



# VMware vSphere

The Best Platform for Cloud Infrastructures

BROCHURE

## At a Glance

**VMware vSphere is the industry's most complete, scalable and powerful virtualization platform, delivering the infrastructure and application services that organizations need to transform their information technology and deliver IT as a service.**

**Proven by more than 170,000 customers—including all the Fortune Global 100—and leveraging more than a decade of industry-leading technology and experience, VMware vSphere provides unparalleled agility, control and efficiency while fully preserving customer choice.**

## Key Benefits

- **Efficiency through utilization and automation**—Achieve consolidation ratios of 15:1 or more and improve hardware utilization from 5 percent to 15 percent to as much as 80 percent or more—without sacrificing performance.
- **Dramatically lower IT costs**—Reduce capital expenditures by up to 70 percent and operational expenditures by up to 30 percent to achieve 20 percent to 30 percent lower IT infrastructure costs for each application running on vSphere.
- **Agility with control**—Respond quickly to changing business needs without sacrificing security or control, and deliver zero-touch infrastructure with built-in availability, scalability and performance guarantees for all business-critical applications running on vSphere.
- **Freedom of choice**—Use a common, standards-based platform to leverage existing IT assets alongside next-generation IT services, and enhance vSphere through open APIs with solutions from a global ecosystem of leading technology providers.

## IT Challenges are Business Challenges

In today's technology-driven environment, business agility depends on IT agility. But for many organizations, the potential business value of information technology has become literally trapped within traditional IT infrastructures that are too rigid, costly and complex to keep up with the pace of real-time business.

In fact, most IT organizations spend 70 percent to 80 percent of their time and budget just to "keep the lights on," leaving little time to innovate or support strategic business initiatives. With users demanding faster response times, and management demanding lower costs, organizations need a better strategy.

### Cloud Computing: A New Model for IT

To break this cycle so that organizations can transform their IT from a cost center to a strategic asset that energizes the business, a new model for IT services is emerging: cloud computing.

Cloud computing is an approach to IT that leverages the efficient pooling of resources to create an on-demand, self-managing virtual infrastructure that can be allocated dynamically as a service. This approach abstracts applications and information from the complexity of underlying hardware infrastructure, so IT organizations can focus on business needs and strategic innovation.

### VMware Provides a Pragmatic Path to the Cloud

As the global leader in virtualization, VMware is charting an evolutionary course to cloud computing that can accommodate the applications of today and the cloud-based IT services of tomorrow. Working in concert with industry leaders, VMware is helping organizations of all sizes move beyond the limitations of traditional IT and revolutionize the way IT serves the business.

## Using vSphere

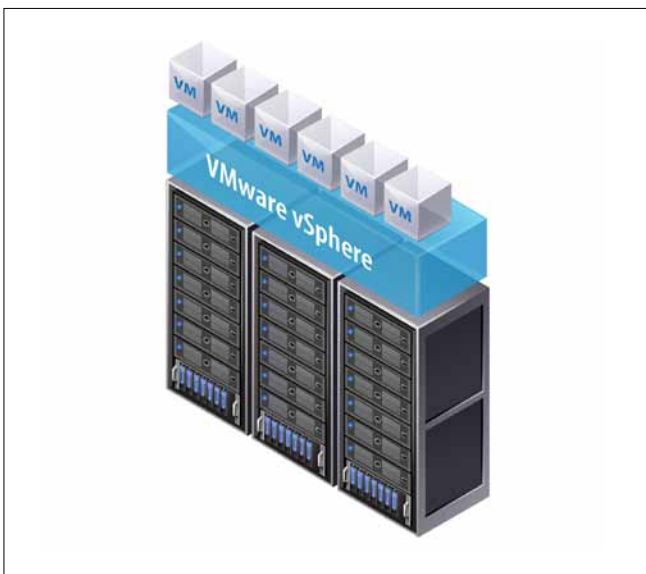
**VMware vSphere is an enterprise-class solution that more than 170,000 organizations of all sizes use to consolidate and optimize existing IT assets, improve business continuity, streamline IT operations and deliver IT as a service.**

### Consolidate & Optimize IT Hardware

vSphere enables IT organizations to delay costly and disruptive datacenter expansion projects by making it possible to consolidate 15 or more **virtual machines** on a single physical server without sacrificing performance or throughput.

Customers also use vSphere to create powerful multicore virtual machines and virtual machine clusters that span multiple physical servers to support even the most demanding applications.

In addition, vSphere reduces the complexity of hardware management through comprehensive virtualization of server, storage and networking hardware. vSphere customers can slash IT capital expenses by an average of **more than 70 percent** and IT operating costs by **more than 30 percent**.



VMware vSphere abstracts server workloads from underlying hardware to create a singular pool of resources that IT organizations can allocate dynamically in response to changing business conditions.

### Improve Business Continuity

vSphere helps organizations reduce the cost and complexity of business continuity and disaster recovery with always-on IT capabilities and layered protection against service outages and data loss.

vSphere eliminates planned downtime and maintenance windows with live migration of virtual machines and shared storage. vSphere also helps to minimize unplanned downtime with hardware-independent failover for virtual machines and fault tolerance capabilities that provide lockstep redundancy for the most critical application loads.

In addition, organizations can leverage the agentless backup and recovery capabilities of vSphere for virtual machines to prevent data loss, with built-in deduplication to reduce data storage requirements.

### Streamline IT Operations

vSphere **lowers operational overhead** and dramatically simplifies the management of large, geographically distributed development, QA and production IT environments that include a heterogeneous mix of applications, operating systems and hardware platforms.

vSphere also simplifies the provisioning of IT services and ensures a uniform assurance of service levels regardless of physical infrastructure or the actual location of the services, which in turn allows IT staff to move application loads from one virtual infrastructure to another without the need to reconfigure or customize policies or configurations.

### Deliver IT as a Service

VMware vSphere is the only virtualization platform that gives customers the power to realize the benefits of cloud computing while maintaining security, compliance and complete control over corporate assets.

With an array of management and automation capabilities such as advanced resource pooling, automated resource allocation, role-based administration, zero-touch infrastructure and self-service portals for end users, vSphere **dynamically aligns IT resources with business needs**, making it possible to deliver IT as a utility-like service.

By adopting vSphere as an IT-as-a-service (ITaaS) platform, organizations gain the ability to transform IT from a cost center to a strategic advantage that saves energy—human, financial and environmental.

# The Most Complete Virtualization Platform

VMware vSphere is the industry's most complete virtualization platform, with infrastructure services that transform IT hardware into a high-performance shared computing platform, and application services that help IT organizations deliver the highest levels of availability, security and scalability.

## Infrastructure Services

### vCompute

vSphere provides a rock-solid virtualization layer that enables organizations to create powerful multicore virtual machines and virtual machine clusters that span across hardware platforms.

vSphere can boost application performance by nearly 50 percent with dynamic, automated, policy-based resource allocation and also helps customers cut IT power usage by up to 55 percent with distributed power management capabilities that continuously and automatically optimize the power consumption of underlying server hardware.

### vStorage

vSphere helps to reduce storage expenditures by up to 50 percent by enabling administrators to defer storage purchases until they are really required and also enables on-demand expansion of virtual machine storage capacity.

### vNetwork

VMware vSphere brings visibility, control and scalability to virtual machine networks, allowing administrators to move beyond per-host network configurations and maintain continuous enforcement of network policies for virtual machines as they live-migrate from one server to another.

## Application Services

### Availability

vSphere helps IT organizations ensure business continuity and prevent data loss with always-on IT capabilities such as automated failover, zero-downtime maintenance, virtual machine fault tolerance and cost-effective data protection.

### Security

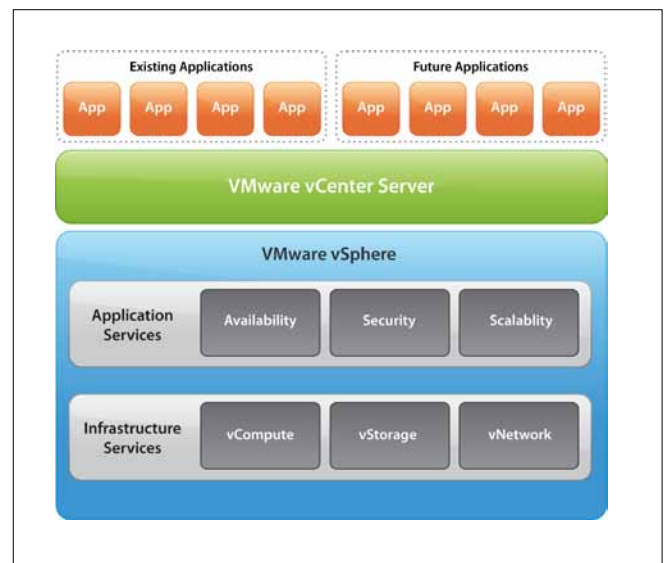
IT security is inherently more complex in virtual environments. vSphere **simplifies security and compliance** by helping to enforce policies at the application level within logical zones in a shared environment while maintaining trust and network segmentation of users and sensitive data.

### Scalability

vSphere makes it possible to achieve cloud-scale capacity with **central management** for thousands of virtual machines and hundreds of vSphere hosts. vSphere also delivers record-breaking performance for Tier-1 applications from Microsoft, Oracle, SAP and other leading software providers.

## Open Architecture

For more than a decade, VMware has embraced an open, standards-based approach to virtualization that allows customers to leverage existing tools and infrastructure while adopting next-generation applications. vSphere also includes a comprehensive set of APIs for building tools and solutions that enhance and extend storage, networking, security and management capabilities.



VMware vSphere provides the most complete set of infrastructure and application services available.

# The Best Platform for Cloud Infrastructures

**VMware vSphere is the best platform for creating private, public and hybrid cloud infrastructures, and the only virtualization solution that offers an evolutionary path to cloud computing, allowing customers to avoid rip-and-replace solutions in favor of a common platform they can use to make a pragmatic transition to cloud-based solutions and services.**

## Private Cloud Infrastructures

vSphere enables organizations to turn their existing datacenters into private clouds that can more efficiently and effectively manage existing applications as well as the next generation of flexible, on-demand IT services.

Capabilities such as resource pooling and dynamic resource allocation, centralized management and automation, and a self-service portal for end users all help to reduce costs and increase agility while ensuring security, compliance, and control over IT assets. vSphere also helps IT administrators streamline routine operational tasks to enhance SLAs, increase productivity and free up time for more strategic initiatives.

By adopting vSphere as a private cloud platform, IT teams can deliver IT services in a more flexible and efficient manner while automating key processes such as systems management and application provisioning.

## Public Cloud Infrastructures

VMware partners with hundreds of hosting and service providers to enable compatible public cloud infrastructures with the vision of enabling IT services that can span across clouds through federation, using vSphere as a common platform.

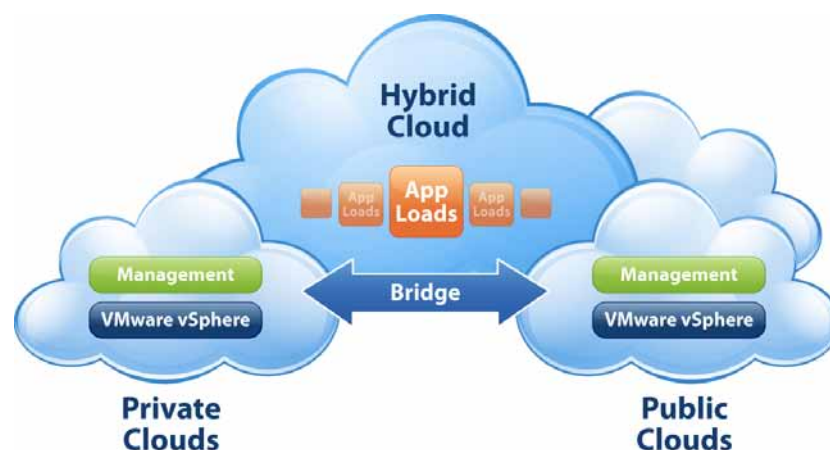
By offering customers the freedom of open standards and interoperability of applications, VMware offers the best choice for organizations looking to expand IT capacity or migrate applications to the public cloud.

A common management and infrastructure platform ensures visibility of pooled resources along with the elasticity to provide the highest service levels for applications. Through a broad ecosystem of leading cloud service providers, organizations can get VMware Virtualized services, ranging from on-demand, pay-as-you go infrastructure to enterprise-class, production-ready offerings.

## Hybrid Cloud Infrastructures

The VMware vision for cloud computing is to bridge internal resources with available external resources, enabling customers to create **hybrid cloud** infrastructures that span seamlessly across multiple **connected clouds**, both private and public.

The model will ultimately allow organizations to achieve the full benefits of cloud computing by leveraging a strategic mix of internal and external solutions for data storage, application hosting and disaster recovery while retaining full control over their IT infrastructures. Customers that adopt private or public cloud solutions based on vSphere will be in the best position to utilize this hybrid cloud model as it becomes mainstream.



VMware vSphere provides a robust common platform for private, public and hybrid cloud infrastructures.

## The World's Top Companies Choose VMware

- 100 percent of the Fortune 100
- 98 percent of the Fortune 500 (491 out of 500)
- 96 percent of the Fortune 1000 (955 out of 1000)
- 100 percent of the Fortune Global 100
- 95 percent of the Fortune Global 500 (476 out of 500)
- 91 percent of the FTSE 100 (U.K.)
- 95 percent of the DAX 100 (Germany)
- 100 percent of the CAC 40 (France)
- 87 percent of the MIB 30 (Italy)
- 91 percent of the IBEX 35 (Spain)
- 94 percent of the ASX 100 (Australia/New Zealand)
- 83 percent of the Nikkei 225 (Japan)

## Customer Success Stories

### Campbell Clinic

Campbell Clinic is a world leader in sports medicine, orthopedics, joint replacement, and physical medicine and rehabilitation. Since adopting VMware vSphere, the clinic has reduced hardware, power and cooling costs by more than \$100,000 while improving the performance, efficiency and availability of Tier-1 applications.

Read the Campbell Clinic success story:

[http://www.vmware.com/go/customer\\_success/campbell\\_clinic](http://www.vmware.com/go/customer_success/campbell_clinic)

### Financial Technologies India Ltd.

Financial Technologies India Ltd. (FTIL) owns and operates 10 international financial exchanges across Africa, India, the Middle East and Southeast Asia. To support rapid, sustainable growth, FTIL adopted vSphere to maximize its existing real estate and infrastructure, achieving 50:1 consolidation ratios while running SAP and Microsoft applications in production environments.

[http://www.vmware.com/go/customer\\_success/FTIL](http://www.vmware.com/go/customer_success/FTIL)

### Marshall University

Marshall University (MU) is the oldest public institution of higher learning in West Virginia and is home to approximately 14,000 students. The university's IT department first adopted VMware technology in 2004, and today the university has virtualized approximately 82 percent of its IT environment, with a long-term goal of virtualizing the entire IT infrastructure.

Read the Marshall University success story:

[http://www.vmware.com/go/customer\\_success/marshall\\_u](http://www.vmware.com/go/customer_success/marshall_u)

### Southwestern/Great American

Founded in 1855, Southwestern/Great American Inc. has a dozen distinct lines of business, including direct selling, customized publishing, school fundraising, sales training, and executive search and recruitment. The company relied on VMware technology to run its SAP infrastructure for several years, and it has been so successful that it now has a "VMware first" policy and uses virtual machines as the default when provisioning new server application workloads.

Read the Southwestern success story:

[http://www.vmware.com/go/customer\\_success/southwestern\\_great\\_american](http://www.vmware.com/go/customer_success/southwestern_great_american)

### SonicWALL

SonicWALL Inc. is a leader in the unified threat management security industry, with solutions such as solid-state firewalls and VPN appliances and value-added security subscriptions. Using vSphere, SonicWALL has virtualized 95 percent of its customer-facing server infrastructure and ensured the rock-solid reliability its customers demand.

Read the SonicWALL success story:

[http://www.vmware.com/go/customer\\_success/sonicwall](http://www.vmware.com/go/customer_success/sonicwall)

## vSphere Kits and Editions

**VMware vSphere Essentials Kits**—Designed especially for IT environments with fewer than 20 physical servers, these kits deliver enterprise-class virtualization with integrated management and business continuity features.

**VMware vSphere Essentials Kits for Retail & Branch Offices**—These kits are tailored for midsize and enterprise customers interested in virtualizing smaller remote sites and provide complete, integrated turnkey solutions for greater business agility and continuity at all remote locations.

**VMware vSphere Standard Edition**—This entry-level solution for basic consolidation of applications slashes hardware costs while accelerating application deployment.

**VMware vSphere Advanced Edition**—This strategic consolidation solution protects all applications against planned and unplanned downtime to provide superior application availability.

**VMware vSphere Enterprise & Enterprise Plus Editions**—These editions include the full range of features for transforming datacenters into dramatically simplified cloud computing environments, providing the next generation of flexible, reliable IT services.

| VMware vSphere Kits and Editions Compared  |   |                     |                          |                              |                                   |                    |                    |                      |                           |
|--|---|---------------------|--------------------------|------------------------------|-----------------------------------|--------------------|--------------------|----------------------|---------------------------|
|  |   | vSphere Essentials* | vSphere Essentials Plus* | vSphere Essentials for ROBO* | vSphere Essentials Plus for ROBO* | vSphere Standard** | vSphere Advanced** | vSphere Enterprise** | vSphere Enterprise Plus** |
| ❶  | <b>Consolidation</b><br>Convert physical system to virtual machines and leverage live migration (vMotion)   | ✓                   | ✓                        | ✓                            | ✓                                 | ✓                  | ✓                  | ✓                    | ✓                         |
| ❷  | <b>Availability</b><br>Enable high availability and fault tolerance for applications  |                     | ✓                        |                              | ✓                                 |                    | ✓                  | ✓                    | ✓                         |
| ❸  | <b>Automated Resource Management</b><br>Deliver load balancing, power management and live storage migration (Storage vMotion) without manual intervention |                     |                          |                              |                                   |                    |                    | ✓                    | ✓                         |
| ❹  | <b>Simplified Operations</b><br>Advanced networking (distributed network switch) and host configuration templates (host profiles) for more OpEx savings   |                     |                          |                              |                                   |                    |                    |                      | ✓                         |
| *All vSphere Essentials Kits contain a version of VMware vCenter Server for centralized management.<br>** A version of VMware vCenter Server (licensed separately) is required for all vSphere editions. |   |                     |                          |                              |                                   |                    |                    |                      |                           |

## Additional vSphere Products and Add-ons

**VMware vCenter Server**—vCenter Server provides unified management for the entire virtual infrastructure and unlocks many key vSphere capabilities such as live migration. vCenter Server can manage thousands of virtual machines across multiple locations and streamlines administration with features such as rapid provisioning and automated policy enforcement.

**Note: vCenter is a required element of a complete vSphere implementation and is licensed separately on a per-instance basis. Customers can also get vCenter Server for Essentials as an included component of all vSphere Essentials Kits.**

**VMware Data Recovery**—available for purchase as an add-on module with vSphere Standard, this add-on is treated as an upgrade to the VMware vSphere Standard license.

**Cisco Nexus 1000V**—This pure software network switch integrates with vSphere to deliver virtualization-aware network services and is available for purchase as an add-on product for use with vSphere Enterprise Plus.

### Support and Professional Services

VMware offers global Subscription and Support (SnS) services to all VMware vSphere customers. For customers that require additional services, VMware also offers professional services engagements on best practices and getting started with your vSphere deployment, both directly and through an extensive network of certified professionals.

<http://www.vmware.com/services/>

## How to Buy

To purchase VMware vSphere, use the online VMware Partner Locator to find an authorized reseller in your area:

<http://partnerlocator.vmware.com/>

You can also visit the online VMware Store to determine which kit or edition of vSphere is right for your organization:

[http://www.vmware.com/vmwarestore/vsphere\\_purchaseoptions.html](http://www.vmware.com/vmwarestore/vsphere_purchaseoptions.html)

If you are an existing VMware vSphere or VMware Infrastructure 3 customer, visit the vSphere Upgrade Center to determine the appropriate upgrade path for your organization:

<http://www.vmware.com/products/vsphere/upgrade-center/>

For organizations that are new to virtualization, VMware offers solution bundles called vSphere Acceleration Kits that combine a VMware vSphere kit or edition with VMware vCenter Server and are available for up to 30 percent off the normal list price:

<http://www.vmware.com/vmwarestore/buyvsphere-acceleration-kits.html>

## Learn More

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

