

VMware Vsphere 5 5

Study Guide

Mastering VMware vSphere 5.5: A Comprehensive Study Guide

VMware vSphere 5.5, a pivotal release in the virtualization landscape, remains a cornerstone for IT professionals seeking to build and manage robust virtualized environments. Its powerful features and underlying architecture continue to shape the way enterprises and organizations deploy and manage applications. This comprehensive guide dives deep into the VMware vSphere 5.5 study landscape, providing a detailed roadmap for mastering this essential virtualization technology. Whether you're a seasoned administrator or a newcomer to virtualization, this guide will equip you with the knowledge to confidently navigate and optimize your vSphere 5.5 deployments.

Understanding the VMware vSphere 5.5 Ecosystem VMware vSphere 5.5 builds upon the foundational elements of prior releases, offering significant enhancements in performance, manageability, and scalability. It's crucial to grasp the core components of vSphere 5.5 to effectively utilize its capabilities:

- vCenter Server: The central nervous system of the vSphere infrastructure, managing all virtual machines

(VMs), hosts, and storage. • ESXi Hosts: The underlying hypervisor layer, responsible for running VMs and providing hardware abstraction. • Virtual Machines (VMs): **Software representations of physical servers, enabling the efficient deployment and management of applications across various platforms.** • Storage: **An essential component for virtual machine data storage, encompassing various storage types and configurations.** • Networking: **Enabling communication between VMs and the external network, crucial for application accessibility.** (Visual Representation Needed Here) *A diagram depicting the interconnectedness of these components would be highly beneficial.*

Key Features and Enhancements in vSphere 5.5

vSphere 5.5 brought a wealth of improvements over prior versions. Although a specific "study guide" in the traditional sense may not exist, understanding the core components and functionalities is critical. Instead of a study guide, this guide will examine the key features for effective mastery.

Advanced Resource Management

vSphere 5.5 introduced enhancements in resource management, optimizing CPU and memory utilization. Dynamic resource allocation and intelligent scheduling algorithms minimized performance bottlenecks.

Improved Networking Capabilities

Advanced networking features like vMotion and Distributed Virtual Switches (DVS) provided enhanced flexibility and performance. Network segmentation and security were more robust.

Enhanced Storage Optimization

vSphere 5.5 significantly enhanced storage optimization through improved storage policies and support for various storage types. This empowered administrators to effectively manage storage capacity.

Enhanced Security Measures

Security enhancements were incorporated, improving the overall security posture of vSphere deployments. Improved access control and encryption features were introduced.

Essential Concepts for Mastering vSphere 5.5

Mastering vSphere 5.5 is not simply about understanding the features; it's about grasping the fundamental concepts:

Understanding Virtual Machine

Lifecycle Management

From creation to power management, understanding the complete lifecycle of a virtual machine is crucial. This includes configuration, backup, and disaster recovery strategies.

Virtual Machine Configuration and Customization

Customizing virtual machine configurations to match specific application requirements is vital for optimizing performance and resource utilization. This includes considerations like CPU, memory, and disk configuration.

Data Center Optimization and Design

Effective planning of data centers using VMware vSphere is essential for achieving maximum utilization and scalability. (Table Representation Needed Here) **A table comparing and contrasting various vSphere 5.5 configurations (e.g., different storage options, network topologies) would help visual learners.**

Hands-on Exercises and Practical Applications

Gaining practical experience is crucial. While no specific "study guide" exists, the following are ways to gain valuable hands-on experience: • Lab Environments: **Setting up**

virtual labs allows you to practice deploying and configuring vSphere 5.5 environments without impacting production systems. • Virtualization Software: **Familiarity with other virtualization software allows comparison and contrast in practical application scenarios.** • Real-world Simulations: Simulate real-world scenarios, such as disaster recovery or performance testing, within the lab to gain hands-on experience handling various issues.

Related Themes and Emerging Trends

While vSphere 5.5 is a mature release, understanding related technologies is crucial.

Cloud Integration and Hybrid Cloud Solutions

Hybrid cloud environments combine on-premises vSphere infrastructures with cloud services for enhanced flexibility and scalability.

Automation and Orchestration Tools

vSphere Automation Tools enhance efficiency by automating various tasks, such as deployment, configuration, and maintenance.

Storage and Networking Technologies

The integration of modern storage technologies (e.g., SSDs) and networking solutions improves performance. (Visual Representation Needed Here) *A flowchart or mind map outlining the various aspects of hybrid cloud deployment using vSphere 5.5 would be valuable.*

Conclusion: Reflections and Future Outlook

VMware vSphere 5.5 remains a powerful virtualization platform with broad applications. While a specific "study guide" is less useful, the key to mastery lies in comprehending the fundamental components, optimizing resource allocation, understanding network capabilities, and leveraging relevant tools. Continued learning, through hands-on experience and staying current with industry trends, is vital to maximizing effectiveness.

5 Insightful FAQs: **1. Q:** What are the key differences between vSphere 5.5 and later versions? **A:** Later versions have introduced advancements in features like automation, security, and enhanced performance optimization. This guide focuses on the core concepts applicable across versions. **2. Q:** Is there a formal vSphere 5.5 study guide available? **A:** No official dedicated study guide exists for vSphere 5.5. The focus instead is on practical experience and leveraging available documentation. **3. Q:** How crucial is hands-on experience for mastering vSphere 5.5? **A:** **Absolutely crucial. Theory is important, but practical application solidifies understanding of**

configuration, troubleshooting, and optimization. 4. Q:

What are some valuable certifications related to vSphere 5.5?

A: VMware offers various certifications, like the VMware Certified Professional - Data Center Virtualization, that validate expertise in vSphere management. 5. Q: How can I

stay updated on vSphere 5.5 best practices? A: Follow VMware's official documentation, attend industry events, and participate in online communities to stay abreast of the latest practices and emerging trends. This guide provides a strong foundation for your journey into mastering VMware vSphere 5.5. Remember to focus on practical application and continuous learning to truly excel.

Unlocking the Secrets of VMware vSphere 5.5: Your Comprehensive Study Guide

Embarking on a journey to master VMware vSphere 5.5 is a strategic move for any IT professional looking to excel in virtualization. Whether you're aiming for certification, seeking to optimize your current infrastructure, or simply expanding your skillset, a solid understanding of vSphere 5.5 is invaluable. This isn't just about memorizing features; it's about grasping the core concepts that drive modern data centers and cloud environments. In this comprehensive study guide, we'll dive deep into the essential components of vSphere 5.5, equip you with the knowledge you need, and point you towards resources for success.

VMware vSphere 5.5, while a previous generation, laid the groundwork for many of the advancements we see in today's cloud-native architectures. Understanding its intricacies provides a fundamental appreciation for the evolution of virtualization technology. So, grab a cup of your favorite beverage, settle in, and let's get started on building your vSphere 5.5 expertise.

The Core Components of VMware vSphere 5.5 Explained

At its heart, VMware vSphere is a virtualization platform that allows you to run multiple operating systems and applications on a single physical server. This abstraction layer is what unlocks incredible efficiencies in terms of hardware utilization, resource management, and operational agility. Let's break down the key players in the vSphere 5.5 ecosystem:

VMware ESXi: The Hypervisor Foundation

Think of ESXi as the engine of vSphere. It's a bare-metal hypervisor, meaning it installs directly onto your server hardware, bypassing the need for a host operating system. This direct hardware access is crucial for its performance and efficiency. ESXi is responsible for:

1. **Virtual Machine Creation and Management:** It allows you to create and run virtual machines (VMs), each acting

as an independent computer with its own CPU, memory, storage, and network resources.

2. **Resource Allocation:** ESXi intelligently allocates physical resources (CPU, RAM, disk I/O, network bandwidth) to the VMs running on it, ensuring fair usage and optimal performance.
3. **Hardware Abstraction:** It abstracts the underlying physical hardware, presenting a consistent virtualized environment to the guest operating systems.
4. **High Availability (HA) and Fault Tolerance (FT) Support:** While managed by vCenter Server, ESXi is the component that actually executes HA and FT functionalities at the hypervisor level.

When studying ESXi, pay close attention to its boot process, storage adapters, network configurations, and the various configuration files that govern its behavior. Understanding how to troubleshoot ESXi issues is a vital skill for any vSphere administrator.

VMware vCenter Server: The Central Command Center

If ESXi is the engine, then vCenter Server is the brain. This centralized management platform is absolutely essential for managing multiple ESXi hosts and their associated VMs. vCenter Server 5.5 offered a wealth of features that transformed the way we managed virtualized environments:

1. **Centralized Management:** Monitor and manage all your ESXi hosts, VMs, storage, and networks from a single pane

of glass. This dramatically simplifies operations.

2. **VMware vMotion:** The holy grail of live migration. vMotion allows you to move running VMs from one ESXi host to another with zero downtime. This is critical for planned maintenance, load balancing, and disaster recovery scenarios.
3. **VMware Distributed Resource Scheduler (DRS):** DRS is an intelligent workload management feature. It monitors resource utilization across your ESXi hosts and automatically migrates VMs to balance the load, ensuring optimal performance and preventing resource contention. Understanding DRS automation levels and its affinity/anti-affinity rules is key.
4. **VMware High Availability (HA):** HA provides automatic failover for VMs. If an ESXi host fails, HA automatically restarts the affected VMs on other healthy hosts in the cluster.
5. **VMware Fault Tolerance (FT):** For mission-critical applications, FT provides continuous availability by creating a live shadow instance of a VM. If the primary VM or its host fails, the shadow instance seamlessly takes over with no data loss or downtime.
6. **VMware Update Manager (VUM):** VUM simplifies the patching and upgrading of ESXi hosts and their associated virtual appliances, ensuring your environment is secure and up-to-date.
7. **Role-Based Access Control (RBAC):** Implement granular permissions to control who can access and manage specific resources within your vSphere environment.

When studying vCenter Server, familiarize yourself with its

architecture (Single Sign-On, Inventory Service, vCenter Server Service), its database requirements, and the various licensing models. Mastering vCenter Server is fundamental to leveraging the full power of vSphere.

Key Concepts for Your vSphere

5.5 Study

Beyond the core components, there are several foundational concepts that you absolutely must grasp to truly understand vSphere 5.5. These concepts underpin the functionality and efficiency of the platform.

Virtual Networking: The Fabric of Your Virtual Data Center

Virtual networking in vSphere 5.5 is sophisticated and powerful. It's not just about connecting VMs; it's about creating a flexible and resilient network infrastructure that mirrors and extends your physical network. Key areas to focus on include:

1. **Virtual Switches:** Understand the difference between the Standard Virtual Switch (vSS) and the Distributed Virtual Switch (vDS). The vDS, introduced earlier, offers centralized management and advanced features for larger environments.
2. **Port Groups:** How VMs connect to virtual switches.
3. **VLAN Tagging:** Ensuring network segmentation and security.

4. **NIC Teaming (Load Balancing and Failover):**

Configuring multiple network adapters for performance and redundancy.

5. **Traffic Shaping:** Controlling bandwidth allocation for different VMs and traffic types.

6. **Network I/O Control:** Prioritizing critical network traffic.

Mastering virtual networking is crucial for ensuring seamless connectivity, robust security, and optimal performance for your virtualized applications.

Virtual Storage: Powering Your Data

Storage is the lifeblood of any data center, and vSphere 5.5 offers a variety of flexible storage solutions. Your study should cover:

1. **Datastores:** Understand the different types of datastores, including VMFS (Virtual Machine File System) and NFS (Network File System). Learn about VMFS datastore options, including different block sizes and their implications.
2. **Virtual Machine Disk Formats:** Explore Thick Provision Lazy Zeroed, Thick Provision Eager Zeroed, and Thin Provision. Understand the trade-offs between performance, disk space utilization, and provisioning speed.
3. **Storage vMotion:** Similar to vMotion for compute, Storage vMotion allows you to move a VM's disk files to a different datastore without downtime.
4. **VMware vSAN (available in later versions, but the concepts of software-defined storage are relevant):** While vSAN as we know it today evolved, understanding

the principles of pooling local storage for VM access was beginning to take shape.

5. **iSCSI, Fibre Channel, and NAS:** Familiarize yourself with how vSphere interacts with various SAN and NAS technologies.
6. **Storage I/O Control (SIOC):** Prioritizing storage I/O for critical VMs.

A strong grasp of virtual storage concepts is essential for ensuring data availability, performance, and efficient capacity management.

Resource Management and Optimization

vSphere 5.5 is all about maximizing resource utilization. Deep dive into:

1. **Resource Pools:** Hierarchical grouping of ESXi hosts and VMs for resource allocation and control.
2. **Affinity and Anti-Affinity Rules:** Controlling where VMs are placed relative to each other or specific hosts.
3. **CPU and Memory Overhead:** Understanding how the hypervisor consumes resources.
4. **Memory Management Techniques:** Ballooning, Compression, and Swapping. Learn when each is used and their impact on performance.
5. **CPU Scheduling:** How vSphere allocates CPU time to VMs.

Preparing for vSphere 5.5 Certification (e.g., VCP5-DCV)

If your goal is to achieve VMware certification, such as the VMware Certified Professional - Data Center Virtualization (VCP5-DCV), your study guide needs a structured approach. While vSphere 5.5 is an older version, understanding the foundational certifications is still valuable for appreciating the evolution of the technologies.

Official VMware Training and Documentation

The official VMware courseware is your most authoritative source. Courses like "VMware vSphere: Install, Configure, Manage" (often referred to as the ICM course) are designed to cover the exam objectives. Supplement this with the official VMware vSphere 5.5 documentation. It's dense, but it's the single source of truth.

Hands-On Labs and Practice Environments

Theory is one thing, but practical experience is another. Set up a home lab using nested virtualization or explore VMware's Hands-On Labs online. The more you interact with vSphere 5.5, the deeper your understanding will become. Practice configuring ESXi, creating VMs, setting up vCenter Server, and implementing features like vMotion and DRS.

Study Groups and Online Forums

Engage with the VMware community. Join study groups, participate in online forums (like those on VMware Communities), and discuss concepts with peers. You'll learn a lot from others' experiences and questions.

Practice Exams

Once you feel you've covered the material, take practice exams. These will help you identify your weak areas and get accustomed to the exam format and question style.

Beyond vSphere 5.5: The Evolution of Virtualization

It's important to acknowledge that vSphere 5.5 is a snapshot in time. VMware has continuously evolved its platform. Understanding vSphere 5.5 provides a strong foundation for grasping newer versions and related technologies:

1. **VMware NSX:** The evolution of software-defined networking, building upon the virtual networking concepts in vSphere.
2. **VMware vSAN:** The mature software-defined storage solution.
3. **VMware Cloud Foundation:** A more comprehensive, integrated stack.
4. **Containerization (Docker, Kubernetes):** While not directly part of vSphere 5.5, understanding virtualization is a prerequisite for appreciating how containers are

managed and deployed within modern virtualized and cloud environments.

Your study of vSphere 5.5 isn't just about mastering an older version; it's about understanding the fundamental principles that have shaped the virtualized and cloud landscapes we work in today.

Conclusion: Your Path to vSphere 5.5 Mastery

Mastering VMware vSphere 5.5 is a rewarding endeavor. By focusing on the core components, understanding key concepts like virtual networking and storage, and engaging in structured study and hands-on practice, you'll build a robust knowledge base. Whether you're pursuing certification or simply aiming to become a more proficient vSphere administrator, this guide provides the roadmap. The skills and knowledge you gain from studying vSphere 5.5 will be invaluable as you navigate the ever-evolving world of IT infrastructure and cloud computing.

VMware vSphere 5.5 Study Guide: Mastering the Foundation of Virtualization

Understanding virtualization has become a cornerstone in modern IT infrastructure, and VMware vSphere 5.5 stands as a pivotal version in this evolution. As organizations increasingly rely on efficient, scalable, and secure virtual environments, mastering this platform is essential for system administrators, network engineers, and cloud architects. A well-structured study guide on VMware vSphere 5.5 serves as a comprehensive roadmap, enabling learners to grasp not only the technical components but also the strategic value these technologies

deliver.

Overview of VMware vSphere 5.5

VMware vSphere 5.5 represents a significant advancement in virtualization, building upon the robust foundation of earlier versions while introducing critical enhancements in performance, security, and management capabilities. As part of the broader vSphere suite, this release focuses on refining the virtual machine lifecycle management, improving resource allocation efficiency, and tightening integration with enterprise data centers. The platform continues to support hybrid cloud deployments, offering seamless interoperability with public cloud services and on-premises

infrastructure. Its architecture enables organizations to consolidate workloads more effectively, reduce hardware dependency, and maintain high availability across diverse environments.

Unlike its predecessors, vSphere 5.5 emphasizes improved automation features, enhanced security protocols, and better compatibility with modern data center management tools. These upgrades position vSphere 5.5 as a reliable choice for enterprises aiming to scale their virtualized infrastructures without sacrificing stability or control. Understanding its core architecture—comprising ESXi hypervisors, vCenter Server, and advanced networking and storage components—is crucial for anyone preparing to deploy or manage vSphere

environments confidently.

Key Insights into vSphere 5.5

Architecture and Key Components At the heart of VMware vSphere 5.5 lies a tightly integrated architecture designed for scalability and resilience. The ESXi hypervisor continues to serve as the foundational layer, offering lightweight, high-performance virtualization with improved memory and CPU management. When paired with vCenter Server, administrators gain centralized control over thousands of virtual machines, enabling real-time monitoring, automated policy enforcement, and streamlined lifecycle operations.

A critical component is the new rVS (vSphere Resource scheduler), introduced to enhance workload

distribution across ESXi hosts dynamically. This scheduler intelligently analyzes resource availability and workload demands, automatically balancing performance and preventing bottlenecks.

Additionally, vSphere 5.5 introduces advanced features like the new vSphere Web Client, which delivers a more intuitive user interface for configuration and management—ideal for both novice and seasoned users.

Storage integration is also strengthened with support for newer storage protocols and enhanced tiering options, ensuring data is efficiently managed across SSD, HDD, and hybrid storage systems. Networking features are expanded with improved integration of distributed switches and support for modern data center

fabrics, enabling low-latency, secure inter-VM communication. Together, these components form a cohesive ecosystem that supports complex, enterprise-grade virtual environments with resilience and agility.

Applications and Real-World Use Cases

VMware vSphere 5.5 finds broad application across industries where virtualization drives operational efficiency and innovation. In data centers, it empowers organizations to consolidate servers, significantly reducing hardware footprint and energy consumption while improving resource utilization. For cloud service providers, vSphere 5.5 enables robust hybrid cloud solutions, allowing dynamic workload migration between

private and public clouds with consistent performance and security.

Enterprise IT departments leverage the platform's advanced automation and management tools to streamline deployment, patching, and recovery processes. Healthcare, finance, and telecommunications sectors utilize vSphere 5.5 to maintain compliant, highly available systems that support mission-critical applications. Its improved disaster recovery capabilities—powered by enhanced VMware Site Recovery Manager integration—allow rapid failover and business continuity planning, minimizing downtime during outages or disruptions.

Furthermore, the platform's compatibility with modern DevOps

workflows makes it a strategic choice for organizations embracing agile development and continuous delivery. By supporting containerization alongside traditional virtual machines, vSphere 5.5 bridges legacy systems with modern application architectures, fostering innovation without compromising stability.

Benefits of Mastering VMware vSphere 5.5 Studying and mastering VMware vSphere 5.5 delivers tangible benefits across technical, operational, and strategic dimensions. From a technical standpoint, proficiency in vSphere 5.5 equips IT professionals with the skills to design, deploy, and manage highly available, secure virtual environments that meet stringent performance and

compliance requirements. The ability to optimize resource allocation, automate routine tasks, and troubleshoot complex issues directly translates into reduced downtime and lower operational costs.

Operationally, mastery of vSphere 5.5 enhances an organization's agility, enabling faster provisioning of workloads and seamless scaling in response to fluctuating demands. Security benefits are equally significant; the platform's built-in hardening features, enhanced isolation, and integration with enterprise identity systems strengthen defenses against evolving cyber threats. Organizations gain greater confidence in maintaining data integrity and meeting regulatory standards.

Strategically, expertise in vSphere 5.5 positions professionals at the forefront of digital transformation. As businesses increasingly adopt hybrid cloud and edge computing models, fluency in this platform ensures readiness to lead infrastructure modernization efforts. The knowledge gained supports long-term planning, vendor neutrality, and informed decision-making when selecting future technologies or extensions to the virtualization stack.

Future Outlook and Continued Relevance Looking ahead, VMware vSphere 5.5 remains a vital component of enterprise infrastructure, even as the broader technology landscape evolves. While VMware continues to

innovate with newer versions such as vSphere 7.x, the foundational principles and operational practices learned from vSphere 5.5 remain relevant. Its emphasis on automation, resource optimization, and secure, scalable virtualization prepares IT teams for emerging trends like AI-driven infrastructure, multi-cloud orchestration, and edge computing.

The platform's compatibility with evolving standards and its integration with cloud-native technologies ensure that organizations can incrementally modernize without wholesale replacements. As virtualization converges with software-defined networking, storage, and security, the core competencies developed through studying vSphere 5.5 provide a stable, adaptable base for future growth. For

professionals and enterprises alike, mastering vSphere 5.5 is not just a step forward—it's a strategic investment in sustained digital resilience and innovation.

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Professionals also benefit significantly from digital resources. Whether used for reference, skill development, or ongoing education, digital books offer quick and reliable access to relevant information. Having *VMware Vsphere 5 5 Study Guide* readily available enables professionals to stay current in their fields, support informed decision-making, and maintain a competitive

edge.

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allows individuals from different cultural and geographic backgrounds to access the same information, promoting cross-cultural understanding and academic exchange. Digital access contributes to a more connected and informed global community.

As technology continues to advance, digital education will play an increasingly central role in how knowledge is shared and developed. The ability to download *Vmware Vsphere 5 5 Study Guide* reflects an adaptive approach to learning that aligns with modern technological trends. Developing digital literacy skills is now essential in both academic and professional contexts.

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Questions & Answers About vmware vsphere 5 5 study guide

No	Question	Answer
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1	What are the key new features in vSphere 5.5 that a study guide should cover?	A comprehensive vSphere 5.5 study guide should emphasize new features like vSphere App HA for application-level fault tolerance, vSphere Virtual Volumes (VVols) for storage flexibility, enhanced vMotion capabilities including cross-vCenter vMotion, and improvements to vSphere Data Protection (VDP) and Content Libraries.
2	What foundational knowledge is crucial before diving into vSphere 5.5 studies?	Solid understanding of virtualization concepts, TCP/IP networking, storage fundamentals (SAN/NAS), Windows or Linux operating system basics, and prior experience with earlier vSphere versions (like 5.1) are essential prerequisites for effectively studying vSphere 5.5.
3	Where can I find reliable resources and practice labs for vSphere 5.5 exam preparation?	Look for official VMware documentation, the VMware Certification website, reputable third-party training providers (like Pluralsight or Udemy), and consider setting up a home lab with the vSphere 5.5 download or using VMware's Hands-on Labs for practical experience.
4	What are the most common challenges people face when studying for vSphere 5.5 certifications?	Common challenges include keeping up with the rapid pace of changes in vSphere, understanding complex networking and storage configurations, mastering specific command-line interfaces, and dedicating sufficient time for hands-on practice alongside theoretical study.

5	How does vSphere 5.5 differ from its predecessor, vSphere 5.1, and what are the implications for a study guide?	vSphere 5.5 introduced significant enhancements over 5.1, including improved performance, scalability, and new management features. A study guide should highlight these differences, focusing on areas like vSphere HA and DRS improvements, the introduction of VVols, and security enhancements that weren't present or as robust in 5.1.
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Many professionals rely on Vmware Vsphere 5 5 Study Guide eBooks to continuously update their skills in fast-changing industries where current knowledge is essential.

Vmware Vsphere 5 5 Study Guide eBooks support offline access, enabling uninterrupted learning without constant internet connectivity.

Vmware Vsphere 5 5 Study Guide eBooks contribute to long-term intellectual resilience.

Vmware Vsphere 5 5 Study Guide eBooks allow readers to highlight, annotate, and bookmark key sections, enhancing long-term retention and review efficiency.

Vmware Vsphere 5 5 Study Guide eBooks help learners manage complex information.

Methodical study improves mastery.

Readers can easily navigate Vmware Vsphere 5 5 Study Guide

eBooks using search, bookmarks, and internal links.

Consistent engagement with VMware Vsphere 5.5 Study Guide eBooks helps reinforce learning routines and intellectual discipline.

VMware Vsphere 5.5 Study Guide eBooks align with modern expectations for speed, accessibility, and usability.

Lower barriers enable a wider audience to access VMware Vsphere 5.5 Study Guide knowledge regardless of geographic or economic limitations.

Their scalability allows consistent distribution across teams and organizations.

Content remains relevant through updates.

Updates maintain long-term relevance.

Readers appreciate VMware Vsphere 5.5 Study Guide eBooks for their predictable structure.

Lower barriers enable a wider audience to access VMware Vsphere 5.5 Study Guide knowledge regardless of geographic or economic limitations.

Organizations often adopt VMware Vsphere 5.5 Study Guide eBooks as part of internal training programs due to their scalability and cost efficiency.

VMware Vsphere 5.5 Study Guide eBooks balance depth and clarity, making complex topics easier to understand.

VMware Vsphere 5.5 Study Guide eBooks empower users to track progress, set learning milestones, and maintain

motivation over time.

Accessible knowledge encourages lifelong learning.

Quick access to organized material improves decision-making efficiency.

Standardized content improves clarity and reduces misinterpretation.

Vmware Vsphere 5 5 Study Guide eBooks are often used in environments that value accuracy.

Vmware Vsphere 5 5 Study Guide eBooks support offline access, enabling uninterrupted learning without constant internet connectivity.

Content remains relevant through updates.

The searchable format of Vmware Vsphere 5 5 Study Guide eBooks makes it easier to locate specific information without rereading entire chapters.

Readers benefit from Vmware Vsphere 5 5 Study Guide eBooks by gaining instant access to organized material.

Vmware Vsphere 5 5 Study Guide eBooks align with structured knowledge systems.

Digital permanence ensures that Vmware Vsphere 5 5 Study Guide content remains accessible without physical degradation.

Vmware Vsphere 5 5 Study Guide eBooks align with structured knowledge systems.

Digital libraries replace bulky collections while preserving

accessibility.

Vmware Vsphere 5 5 Study Guide eBooks help learners manage complex information.

Readers can easily navigate Vmware Vsphere 5 5 Study Guide eBooks using search, bookmarks, and internal links.

Quick access to organized material improves decision-making efficiency.

Structured chapters guide readers through logical progression.

Structured content improves comprehension and long-term retention.

Vmware Vsphere 5 5 Study Guide eBooks contribute to long-term intellectual resilience.

Digital access to Vmware Vsphere 5 5 Study Guide eBooks eliminates physical storage concerns.

Digital formats ensure identical learning materials for all participants.

Vmware Vsphere 5 5 Study Guide eBooks allow rapid content revision and correction.

Thoughtful reading supports critical thinking.

Vmware Vsphere 5 5 Study Guide eBooks align with modern productivity systems.

The searchable format of Vmware Vsphere 5 5 Study Guide eBooks makes it easier to locate specific information without rereading entire chapters.

Reusable content supports long-term learning goals.

Baseline knowledge supports independent research.

Learners using VMware Vsphere 5 5 Study Guide eBooks often report improved focus due to the organized presentation of information.

Structured chapters promote steady progress.

Methodical study improves mastery.

Ultimately, VMware Vsphere 5 5 Study Guide eBooks represent a scalable, efficient, and future-oriented approach to knowledge delivery.

Focused presentation improves engagement and comprehension.

VMware Vsphere 5 5 Study Guide eBooks are frequently updated to reflect current standards, practices, and emerging trends.

Ultimately, VMware Vsphere 5 5 Study Guide eBooks offer an efficient, scalable, and flexible approach to continuous learning.

VMware Vsphere 5 5 Study Guide eBooks are suitable for learners at different experience levels.

Professionals often prefer VMware Vsphere 5 5 Study Guide eBooks for reference-based learning.

Dedicated reading reduces multitasking.

Many learners report improved discipline when using VMware Vsphere 5 5 Study Guide eBooks.

Formal presentation supports serious study.

Organizations rely on VMware Vsphere 5 5 Study Guide eBooks for knowledge preservation.

VMware Vsphere 5 5 Study Guide eBooks provide a structured and reliable way to consume knowledge in an increasingly digital world.

Baseline knowledge supports independent research.

The low entry barrier of VMware Vsphere 5 5 Study Guide eBooks allows learners to start new subjects without significant financial investment.

Logical sequencing reduces cognitive overload.

Learners often revisit VMware Vsphere 5 5 Study Guide eBooks as reference materials.

Search functionality enhances review and recall.

Updates can be deployed without reprinting or redistribution delays.

Centralization improves efficiency.

As technology evolves, VMware Vsphere 5 5 Study Guide eBooks continue to offer stability.

VMware Vsphere 5 5 Study Guide eBooks can be accessed offline after download, ensuring uninterrupted learning even without internet access.

VMware Vsphere 5 5 Study Guide eBooks contribute to a more efficient learning ecosystem.

Structured content improves comprehension and long-term retention.

The structured chapters of VMware Vsphere 5 5 Study Guide eBooks guide readers through progressive learning stages.

They represent a practical response to evolving learning expectations.

VMware Vsphere 5 5 Study Guide eBooks are effective tools for refreshing knowledge before projects, meetings, or assessments.

Anchored knowledge supports adaptability.

The adaptability of VMware Vsphere 5 5 Study Guide eBooks makes them suitable for beginners, intermediate learners, and advanced professionals alike.

Dedicated reading reduces multitasking.

They adapt to changing consumption patterns.

This emphasis encourages thoughtful understanding.

Many professionals rely on VMware Vsphere 5 5 Study Guide eBooks for skill development, ongoing education, and quick reference during real-world application.

VMware Vsphere 5 5 Study Guide eBooks help learners manage long-term educational goals.

Digital libraries replace bulky collections while preserving accessibility.

VMware Vsphere 5 5 Study Guide eBooks allow rapid content updates.

Readers appreciate VMware vSphere 5.5 Study Guide eBooks for their ability to centralize information in one accessible format.

VMware vSphere 5.5 Study Guide eBooks support self-paced learning.

The flexibility of VMware vSphere 5.5 Study Guide eBooks allows learners to combine structured study with real-world experimentation.

Standardization improves assessment alignment and learning outcomes.

Updates maintain long-term relevance.

VMware vSphere 5.5 Study Guide eBooks support stable learning ecosystems.

The convenience of VMware vSphere 5.5 Study Guide eBooks makes them ideal companions for professionals managing busy schedules.

VMware vSphere 5.5 Study Guide eBooks support incremental learning by breaking complex subjects into manageable sections.

VMware vSphere 5.5 Study Guide eBooks represent a shift in how information is consumed, prioritizing convenience, efficiency, and adaptability in modern learning environments.

The convenience of VMware vSphere 5.5 Study Guide eBooks makes them ideal companions for professionals managing busy schedules.

The modular design of VMware vSphere 5.5 Study Guide

eBooks allows readers to focus on specific sections.

Digital materials eliminate printing and logistics expenses.

Vmware Vsphere 5 5 Study Guide eBooks enable careful pacing.

Vmware Vsphere 5 5 Study Guide eBooks allow readers to revisit foundational concepts as their understanding deepens.

By offering instant access, Vmware Vsphere 5 5 Study Guide eBooks eliminate delays often associated with traditional publishing and physical distribution.

Vmware Vsphere 5 5 Study Guide eBooks encourage self-paced learning, allowing individuals to revisit complex concepts multiple times without pressure or limitation.

The continued adoption of Vmware Vsphere 5 5 Study Guide eBooks reflects changing learning preferences in the digital age.

Digital Vmware Vsphere 5 5 Study Guide books integrate smoothly into modern workflows, allowing readers to study during short breaks, commutes, or dedicated learning sessions without carrying physical materials.

Extended focus improves comprehension and retention.

Strong foundations support advanced skill development.

By presenting information in a fixed and organized format, Vmware Vsphere 5 5 Study Guide eBooks help reduce ambiguity often found in fragmented online sources.

Many professionals rely on Vmware Vsphere 5 5 Study Guide

eBooks to continuously update their skills in fast-changing industries where current knowledge is essential.

Vmware Vsphere 5 5 Study Guide eBooks help bridge the gap between theory and practice through structured explanations.

As digital literacy grows, Vmware Vsphere 5 5 Study Guide eBooks become increasingly relevant.

Repeated exposure reinforces knowledge and supports mastery.

Preserved knowledge supports continuity despite staff changes.

Many learners report improved focus when using Vmware Vsphere 5 5 Study Guide eBooks due to structured presentation.

This integration allows learners to connect reading materials with broader knowledge management practices.

Vmware Vsphere 5 5 Study Guide eBooks function as dependable educational anchors.

Vmware Vsphere 5 5 Study Guide eBooks support offline access, enabling uninterrupted learning without constant internet connectivity.

Vmware Vsphere 5 5 Study Guide eBooks serve as dependable reference materials for long-term use.

Vmware Vsphere 5 5 Study Guide eBooks help learners manage long-term educational goals.

The low entry barrier of Vmware Vsphere 5 5 Study Guide

eBooks allows learners to start new subjects without significant financial investment.

Entire libraries can be accessed from a single device.

Modern learners value VMware Vsphere 5 5 Study Guide eBooks for their balance between depth, flexibility, and accessibility.

VMware Vsphere 5 5 Study Guide eBooks encourage consistent engagement by lowering barriers to entry.

VMware Vsphere 5 5 Study Guide eBooks function as dependable educational anchors.

Structured layouts improve comprehension.

VMware Vsphere 5 5 Study Guide eBooks help learners manage long-term educational goals.

VMware Vsphere 5 5 Study Guide eBooks encourage self-directed learning by giving readers control over pacing, sequencing, and depth of exploration.

Digital learning through VMware Vsphere 5 5 Study Guide eBooks aligns well with modern productivity systems and digital note-taking tools.

Methodical study improves mastery.

As technology evolves, VMware Vsphere 5 5 Study Guide eBooks continue to offer stability.

The convenience of VMware Vsphere 5 5 Study Guide eBooks makes them ideal companions for professionals managing busy schedules.

Centralized content improves trust.

Searchable content enhances productivity and supports just-in-time learning scenarios.

Advanced Tips

Advanced tips for managing and using VMware vSphere 5.5 Study Guide are essential for users who want to maximize efficiency, security, and flexibility when working with digital documents. As collections grow and usage becomes more complex, understanding advanced techniques helps ensure that files remain optimized, accessible, and easy to manage across different devices and use cases.

One of the most important advanced practices is optimizing file size. Large PDF files can be difficult to share, slow to open, and consume unnecessary storage space. By compressing VMware vSphere 5.5 Study Guide files, users can significantly reduce file size without compromising readability or visual quality. Many professional PDF tools and online services offer intelligent compression that preserves text clarity, images, and layout while removing redundant data.

Another advanced technique involves securing sensitive content. If VMware vSphere 5.5 Study Guide contains proprietary, academic, or personal information, adding password protection can prevent unauthorized access. Passwords can restrict opening the file, printing, editing, or copying text. This is particularly useful when sharing documents in professional or collaborative environments where data protection is a priority.

Format conversion is also an advanced but practical strategy. Converting VMware Vsphere 5 5 Study Guide PDFs into editable formats such as Word or Excel allows users to revise content, extract data, or repurpose information for presentations and reports. After editing, files can be converted back to PDF to preserve formatting and compatibility. This workflow combines flexibility with consistency, making it ideal for research, education, and professional documentation.

Optimizing file performance

Beyond compression, users can improve performance by removing unnecessary pages, embedded fonts, or unused elements. Splitting large documents into smaller sections can also enhance navigation and reduce loading times, especially on mobile devices or older hardware.

Using Interactive Features

Modern editions of VMware Vsphere 5 5 Study Guide increasingly include interactive features designed to improve engagement and learning outcomes. These features transform static documents into dynamic experiences that support deeper understanding and active participation. Interactive content is especially valuable for educational materials, training manuals, and technical guides.

Videos embedded within VMware Vsphere 5 5 Study Guide can demonstrate concepts visually, making complex topics easier to grasp. Short explanatory clips, tutorials, or demonstrations complement written text and cater to visual learners. Users should ensure that their PDF reader or eBook

application supports multimedia playback to fully benefit from these features.

Quizzes and self-assessment tools are another powerful interactive element. They allow readers to test their understanding, reinforce key concepts, and identify areas that need further review. Interactive quizzes transform passive reading into active learning, improving retention and engagement.

Interactive diagrams and clickable illustrations enable users to explore content in greater detail. Zoomable charts, layered graphics, or clickable annotations provide additional context without overwhelming the main text. These elements are particularly useful in technical, scientific, or instructional versions of VMware Vsphere 5 5 Study Guide.

Hyperlinks also play a crucial role in interactivity. Internal links improve navigation by connecting chapters, sections, or references, while external links direct users to supplementary resources. Effective use of hyperlinks creates a seamless reading experience and encourages further exploration of related topics.

Best practices for interactive content

To fully utilize interactive features, users should keep their reading software updated. Compatibility issues can limit access to multimedia or interactive elements. Testing features across different devices ensures a consistent experience and prevents frustration during use.

Printing Tips

Despite the advantages of digital formats, printing VMware Vsphere 5 5 Study Guide remains important for many users. Whether for study, annotation, or archival purposes, proper printing techniques ensure that the physical copy maintains the quality and structure of the original document.

Before printing, users should review page setup options carefully. Adjusting page size, orientation, and margins helps prevent content from being cut off or misaligned. Selecting the correct paper size is especially important for documents designed with specific layouts, such as textbooks or manuals.

Duplex printing is an effective way to reduce paper usage and create more compact documents. Printing on both sides of the paper not only saves resources but also makes large documents easier to handle and store. Many modern printers support automatic duplex printing, simplifying the process.

Print quality settings should be adjusted based on purpose. Draft mode is suitable for internal review or rough notes, while high-quality settings are better for final copies or professional presentations. Balancing quality and ink usage helps manage printing costs effectively.

For long documents, printing selected sections rather than the entire file can save time and resources. Using bookmarks or table of contents entries allows users to target specific chapters or pages, making printing more efficient and purposeful.

Binding and physical organization

After printing, organizing physical copies improves usability. Binding options such as spiral binding, folders, or binders keep pages secure and easy to reference. Labeling printed materials with titles and dates further enhances organization and long-term usability.

Advanced workflows and productivity

Integrating VMware Vsphere 5 5 Study Guide into advanced workflows can significantly boost productivity. Combining digital annotation tools with note-taking applications creates a unified research or study environment. Syncing notes across devices ensures continuity and reduces duplication of effort.

Version control is another advanced practice worth adopting. When editing or updating VMware Vsphere 5 5 Study Guide, maintaining clear version numbers and change logs prevents confusion and accidental overwriting. This is especially important in collaborative projects where multiple contributors are involved.

Automation tools can also streamline repetitive tasks. Batch conversion, bulk compression, or automated backups save time and reduce manual effort. Users managing large collections of digital documents benefit greatly from these efficiencies.

Balancing digital and physical use

Advanced users often combine digital and printed formats strategically. Digital copies offer portability, searchability, and interactivity, while printed versions provide tactile

engagement and ease of annotation. Choosing the right format for each task maximizes effectiveness and comfort.

Security and long-term preservation

Protecting VMware Vsphere 5 5 Study Guide goes beyond passwords. Regular backups, encryption, and secure storage practices ensure long-term preservation. Cloud services with version history and redundancy provide additional protection against data loss.

Archiving older versions in a separate location prevents clutter while preserving historical records. Clear labeling and documentation make archived files easy to retrieve if needed in the future.

Final thoughts on advanced usage of VMware Vsphere 5 5 Study Guide

Mastering advanced tips for VMware Vsphere 5 5 Study Guide empowers users to work more efficiently, securely, and creatively. From compression and security to interactive features and professional printing, these strategies enhance both digital and physical experiences. By adopting advanced workflows, leveraging interactivity, and maintaining organized storage, users can unlock the full potential of VMware Vsphere 5 5 Study Guide in academic, professional, and personal contexts.

Unlocking VMware vSphere 5.5 Mastery: Your Comprehensive Study Guide

In the dynamic world of IT infrastructure, virtualization remains a cornerstone of efficiency, scalability, and cost-effectiveness. At the forefront of this revolution stands VMware vSphere, and understanding its intricacies is paramount for IT professionals. For those looking to delve deep into version 5.5, a robust [VMware vSphere 5.5 study guide](#) is not just a recommendation - it's a necessity. This article provides a detailed, analytical, and SEO-friendly deep dive into what you need to know to master vSphere 5.5, empowering you to achieve certification and excel in your career.

Why Focus on VMware vSphere 5.5?

While newer versions of vSphere have since been released, vSphere 5.5 holds significant relevance. Many organizations still operate on this version due to its stability, maturity, and the substantial investment in existing infrastructure. Furthermore, understanding vSphere 5.5 provides a strong foundational knowledge that easily translates to later versions, making it an excellent starting point for aspiring [vSphere certification](#) candidates. Mastering this version demonstrates a solid understanding of core virtualization concepts, essential for roles such as VMware Administrator, Virtualization Engineer, and Cloud Architect.

Key Components of a Comprehensive VMware vSphere 5.5 Study Guide

A truly effective [VMware vSphere 5.5 study guide](#) should cover a broad spectrum of topics, from fundamental concepts to advanced configurations. The ideal guide will break down the complex architecture into digestible modules, fostering a deep understanding of each component's role and interaction.

1. vSphere Core Concepts and Architecture

Before diving into specific features, a solid grasp of the underlying architecture is crucial. This includes:

1. **ESXi Host:** Understanding the bare-metal hypervisor, its role in abstracting hardware, and its core functionalities like CPU, memory, storage, and network management.
2. **vCenter Server:** Exploring the centralized management platform, its importance in managing multiple ESXi hosts, and its various components like the vCenter Server Appliance (VCSA) and the Windows-based installation.
3. **Virtual Machines (VMs):** Delving into the creation, configuration, and management of virtual machines, including virtual hardware, VMDK files, snapshots, and cloning.
4. **Datastores:** Learning about different storage types (VMFS, NFS), their configurations, and best practices for performance and availability.
5. **Networking:** Understanding virtual switches (vSphere Standard Switch and vSphere Distributed Switch), port groups, VLAN tagging, NIC teaming, and network security.

2. Installation and Configuration of vSphere 5.5 Components

A practical [VMware vSphere 5.5 study guide](#) will dedicate significant attention to the installation and initial setup of vSphere. This involves:

1. **ESXi Installation:** Covering different installation methods, host profiles, and initial configuration steps.
2. **vCenter Server Installation:** Detailing the prerequisites, installation process for both VCSA and Windows-based vCenter, and the critical post-installation configuration.
3. **Datacenter and Cluster Setup:** Understanding the hierarchical structure of vSphere environments, creating datacenters, and configuring clusters for high availability and load balancing.

3. High Availability and Fault Tolerance

One of vSphere's most compelling benefits is its ability to ensure business continuity. A comprehensive study guide must cover:

1. **vSphere High Availability (HA):** Explaining how HA automatically restarts VMs on other hosts in case of a host failure, including admission control, failover levels, and network isolation detection.
2. **vSphere Fault Tolerance (FT):** Understanding how FT provides continuous availability by creating a live shadow instance of a VM, ensuring zero downtime during host failures. This section should highlight the performance considerations and limitations of FT.

3. **vSphere Distributed Resource Scheduler (DRS):**

Covering how DRS balances workloads across hosts in a cluster to optimize resource utilization and prevent performance bottlenecks. This includes understanding automation levels and DRS affinity/anti-affinity rules.

4. **Storage Management in vSphere 5.5**

Efficient storage management is critical for performance and capacity planning. Key areas to focus on include:

1. **VMFS Datastores:** Deep dive into VM File System, its versioning, and best practices for creation and management.
2. **Network Attached Storage (NAS) and Storage Area Networks (SAN):** Understanding how vSphere interacts with different storage protocols like iSCSI, Fibre Channel, and NFS.
3. **vSphere Storage vMotion:** Learning how to migrate running VMs' disks and memory to different storage locations without downtime.
4. **Storage DRS:** Exploring how Storage DRS automates the placement and load balancing of virtual machine disks across datastores.
5. **Thin Provisioning:** Understanding the benefits and implications of thin-provisioned virtual disks.

5. **Networking in vSphere 5.5**

Robust and secure networking is essential for any virtualized environment. A good [VMware vSphere 5.5 study guide](#) will cover:

1. **Virtual Switches:** Detailed explanation of vSphere Standard Switches (VSS) and vSphere Distributed Switches (VDS), including their respective advantages and use cases.
2. **Port Groups and VLANs:** Understanding how to segment network traffic and implement security policies.
3. **NIC Teaming:** Learning how to aggregate multiple network adapters for increased bandwidth and fault tolerance.
4. **Network I/O Control:** Exploring how to prioritize network traffic for critical applications.
5. **Security Features:** Understanding MAC address filtering, promiscuous mode, and other security configurations.

6. vSphere Management and Monitoring

Effective management and proactive monitoring are key to maintaining a healthy vSphere environment. This includes:

1. **vSphere Client:** Mastering the interface for managing vSphere components.
2. **Performance Monitoring:** Utilizing vCenter Server alarms, performance charts, and ESXTOP for identifying and troubleshooting performance issues.
3. **Logging and Auditing:** Understanding vSphere logs and audit trails for troubleshooting and security.
4. **vSphere Update Manager:** Learning how to patch and upgrade ESXi hosts and vCenter Server components.

7. vSphere Command-Line Interface (CLI) and APIs

For advanced users and automation, understanding the CLI and APIs is invaluable. This includes:

1. **ESXi Shell and PowerCLI:** Learning to script and automate common tasks using the command line.
2. **vSphere API:** Gaining an understanding of how to programmatically interact with vSphere for custom integrations and automation.

Preparing for vSphere Certification with a Study Guide

For many, the primary driver for using a [VMware vSphere 5.5 study guide](#) is to prepare for official VMware certifications. The most common certification path for vSphere 5.5 is the [VCP \(VMware Certified Professional\)](#). A well-structured study guide will align with the exam objectives, providing targeted content and practice questions.

Choosing the Right Study Material

When selecting a [VMware vSphere 5.5 study guide](#), consider the following:

1. **Authoritative Sources:** Look for guides from reputable VMware instructors, official VMware documentation, or established training providers.
2. **Hands-On Labs:** The best study guides often incorporate or recommend hands-on lab exercises. Practical experience is crucial for solidifying theoretical knowledge.
3. **Practice Exams:** Authentic practice exams that mimic the format and difficulty of the real certification test are invaluable.
4. **Up-to-Date Information:** While focusing on vSphere 5.5,

ensure the guide reflects any crucial errata or clarifications released by VMware for that version.

5. **Clarity and Structure:** The guide should be logically organized, easy to read, and provide clear explanations of complex topics.

Beyond Certification: Practical Application of vSphere 5.5 Knowledge

While certification is a significant goal, the true value of mastering vSphere 5.5 lies in its practical application. A thorough understanding enables you to:

1. **Design and Deploy Efficient Virtual Infrastructures:** Make informed decisions about hardware, storage, and network configurations.
2. **Troubleshoot Complex Issues:** Quickly identify and resolve performance bottlenecks, availability problems, and configuration errors.
3. **Optimize Resource Utilization:** Ensure your virtual environment is running efficiently, minimizing costs and maximizing performance.
4. **Enhance Security and Compliance:** Implement robust security measures and meet industry compliance standards.
5. **Automate Routine Tasks:** Streamline operations and reduce manual effort through scripting and automation.

The Evolving Landscape: Transitioning from vSphere 5.5

As you master vSphere 5.5, it's important to acknowledge the advancements in newer versions. While the core principles remain, understanding the evolution from 5.5 to later releases (e.g., vSphere 6.x, 7.x) will be crucial for long-term career growth. Many concepts learned in a [VMware vSphere 5.5 study guide](#), such as HA, DRS, and vMotion, have been refined and expanded upon in subsequent versions.

Conclusion

Embarking on the journey to master VMware vSphere 5.5 is a strategic investment in your IT career. A well-chosen [VMware vSphere 5.5 study guide](#) is your compass, navigating you through the intricate landscape of this powerful virtualization platform. By focusing on core concepts, practical implementation, and effective troubleshooting, you'll not only be well-prepared for certification but also gain the skills necessary to manage and optimize modern IT infrastructures. Embrace the learning process, leverage the available resources, and unlock the full potential of VMware vSphere 5.5.

SEO Keywords:

1. vmware vsphere 5 5 study guide
2. vsphere 5 5 certification
3. vmware vsphere 5 5

4. vsphere 5 5 training
5. vcp certification
6. esxi 5 5
7. vcenter server 5 5
8. vsphere 5 5 installation
9. vsphere 5 5 networking
10. vsphere 5 5 storage
11. vmware virtualization
12. it infrastructure
13. datacenter virtualization
14. virtualization best practices
15. vmware administrator
16. virtualization engineer
17. cloud architect
18. vSphere High Availability
19. vSphere DRS
20. vSphere Storage vMotion
21. vmware certification
22. VCP5-DCV