

# VMware vCenter Operations Management Suite

Automated Operations Management for Virtual and Cloud Infrastructure

## AT A GLANCE

VMware® vCenter™ Operations Management Suite™ automates operations management using predictive analytics and an integrated approach to performance, capacity, and configuration management. vCenter Operations Management Suite enables IT organizations to get greater visibility and actionable intelligence to proactively ensure service levels, optimum resource usage, and configuration compliance in dynamic virtual and cloud environments.

## KEY BENEFITS

- Higher quality of service, fewer incidents, and less downtime of infrastructure and application services
- Up to 70 percent in IT productivity gains from simplified performance, incident, and change management tasks
- Up to 30 percent reduction in resource consumption from rightsizing and reclaiming overprovisioned capacity
- Up to 45 percent reduction in time and effort on compliance management
- Improved team collaboration from better visibility across the entire environment
- Fewer tools needed to monitor the environment

## What Is VMware vCenter Operations Management Suite?

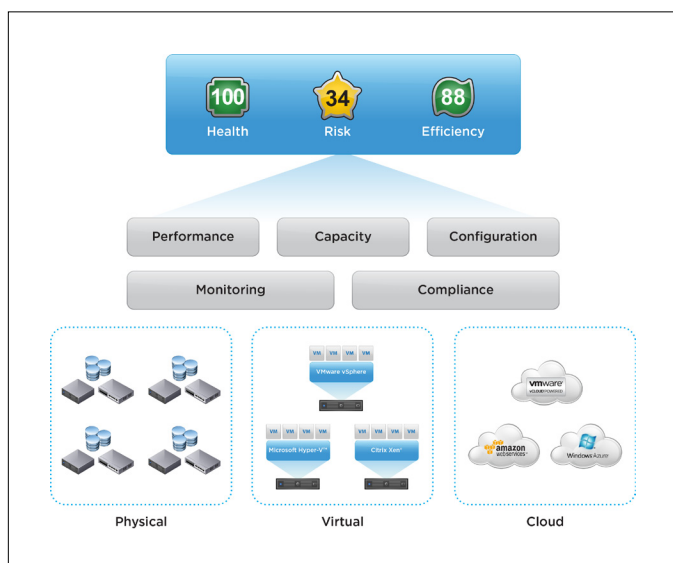
The role of operations management is to ensure and restore service levels while continuously optimizing operations for efficiency and cost. Dynamic virtual and cloud infrastructure present new challenges to infrastructure and operations teams, including the following:

- **Scale** – An administrator might manage up to 5–10 times more virtual machines (compared to physical environments), and a large number of alerts and false positives need a response.
- **Change** – Infrastructure and application services delivered through self-service portals enable business agility but also make workloads and demand for resources unpredictable, resulting in unplanned change.
- **Convergence** – Management capabilities directly embedded in the platform and new hardware architectures require a new class of metrics that enable IT to understand the overall workload and health of the environment.

vCenter Operations Management Suite provides a new approach that delivers on three characteristics essential for success:

- **Automated** – Predictive, self-learning analytics enable a much higher degree of automation than traditional management tools, delivering nearly 70 percent gains in IT productivity, 30 percent reduction in resource consumption, and additional business benefits, according to Forrester.
- **Integrated** – The suite provides an integrated approach to performance, capacity and configuration management. It converges management disciplines and unifies teams across infrastructure and operations.
- **Comprehensive** – Built on an open and extensible operations platform designed for dynamic hybrid cloud environments, vCenter Operations Management Suite delivers a comprehensive set of management capabilities, including performance, capacity, change, configuration, and compliance management; application discovery and monitoring.

With vCenter Operations Management Suite, infrastructure and operations teams gain intelligent operational insights, policy-based automation, and unified management to ensure quality of service as efficiently as possible.



Automated operations management for virtual and cloud infrastructure.

## How Is vCenter Operations Management Suite Used?

vCenter Operations Management Suite gives you greater visibility across all layers of the infrastructure. It collects and analyzes performance data, correlates abnormalities, and identifies the root cause of emerging performance problems. vCenter Operations Management Suite provides capacity management to optimize resource usage and policy-based configuration management to assure compliance. Application discovery and dependency mapping enable infrastructure and operations teams to ensure service levels of critical applications and build disaster recovery plans.

### Intelligent Operations

Gain deep operational insights into the health, risk, and efficiency of infrastructure and applications to help ensure quality of service and early detection of performance, capacity, and configuration issues.

- Enhanced application monitoring with VMware vCenter Hyperic® provides out-of-box dashboards for business-critical applications (Microsoft SQL, Exchange).
- Storage analytics provide deep visibility into storage infrastructure, bringing together views into topology, statistics, and events across host bus adapters, fabric, and arrays. Analytics use standardized protocols such as Common Information Model (CIM), SIM-S and vStorage APIs for Storage Awareness (VASA).
- Monitoring data is automatically analyzed and expressed as health, risk, and efficiency measures that enable IT to detect potential issues in the environment more easily.
- Prebuilt and configurable operations dashboards provide real-time insight into infrastructure behavior, upcoming problems, and opportunities for efficiency improvements.
- Visual correlation of change events with performance data across virtual infrastructure, OS, and applications provide visibility into performance degradation from configuration changes.
- Flexible group policies define specific thresholds, alert types, notifications, and other configuration settings at a group level to prioritize operational activities for business-critical applications and production workloads.

Best-in-class scalability enables IT to monitor multiple sites, thousands of metrics, and more than 100,000 virtual machines with a single deployment. Designed for VMware vSphere®, yet open and heterogeneous to work across multiple hypervisors and public cloud providers such as Microsoft Hyper-V and Amazon AWS, vCenter Operations Management Suite is the best solution for managing virtualized and cloud environments.

### Policy-Based Automation

Automate root-cause analysis with advisory tools and orchestration workflows to enable optimal resource utilization, operational efficiency, and enforcement of configuration standards.

- Infrastructure and operations analytics eliminate time-consuming problem-resolution processes through automated root-cause analysis.
- Actionable recommendations provide simplified explanations of underlying problems and corrective actions to remediate them.
- Automated workflow triggers enable administrators to associate workflows created in VMware vCenter Orchestrator™ with vCenter Operations alerts.
- Detection, enforcement, and remediation of security-hardening guidelines, configuration standards, and regulatory requirements are automated across virtual and physical infrastructure and operating systems.
- Automated capacity optimization reclaims overprovisioned capacity and eliminates the need for spreadsheets or complex scripts. “What if” scenarios facilitate capacity optimizations and help defer unnecessary hardware investments.

### Unified Management

Get a holistic view into what is driving performance, capacity, and configuration issues as well as infrastructure and application dependencies. Meet service-level agreements (SLAs) by using real-time performance dashboards across hybrid and heterogeneous cloud environments.

- Hyper-V and Amazon Web Services monitoring dashboards provide a single operations console across private, public, and hybrid clouds.
- Extensibility enables integration with existing monitoring tools to provide a holistic view and proactive management capabilities across hybrid cloud infrastructure, including physical and virtual hardware and applications.
- Self-learning performance analytics and dynamic thresholds adapt to the environment to simplify operations management and eliminate false alerts.
- Real-time, integrated dashboards of performance, capacity, and configuration change events enable a proactive management approach and help ensure that SLAs are met.
- Application dependency, discovery and visualization bring application-level awareness to infrastructure and operations teams to ensure service levels and disaster-recovery protection for all critical application services.
- Out-of-the-box compliance templates ensure continuous compliance with security best practices, hardening guidelines, and regulatory requirements across all aspects of the data center infrastructure.

## What's Included in vCenter Operations Management Suite?

vCenter Operations Management Suite includes five components: VMware vCenter Operations Manager™, VMware vCenter Configuration Manager™, VMware vCenter Hyperic, and VMware vCenter Infrastructure Navigator™

### vCenter Operations Manager

The foundation of the suite, vCenter Operations Manager provides the operations dashboards, performance analytics, and capacity optimization capabilities needed to gain comprehensive visibility, proactively ensure service levels, and manage capacity in dynamic virtual and cloud environments.

### vCenter Configuration Manager

vCenter Configuration Manager automates configuration management across virtual and physical servers, increasing efficiency by eliminating manual, error-prone, and time-consuming work. This automation enables enterprises to maintain continuous compliance by detecting changes and enforcing IT policies, regulatory requirements, and security-hardening guidelines.

### vCenter Hyperic

vCenter Hyperic monitors physical hardware resources, operating systems, middleware, and applications. Because vCenter Hyperic is tightly integrated with vCenter Operations Manager, you can manage virtual and physical infrastructure and business-critical applications with a single suite.

### vCenter Infrastructure Navigator

This component automatically discovers and visualizes application and infrastructure dependencies. It provides visibility into the application services running over the virtual-machine infrastructure and their interrelationships for day-to-day operational management.

## How to Buy

vCenter Operations Management Suite is available in three editions targeting teams responsible for managing vSphere and virtual infrastructure, heterogeneous virtual and physical environments, or hybrid cloud infrastructure at the OS and application level:

- **VMware vCenter Operations Management Suite Standard Edition** – Anticipate performance bottlenecks, optimize capacity consumption, and enable vSphere infrastructure health with predictive, self-learning analytics, intuitive operations dashboards, and actionable recommendations.

- **VMware vCenter Operations Management Suite Advanced Edition** – Deliver quality of service, operational efficiency, and configuration compliance across virtual and physical infrastructure with comprehensive operations management capabilities.
- **VMware vCenter Operations Management Suite Enterprise Edition** – Get OS- and application-level monitoring, as well as change and configuration management capabilities, to help ensure quality of service, operational efficiency, and continuous compliance of both infrastructure and business-critical applications in dynamic hybrid cloud environments.

VMware vCenter Operations Manager Foundation™ is included with every vSphere edition, free of charge, and provides operational insights and visibility to monitor the performance and health of the vSphere environment.

vCenter Operations Management Suite is available with two license models to fit your needs:

- **Per processor and unlimited virtual machines** – For virtual environments with high consolidation ratios, consider purchasing vCenter Operations Management Suite as part of VMware vCloud® Suite or VMware vSphere with Operations Management™.
- **Per virtual machine or physical server** – For environments with a mix of virtual and physical servers, vCenter Operations Management Suite is also available à la carte in 25-OS-instance license packs.

## Support and Professional Services

VMware offers enterprise-class support to all vCenter Operations Management Suite customers. If you require additional services, VMware also offers several professional services engagements on best practices and getting started with your vCenter Operations deployment.

## Find Out More

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

## Features in vCenter Operations Management Suite

The following table shows the key features and capabilities of each vCenter Operations edition.

vCENTER OPERATIONS MANAGEMENT SUITE			
Standalone product editions, licensed per VM or physical server	Standard	Advanced	Enterprise
Included in a VMware suite, licensed per processor	VMware vCloud Suite® Standard	VMware vCloud Suite® Advanced	VMware vCloud Suite® Enterprise
	VMware vSphere® with Operations Management™	vCenter Operations Management Adv for vSphere with Operations Management	
Key Features and Capabilities			
Operational Visibility & Management			
Proactive Smart Alerts	•	•	•
Intelligent Operations Groups	•	•	•
Comprehensive Operations Dashboards	•	•	•
Flexible Operations Policies	•	•	•
Automated Workflow Triggers	•	•	•
Operational Compliance Views		•	•
Customizable Dashboards		•	•
Performance Monitoring & Analytics			
vSphere Health Monitoring	•	•	•
Self-learning Performance Analytics	•	•	•
Dynamic Thresholds	•	•	•
Root Cause Analysis and Recommendations	•	•	•
Monitoring of OS Resources (CPU, disk, memory, network)*		•	•
Extensible with data feeds from third-party storage and network monitoring tools**		•	•
Monitoring of, middleware, applications and databases (Full vCenter Hyperic)			•
Extensible with data feeds from third-party OS and app monitoring tools**			•
Capacity Management			
Capacity Metering and Trending	•	•	•
Right-sizing and resource optimization	•	•	•
Scenarios and Modeling	•	•	•
Alerting and Reporting	•	•	•
Change, Configuration and Compliance Management			
vSphere hardening, change, configuration and regulatory compliance		•	•
OS-level change, configuration and patch management			•
OS-level regulatory compliance content packs (PCI, HIPAA, SOX, etc.)***			•
Application Dependency Mapping			
Automated Discovery		•	•
Naming and Versioning		•	•
Relationship Visualization		•	•

\* vCenter Hyperic in Advanced edition includes Platform plug-ins for Windows, Linux, AIX, Solaris, HP-UX (EULA restricted). Full vCenter Hyperic is included in Enterprise edition.

\*\* For complete third-party adapter list, please visit <https://solutionexchange.vmware.com/store>.

\*\*\* Enterprise edition includes Regulatory Compliance for the guest-OS level or physical servers.



VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 [www.vmware.com](http://www.vmware.com)

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