

# VMware vCenter Server

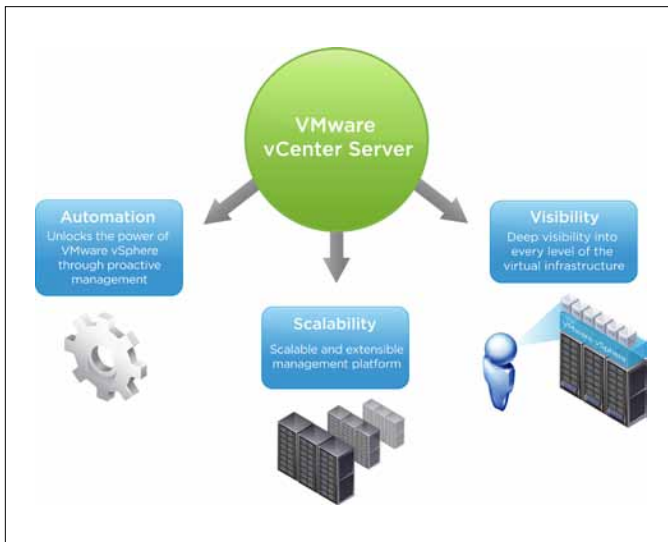
## Unify and Simplify Virtualization Management

### AT A GLANCE

VMware vCenter™ Server provides a scalable and extensible platform for proactive virtualization management, delivering deep visibility into virtual infrastructure. vCenter Server centrally manages VMware vSphere® environments and simplifies daily tasks, dramatically improving administrative control over the environment.

### KEY BENEFITS

- Analyze and remediate issues quickly with deep visibility into vSphere and its underlying infrastructure.
- Improve IT responsiveness by proactively managing vSphere environments with rapid provisioning, automated load balancing of virtual machine workloads and out-of-box workflows for automation.
- Quickly deploy vCenter Server and manage vSphere using a Linux-based virtual appliance with the vCenter Server Appliance (vCSA).
- Scale to meet the needs of the most demanding enterprise environments and manage up to 10,000 virtual machines.



vCenter Server delivers automation, scalability and visibility for vSphere environments.

## What is vCenter Server?

vCenter Server provides unified management of all vSphere hosts and virtual machines in the datacenter from a single console. VMware vCenter Server provides unified management of all hosts and virtual machines in a datacenter from a single console, allowing IT administrators can improve control, simplify day-to-day tasks, and reduce the complexity and cost of managing IT environments.

## How is vCenter Server Used?

- Centralize virtualization management – vCenter Server allows IT organizations to organize, rapidly provision and configure the entire IT environment through a single interface, with thorough and consistent performance monitoring of all critical components (including CPU, memory, storage and networking).
- Improve agility through automation – Task scheduling and alerts help administrators improve responsiveness to business needs and prioritize their actions appropriately.
- Strengthen security and control – Robust permissions mechanisms and Microsoft Active Directory integration help IT teams control authorized access to virtual machines and vSphere hosts with full delegation of administrative privileges.
- Optimize availability and resource allocation – vCenter Server provides a single interface for configuring and managing live migration, load balancing, high availability and fault tolerance in vSphere environments.
- Streamline patches and updates – Integration with VMware vSphere Update Manager enables IT teams to enforce configuration and compliance standards automatically.

## How Does vCenter Server Work?

vCenter Server includes several key components that work together to give enterprises a scalable virtualization management hub. Management servers provide central management points for hosts and virtual machines, with inventory and performance information stored in a database. vCenter Agent provides connectivity between hosts and management servers.

To access vCenter Server, administrators can use the vSphere Client on any Windows PC, or they can use the vSphere Web Client remotely from any Web browser.

Roles and permissions are replicated across management servers, enabling administrators to manage multiple instances of vCenter Server from one console. A search engine makes it possible to quickly find virtual machines, hosts or other inventory objects located anywhere in the enterprise.

## Key Features

### Centralized Control and Deep Visibility

- **Remote access from anywhere** – With the vSphere Web Client, administrators can manage the essential functions of vSphere from any browser anywhere in the world.
- **Real-time monitoring of dynamic virtual elements** – vCenter Server has deep awareness of all virtual elements and related physical components, including server hardware, shared storage and networking. Event and alarm triggers make it easy to monitor the environment and to diagnose and troubleshoot issues. Administrators can visualize the relationships between physical servers, virtual machines, networks and storage by using dynamic topology maps that verify correct configuration of vSphere. vCenter Server monitors performance and availability of virtual machines and other virtual elements, such as resource pools, with detailed statistics and graphs that can be viewed in real time.
- **Customizable alarm triggers** – vCenter Server can generate automated notifications and alerts and can trigger automated workflows to remedy and prevent problems.
- **Simplified navigation and inventory search** – A global search function provides access to the entire inventory of vCenter Server instances, including virtual machines, hosts, datastores and networks, from anywhere within vCenter Server. An improved user interface simplifies navigation.

### Proactive Management of vSphere Environments

- **Rapid provisioning and simplified patch management** – Administrators can create new virtual machines or hosts in minutes using a wizard or template to minimize errors and downtime with configuration standards. Using vSphere Update Manager, administrators can easily patch virtual machines and hosts. The host profiles feature makes it easy to standardize and validate host configuration.

- **Dynamic resource allocation to ensure SLAs** – vCenter Server continuously monitors utilization across resource pools with vSphere Distributed Resource Scheduler (DRS), which intelligently migrates virtual machines across hosts without causing downtime or affecting service-level agreements (SLAs). The result is a self-managing, highly optimized and efficient IT environment with built-in load balancing.
- **Workflow automation** – vCenter Server includes VMware vCenter Orchestrator, a powerful orchestration engine that simplifies management. Administrators can automate more than 800 tasks by using out-of-the-box workflows or by assembling workflows using a drag-and-drop interface.
- **vCenter Server availability** – A service management console displays the health of vCenter components, allowing administrators to quickly identify and correct problems in the management infrastructure. VMware vCenter Server Heartbeat (licensed separately) provides additional availability with deep awareness of all vCenter Server components, enabling failover of the management server and database to a standby server over the LAN or WAN.

### Scalability and Extensibility

- **Large-scale management** – vCenter Server is a 64-bit solution that can handle the largest IT environments. A single instance of vCenter Server manages up to 1,000 hosts and 10,000 virtual machines. In linked mode, administrators can manage up to 3,000 hosts and 30,000 virtual machines across 10 vCenter Server instances from a single console.
- **Open architecture** – vCenter APIs and a .NET extension enable integration between vCenter Server and other tools, and support customized plug-ins to the vSphere Client. This protects an organization's investments and provides freedom of choice in managing the IT environment.

## Find Out More

For information or to purchase VMware products, call 877-4-VMWARE (outside 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 system requirements, refer to the vCenter Server documentation.

