next ,you'll design and plan a virtualization infrastructure to drive planning and performance analysis. Following this , you will be proceeding with workflow and installation of components. New network trends are also covered which will help you in optimally designing the vSphere environment. You will also learn the practices and procedures involved in configuring and managing virtual machines in a vSphere infrastructure. With vSphere 6.5, you'll make use of significantly more powerful capabilities for patching, upgrading, and managing the configuration of the virtual environment. Next we'll focus on specific availability and resiliency solutions in vSphere. Towards the end of the book you will get information on how to save your configuration, data and workload from your virtual infrastructure. By the end of the book you'll learn about VMware vSphere 6.5 right from design to deployment and management. Style and Approach This book acts as a reference guide providing real-world scenarios and a possible baseline for each virtualization project based on VMware vSphere.

Learn virtualization skills by building your own virtual machine Virtualization Essentials, Second Edition provides new and aspiring IT professionals with immersive training in working with virtualization environments. Clear, straightforward discussion simplifies complex concepts, and the hands-on tutorial approach helps you quickly get up to speed on the fundamentals. You'll begin by learning what virtualization is and how it works within the computing environment, then you'll dive right into building your own virtual machine. You'll learn how to set up the CPU, memory, storage, networking, and more as you master the skills that put you in-demand on the job market. Each chapter focuses on a specific goal, and concludes with review questions that test your understanding as well as suggested exercises that help you reinforce what you've learned. As more and more companies are leveraging virtualization, it's imperative that IT professionals have the skills and knowledge to interface with virtualization-centric infrastructures. This book takes a learning-by-doing approach to give you hands-on training and a core understanding of virtualization. Understand how virtualization works Create a virtual machine by scratch and migration Configure and manage basic components and supporting devices Develop the necessary skill set to work in today's virtual world Virtualization was initially used to build test labs, but its use has expanded to become best practice for a tremendous variety of IT solutions including high availability, business continuity, dynamic IT, and more. Cloud computing and DevOps rely on virtualization technologies, and the exponential spread of these and similar applications make virtualization proficiency a major value-add for any IT professional. Virtualization Essentials, Second Edition provides accessible, user-friendly, informative virtualization training for the forward-looking pro. 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 conceptsand become an xpert level administrator Who This Book Is For The books 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 vShpere 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.

Complete Hands-On Help for Securing VMware vSphere and Virtual Infrastructure by Edward Haletky, Author of the Best Selling Book on VMware, VMware ESX Server in the Enterprise As VMware has become increasingly ubiquitous in the enterprise, IT professionals have become increasingly concerned about securing it. Now, for the first time, leading VMware expert Edward Haletky brings together comprehensive guidance for identifying and mitigating virtualization-related security threats on all VMware platforms, including the new cloud computing platform, vSphere. This book reflects the same hands-on approach that made Haletky's VMware ESX Server in the Enterprise so popular with working professionals. Haletky doesn't just reveal where you might be vulnerable; he tells you exactly what to do and how to reconfigure your infrastructure to address the problem. VMware vSphere and Virtual Infrastructure Security begins by reviewing basic server vulnerabilities and explaining how security differs on VMware virtual servers and related products. Next, Haletky drills deep into the key components of a VMware installation, identifying both real and theoretical exploits, and introducing effective countermeasures. Coverage includes • Viewing virtualization from the attacker's perspective, and understanding the new security problems it can introduce • Discovering which security threats the vmkernel does (and doesn't) address • Learning how VMsafe enables third-party security tools to access the vmkernel API • Understanding the security implications of VMI, paravirtualization, and VMware Tools • Securing virtualized storage: authentication, disk encryption, virtual storage networks, isolation, and more • Protecting clustered virtual environments that use VMware High Availability, Dynamic Resource Scheduling, Fault Tolerance, vMotion, and Storage vMotion • Securing the

deployment and management of virtual machines across the network • Mitigating risks associated with backup, performance management, and other day-to-day operations • Using multiple security zones and other advanced virtual network techniques • Securing Virtual Desktop Infrastructure (VDI) • Auditing virtual infrastructure, and conducting forensic investigations after a possible breach informit.com/ph www.Astroarch.com

Covering the latest VMware vSphere software, an essential book aimed at solving vSphere performance problems before they happen VMware vSphere is the industry's most widely deployed virtualization solution. However, if you improperly deploy vSphere, performance problems occur. Aimed at VMware administrators and engineers and written by a team of VMware experts, this resource provides guidance on common CPU, memory, storage, and network-related problems. Plus, step-by-step instructions walk you through techniques for solving problems and shed light on possible causes behind the problems. Divulges troubleshooting methodologies, performance monitoring tools, and techniques and tools for isolating performance problems Details the necessary steps for handling CPU, memory, storage, and network-related problems Offers understanding on the interactions between VMware vSphere and CPU, memory, storage, and network VMware vSphere Performance is the resource you need to diagnose and handle VMware vSphere performance problems, and avoid them in the future.

Understand and implement VMware Virtual SAN: the heart of tomorrow's Software-Defined Datacenter (SDDC) VMware's breakthrough Software-Defined Datacenter (SDDC) initiative can help you virtualize your entire datacenter: compute, storage, networks, and associated services. Central to SDDC is VMware Virtual SAN (VSAN): a fully distributed storage architecture seamlessly integrated into the hypervisor and capable of scaling to meet any enterprise storage requirement. Now, the leaders of VMware's wildly popular Virtual SAN previews have written the first authoritative guide to this pivotal technology. You'll learn what Virtual SAN is, exactly what it offers, how to implement it, and how to maximize its value. Writing for administrators, consultants, and architects, Cormac Hogan and Duncan Epping show how Virtual SAN implements both object-based storage and a policy platform that simplifies VM storage placement. You'll learn how Virtual SAN and vSphere work together to dramatically improve resiliency, scale-out storage functionality, and control over QoS. Both an up-to-the-minute reference and hands-on tutorial, Essential Virtual SAN uses realistic examples to demonstrate Virtual SAN's most powerful capabilities. You'll learn how to plan, architect, and deploy Virtual SAN successfully, avoid gotchas, and troubleshoot problems once you're up and running. Coverage includes Understanding the key goals and concepts of Software-Defined Storage and Virtual SAN technology Meeting physical and virtual requirements for safe Virtual SAN implementation Installing and configuring Virtual SAN for your unique environment Using Storage Policy Based Management to control availability, performance, and reliability Simplifying deployment with VM Storage Policies Discovering key Virtual SAN architectural details: caching I/O, VASA, witnesses, pass-through RAID, and more Ensuring efficient day-to-day Virtual SAN management and maintenance Interoperating with other VMware features and products Designing and sizing Virtual SAN clusters Troubleshooting, monitoring, and performance optimization

4+ Hours of Video Instruction VMware vSphere Virtualization Fundamentals LiveLessons is an excellent place to start your virtualization journey, covering basic fundamentals of a VMware vSphere virtual data center. Bestselling author and VCI (VMware Certified Trainer) Bill Ferguson is ready to get you started with vSphere, VMware vSphere the leading product for creating virtualized data centers. Virtualization is one of the most interesting and beneficial concepts in today's IT world. Nearly everyone in IT has some experience with virtualized data. Many IT and business professionals would like to learn more about the concepts, but have no idea where to begin. This LiveLesson, part of the VMware Press Series, is an excellent starting

point. This video will teach you the fundamentals of virtualization topics as they relate to (create, manage, and control) a VMware vSphere virtual data center. This video begins with coverage of core virtualization concepts and then becomes increasingly specific with regard to vSphere, virtual machines, virtual resources, and the features that allow for management and control of a virtual data center. It starts at a beginner level and gradually builds on the specifics of VMware and vSphere related topics. By the end of the video, the viewer should have an understanding of the basics of vSphere. Lessons: Introduction to VMware vSphere Virtualization Fundamentals LiveLessons Lesson 1 - Core VMware Virtualization Concepts 1.1 Comparing Physical Infrastructure with Virtual Infrastructure 1.2 Comparing Physical Architecture with Virtual Architecture 1.3 Real-World Benefits of Using Virtual Machines Lesson 2 - What is vSphere? 2.1 vSphere Concepts 2.2 vSphere Networking 2.3 vSphere Storage 2.4 vSphere Management Lesson 3 - Understanding Virtual Machines 3.1 Virtual Machine Files and Concepts 3.2 Virtual Machine Hardware 3.3 Guest OS Installation Options 3.4 Faster Ways to Deploy Virtual Machines Lesson 4 - Managing Virtual Machines 4.1 Hardware Settings 4.2 Options Settings 4.3 Resource Settings Lesson 5 - Allocating CPU and Memory Resources 5.1 Patented Technologies for Memory Efficiency 5.2 Best Practices for Virtual Machine CPU and Memory 5.3 Using Shares to Establish Priority 5.4 Using Limits and Reservations When Needed 5.5 Using Resource Pools Lesson 6 - Scalability Features in vSphere 6.1 vMotion 6.2 Storage vMotion 6.3 High Availability and Fault Tolerance 6.4 Distributed Resource Scheduler 6.5 Storage Distributed Resource Scheduler Lesson 7 - Performance Monitoring and Tuning 7.1 vCenter Performance Charts 7.2 vCenter Alarms 7.3 Resxtop Lesson 8 - Extending vSphere Capabilities to the Cloud 8.1 Tools for Managing Large or Multiple Virtual Datacenters 8.2 Tools for Managing a Cloud Environment Summary of VMware vSphere Virtualization Fundamentals LiveLessons LiveLessons Video Training series publishes hundreds of hands-on, expert-led video tutorials covering a wide selection of technology topics designed to teach you the skills you need to succeed. This professional and personal technology video series features world-leading author instructors published by your trusted technology brands: Addison-Wesley, Cisco Press, VMware Press, IBM Press, Pearson IT Certification, Prentice Hall, Sams, and Que. Topics include: IT Certification, Programming, Web Development, Mobile Development, Home & Office Technologies, Business & Management, and more. View All LiveLessons http: //www.pearsonitcertification.com/imprint/series_detail.aspx?ser=2185116 VMware Press is the official publisher of VMware books and training materials, which provide guidance on the critical topics facing today's technology professionals and students. Enterprises, as well as small- and medium-sized organizations, adopt virtualization as a more agile way of scaling IT to meet business needs. VMware Press provides proven, technically accurate information that will help them meet their goals for customizing, building, and maintaining their virtual environment. With books, certification and study guides, video training, and learning tools produced by world-class architects and IT experts, VMware Press helps IT professionals master a diverse range of topics on virtualization and cloud computing and is the official source of reference materials for preparing for the VMware Certified Professional Examination. For more information about VMware Press, please visit vmwarepress.com. Your One-Stop Reference for VMware vSphere Automation If you manage vSphere in a Windows environment, automatingroutine tasks can save you time and increase efficiency. VMwarevSphere PowerCLI is a set of pre-built commands based on WindowsPowerShell that is designed to help you automate vSphere processesinvolving virtual machines, datacenters, storage, networks, andmore. This detailed guide—using a practical, task-basedapproach and real-world examples—shows you how to get themost out of PowerCLI's handy cmdlets. Learn how to: Automate vCenter Server and ESX/ESX(i) Server deployment andconfiguration Create and configure virtual machines and use vApps Secure, back up, and restore your virtual

machines Monitor, audit, and report the status of your vSphereenvironment Use the PowerCLI SDK, PowerWF Studio, and vEcoShell Schedule and view automation Add a GUI front end to your scripts

Data Center Virtualization Fundamentals For many IT organizations, today''s greatest challenge is to drive more value, efficiency, and utilization from data centers. Virtualization is the best way to meet this challenge. Data Center Virtualization Fundamentals brings together the comprehensive knowledge Cisco professionals need to apply virtualization throughout their data center environments. Leading data center expert Gustavo A. A. Santana thoroughly explores all components of an end-to-end data center virtualization solution, including networking, storage, servers, operating systems, application optimization, and security. Rather than focusing on a single product or technology, he explores product capabilities as interoperable design tools that can be combined and integrated with other solutions, including VMware vSphere. With the author''s guidance, you''ll learn how to define and implement highly-efficient architectures for new, expanded, or retrofit data center projects. By doing so, you can deliver agile application provisioning without purchasing unnecessary infrastructure, and establish a strong foundation for new cloud computing and IT-as-a-service initiatives. Throughout, Santana illuminates key theoretical concepts through realistic use cases, real-world designs, illustrative configuration examples, and verification outputs. Appendixes provide valuable reference information, including relevant Cisco data center products and CLI principles for IOS and NX-OS. With this approach, Data Center Virtualization Fundamentals will be an indispensable resource for anyone preparing for the CCNA Data Center, CCNP Data Center, or CCIE Data Center certification exams. Gustavo A. A. Santana, CCIE No. 8806, is a Cisco Technical Solutions Architect working in enterprise and service provider data center projects that require deep integration across technology areas such as networking, application optimization, storage, and servers. He has more than 15 years of data center experience, and has led and coordinated a team of specialized Cisco engineers in Brazil. He holds two CCIE certifications (Routing & Switching and Storage Networking), and is a VMware Certified Professional (VCP) and SNIA Certified Storage Networking Expert (SCSN-E). A frequent speaker at Cisco and data center industry events, he blogs on data center virtualization at gustavoaasantana.net. Learn how virtualization can transform and improve traditional data center network topologies Understand the key characteristics and value of each data center virtualization technology Walk through key decisions, and transform choices into architecture Smoothly migrate existing data centers toward greater virtualization Burst silos that have traditionally made data centers inefficient Master foundational technologies such as VLANs, VRF, and virtual contexts Use virtual PortChannel and FabricPath to overcome the limits of STP Optimize cabling and network management with fabric extender (FEX) virtualized chassis Extend Layer 2 domains to distant data center sites using MPLS and Overlay Transport Virtualization (OTV) Use VSANs to overcome Fibre Channel fabric challenges Improve SAN data protection, environment isolation, and scalability Consolidate I/O through Data Center Bridging and FCoE Use virtualization to radically simplify server environments Create server profiles that streamline "bare metal" server provisioning "Transcend the rack" through virtualized networking based on Nexus 1000V and VM-FEX Leverage opportunities to deploy virtual network services more efficiently Evolve data center virtualization toward full-fledged private clouds -Reviews - "The variety of material that Gustavo covers in this work would appeal to anyone responsible for Data Centers today. His grasp of virtualization technologies and ability to relate it in both technical and non-technical terms makes for compelling reading. This is not your ordinary tech manual. Through use of relatable visual cues, Gustavo provides information that is easily recalled on the subject of virtualization, reaching across Subject Matter Expertise domains. Whether you consider yourself well-versed or a novice on the topic, working in large or small environments, this work will provide a clear understanding of the

diverse subject of virtualization." -- Bill Dufresne, CCIE 4375, Distinguished Systems Engineer, Cisco (Americas) "..this book is an essential reference and will be valuable asset for potential candidates pursuing their Cisco Data Center certifications. I am confident that in reading this book, individuals will inevitably gain extensive knowledge and hands-on experience during their certification preparations. If you''re looking for a truly comprehensive guide to virtualization, this is the one!" -- Yusuf Bhaiji, Senior Manager, Expert Certifications (CCIE, CCDE, CCAr), Learning@Cisco "When one first looks at those classic Cisco Data Center blueprints, it is very common to become distracted with the overwhelming number of pieces and linkages. By creating a solid theoretical foundation and providing rich sets of companion examples to illustrate each concept, Gustavo''s book brings hope back to IT Professionals from different areas of expertise. Apparently complex topics are demystified and the insertion of products, mechanisms, protocols and technologies in the overall Data Center Architecture is clearly explained, thus enabling you to achieve robust designs and successful deployments. A must read... Definitely!" -- Alexandre M. S. P. Moraes, Consulting Systems Engineer -- Author of "Cisco Firewalls"

From the author of the vSphere Clustering Deep Dive series - The VMware vSphere 6.5 Host Resources Deep Dive is a guide to building consistent high-performing ESXi hosts. A book that people can't put down. Written for administrators, architects, consultants, aspiring VCDX-es and people eager to learn more about the elements that control the behavior of CPU, memory, storage and network resources. This book shows that we can fundamentally and materially improve the systems we're building. We can make the currently running ones consistently faster by deeply understanding and optimizing our systems. The reality is that specifics of the infrastructure matter. Details matter. Especially for distributed platforms which abstract resource layers, such as NSX and vSAN. Knowing your systems inside and out is the only way to be sure you've properly handled those details. It's about having a passion for these details. It's about loving the systems we build. It's about understanding them end-to-end. This book explains the concepts and mechanisms behind the physical resource components and the VMkernel resource schedulers, which enables you to: Optimize your workload for current and future Non-Uniform Memory Access (NUMA) systems. Discover how vSphere Balanced Power Management takes advantage of the CPU Turbo Boost functionality, and why High Performance does not. How the 3-DIMMs per Channel configuration results in a 10-20% performance drop. How TLB works and why it is bad to disable large pages in virtualized environments. Why 3D XPoint is perfect for the vSAN caching tier. What queues are and where they live inside the end-to-end storage data paths. Tune VMkernel components to optimize performance for VXLAN network traffic and NFV environments. Why Intel's Data Plane Development Kit significantly boosts packet processing performance.

The Best Fully Integrated Study System Available With hundreds of practice questions and hands-on exercises, VCP VMware Certified Professional vSphere 4 Study Guide covers what you need to know--and shows you how to prepare--for this challenging exam. 100% complete coverage of all official ojectives for exam VCP410 Inside the Exam sections in every chapter highlighting key exan tipics covered Two-minute drills for quick review at the end of every chapter Simulated exam questions match the format, tone, topics, and difficulty of the real exam Covers all the exam topics, including: vSphere * Server Virtualization and the VMware Product Line * Installing, Upgrading, and Configuring ESX Server * Installing and Configuring vCenter Server * Understanding Networking and Virtual Switches on ESX/ESXi Servers * Understanding and Configuring Storage on ESX/ESXi Servers * Creating, Deploying, and Managing Virtual Machines and vApps * Managing Compliance * Establishing Service Levels * Basic Troubleshooting and Alarm Management CD-ROM includes: Complete MasterExam practice testing engine, featuring: One full practice exam, Detailed answers with explanations, and Score Report performance assessment tool Flash card study deck Electronic book for

studying on the go With free online registration: Bonus downloadable MasterExam practice test "Now that virtualization has blurred the lines between networking and servers, many VMware specialists need a stronger understanding of networks than they may have gained in earlier IT roles. Networking for VMware administrators fills this crucial knowledge gap. Writing for VMware professionals, Christopher Wahl and Steve Pantol illuminate the core concepts of modern networking, and show how to apply them in designing, configuring, and troubleshooting any virtualized network environment"--P. [4] of cover.

A plain-English guide to the market-leading virtualization and cloud computing technology With virtualization, a single server can host dozens or hundreds of virtual machines running a variety of operating systems, and even hook them together in a virtual network or cloud infrastructure. This practical guide shows you how to create a virtual system using the VMware VSphere environment. You'll find all the information you need to understand, design, and deploy one—without getting overwhelmed with technical detail. And once you're up and running, this book is the perfect reference for maintenance and troubleshooting issues. Introduces you to virtualization and VMware's virtualization/cloud computing technology, the most recent version is VMware vSphere Shows you how to design a vSphere environment Covers installation, deployment, management, maintenance, and troubleshooting Provides what IT managers and system administrators need to roll out their first virtualized or cloud infrastructure, or to get up to speed on VMware's technology Get up and running on the cloud with VMware vSphere For Dummies!

With scores of step-by-step solutions, this cookbook helps you work with VMware ESXi in a wide range of network environments. You'll not only learn the basics—how to pool resources from hardware servers, computer clusters, networks, and storage, and then distribute them among virtual machines—but also how to overcome the stumbling blocks you'll encounter when you monitor systems, troubleshoot problems, and deal with security. This expanded second edition covers recent advances in vCloud Director and vShield cloud security. Ideal for system administrators of any level, VMware Cookbook also includes valuable information to help you determine your virtualization needs. Move into the cloud with vCloud Director, and secure virtual datacenters with vSphere Secure and monitor your virtual environment from the command line Manage disk, SSD, and SAN storage implementation and configuration Discover options for managing resources, such as clustering, shares, and hot add/hotplug support Configure logical and physical networks, including virtual switches and software and hardware adapters Make virtual machine replication easier by automating ESXi installations Gain valuable tips for configuration and fine-tuning

Kubernetes radically changes the way applications are built and deployed in the cloud. Since its introduction in 2014, this container orchestrator has become one of the largest and most popular open source projects in the world. The updated edition of this practical book shows developers and ops personnel how Kubernetes and container technology can help you achieve new levels of velocity, agility, reliability, and efficiency. Kelsey Hightower, Brendan Burns, and Joe Beda—who've worked on Kubernetes at Google and beyond—explain how this system fits into the lifecycle of a distributed application. You'll learn how to use tools and APIs to automate scalable distributed systems, whether it's for online services, machine learning applications, or a cluster of Raspberry Pi computers. Create a simple cluster to learn how Kubernetes works Dive into the details of deploying an application using Kubernetes Learn specialized objects in Kubernetes, such as DaemonSets, jobs, ConfigMaps, and secrets Explore deployments that tie together the lifecycle of a complete application Get practical examples of how to develop and deploy real-world applications in Kubernetes

Master your virtual environment with the ultimate vSphere guide Mastering VMware vSphere 6 is the fully updated edition of the bestselling guide to VMware's virtualization solution. With comprehensive coverage of this industry-leading toolset, this book acts as an informative guide

and valuable reference. Step-by-step instruction walks you through installation, configuration, operation, security processes, and much more as you conquer the management and automation of your virtual environment. Written by certified VMware vExperts, this indispensable guide provides hands-on instruction and detailed conceptual explanations, anchored by practical applications and real-world examples. This book is the ultimate guide to vSphere, helping administrators master their virtual environment. Learn to: Install, configure, and manage the vCenter Server components Leverage the Support Tools to provide maintenance and updates Create and configure virtual networks, storage devices, and virtual machines Implement the latest features to ensure compatibility and flexibility Manage resource allocation and utilization to meet application needs Monitor infrastructure performance and availability Automate and orchestrate routine administrative tasks Mastering VMware vSphere 6 is what you need to stay up-to-date on VMware's industry-leading software for the virtualized datacenter.

Micro-segmentation - Day 1 brings together the knowledge and guidance for planning, designing, and implementing a modern security architecture for the software-defined data center based on micro-segmentation. VMware NSX makes network micro-segmentation feasible for the first time. It enables granular firewalling and security policy enforcement for every workload in the data center, independent of the network topology and complexity. Micro-segmentation with NSX already helped over a thousand organizations improve the security posture of their software-defined data center by fundamentally changing the way they approach security architecture. Micro-segmentation - Day 1 is your roadmap to simplify and enhance security within software-defined data centers running NSX. You will find insights and recommendations proven in the field for moving your organization from a perimeter-centric security posture to a micro-segmented architecture that provides enhanced security and visibility within your data center.

This book is intended for virtualization administrators who want to learn VMware vSphere quickly. It is assumed that you have some basic knowledge of virtualization and the vSphere environment.

Prepare for the VCP-DCV Exam Prepare yourself for VMware's challenging VMware Certified Professional-Data Center Virtualization exam, as well as the typical tasks and responsibilities you can expect as a VMware vSphere 5.5-certified professional. This comprehensive book guides you through all topics and objectives you'll need to know for the exam. These include planning, installing, upgrading, and securing vCenter Server and ESXi; configuring networking and storage; performing basic troubleshooting; and more. You'll also gain access to premium online practice and review tools. Prepares certification candidates for the VMware Certified Professional-Data Center Virtualization exam (VCP-DCV) Covers all exam objectives Features real-world scenarios, hands-on exercises, and challenging review questions Explores key topics such as securing vCenter and ESXi, planning and configuring vSphere networking and storage, creating and deploying virtual machines and vApps, establishing services levels, and more Includes access to online practice exams, flashcards, and other study tools If you want the best preparation for the VCP-DCV certification exam, you'll want VCP-DCV VMware Certified Professional Data Center Virtualization on vSphere Study Guide.

Make the most of software-defined data centers with revolutionary VMware technologies About This Book Learn how you can automate your data center operations and deploy and manage applications and services across your public, private, and hybrid infrastructure in minutes Drive great business results with cost-effective solutions without compromising on ease, security, and controls Transform your business processes and operations in a way that delivers any application, anywhere, with complete peace of mind Who This Book Is For If you are an IT professional or VMware administrator who virtualizes data centers and IT infrastructures, this book is for you. Developers and DevOps engineers who deploy applications and services

would also find this book useful. Data center architects and those at the CXO level who make decisions will appreciate the value in the content. What You Will Learn Understand and optimize end-to-end processes in your data center Translate IT processes and business needs into a technical design Apply and create vRO workflow automation functionalities to services Deploy NSX in a virtual environment Technically accomplish DevOps offerings Set up and use vROPs to master the SDDC resource demands Troubleshoot all the components of SDDC In Detail VMware offers the industry-leading software-defined data center (SDDC) architecture that combines compute, storage, networking, and management offerings into a single unified platform. This book uses the most up-to-date, cutting-edge VMware products to help you deliver a complete unified hybrid cloud experience within your infrastructure. It will help you build a unified hybrid cloud based on SDDC architecture and practices to deliver a fully virtualized infrastructure with cost-effective IT outcomes. In the process, you will use some of the most advanced VMware products such as VSphere, VCloud, and NSX. You will learn how to use vSphere virtualization in a software-defined approach, which will help you to achieve a fully-virtualized infrastructure and to extend this infrastructure for compute, network, and storage-related data center services. You will also learn how to use EVO:RAIL. Next, you will see how to provision applications and IT services on private clouds or IaaS with seamless accessibility and mobility across the hybrid environment. This book will ensure you develop an SDDC approach for your datacenter that fulfills your organization's needs and tremendously boosts your agility and flexibility. It will also teach you how to draft, design, and deploy toolsets and software to automate your datacenter and speed up IT delivery to meet your lines of businesses demands. At the end, you will build unified hybrid clouds that dramatically boost your IT outcomes. Style and approach With the ever-changing nature of businesses and enterprises, having the capability to navigate through the complexities is of utmost importance. This book takes an approach that combines industry expertise with revolutionary VMware products to deliver a complete SDDC experience through practical examples and techniques, with proven cost-effective benefits.

Use this expert guide to prepare for the VCA-DCV exam VCA-DCV VMware Certified Associate on vSphere Study Guide: VCAD-510 is a comprehensive study guide for the VMware Certified Associate – Data Center Virtualization exam. Hands-on examples, real-world scenarios, and expert review questions cover the full exam blueprint, and the companion website offers a suite of tools to help you prepare for the exam including practice exams, electronic flashcards, and a glossary of key terms. In addition, the website includes videos that demonstrate how to complete the more challenging tasks. Focused on practical skills, this study guide not only prepares you for the certification exam, but also for the duties expected of a VCA. The VMware Certified Associate-Data Center Virtualization certification targets those with limited virtualization and VMware data center technology experience, providing a springboard to the popular VMware Certified Professional-Data Center Virtualization certification. Virtualization has become a high priority among organizations, and credentialed professionals are in high demand. This guide helps you prove a certain level of foundational skill in basic virtualization technology, including the vSphere suite's Infrastructure Services, Application Services, and vCenter Server. Topics include: Explaining data center virtualization concepts Identifying the core components of vSphere Networking and storage planning/configuration with vSphere Correlating VMware solutions to common business challenges The VCA-DCV certification is the only one with no instructor-led training requirement, so a thorough study guide is an invaluable tool in you exam preparation. This book not only covers the full exam, but also provides practice designed to actually improve the skills used every day on the job. VCA-DCV VMware Certified Associate on vSphere Study Guide is more than just test prep—it's job prep.

Unleash the benefits of VMware vSphere 6.7 to provide a powerful, flexible and secure digital

infrastructure Key Features Deep dive into areas like management, security, scalability, availability and more with vSphere 6.7 Design, deploy and manage VMware vSphere virtual datacenters Implement monitoring and security of VMware workloads with ease Book Description vSphere 6.7 is the latest release of VMware's industry-leading, virtual cloud platform. It allows organisations to move to hybrid cloud computing by enabling them to run, manage, connect and secure applications in a common operating environment. This up-to-date, 2nd edition provides complete coverage of vSphere 6.7. Complete with step-by-step explanations of essential concepts, practical examples and self-assessment questions, you will begin with an overview of the products, solutions and features of the vSphere 6.7 suite. You'll learn how to design and plan a virtual infrastructure and look at the workflow and installation of components. You'll gain insight into best practice configuration, management and security. By the end the book you'll be able to build your own VMware vSphere lab that can run even the most demanding of workloads. What you will learn Explore the immense functionality of vSphere 6.7 Design, manage and administer a virtualization environment Get tips for the VCP6-DCV and VCIX6-DCV exams Understand how to implement different migration techniques across different environments Explore vSphere 6.7s powerful capabilities for patching, upgrading and managing the configuration of virtual environments. Understand core vSphere components Master resource management, disaster recovery, troubleshooting, monitoring and security Who this book is for This book is for Administrators, Infrastructure Engineers, Architects, and Consultants with basic knowledge of VMware vSphere. Explore the benefits of VMware vSphere 6.7 to provide a powerful, flexible, and secure virtual infrastructure, and secure apps. Next, you'll pick up on how to enhance your infrastructure with high-performance storage access, such as remote direct memory access (RDMA) and Persistent Key Features Design, deploy and manage VMware vSphere virtual data centers Implement monitoring and security of VMware workloads with ease Explore tips and techniques for designing a robust virtual infrastructure Book Description vSphere 6.7 is the latest release of VMware's industry-leading virtual cloud platform. By understanding how to manage, secure, and scale apps with vSphere 6.7, you can easily run even the most demanding of workloads. This Learning Path begins with an overview of the features of the vSphere 6.7 suite. You'll learn how to plan and design a virtual infrastructure. You'll also gain insights into best practices to efficiently configure, manage, and secure apps. Next, you'll pick up on how to enhance your infrastructure with high-performance storage access, such as remote direct memory access (RDMA) and Persistent memory. The book will even guide you in securing your network with security features, such as encrypted vMotion and VM-level encryption. Finally, by learning how to apply Proactive High Availability and Predictive Distributed Resource Scheduler (DRS), you'll be able to achieve enhanced computing, storage, network, and management capabilities for your virtual data center. By the end of this Learning Path, you'll be able to build your own VMware vSphere lab that can run high workloads. This Learning Path includes content from the following Packt products: VMware vSphere 6.7 Data Center Design Cookbook - Third Edition by Mike Brown and Hersey Cartwright Mastering VMware vSphere 6.7 - Second Edition by Martin Gavanda, Andrea Mauro, Karel Novak, and Paolo Valsecchi What you will learn Understand how to patch, upgrade, and manage a virtual environment with vSphere 6.7 Identify key factors related to a vSphere design Mitigate security risks and meet compliance requirements in a vSphere design Create a vSphere conceptual design by identifying technical and business requirements Map the logical resource design into the physical vSphere design Create professional vSphere design documentation Who this book is for This Learning Path is for administrators, infrastructure engineers, consultants, and architects who want to design virtualized data center environments using VMware vSphere 6.x (or previous versions of vSphere and the supporting components). Basic knowledge of VMware vSphere is required to get the most out of this

Learning Path.

Achieve the performance, scalability, and ROI your business needs What can you do at the start of a virtualization deployment to make things run more smoothly? If you plan, deploy, maintain, and optimize vSphere solutions in your company, this unique book provides keen insight and solutions. From hardware selection, network layout, and security considerations to storage and hypervisors, this book explains the design decisions you'll face and how to make the right choices. Written by two virtualization experts and packed with real-world strategies and examples, VMware vSphere Design, Second Edition will help you design smart design decisions. Shows IT administrators how plan, deploy, maintain, and optimize vSphere virtualization solutions Explains the design decisions typically encountered at every step in the process and how to make the right choices Covers server hardware selection, network topology, security, storage, virtual machine design, and more Topics include ESXi hypervisors deployment, vSwitches versus dvSwitches, and FC, FCoE, iSCSI, or NFS storage Find out the "why" behind virtualization design decisions and make better choices, with VMware vSphere Design, Second Edition, which has been fully updated for vSphere 5.x.

The 2013 edition of the bestselling vSphere book on the market Virtualization remains the hottest trend in the IT world, and VMware vSphere is the industry's most widely deployed virtualization solution. The demand for IT professionals skilled in virtualization and cloud-related technologies is great and expected to keep growing. This comprehensive Sybex guide covers all the features and capabilities of VMware vSphere, showing administrators step by step how to install, configure, operate, manage, and secure it. This perfect blend of hands-on instruction, conceptual explanation, and practical application is reinforced with real-world examples. Led by Scott Lowe and Nick Marshall, both VMware vExperts, the author team provides expertise that will prepare IT professionals to excel in using this virtualization technology. Virtualization is seen as a "best practice" for high availability and disaster recovery solutions, as well as for applications such as Exchange Server and SharePoint IDC estimates that there are as many as 7 million jobs available worldwide in virtualization and cloud technology Provides hands-on instruction in all the latest features and capabilities of VMware vSphere, with both conceptual explanations and practical applications Author team is lead by Scott Lowe and Nick Marshall, well-known VMware experts and popular bloggers Mastering VMware vSphere provides what every virtualization professional needs to know.

The VMware Certified Professional on vSphere 5—Datacenter Virtualization (VCP5-DCV) certification is the most desired certification for virtualization professionals, and this study guide covers all the requirements for the exam. Skill in virtualization is a top priority for companies when hiring IT staff, and VMware skills are in high demand. Part of the highly acclaimed Sybex Study Guide series, this comprehensive book guides you through planning, installing, and upgrading

ESXi; configuring networking, storage, and vCenter Server; deploying and managing virtual machines, and much more. Virtualization skills are in high demand by employers, and the VCP5-DCV certification enhances your marketability as an IT professional This Sybex Study Guide helps prepare you to successfully complete all parts of the exam Covers all aspects of ESXi planning, installation, upgrading, configuration, troubleshooting, and alarm management Includes 100% coverage of the exam objectives, real world scenarios, hands-on exercises, challenging review questions, bonus practice exams, and electronic flashcards If you want the best preparation for the VCP5-DCV exam, this is the study guide you need.

Deploy and configure vSphere infrastructure and learn to effectively create and administer vSphere virtual machines Key Features Implement advanced network virtualization techniques Configure and administer vSphere high availability Enhance your data center virtualization skills with practice questions and mock tests Book Description This exam guide enables you to install, configure, and manage the vSphere 6.5 infrastructure in all its components: vCenter Server, ESXi hosts, and virtual machines, while helping you to prepare for the industry standard certification. This data center book will assist you in automating administration tasks and enhancing your environment's capabilities. You will begin with an introduction to all aspects related to security, networking, and storage in vSphere 6.5. Next, you will learn about resource management and understand how to back up and restore the vSphere 6.5 infrastructure. As you advance, you will also cover troubleshooting, deployment, availability, and virtual machine management. This is followed by two mock tests that will test your knowledge and challenge your understanding of all the topics included in the exam. By the end of this book, you will not only have learned about virtualization and its techniques, but you'll also be prepared to pass the VCP6.5-DCV (2V0-622) exam. What you will learn Deploy and configure vSphere infrastructure Create and administer vSphere virtual machines Optimize, secure, and troubleshoot all vSphere components Implement vSphere HA on a vSAN cluster Understand how to back up and restore your vSphere 6.5 infrastructure Test your understanding of key concepts required through sample questions Who this book is for If you are interested in achieving Data Center Virtualization certification, this is the book is for you. You will also benefit from this book if you are a system administrator or network engineer. Some prior knowledge of virtualization can assist you in understanding key concepts covered in the book.