

VMware Vshield Administration Guide

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.

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.

VMware View 5 for the Desktop DELIVER HIGH-VALUE VIRTUAL DESKTOP INFRASTRUCTURE AND A SUPERIOR USER EXPERIENCE Companies that have already realized the benefits of VMware server virtualization are now discovering that VMware View 5 offers equally powerful opportunities on the client side. VMware View 5 is a comprehensive enterprise-class solution. But, until now, crucial information about it has been scattered throughout dozens of technical documents. In VMware View 5, leading desktop virtualization expert Paul O'Doherty combines this critical information with deep insights and best practices from his extensive enterprise deployment experience. O'Doherty walks through every step, from the earliest planning phases through configuration, implementation, and management. He addresses important considerations ranging from changes to end-user experience through support and performance management. You'll learn how to plan and smoothly stage virtual desktop infrastructure deployments, and avoid pitfalls associated with latency, scalability, storage, and networking. Whether you're an architect, system administrator, or virtualization consultant, this guide's proven techniques can help you dramatically improve IT productivity as you build environments that are far more flexible and easier to manage.

Master vSphere automation with this comprehensive reference VMware vSphere PowerCLI Reference, Automating vSphere Administration, 2nd Edition is a one-stop solution for vSphere automation. Fully updated to align with the latest vSphere and PowerCLI release, this detailed guide shows you how to get the most out of PowerCLI's handy cmdlets using real-world examples and a practical, task-based approach. You'll learn how to store, access, update, back up, and secure massive amounts of data quickly through the power of virtualization automation, and you'll get acquainted with PowerCLI as you learn how to automate management, monitoring, and life-cycle operations for vSphere. Coverage includes areas like the PowerCLI SDK, SRM, vCOPS, and vCloud Air. Plus guidance toward scheduling and viewing automation, using DevOps methodology and structured testing and source control of your PowerCLI scripts. Clear language and detailed explanations make this reference the manual you've been looking for. This book is your complete reference for managing vSphere in a Windows environment, with expert instruction and real-world application. Automate vCenter Server deployment and configuration Create and configure virtual machines, and utilize vApps Monitor, audit, and report the status of your vSphere environment Secure, back up, and restore your virtual machines Work with other vSphere components from your PowerCLI scripts Take control of your PowerCLI scripts through versioning and structured testing Don't spend another day slogging through routine systems management — automate it, with this invaluable guide.

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.

"Every developer working with the Web needs to read this book." -- David Heinemeier Hansson, creator of the Rails framework "RESTful Web Services finally provides a practical roadmap for constructing services that embrace the Web, instead of trying to route around it." -- Adam Trachtenberg, PHP author and eBay Web Services Evangelist You've built web sites that can be used by humans. But can you also build web sites that are usable by machines? That's where the future lies, and that's what RESTful Web Services shows you how to do. The World Wide Web is the most popular distributed application in history, and Web services and mashups have turned it into a powerful distributed computing platform. But today's web service technologies have lost sight of the simplicity that made the Web successful. They don't work like the Web, and they're missing out on its advantages. This book puts the "Web" back into web services. It shows how you can connect to the programmable web with the technologies you already use every day. The key is REST, the architectural style that drives the Web. This book: Emphasizes the power of basic Web technologies -- the HTTP application protocol, the URI naming standard, and the XML markup language Introduces the Resource-Oriented Architecture (ROA), a common-sense set of rules for designing RESTful web services Shows how a RESTful design is simpler, more versatile, and more scalable than a design based on Remote Procedure Calls (RPC) Includes real-world examples of RESTful web services, like Amazon's Simple Storage Service and the Atom Publishing Protocol Discusses web service clients for popular programming languages Shows how to implement RESTful services in three popular frameworks -- Ruby on Rails, Restlet (for Java), and Django (for Python) Focuses on practical issues: how to design and implement RESTful web services and clients This is the first book that applies the REST design philosophy to real web services. It sets down the best practices you need to make your design a success, and the techniques you need to turn your design into working code. You can harness the power of the Web for programmable applications: you just have to work with the Web instead of against it. This book shows you how.

DevOps for VMware® Administrators is the first book focused on using DevOps tools and practices with VMware technologies. The authors introduce high-value tools from third parties and VMware itself, and guide you through using them to improve the performance of all your virtualized systems and applications. You'll walk through automating and optimizing configuration management, provisioning, log management, continuous integration, and more. The authors also offer step-by-step coverage of deploying and managing applications at scale with Docker containers and Google Kubernetes. They conclude with an up-to-the-minute discussion of VMware's newest DevOps initiatives, including VMware vRealize Automation and VMware vRealize Code Stream. Coverage includes

- Understanding the challenges that DevOps tools and practices can help VMware administrators to solve
- Using Vagrant to quickly deploy Dev and Test environments that match production system specifications
- Writing Chef "recipes" that streamline server configuration and maintenance
- Simplifying Unix/Linux configuration management and orchestration with Ansible
- Implementing Docker containers for faster and easier application management
- Automating provisioning across the full lifecycle with Razor
- Integrating Microsoft PowerShell Desired State Configuration (DSC) and VMware PowerCLI to automate key Windows Server and vSphere VM admin tasks
- Using Puppet to automate infrastructure provisioning, configuration, orchestration, and reporting
- Supercharging log management with ELK (Elasticsearch, Logstash, Kibana)
- Supporting DevOps source code management with Git and continuous integration practices with Jenkins
- Achieving continuous integration, delivery, and deployment with VMware's vRealize Code Stream

Offers information on cloud theory and strategies and includes information on how to build and deliver a private cloud using VMware vCloud Director 5.1.

VMware vCloud Security provides the reader with in depth knowledge and practical exercises sufficient to implement a secured private cloud using VMware vCloud Director and vCloud Networking and Security. This book is primarily for technical professionals with system administration and security administration skills with significant VMware vCloud experience who want to learn about advanced concepts of vCloud security and compliance.

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.

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.

Network virtualization at your fingertips Key Features Over 70 practical recipes created by two VCIX-NV certified NSX experts Explore best practices to deploy, operate, and upgrade VMware NSX for vSphere Leverage NSX REST API using various tools from Python in VMware vRealize Orchestrator Book Description This book begins with a brief introduction to VMware's NSX for vSphere Network Virtualization solutions and how to deploy and configure NSX components and features such as Logical Switching, Logical Routing, layer 2 bridging and the Edge Services Gateway. Moving on to security, the book shows you how to enable micro-segmentation through NSX Distributed Firewall and Identity Firewall and how to do service insertion via network and guest introspection. After covering all the feature configurations for single-site deployment, the focus then shifts to multi-site setups using Cross-vCenter NSX. Next, the book covers management, backing up and restoring, upgrading, and monitoring using built-in NSX features such as Flow Monitoring, Traceflow, Application Rule Manager, and Endpoint Monitoring. Towards the end, you will explore how to leverage VMware NSX REST API using various tools from Python to VMware vRealize Orchestrator. What you will learn Understand, install, and configure VMware NSX for vSphere solutions Configure logical switching, routing, and Edge Services Gateway in VMware NSX for vSphere Learn how to plan and upgrade VMware NSX for vSphere Learn how to use built-in monitoring tools such as Flow Monitoring, Traceflow, Application Rule Manager, and Endpoint Monitoring Learn how to leverage the NSX REST API for management and automation using various tools from Python to VMware vRealize Orchestrator Who this book is for If you are a security and network administrator and looking to gain an intermediate level for network and security virtualization, then this book is for you. The reader should have a basic knowledge with VMware NSX.

The complete guide to provisioning and managing cloud-based Infrastructure as a Service (IaaS) data center solutions Cloud computing will revolutionize the way IT resources are deployed, configured, and managed for years to come. Service providers and customers each stand to realize tremendous value from this paradigm shift-if they can take advantage of it. Cloud Computing brings together the realistic, start-to-finish guidance they need to plan, implement, and manage cloud solution architectures for tomorrow's virtualized data centers. It introduces cloud 'newcomers' to essential concepts, and offers experienced operations professionals detailed guidance on delivering Infrastructure as a Service (IaaS), Platform as a Service (PaaS), and Software as a Service (SaaS). This book's replicable solutions and fully-tested best practices will help enterprises, services providers, consultants, and Cisco partners meet the challenge of provisioning end-to-end cloud infrastructures. Drawing on extensive experience working with leading cloud vendors and integrators, the authors present detailed operations workflow examples, proven techniques for operating cloud-based network, compute, and storage infrastructure; a comprehensive management reference architecture; and a complete case study demonstrating rapid, lower-cost solutions design. Cloud Computing will be an indispensable resource for all network/IT professionals and managers involved with planning, implementing, or managing the next generation of cloud computing services. • Review the key concepts needed to successfully deploy and cloud-based services • Transition common enterprise design patterns and use cases to the cloud • Master architectural principles and infrastructure design for 'real-time' managed IT services • Understand the Cisco approach to cloud-related technologies, systems, and services • Develop a cloud management architecture using ITIL, TMF, and ITU-TMN standards • Implement best practices for cloud service provisioning, activation, and management • Automate cloud infrastructure to simplify service delivery, monitoring and assurance • Choose and implement the right billing/chargeback approaches for your business • Design and build IaaS services, from start to finish • Manage the unique capacity challenges associated with sporadic, real-time demand • Provide a consistent and optimal cloud user experience This book is part of the Networking Technology Series from Cisco Press, which offers networking professionals valuable information for constructing efficient networks, understanding new technologies, and building successful careers.

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 objectives for exam VCP410 Inside the Exam sections in every chapter highlighting key exam topics 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

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.

The 2013 International Conference on Cyber Science and Engineering (CyberSE 2013) will be held on in Guangzhou, China during December 14– 15, 2013. CyberSE is an annual conference to call together researchers, engineers, academicians as well as industrial professionals from all over the world to present their research results and development activities in Cyber Science and Engineering. CyberSE 2013 is sponsored by International Association for Cyber Science and Engineering, Hong Kong. CyberSE 2013 has received more than 200 submissions from 15 countries and regions. The papers come from both academia and industry reflecting the international flavor of this event in the topics of Cyber Science and Engineering. About 20 PC members and 40 International reviewers worked hard in reviewing the submissions. Based on the review reports, about 63 papers were accepted to be presented in CyberSE 2013 by the chairs. The papers were grouped into five sessions viz., 1. Computer and Information Technologies, 2. Communication Technologies, 3. Artificial Intelligence, 4. Management and Services Science, 5. Circuits and Systems. All the accepted papers have been presented on the conference, mainly by oral presentations. During the conference, many novel research works caught the attentions of the participants. The participants came to an agreement that they will participate in the CyberSE 2014 next year. All the presented papers will be published by DEStech Publications, USA. DEStech will have the proceeding indexed in ISI (Institute of Scientific Information), CPCI-S (ISTP), Google Book Search, EI and other worldwide online citation of qualified papers. We express our thanks to all the members of the General Committee Chairs, Program Committee Chairs, Technical Program Committee and Volunteers who worked so hard to prepare the conference and chair the five sessions in CyberSE 2013. We hope that CyberSE 2013 will be successful and enjoyable to all participants. We look forward to seeing all of you next year at the CyberSE 2014. Deyao Tan, International Association for Cyber Science and Engineering, China

Your One-Stop Reference for VMware vSphere Automation If you manage vSphere in a Windows environment, automating routine tasks can save you time and increase efficiency.

VMware vSphere PowerCLI is a set of pre-built commands based on Windows PowerShell that is designed to help you automate vSphere processes involving virtual machines, datacenters, storage, networks, and more. This detailed guide—using a practical, task-based approach and real-world examples—shows you how to get the most out of PowerCLI's handy cmdlets. Learn how to: Automate vCenter Server and ESX/ESX(i) Server deployment and configuration Create and configure virtual machines and use vApps Secure, back up, and restore your virtual machines Monitor, audit, and report the status of your vSphere environment Use the PowerCLI SDK, PowerWF Studio, and vEcoShell Schedule and view automation Add a GUI front end to your scripts The first book in the IT Architect series helps aspiring & experienced IT infrastructure architects/administrators, and those pursuing infrastructure design certifications, establish a solid foundation in the art of infrastructure design. The three authors

Trust the bestselling Official Cert Guide series from VMware Press to help you learn, prepare, and practice for VCP5 exam success. They are the only VMware authorized self-study books and are built with the objective of providing assessment, review, and practice to help ensure you are fully prepared for your certification exam. **Note to readers** In March 2013 VMware renamed the VCP5 (VMware Certified Professional on vSphere 5) to VCP5-DCV (VMware Certified Professional on vSphere 5 - Data Center Virtualization). The Official VCP5 Certification Guide presents you with an organized test preparation routine through the use of proven series elements and techniques. “Do I Know This Already?” quizzes open each chapter and enable you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. Master VMware VCP510 exam topics Assess your knowledge with chapter-opening quizzes Review key concepts with exam preparation tasks The Official VCP5 Certification Guide is part of a recommended learning path from VMware that includes simulation and hands-on training from authorized VMware instructors and self-study products from VMware Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered worldwide, please visit www.vmware.com/training.

Distributed and Cloud Computing: From Parallel Processing to the Internet of Things offers complete coverage of modern distributed computing technology including clusters, the grid, service-oriented architecture, massively parallel processors, peer-to-peer networking, and cloud computing. It is the first modern, up-to-date distributed systems textbook; it explains how to create high-performance, scalable, reliable systems, exposing the design principles, architecture, and innovative applications of parallel, distributed, and cloud computing systems. Topics covered by this book include: facilitating management, debugging, migration, and disaster recovery through virtualization; clustered systems for research or ecommerce applications; designing systems as web services; and social networking systems using peer-to-peer computing. The principles of cloud computing are discussed using examples from open-source and commercial applications, along with case studies from the leading distributed computing vendors such as Amazon, Microsoft, and Google. Each chapter includes exercises and further reading, with lecture slides and more available online. This book will be ideal for students taking a distributed systems or distributed computing class, as well as for professional system designers and engineers looking for a reference to the latest distributed technologies including cloud, P2P and grid computing. Complete coverage of modern distributed computing technology including clusters, the grid, service-oriented architecture, massively parallel processors, peer-to-peer networking, and cloud computing Includes case studies from the leading distributed computing vendors: Amazon, Microsoft, Google, and more Explains how to use virtualization to facilitate management, debugging, migration, and disaster recovery Designed for undergraduate or graduate students taking a distributed systems course—each chapter includes exercises and further reading, with lecture slides and more available online

VMware 2V0-620 and 2V0-621 exams retired in 2019. We are continuing to make this content available for those who wish to use it to study the foundational information it contains. vSphere 6 Foundations Exam Official Cert Guide (Exam #2V0-620) vSphere 6 Foundations Exam Official Cert Guide (Exam #2V0-620) presents you with an organized test-preparation routine through the use of proven series elements and techniques. “Do I Know This Already?” quizzes open each chapter and enable you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. · Master VMware vSphere 6 Foundations Exam topics · Assess your knowledge with chapter-opening quizzes · Review key concepts with exam-preparation tasks · Practice with realistic exam questions vSphere 6 Foundations Exam Official Cert Guide (Exam #2V0-620) focuses specifically on the objectives for the vSphere 6 Foundations (#2V0-620) Exam. Leading VMware consultant and trainer Bill Ferguson shares preparation hints

and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The companion website contains a powerful Pearson IT Certification Practice Test engine that enables you to focus on individual topic areas or take a complete, timed exam. The assessment engine tracks your performance and provides feedback on a module-by-module basis, laying out a complete assessment of your knowledge to help you focus your study where it is needed most. Well regarded for its level of detail, assessment features, comprehensive design scenarios, and challenging review questions and exercises, this official study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time. vSphere 6 Foundations Exam Official Cert Guide (Exam #2V0-620) is part of a recommended learning path from VMware that includes simulation and hands-on training from authorized VMware instructors and self-study products from VMware Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered worldwide, please visit www.vmware.com/training. The official study guide helps you master all the topics on the vSphere 6 Foundations Exam (#2V0-620), including

- Identifying vSphere architecture and solutions for a given use case
- Installing and configuring vCenter Server and ESXi
- Configuring vSphere networking, including vSS, vDS, and their features
- Configuring vSphere storage
- Deploying and administering virtual machines, VM clones, templates, and vApps
- Establishing and maintaining availability and resource management features, including clusters, fault tolerance, and resource pools
- Troubleshooting ESXi, vCenter Server, vCenter operations, VM operations, and basic misconfigurations
- Monitoring a vSphere implementation, including ESXi, vCenter Server, and virtual machines
- Installing, configuring, and managing vCenter Operations Manager

NOTE: Although there are changes between vSphere 6.0 and 6.5, they are not in the area of Foundations, therefore, vSphere 6 Foundations Exam #2V0-620 can be taken as part of official preparation steps toward your 6.5 or 7.0 certifications.

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.

Best practices, guidance, and tips for virtualizing Microsoft® business critical applications on the VMware vSphere® platform By virtualizing Microsoft's enterprise applications on vSphere, you can drive down costs while migrating toward flexible, low-cost private cloud architectures. This unique guidebook bridges the gap between the Microsoft and VMware worlds, bringing together the deep knowledge, cutting-edge best practices, and practical techniques you need to succeed. Leading experts Matt Liebowitz and Alex Fontana present end-to-end coverage of virtualizing Windows Server 2012 AD domain controllers and failover clusters, Exchange Server 2013, SQL Server 2012, and SharePoint Server 2013. They offer indispensable advice on sizing, architecture, performance, availability, monitoring, and metrics. Throughout, the authors share valuable tips, tricks, and insights from their own experiences. For each Microsoft application, they provide "proof of concept" sample configurations and clearly explain how new features impact virtualization. You'll also find authoritative, up-to-date guidance on licensing and other issues related to ensuring full support from both Microsoft and VMware. Coverage includes

- Evaluating the benefits, risks, and challenges of virtualizing Microsoft business critical applications
- Identifying strategies for success associated with people, processes, and technology
- Reviewing VMware vSphere features most important to virtualizing business-critical applications
- Taking advantage of new virtualization-aware features built in to Windows Server 2012 domain controllers
- Designing and configuring vSphere High Availability (vSphere HA) clusters to run Windows enterprise applications
- Reflecting Exchange Server 2013's new architecture to maximize its performance in virtualized environments
- Leveraging new SQL Server 2012 features to simplify the delivery of high availability on virtual servers
- Reducing SQL Server 2012 licensing costs through virtualization
- Planning, designing, and deploying virtualized SharePoint Server 2013 environments

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

The complete vCAT printed reference: knowledge, tools, and validated designs for building high-value vCloud® solutions The vCloud Architecture Toolkit (vCAT) brings together validated designs, tools, and knowledge for architecting, implementing, operating, and consuming modern vCloud infrastructure based on the Software Defined Data Center (SDDC). vCAT has already helped hundreds of VMware customers succeed with vCloud. Now, pioneering VMware architect John Arrasjid has integrated essential vCAT information into a definitive printed guide, adding even more context and examples for successful planning and deployment. To do so, Arrasjid has distilled contributions from more than 100 VMware architects, consultants, administrators, engineers, project managers, and other technical leaders. VMware vCloud Architecture Toolkit (vCAT) is your complete roadmap for using virtualization to simplify data centers and related IT infrastructure. You'll find up-to-the-minute, field-proven insights for addressing a wide spectrum of challenges—from availability to interoperability, security to business continuity. Coverage includes vCAT design guidelines and patterns for efficiently architecting, operating, and consuming VMware cloud computing solutions Software-defined datacenter services for storage, networking, security, and availability People, process, and technology issues associated with effective vCloud

operation and maintenance Efficient service consumption: consumption models, service catalogs, vApps, and service provider interactions Workflows to coordinate and automate task sequences, which extend beyond vCloud VMware vCloud Director® Server Resource Kit software tools Advanced “cloud bursting” and autoscaling techniques to dynamically leverage additional computing resources Planning and management of capacity, security, compliance, and disaster recovery

The only quick reference guide to the number one virtualization product! Get all your solutions about VMware's newest virtualization infrastructure software on the spot with this handy reference guide.

Designed for quick access with special headings, thumb tabs, easy-to-read lists, and more, this book is the perfect companion to any comprehensive VMware guide, such as Mastering VMware vSphere 4.

Covers the market-leading virtualization product, VMware's new vSphere 4 Offers a quick-access reference for your day-to-day administration of vSphere 4 Includes thumb tabs, secondary and tertiary tables of contents, and special heading treatments to provide quick and easy lookup, as well as quick-reference tables, lists, and step-by-step instruction to provide VMware administrators answers on the spot Keep this helpful, handy guide within easy reach.

To help readers understand virtualization and cloud computing, this book is designed to cover the theories and concepts enough to understand the cutting-edge technology. Meanwhile, in this book, the reader can gain hands-on skills on VMware Cloud Suite to create a private cloud. With the academic support from VMware, readers can use the VMware supported software to create various virtualized IT infrastructures sophisticated enough for various sized enterprises. Then, the virtualized IT infrastructure can be made available to an enterprise through the private cloud services.

Design, develop and deploy a highly available vSphere environment for VMware Horizon View About This Book Enhance your capability of meeting various Service Level Agreements in VMware Horizon View Get acquainted through all the necessary considerations for building a View environment Cover VMware High Availability hurdle by hurdle along with the checklists for verification of the environment

being ready for production Who This Book Is For If you manage, plan or deploy VMware Horizon View or are looking for tips for best practices and configuration details this book is for you. This book is intended for administrators who design and deploy VMware Horizon View or administrators who are looking for ways to improve their existing View environment. What You Will Learn Install and configure a VMware Horizon View Connection Server and redundant pair Discover the networking requirements for View and learn how to build redundancy into your network Analyze each of the View user pool types and how each one can be made highly available and survivable. Get to know about storage protocols such as NFS, iSCSI and Fibre Channel Deploy Virtual SAN, and find out how to effectively couple Virtual SAN with View Learn about View monitoring tools to allow fast responses to various crises Plan, analyze and upgrade VMware Horizon View Analyze network services required for VMware Horizon View and build them in a redundant manner In Detail The increasing movement to virtualize workloads and workstations has put VMware Horizon View into a central mission critical role in many environments.

Administrators may be overwhelmed with planning for outages and dealing with failure scenarios. It's easy to miss small details that will result in outages down the road. Following VMware Horizon View best practices and planning ahead with network infrastructure will allow you to avoid these common pit falls. This book will walk you through the setup and configuration of View in a highly available configuration. It will provide you with the skills to analyze and deploy configurations that can stand up to rigorous failure standards. The book starts with deploying and basic configuration of VMware Horizon View in a redundant setup, then moves on to cover high availability for networking, fibre channel, NFS, and iSCSI. We finish this book with monitoring and upgrade planning. At the end we also learn about maintaining the uptime and minimizing the downtime that can be caused due to various factors. Each topic comes with a list of best practices and failure scenarios to test. Administrators will learn the intricacies of protecting a View environment. Style and approach This book provides configuration and installation steps for administration and installation of a Horizon View server. It includes high-level overviews of any protocols, services used by Horizon View, and best practices and high availability checklists for each chapter.

Learn how to virtualize your network and discover the full potential of a Software Defined Data Center. A smarter way to use network resources begins here About This Book Experience the dynamism and flexibility of a virtualized software defined data center with NSX Find out how to design your network infrastructure based on what your organization needs From security to automation, discover how NSX's impressive range of features can unlock a more effective and intelligent approach to system administration Who This Book Is For If you're a network administrator and want a simple but powerful solution to your network virtualization headaches, look no further than this fast-paced, practical guide. What You Will Learn Deep dive into NSX-v Manager, Controller deployment, and design decisions Get to grips with NSX-v Security features and automate security Leverage Cross VC, identify the benefits, and work through a few deployment scenarios Troubleshoot an NSX-v to isolate problems and identify solutions through a step-by-step process In Detail VMware NSX is at the forefront of the software-defined networking revolution. It makes it even easier for organizations to unlock the full benefits of a software-defined data center – scalability, flexibility – while adding in vital security and automation features to keep any sysadmin happy. Software alone won't power your business – with NSX you can use it more effectively than ever before, optimizing your resources and reducing costs. Getting started should be easy – this guide makes sure it is. It takes you through the core components of NSX, demonstrating how to set it up, customize it within your current network architecture. You'll learn the principles of effective design, as well as some things you may need to take into consideration when you're creating your virtual networks. We'll also show you how to construct and maintain virtual networks, and how to deal with any tricky situations and failures. By the end, you'll be confident you can deliver, scale and secure an exemplary virtualized network with NSX. Style and approach This book provides you with an introduction to software-defined networking with VMware NSX. Focusing on the most essential elements, so you can put your knowledge into practice quickly, it's a guide dedicated to anyone who understands that sometimes real-world problems require virtualized solutions.

This book is a practical, hands-on guide that will help you learn everything you need to know to administer your environment with VMware vCenter Server. Throughout the book, there are best practices and useful tips and tricks which can be used for day-to-day tasks. If you are an administrator or a technician starting with VMware, with little or no knowledge of virtualization products, this book is ideal for you. Even if you are an IT professional looking to expand your existing environment, you will be able to use this book to help you improve the management of these environments. IT managers will find it helpful in terms of improving cost efficiency, ensuring required levels of service and utilising its excellent reporting abilities.

If you are a virtualization professional who wants to unleash the power of automation and combat the complexity of sprawling virtual environments, this book is ideal for you. This book will enhance your skills of administering VMware vSphere and vCloud Director with PowerCLI.

vSphere 6 Foundations Exam Official Cert Guide (Exam #2V0-620) vSphere 6 Foundations Exam Official Cert Guide (Exam #2V0-620) presents you with an organized test-preparation routine through the use of proven series elements and techniques. "Do I Know This Already?" quizzes open each chapter and enable you to decide how much time you need to spend on each section. Exam topic lists make referencing easy. Chapter-ending Exam Preparation Tasks help you drill on key concepts you must know thoroughly. · Master VMware vSphere 6 Foundations Exam topics · Assess your knowledge with chapter-opening quizzes · Review key concepts with exam-preparation tasks · Practice with realistic exam questions vSphere 6 Foundations Exam Official Cert Guide (Exam #2V0-620) focuses specifically on the objectives for the vSphere 6 Foundations (#2V0-620) Exam. Leading VMware consultant and trainer Bill Ferguson shares preparation hints and test-taking tips, helping you identify areas of weakness and

improve both your conceptual knowledge and hands-on skills. Material is presented in a concise manner, focusing on increasing your understanding and retention of exam topics. The companion website contains a powerful Pearson IT Certification Practice Test engine that enables you to focus on individual topic areas or take a complete, timed exam. The assessment engine tracks your performance and provides feedback on a module-by-module basis, laying out a complete assessment of your knowledge to help you focus your study where it is needed most. Well regarded for its level of detail, assessment features, comprehensive design scenarios, and challenging review questions and exercises, this official study guide helps you master the concepts and techniques that will enable you to succeed on the exam the first time. vSphere 6 Foundations Exam Official Cert Guide (Exam #2V0-620) is part of a recommended learning path from VMware that includes simulation and hands-on training from authorized VMware instructors and self-study products from VMware Press. To find out more about instructor-led training, e-learning, and hands-on instruction offered worldwide, please visit www.vmware.com/training. The official study guide helps you master all the topics on the vSphere 6 Foundations Exam (#2V0-620), including

- Identifying vSphere architecture and solutions for a given use case
- Installing and configuring vCenter Server and ESXi
- Configuring vSphere networking, including vSS, vDS, and their features
- Configuring vSphere storage
- Deploying and administering virtual machines, VM clones, templates, and vApps
- Establishing and maintaining availability and resource management features, including clusters, fault tolerance, and resource pools
- Troubleshooting ESXi, vCenter Server, vCenter operations, VM operations, and basic misconfigurations
- Monitoring a vSphere implementation, including ESXi, vCenter Server, and virtual machines
- Installing, configuring, and managing vCenter Operations Manager

Get to grips with a new technology, understand what it is and what it can do for you, and then get to work with the most important features and tasks. This book is written in an easy-to-read style, with a strong emphasis on real-world, practical examples. Step-by-step explanations are provided for performing important tasks. If you are a Cloud engineer or administrator looking forward to working with vCloud, then this is the best guide to get you started with it.

Best Practices, How-Tos, and Technical Deep Dives for Working VMware VI4/VI3 Pros Maximum vSphere is the comprehensive, up-to-the-minute, working reference for everyone who plans, implements, or administers VMware virtual infrastructure. Authored by top VMware consultants, it brings together proven best practices, tips, and solutions for achieving outstanding performance and reliability in your production environment. This book brings together crucial knowledge you won't find anywhere else, including powerful new vSphere 4 techniques drawn from the experiences of dozens of advanced 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 Eric Siebert takes the same hands-on approach that made his VMware® VI3 Implementation and Administration so popular with working professionals. Whether you're implementing or managing vSphere 4, upgrading from older virtualization technologies, or taking on new responsibilities in any VMware environment, you'll find this book indispensable. Coverage includes

- Understanding how key vSphere 4 changes affect production environments
- Working with ESX and ESXi hosts and host profiles
- Getting "under the hood" with vSphere 4 virtual machines
- Making the most of vCenter Server and plug-ins
- Choosing and configuring storage for maximum efficiency
- vSphere Networking: physical/virtual NICs, standard/distributed vSwitches, Cisco Nexus 1000V, and more
- Monitoring and troubleshooting vSphere performance: CPU, memory, disk/storage, and other issues
- Backing up and recovering VMware environments
- Using advanced features, including High Availability (HA), Distributed Resource, Distributed Power Management (DPM) and vMotion
- Managing vSphere through the client, Web access, command line, Management Assistant, Powershell, ESX Service Console, and third-party tools
- Building your own vSphere 4 lab
- Performing more efficient installations and upgrades

Use policies and Cisco® ACI to make data centers more flexible and configurable--and deliver far more business value Using the policy driven data center approach, networking professionals can accelerate and simplify changes to the data center, construction of cloud infrastructure, and delivery of new applications. As you improve data center flexibility, agility, and portability, you can deliver far more business value, far more rapidly. In this guide, Cisco data center experts Lucien Avramov and Maurizio Portolani show how to achieve all these benefits with Cisco Application Centric Infrastructure (ACI) and technologies such as python, REST, and OpenStack. The authors explain the advantages, architecture, theory, concepts, and methodology of the policy driven data center. Next, they demonstrate the use of python scripts and REST to automate network management and simplify customization in ACI environments. Drawing on experience deploying ACI in enterprise data centers, the authors review design considerations and implementation methodologies. You will find design considerations for virtualized datacenters, high performance computing, ultra-low latency environments, and large-scale data centers. The authors walk through building multi-hypervisor and bare-metal infrastructures, demonstrate service integration, and introduce advanced telemetry capabilities for troubleshooting. Leverage the architectural and management innovations built into Cisco® Application Centric Infrastructure (ACI)

- Understand the policy driven data center model
- Use policies to meet the network performance and design requirements of modern data center and cloud environments
- Quickly map hardware and software capabilities to application deployments using graphical tools--or programmatically, via the Cisco APIC API
- Increase application velocity: reduce the time needed to move applications into production
- Define workload connectivity instead of (or along with) subnets, VLAN stitching, and ACLs
- Use Python scripts and REST to automate policy changes, parsing, customization, and self-service
- Design policy-driven data centers that support hypervisors
- Integrate OpenStack via the Cisco ACI APIC OpenStack driver
- architecture
- Master all facets of building and operating multipurpose cloud architectures with ACI
- Configure ACI fabric topology as an infrastructure or tenant administrator
- Insert Layer 4-Layer 7 functions using service graphs
- Leverage centralized telemetry to optimize performance; find and resolve problems
- Understand and familiarize yourself with the paradigms of programmable policy driven networks

VMware vCloud Director Cookbook will adopt a Cookbook-based approach. Packed with illustrations and programming examples, this book explains the simple as well as the complex recipes in an easy-to-understand language. VMware vCloud Director Cookbook is aimed at system administrators and technical architects moving from a virtualized environment to cloud environments. Familiarity with cloud computing platforms and some knowledge of virtualization and managing cloud environments is expected.

CCNA Data Center DCICT 200-155 Official Cert Guide from Cisco Press enables you to succeed on the exam the first time and is the only self-study resource approved by Cisco. A team of leading Cisco data center experts shares preparation hints and test-taking tips, helping you identify areas of weakness and improve both your conceptual knowledge and hands-on skills. This is the eBook edition of the CCNA Data Center DCICT 200-155 Official Cert Guide. This eBook does not include the access code for the practice exam that comes with the print edition. This complete, official study package includes

- A test-preparation routine proven to help you pass the exam
- "Do I Know This Already?" quizzes, which enable you to decide how much time you need to spend on each section
- Part-ending exercises, which help you drill on key concepts you must know thoroughly
- Study plan suggestions and templates to help you organize and optimize your study time
- A final preparation chapter that guides you through tools and resources to help you craft your review and test-taking strategies

Well regarded for its level of detail, study plans, assessment features, and challenging review questions and exercises, this official study guide helps you master the concepts and techniques that ensure your exam success. The official study guide helps you master topics on the CCNA Data Center DCICT 200-155 exam.

It's All About Delivering Service with vCloud Director Empowered by virtualization, companies are not just moving into the cloud, they're moving into private clouds for greater security, flexibility, and cost savings. However, this move involves more than just infrastructure. It also represents a different business model and a new way to provide services. In this detailed book, VMware vExpert Simon Gallagher

makes sense of private cloud computing for IT administrators. From basic cloud theory and strategies for adoption to practical implementation, he covers all the issues. You'll learn how to build a private cloud and deliver it as a service using VMware vCloud Director 5.1. Consider what it takes to transition to the cloud, including the business, technical, and operational issues Get familiar with the essential tools—the vCloud Director 5.1 suite Understand the delivery model of infrastructure-as-a-service Define a service catalog, including determining how to track and allocate costs and design for service levels Measure the impact of a private cloud on your legacy applications and infrastructure Implement efficient operations—learn how to apply automation, set up backup and restore, and maintain HA Deliver an end-to-end solution to an end user with a fully managed guest Foreword by Joe Baguley, Chief Technologist, EMEA, VMware

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