VMware vSphere with Operations Management and VMware vSphere Licensing, Pricing and Packaging

WHITE PAPER
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Executive Summary

This guide provides an overview of the licensing, pricing, and packaging for VMware vSphere® with Operations Management™ 6 and VMware vSphere® 6. The key topics discussed in this guide include:

- VMware vSphere with Operations Management Offering Overview
- Licensing Overview – Licensing per edition and license management
- Packaging Overview – Packaging options for editions (including VMware vCenter Server™) and kits
- Version Upgrade Entitlements for Existing Customers
- Paid Edition Upgrades from VMware vSphere 6 and VMware vSphere with Operations Management 6

VMware vSphere with Operations Management Overview

vSphere with Operations Management offers the most trusted virtualization platform with critical operational enhancements in performance monitoring and capacity management. It is designed for businesses of all sizes to run applications at high service levels and maximize hardware savings through higher capacity utilization and consolidation ratios. IT can gain visibility into virtual environments, proactively identify and remediate emerging performance issues, and optimize resource utilization through a unified console. On average, customers see tremendous benefits beyond using vSphere alone: 36 percent reduction in application downtime, 30 percent increase in hardware savings, and 26 percent decrease in time spent on troubleshooting issues.

For more information on the differences between vSphere with Operations Management and vSphere, please refer to the Packaging Overview section.


Licensing Overview

VMware vSphere with Operations Management 6 Licensing: Per-Processor

VMware vSphere with Operations Management 6 is licensed on a per-processor basis. Each physical processor (CPU) in a server needs to have exactly one vSphere with Operations Management processor license key assigned to be able to run vSphere with Operations Management. vSphere with Operations Management license keys can be purchased, deployed and managed in the same way they were with vSphere 5.x and vSphere with Operations Management 5.x.

No Limits on Physical Resources

There are no restrictions on physical cores or physical RAM with vSphere with Operations Management 6.

No Limits on Number of Virtual Machines

There are no restrictions on the number of virtual machines that can run on each properly licensed vSphere with Operations Management 6 processor.

Two Components Under a Single License

VMware vSphere with Operations Management 6 combines two components (vSphere and VMware vRealize™ Operations™ Standard) into a single product with a single license. All virtual machines running on a properly licensed VMware vSphere with Operations Management processor can use all components. vSphere with Operations Management is not decomposable: the two components of a vSphere with Operations Management edition behave as a single entitlement. Upgrades occur on an edition basis or through the vRealize Operations Insight™ add-on only – vSphere and VMware vRealize Operations™ components cannot be upgraded independently.
However, vSphere customers have the option to assign their license keys directly to individual hosts. There is no difference between directly and centrally assigned license keys. When a vSphere host is added to the vCenter Server inventory, any license key already on the host will become available for management, reporting and assignment in vCenter Server, just like any license key added directly via vCenter Server. For more information on vSphere licensing, visit [http://www.vmware.com/support/licensing.html](http://www.vmware.com/support/licensing.html).

**Example: Licensing New Hosts with vSphere with Operations Management 6**

A user has two 2-CPU (each with 6 cores) hosts with 128GB of physical RAM each that they wish to license with vSphere with Operations Management 6 Enterprise edition. Each physical CPU requires a license, so four vSphere with Operations Management 6 Enterprise licenses are required. No additional licenses will be needed regardless of the number of virtual machines, amount of virtual memory (vRAM) or physical cores or RAM.

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**Packaging Overview**

VMware offers several packaging options that are designed for customers to meet their specific requirements for scalability, size of environment, and use cases.

**vSphere with Operations Management Editions**

Customers can choose from three editions of vSphere with Operations Management (see Figure 1). A Support and Subscription (SnS) contract is required for every edition purchase.

- **vSphere with Operations Management Standard Edition** provides an entry-level solution for basic server consolidation to slash hardware costs while accelerating application deployment. Best in class management capabilities allow IT to gain visibility into virtual environments, proactively identify and remediate emerging performance issues, and optimize resource utilization through a unified console.

- **vSphere with Operations Management Enterprise Edition** is a robust solution that customers can use to optimize IT assets, ensure cost-effective business continuity and streamline IT operations through automation. Best in class management capabilities allow IT to gain visibility into virtual environments, proactively identify and remediate emerging performance issues, and optimize resource utilization through a unified console.
vSphere with Operations Management Enterprise Plus Edition offers the full range of vSphere features for transforming data centers into dramatically simplified virtualized infrastructures, for running today’s applications with the next generation of flexible, reliable IT services. Best in class management capabilities allow IT to gain visibility into virtual environments, proactively identify and remediate emerging performance issues, and optimize resource utilization through a unified console.

For information on local currency prices for vSphere with Operations Management Editions visit: http://www.vmware.com/products/vsphere-operations-management/pricing.html

vSphere Editions

Customers can choose from three editions of vSphere (see Figure 2). A Support and Subscription (SnS) contract is required for every edition purchase.

vSphere Standard Edition provides an entry-level solution for basic server consolidation to slash hardware costs while accelerating application deployment.

vSphere Enterprise Edition is a robust solution that customers can use to optimize IT assets, ensure cost-effective business continuity and streamline IT operations through automation.

vSphere Enterprise Plus Edition offers the full range of vSphere features for transforming data centers into dramatically simplified cloud infrastructures, for running today’s applications with the next generation of flexible, reliable IT services. For information on local currency prices for vSphere Editions, visit: http://www.vmware.com/products/datacenter-virtualization/vsphere/pricing.html

**Figure 1. vSphere with Operations Management 6 and vSphere 6 Editions**

* vSphere Monitoring, Capacity Optimization, and Operations Visibility are found also in VMware vRealize™ Operations™ Standard

1 Advanced backup features (app-aware agents, replication, integration with Data Domain, etc.) are now available in vSphere Data Protection™

<table>
<thead>
<tr>
<th>VSPHERE WITH OPERATIONS MANAGEMENT</th>
<th>VSPHERE</th>
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<tbody>
<tr>
<td></td>
<td>Standard</td>
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<tr>
<td>Features</td>
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<tr>
<td>vSphere Monitoring*</td>
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<tr>
<td>Capacity Optimization*</td>
<td>●</td>
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<td>Operations Visibility*</td>
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<td>Hypervisor</td>
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<td>vMotion*, Storage vMotion and X-Switch vMotion</td>
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<td>Virtual Volumes and Storage-Policy Based Management</td>
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<td>APIs for Storage Awareness</td>
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<td>Content Library</td>
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<td>APIs for Array Integration, Multipathing</td>
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<td>Distributed Resource Scheduler™ and Distributed Power Management™</td>
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<td>Big Data Extensions</td>
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<td>Distributed Switch™</td>
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<td>Storage DRS™</td>
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<td>I/O Controls (Network and Storage) and SR-IOV</td>
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<td>Host Profiles and Auto Deploy</td>
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<tr>
<td>Flash Read Cache™</td>
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<td>Cross-vCenter and Long Distance vMotion</td>
<td>●</td>
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<tr>
<td>vGPU</td>
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vSphere with Operations Management add-on:
VMware vRealize Operations Insight™ is a unified management solution for performance management, capacity optimization, and real-time log analytics. vRealize Operations Insight is sold as a bundled solution that includes vRealize Operations Advanced and vRealize Log Insight™ and is available as an add-on to vSphere with Operations Management Standard, Enterprise, and Enterprise Plus.
VMware Integrated OpenStack

VMware vSphere Hypervisor

VMware vSphere Desktop

vSphere with Operations Management Acceleration Kits

VMware vSphere Essentials Kits
<table>
<thead>
<tr>
<th>Features</th>
<th>Essentials Kits</th>
<th>Essentials Plus</th>
<th>Standard</th>
<th>Enterprise</th>
<th>Enterprise Plus</th>
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<td>Capacity Optimization*</td>
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<td>Operations Visibility*</td>
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<td>Hypervisor</td>
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<td>vMotion® and X-Switch vMotion</td>
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<td>Data Protection™ and Replication†</td>
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<td>vShield Endpoint™</td>
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<td>Fault Tolerance</td>
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<td>4 vCPU</td>
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<td>Virtual Volumes and Storage-Policy Based Management</td>
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Figure 2. vSphere 6 Essentials Kits and vSphere with Operations Management 6 Acceleration Kits
*vSphere Monitoring, Capacity Optimization, and Operations Visibility are found also in VMware vRealize™ Operations™ Standard
† Advanced backup features (app-aware agents, replication, integration with Data Domain, etc.) are now available in vSphere Data Protection™
VMware vSphere Remote Office Branch Office

vSphere Remote Office Branch Office Standard and vSphere Remote Office Branch Office Advanced are new vSphere editions designed specifically for IT infrastructure located in remote, distributed sites and deliver improved service-levels, standardization, availability and compliance. These editions include 25 Virtual Machine (VM) licenses of the new vSphere Remote Office Branch Office Standard or vSphere Remote Office Branch Office Advanced. The flexible per VM pricing model also allows customers to deploy only the number of workloads they require in each remote site. Customers can deploy a maximum of 25 VMs per Remote Office Branch Office site. Server hosts can be managed by vCenter Server Foundation or vCenter Server Standard purchased separately.

vSphere Remote Office Branch Office Standard enables highly available IT infrastructure in the remote sites. This edition includes vMotion, High Availability, Data Protection and Replication, Hot Add, vShield Endpoint, Fault Tolerance, Storage vMotion, Virtual Volumes and Storage-Policy Based Management.

vSphere Remote Office Branch Office Advanced enables rapid provisioning of servers, minimization of host configuration drift and enhanced visibility into regulatory compliance, across multiple sites. This edition includes vMotion, High Availability, Data Protection and Replication, Hot Add, vShield Endpoint, Fault Tolerance, Storage vMotion, Virtual Volumes, Storage-Policy Based Management, Host Profiles, Auto-deploy and Distributed Switch.


vCenter Server Editions

vCenter Server provides unified management for vSphere environments and is a required component of a complete vSphere deployment. One instance of vCenter Server is required to centrally manage virtual machines and their hosts and to enable all vSphere features.

vCenter Server is available in the following packages:

- vCenter Server Essentials – Integrated management for vSphere Essentials Kits
- vCenter Server Standard – Highly scalable management with rapid provisioning, monitoring, orchestration and control of all virtual machines in a vSphere environment


<table>
<thead>
<tr>
<th>VCENTER SERVER</th>
<th>Essentials</th>
<th>Standard</th>
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</thead>
<tbody>
<tr>
<td>Number of hosts</td>
<td>Up to 3</td>
<td>Unlimited</td>
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<tr>
<td>vSphere licensed managed</td>
<td>vSphere Essentials and vSphere Essentials Plus</td>
<td>vSphere Standard, vSphere Enterprise, vSphere Enterprise Plus, vSphere with Operations Management, and vCloud Suite</td>
</tr>
</tbody>
</table>

Figure 3. vCenter Server Essentials and vCenter Server Standard
Version Upgrade Entitlements for Existing Customers

vSphere customers with an active SnS contract are entitled to version upgrade to vSphere 6.0 at no extra charge. All version upgrades to vSphere 6.0 require acceptance of the new end-user licensing agreement (EULA) and vSphere 6 licensing model (see Figure 4).

Reinstatement Options for Customers with Inactive SnS Contracts

Customers who have an expired SnS must pay reinstatement fees to purchase supported upgrades. Reinstatement fees are based on the following criteria:

- The applicable SnS fees for the current contract term
- Fees that would have been paid for the period of time that the customer’s SnS contract was not active
- A 20 percent fee on the sum of the fees in the preceding two criteria

Paid Edition Upgrades

Customers may purchase an upgrade to a higher vSphere edition, to a vSphere with Operations Management edition, or to a VMware vCloud Suite® edition (see Figure 5). For example, vSphere Enterprise Plus customers may upgrade to vSphere with Operations Management Enterprise Plus or to any vCloud Suite edition. When customers upgrade supported licenses to a higher edition, the original license key is deactivated and a new license key is issued for the upgraded edition. A SnS contract for the edition upgraded to must be purchased at time of upgrade purchase. This new SnS contract will be extended by the original SnS contract value remaining on the edition from which the customer upgraded. SnS contracts as short as two months are available for customers with a significant value remaining in their existing contract. This process ensures that only a single license key exists that has a single SnS contract with a single termination date.

Version downgrades for vSphere and vSphere with Operations Management

- vSphere can version downgrade.
- vSphere with Operations Management cannot version downgrade the vSphere component to 4.x or prior. Customers can choose to run any vSphere 5.x or 6.0 version (downgrade via My VMware portal) and any vRealize™ Operations™ Standard 5.6-6.0 version (via static key available in product download group).
- VMware vSphere Remote Office Branch Office™ can version downgrade from 6.0 to 5.5U2. vCenter Server needs to be at the same version or above than the ESX host. For example, if the ESX version is 5.5U2, vCenter Server needs to be 5.5U2 or above.
Since vSphere with Operations Management Acceleration Kits decompose into individual kit components after purchase, customers upgrade using the same upgrade paths as vSphere with Operations Management Edition customers. There are no Acceleration Kit to Acceleration Kit upgrades.

For information on local currency prices for vSphere Editions and Kits visit: www.vmware.com/products/vsphere/pricing.html

FAQ

Q. How is vSphere with Operations Management 6 licensed?
A. vSphere with Operations Management is licensed on a per-processor basis without limitation on the number of virtual machines, cores or amount of physical RAM.

Q. How many license keys will a customer get when they purchase vSphere with Operations Management?
A. vSphere with Operations Management will show up in the customer’s license portal as a unique entitlement. This entitlement will generate one license key that the customer will activate in vCenter Server.

Q. Are there VMware Acceleration Kits for vSphere with Operations Management?
A. Yes, there are three Acceleration Kits associated with the three editions of vSphere with Operations Management. Each kit consists of six processor licenses for vSphere with Operations Management, and a license for one instance of vCenter Server Standard.

Q. Can I purchase an upgrade from vSphere with Operations Management to VMware vRealize™ Operations™ Advanced and Enterprise?
A. All vSphere with Operations Management editions include VMware vRealize Operations Standard. Customers can add VMware vRealize Operations Advanced to all editions of VMware vSphere with Operations Management by purchasing the vRealize Operations Insight add-on, a bundled solution that includes vRealize Operations Advanced and vRealize Log Insight. Customers who want VMware vRealize Operations Enterprise have two options: (1) purchase a paid upgrade to vCloud Suite Enterprise or (2) purchase standalone VMware vRealize Operations Enterprise on a per-VM basis.

Q. Is it acceptable to have both vSphere hosts and vSphere with Operations Management hosts managed under a single vCenter Server?
A. VMware recommends managing only a single vSphere with Operations Management edition under a vCenter Server instance to simplify license management and compliance. If you must run multiple vSphere with Operations Management editions (or both vSphere with Operations Management and vSphere/vCloud Suite) under a single vCenter Server instance (mixed environment), you can still be compliant. To be compliant in a mixed environment, you must ensure that all virtual machines are properly licensed for the functionality being used (e.g., capacity management provided by VMware vRealize Operations Standard). A virtual machine can be properly licensed either through a vSphere with Operations Management license (on a per-processor basis) or a standalone product license (on a per–virtual machine basis).

Q. Is it acceptable to have both VMware vRealize Operations on a per-VM basis and vSphere with Operations Management on a per-CPU basis? (e.g. customer adds vSphere with Operations Management into existing VMware vRealize Operations environment)
A. Yes, this is acceptable as long as license compliance is maintained.

Q. Does the vSphere 6 licensing model—per-processor without limitation on the number of virtual machines, cores or amount of physical RAM—apply to vSphere 5.x and vSphere 6.0?
A. Yes. There are no restrictions on the number of cores or amount of physical RAM vSphere 5.x and 6.0 customers. This also applies to vSphere with Operations Management customers.

Q. Does the vSphere 6 licensing model apply to existing licenses of vSphere 4.x or prior?
A. No. The new vSphere licensing model applies only to new purchases of vSphere licenses or to existing licenses of vSphere 4.x or older that are version upgraded to vSphere 5.x or vSphere 6.0.

Q. When version upgrading to existing licenses for vSphere 4.x or older to vSphere 5.x or vSphere 6.0, may I maintain the vSphere 4.x licensing model?
A. No. In order to complete the upgrade, the new vSphere 5.x or vSphere 6.0 EULA must be accepted.
Q. Can I apply the vRealize Operations functionality included with vSphere with Operations Management to virtual machines running on hosts that are not licensed with vSphere with Operations Management?
A. No, the vRealize Operations functionality included with vSphere with Operations Management can only be used for virtual machines running on hosts that are properly licensed with vSphere with Operations Management. Virtual Machines running on other hosts would need to be licensed separately.

Q. Which customers are eligible for vSphere Desktop?
A. vSphere Desktop is available to all commercial, academic, and government customers who want to purchase new licenses of vSphere for only host desktop virtualization. Customers who purchase the Horizon View bundles get vSphere Desktop.

Q. I am currently using vSphere Enterprise Plus to deploy a third-party desktop virtualization solution. Can I continue to do so?
A. Yes. Customers currently using vSphere as backend for a third-party VDI deployment can continue to do so.

Q. Can vSphere Desktop be used to run third-party desktop management and infrastructure tools or third-party server products for desktops?
A. As per the vSphere 6 EULA, vSphere Desktop standalone can be used for hosting virtual desktop machines or desktop management and monitoring tools that are used for VDI deployments only.

How to Buy
For information on local currency prices for vSphere and vSphere with Operations Management Editions and Kits visit: http://www.vmware.com/products/vsphere-operations-management/pricing.html

To purchase vSphere or vSphere with Operations Management, 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 with Operations Management or vSphere is right for your organization: http://www.vmware.com/vmwarestore/

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