### **VMware vCenter Operations Management Suite**

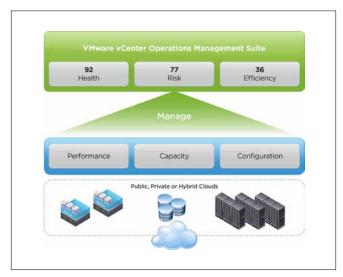
Automated Operations Management for Virtual and Cloud Infrastructure



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

#### KEV BENEELTS

- Higher quality of service, fewer incidents and less downtime of infrastructure and application services
- Improved team collaboration and increased productivity from better visibility across the entire environment
- Infrastructure cost savings and better resource utilization from capacity optimizations
- Fewer tools needed to monitor the environment
- Continuous compliance with IT policies and regulatory requirements



Automated operations management for virtual and cloud infrastructure.

## Automated Operations Management for Virtual and Cloud Infrastructure

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 Up to 5–10 times more virtual machines that can be managed by an administrator compared to physical environments and the sheer volume of alerts and false positives that need to be responded to.
- **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 enables IT to understand the overall workload and health of the environment.

Traditional tools and processes designed for siloed, static physical infrastructures don't provide the automation and control you need to effectively manage highly virtualized and cloud environments.

The vCenter Operations Management Suite provides a new approach that enables IT to simplify and automate operations management. Using patented analytics and an integrated approach to performance, capacity and configuration management, vCenter Operations enables comprehensive visibility, intelligent automation and proactive management to ensure quality of service as efficiently as possible.

# How is the vCenter Operations Management Suite Used?

vCenter Operations is used to gain better visibility across all layers of the infrastructure. It collects and analyzes performance data, correlates abnormalities and identifies the root cause of building performance problems. vCenter Operations provides capacity management to optimize resource usage and policy-based configuration management to assure compliance and eliminate sprawl and configuration drift. Application discovery, dependency mapping and cost metering capabilities bring new levels of application awareness and financial responsibility to infrastructure and operations teams.



### Gain Comprehensive Visibility Across the Infrastructure

Gain better visibility into planned and unplanned configuration changes and remediate unwanted changes to ensure operational and regulatory compliance. Manage compliance automatically with out-of-the-box configuration templates. Ensure compliance with policy control and integrated smart alerts across both virtual and physical aspects of your datacenter infrastructure.

- Prebuilt and configurable operations dashboards provide real-time insight into infrastructure behavior, upcoming problems and opportunities for efficiency improvements.
- Monitoring data is abstracted into health, risk and efficiency measures that enable IT to efficiently identify building performance problems with less effort.
- Capacity analytics identify overprovisioned resources so they can be rightsized for most efficient use of virtualized resources.
  "What If" scenarios eliminate the need for spreadsheets, scripts and rules of thumb.
- Out-of-the-box templates ensure continuous compliance with security best practices, hardening guidelines and regulatory requirements.
- 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.
- Application components and version numbers are named automatically and updated continuously.
- Best-in-class scalability enables the monitoring of multiple sites, thousands of metrics and more than 100,000 virtual machines with a single deployment.
- Designed for VMware vSphere® and built for the cloud, vCenter Operations is the best solution for managing dynamic VMware environments. Hooks into third-party monitoring tools enable IT to leverage existing investments.

# Intelligently Automate Operations Management to Maximize Efficiency and Agility

Automate performance, capacity and configuration management with patented analytics and an integrated approach to management. Eliminate finger pointing, improve team collaboration and reduce manual problem-solving efforts by as much as 40 percent with automated root-cause analysis.

- Infrastructure and operations analytics eliminate timeconsuming problem resolution processes through automated root-cause analysis.
- Automated correlation of health, performance and change events at the infrastructure and guest operating system level help pinpoint lingering performance problems.
- Automated rollback and remediation of configuration changes enable administrators to enforce IT policies.

- Flexible capacity and cost-reporting capabilities provide deep visibility into resource-consumption trends.
- Automated provisioning and configuration analysis detects unwanted changes and helps IT maintain continuous compliance with operational best practices and regulatory requirements.

#### Proactively Manage Service Levels Across the Entire Infrastructure

Get proactive warning of performance issues and capacity shortfalls before problems affect end users. Real-time performance dashboards let you meet service-level agreements (SLAs) by pinpointing building performance issues before end users notice. Optimize your infrastructure for efficiency and minimize risk of performance across your entire infrastructure, both virtual and physical.

- Self-learning performance analytics and dynamic thresholds adapt to the environment to simplify operations management and eliminate false alerts.
- Integrated smart alerts for health, performance and capacity degradation identify building performance problems before they affect end users.
- Advanced capacity analytics enable administrators to optimize virtual-machine density and identify capacity shortfalls before they affect end users.
- Real-time, integrated dashboards of performance, capacity and configuration change events enable a proactive management approach and help ensure that SLAs are met.
- Policy-based configuration management ensures compliance across all aspects of the datacenter infrastructure, including virtual and physical resources.

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

#### **VMware vCenter Operations Manager**

VMware vCenter Operations Manager uses patented analytics and an integrated approach to operations management to provide the intelligence and visibility needed to proactively ensure service levels, optimum resource usage and configuration compliance in dynamic virtual and cloud environments.

#### VMware vCenter Configuration Manager

VMware vCenter Configuration Manager™ automates configuration management across virtual and physical servers and desktops, increasing efficiency by eliminating manual, error-prone and time-consuming work. This enables enterprises to maintain continuous compliance by detecting changes and comparing them to configuration and security policies.

#### VMware vCenter Infrastructure Navigator

VMware vCenter Infrastructure Navigator 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.

#### VMware vCenter Chargeback Manager

VMware vCenter Chargeback Manager™ enables accurate cost measurement, analysis and reporting of virtual machines, providing visibility into the actual cost of the virtual infrastructure required to support business services.

#### How to Buy

The vCenter Operations Management Suite is available in four editions: Standard, Advanced, Enterprise and Enterprise Plus.

#### **Support and Professional Services**

VMware offers enterprise-class support to all vCenter Operations Management Suite customers. For customers that 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, dial +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 View™ documentation.

"To us, cloud computing means dynamic resources that are self-provisioning, and VMware vCenter Operations Management is purpose-built to support this type of environment. Two things set the solution apart: the hooks into VMware vSphere that give it broad understanding of the system—storage, network, virtual machine performance—and the analytics that will transform the data it gleans into actionable information."

Brian Alexander
Systems Architect, Information Technology,
Mentor Graphics Corp.

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

	vCENTER OPERATIONS MANAGEMENT SUITE			
Edition	Standard	Advanced	Enterprise	Enterprise Plus
Scope	Small vSphere environments	Large vSphere environments	Virtual and cloud infrastructure	Cloud and heterogeneous environments
Best for	Small and Midsize Business		Enterprise	
Components				
vCenter Operations Manager	X (Performance Only)	X	Х	Х
vCenter Infrastructure Navigator			X	X
vCenter Chargeback Manager			Х	X
vCenter Configuration Manager			X (for vSphere hosts only)	X
Key Features and Capabilities				
Operations Dashboard	X	X	Х	Х
Proactive Smart Alerts	X	X	X	X
Customizable Dashboards			X	X
Performance Management				
Self-learning Performance Analytics	X	X	X	X
Dynamic Thresholds	X	X	X	X
Extensible to 3rd party datasources			X	X
3rd party adapters included				X
Capacity Management				
Capacity Metering	X	X	X	X
Trending Dashboards		X	X	X
Scenarios and Modeling		X	X	X
Alerting and Reporting		X	X	X
Configuration and Compliance				
vSphere change event correlation	X	X	X	X
Compliance for vSphere hosts			X	X
In-guest change event correlation				X
Compliance for VM and guest OS				Х
Remediation and Rollback				Х
Application Dependency Mapping				
Automated Discovery			X	X
Naming and Versioning			X	Х
Relationship Visualization			X	Х
Cost Metering and Reporting				
Fixed and variable cost models			X	X
Cost visibility for business teams			X	X
Cost analysis and reporting			X	X

