What Is VMware vSphere?

VMware vSphere, the industry leading virtualization platform, empowers users to virtualize scale-up and scale-out applications with confidence, redefines availability, and simplifies the virtual data center. The result is a highly available, resilient, on-demand infrastructure that is the ideal foundation of any cloud environment. This dramatically reduces data center cost, increases system and application uptime, and drastically simplifies the way you operate your data center. vSphere is purpose-built for the next generation of applications and serves as the core foundational building block for the Software-Defined Data Center. vSphere simplifies IT by separating applications and operating systems (OSs) from the underlying hardware. Your existing applications see dedicated resources, but your servers can be managed as a pool of resources. The result is that your business runs on a simplified yet resilient IT environment.

What Are vSphere Essentials Kit and Essentials Plus Kit?

vSphere Essentials Kit and Essentials Plus Kit are designed for small businesses that are getting started with virtualization. Both provide virtualization and centralized management for up to three server hosts. vSphere Essentials Kit provides server consolidation to help you get the most out of your hardware and reduce hardware costs.

vSphere Essentials Plus Kit provides business continuity with a smaller IT footprint, which reduces overall hardware costs. Small businesses can ensure business continuity without shared storage hardware by using features such as vSphere High Availability (automatic restart of applications when server failures are detected) and vSphere vMotion® (elimination of planned downtime during server maintenance). Protect your business applications and data with features such as VMware vSphere Data Protection™ (agent-less, image-level VM backup/recovery and application-aware protection for business critical applications) and VMware vShield Endpoint™ (agentless antivirus and antimalware protection for virtual machines). vSphere Replication™ adds low-cost replication for your virtual machines and provides a foundation for small businesses to leverage a cloud-based disaster-recovery solution from a VMware cloud service provider.

The result is an always-available IT environment that is more cost-effective, resilient and responsive to changing business needs. As small businesses grow and their needs increase, they can easily upgrade to vSphere with Operations Management Acceleration Kits for more-advanced capabilities.
How Are vSphere Essentials Kit and Essentials Plus Kit Used?

- **Maximize application availability and protect information assets** – Achieve always-available IT with live migration for virtual machines and high availability for applications in virtual-machine clusters. Protect your data with the reliability of vSphere and integrated backup, recovery and failover features.

- **Consolidate and optimize IT investments** – Achieve consolidation ratios of 10:1 or higher and improve hardware utilization from 5–15 percent to 80 percent or more without sacrificing application performance.

- **Simplify management and enhance productivity** – Provision new applications in minutes instead of days or weeks, monitor virtual-machine performance and automate patch and update management.

- **Streamline software development** – Safely test complex multtier configurations in a secure, isolated sandbox environment while enabling test and development teams to share server, network and storage infrastructure.

Key Features and Components

VMware vSphere Essentials Kit and Essentials Plus Kit include the following key features and components:

- **VMware vSphere Hypervisor Architecture** provides a robust, production-proven, high-performance virtualization layer that enables multiple virtual machines to share hardware resources with performance that can match or exceed native throughput.

- **VMware vCenter Server for Essentials** provides centralized management and performance monitoring for all virtual machines and vSphere hosts with built-in physical-to-virtual (P2V) machine conversion and rapid provisioning, using virtual-machine templates.

- **VMware vSphere VMFS** enables virtual machines to access shared storage devices (Fibre Channel, iSCSI, etc.) and is a key enabling technology for other components such as VMware vSphere Storage vMotion®.

- **VMware vSphere Thin Provisioning** provides dynamic allocation of shared storage capacity, enabling IT organizations to implement a tiered storage strategy while reducing storage spending by up to 50 percent.

- **VMware vSphere vStorage APIs** provide integration with supported third-party data protection.

- **VMware vCenter Update Manager®** automates tracking, patching and updating for vSphere hosts and for applications and OSs running in VMware virtual machines.

- **VMware vCenter Converter™** enables IT administrators to rapidly convert physical servers and third-party virtual machines to VMware virtual machines.

- **VMware vCenter Operations Manager Foundation** enables you to leverage comprehensive views into health, risk and efficiency scores of your vSphere environment infrastructure. Quickly drill down to see what’s causing current workload conditions, pinpoint potential problems in the future and identify areas with inefficient use of resources.

- **VMware vSphere Content Library** provides simple and effective centralized management for VM templates, virtual appliances, ISO images, and scripts.

- **Hardware compatibility** is possible with the broadest range of 32- and 64-bit servers and OSs, storage and networking equipment and enterprise management tools.

VMware vSphere Essentials Plus Kit includes the following business-continuity features and components for always-available IT:

- **vSphere High Availability** provides cost-effective, automated restart within minutes for all applications in the event of hardware or OS failures.

- **vSphere vMotion** enables live migration of virtual machines across servers with no disruption to users or service loss, eliminating the need to schedule application downtime for server maintenance.

- **VMware vSphere Data Protection™** is VMware's backup and replication solution, powered by EMC Avamar. It delivers storage-efficient backups through patented variable-length deduplication, rapid recovery and WAN-optimized replication for DR. Its vSphere-integration and simple user interface makes it an easy and effective backup tool for vSphere. It provides agent-less, image-level VM backups to disk and application-aware protection for business-critical applications (e.g., Exchange, SQL Server) along with WAN-efficient, encrypted backup replication across sites.

- **vShield Endpoint** provides agentless antivirus and antimalware protection to secure your virtual machines.

- **vSphere Replication** provides low-cost replication for your virtual machine and serves as the foundation for leveraging a cloud-based disaster-recovery solution from a VMware cloud service provider.
## How to Buy

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## Learn More

For information or to purchase VMware products, call 877-4-VMWARE (outside North America, +1-650-427-5000), visit [http://www.vmware.com/products](http://www.vmware.com/products) or search online for an authorized reseller. For detailed product specifications and system requirements, refer to the vSphere documentation.