## VMware vCenter Server 4

Unify and Simplify Virtualization Management



VMware vCenter™ Server 4 provides a scalable and extensible platform for proactive virtualization management, delivering deep visibility into virtual infrastructure. VMware vCenter Server centrally manages VMware vSphere™ 4 environments and simplifies daily tasks, dramatically improving administrative control over the environment.

#### BENEFITS

- Analyze and remediate issues quickly with deep visibility in to VMware vSphere and its underlying infrastructure.
- Improve IT responsiveness by proactively managing your VMware vSphere environment with rapid provisioning, automated load balancing of virtual machine workloads, and out-of-box workflows for automation.
- Scale to meet the needs of the most demanding enterprise environments with support for up to 10.000 virtual machines.



#### What is VMware vCenter Server?

VMware vCenter Server is the universal hub for managing your VMware vSphere environment. VMware vCenter Server provides unified management of all hosts and virtual machines in a datacenter from a single console. VMware vCenter Server allows administrators to improve control, simplify day-to-day tasks and reduce the complexity and cost of managing an IT environment.

# How is VMware vCenter Server Used in the Enterprise?

VMware vCenter Server provides a scalable, extensible virtualization management platform. With VMware vCenter Server, IT organizations get:

#### Centralized management.

VMware vCenter Server allows IT organizations to organize, rapidly provision and configure the entire IT environment through a single interface, resulting in lower operating costs. Thorough and consistent performance monitoring of all critical components—including CPU, memory, storage and networking—provide the detail administrators need.

#### • Operational automation.

Task scheduling and alerting improves responsiveness to business needs and prioritizes actions requiring the most urgent attention.

#### • Secure access control.

Robust permissioning mechanisms and integration with Microsoft® Active Directory guarantee authorized access to an environment and its virtual machines. Responsibilities can be delegated to tiers of system administrators.

#### · Availability and resource management.

From VMware vCenter Server, administrators can configure and manage VMware VMotion™, Storage VMotion, VMware High Availability (HA) and VMware Fault Tolerance (FT).

#### · Higher levels of security.

Enforce compliance with patch standards automatically through VMware vCenter Update Manager, allowing organizations to protect their virtual infrastructure from vulnerabilities.

### • Automated energy efficiency.

Enterprises can minimize power consumption with VMware Distributed Power Management (DPM), which enables an "energy efficient" datacenter.



#### How Does VMware vCenter Server Work?

The VMware vCenter Server platform 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. A VMware vCenter agent provides connectivity between the host and management server.

Administrators can access VMware vCenter Server from the VMware vSphere Client from any Windows PC, or use the vCenter Web Access portal for remote access from any Web browser.

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

#### Key Features of VMware vCenter Server

#### Centralized Control and Deep Visibility in to Every Level of the Virtual Infrastructure

· Real-time monitoring of dynamic virtual elements.

VMware vCenter Server has deep awareness of all virtual elements and related physical components, including server hardware, shared storage and networking, with event and alarm triggers that make it easier to monitor the environment, diagnose and troubleshoot issues. Administrators can visualize the relationships between physical servers, virtual machines, networks and storage with dynamic topology maps that verify correct configuration of VMware vSphere. VMware 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.

VMware vCenter Server can generate automated notifications and alerts, and can trigger automated workflows to remedy and pre-empt problems.

#### · Simplified navigation and inventory search.

Use a global search function to access the entire inventory of multiple instances of VMware vCenter Server, including virtual machines, hosts, datastores and networks, anywhere from within VMware vCenter Server. An improved user interface allows for easier navigation.

#### Proactive Management of VMware vSphere

• Rapid provisioning and simplified patch management.

Create new virtual machines or hosts in minutes using a wizard or template to minimize errors and downtime with configuration standards. Easily patch virtual machines

and hosts using VMware vCenter Update Manager, and standardize and validate host configuration using the host profiles feature.

#### • Dynamic resource allocation to ensure SLAs.

VMware vCenter Server continuously monitors utilization across resource pools with VMware Distributed Resources 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. When excess capacity is not needed by virtual machines in a resource pool, VMware DPM places hosts in standby to reduce power consumption without affecting SLAs.

#### · Workflow automation.

VMware vCenter Server includes VMware vCenter Orchestrator, a powerful orchestration engine that simplifies management by enabling administrators to automate over 800 tasks using out-of-the-box workflows or by assembling workflows using an easy drag-and-drop interface.

#### VMware vCenter Server availability.

A service management console displays the health of the VMware 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 VMware vCenter Server components, failing over the management server and database over the LAN or WAN to a standby server.

#### Scalability and Extensibility

#### • Large-scale management.

VMware vCenter Server is designed from the ground up to handle the largest IT environments. A single instance of vCenter Server 4.0 manages up to 300 hosts and 3000 virtual machines and with Linked Mode you can manage up to 1,000 hosts and 10,000 virtual machines across 10 VMware vCenter Server instances from a single console.

#### Open architecture.

The VMware vCenter APIs and a .NET Extension allow integration between VMware vCenter Server and other tools, and support customized plug-ins to the VMware vSphere Client, protecting your investments and giving you freedom of choice in how you manage your environment.

#### Find Out More

For information or to purchase VMware products, call 1-877-4VMWARE (outside of North America dial +1-650-427-5000), visit <a href="http://www.vmware.com/products">http://www.vmware.com/products</a> or search online for an authorized reseller. For detailed product specifications and systems requirements, please refer to the VMware vCenter Server install and configure guide.

