

WHITE PAPER

VMware Infrastructure 3

Pricing, Packaging and Licensing Overview



Table of Contents

Introduction3

Summary3

Introducing VMware Infrastructure 34

VMware Infrastructure 3 Editions4

A la Carte Products6

Capacity Pricing Per Two-Processors7

Support and Subscription Options for VMware Infrastructure 37

Support and Limited Subscription (SLS)7

New Calculation for SnS and SLS8

VMware Infrastructure 3 SnS Entitlements & Upgrades9

Virtual Infrastructure Node (VIN) Customers9

ESX Server 2.x Customers 11

VirtualCenter Customers 12

GSX Server Customers 12

Upgrades among VMware Infrastructure 3 Editions 13

Access to Previous Version Product and License Keys 13

VMware Infrastructure 3 Adopts New Licensing Mechanism 14

Summary 15

Got Questions? 15

VMware Infrastructure 3

Pricing, Packaging and Licensing Overview

Introduction

VMware® Infrastructure is the industry's first full infrastructure virtualization suite that empowers enterprises and small businesses alike to transform, manage and optimize their IT systems infrastructure through virtualization. VMware Infrastructure 3 includes:

- VMware ESX Server 3 with VMware VMFS, VMware VirtualCenter Agent, and VMware Virtual SMP
- VMware VirtualCenter 2 with VMware VMotion™, VMware HA, VMware DRS
- VMware Consolidated Backup

With the introduction of VMware Infrastructure 3, VMware is making significant changes to how these products are priced, packaged and licensed. VMware is also making several significant changes and additions to its support offerings and pricing. This paper explains these important changes and reviews both entitlements for existing customers and upgrade paths available for new and existing customers.

Summary

Simplifying how customers purchase, deploy and get support for VMware data center products, the VMware Infrastructure 3 product suite introduces significant changes to pricing, packaging and licensing for all products included in the suite. These changes include:

- **Capacity pricing per two processors.** VMware Infrastructure 3 is sold in increments of two processors instead of 2-, 4-, 8- and 16-CPU specific part numbers. Processor capacity purchased can be deployed or re-deployed on any mix of servers as required.
- **VMware Infrastructure 3 editions.** VMware Infrastructure 3 uses a bundling approach similar to the Virtual Infrastructure Node (VIN) bundle to make the customer decision-making and purchasing process easier. VMware Infrastructure is sold in three distinct editions: Starter, Standard and Enterprise.
- **Reduced number of a la carte products.** Several a la carte options have been removed from the price list and are now integrated into the different editions of VMware Infrastructure 3.

- **Support and Limited Subscription (SLS).** Support and Limited Subscription provides a new option that entitles customers to technical support and minor product releases under the major product release that is available at the time of the purchase. Customers who opt for Support and Limited Subscription will have to purchase upgrades to the next new major release of VMware Infrastructure 3 separately.
- **New calculation for support and subscription.** Both Support and Subscription (SnS) and Support and Limited Subscription (SLS) will be calculated based on the list price of any VMware Infrastructure or VMware Infrastructure-related a la carte product. This holds true for bundles of several products (e.g., the VMware Infrastructure editions) as well (i.e., both SnS and SLS are calculated based on the list price of the entire bundle).
- **New licensing mechanism.** VMware Infrastructure 3 uses an embedded licensing server to manage all product licenses centrally. Licenses can also be managed manually on a host-host basis.

Introducing VMware Infrastructure 3

Previously, VMware ESX Server, Virtual SMP, VirtualCenter Management Server, VirtualCenter Agent, and VMotion were all sold separately. In addition, customers had the option to purchase these products as a “Virtual Infrastructure Node” (VIN) bundle.

VMware Infrastructure 3 uses a packaging approach similar to the VIN bundle but expands the available options to three distinct product suite editions: Starter, Standard and Enterprise.

VMware Infrastructure 3 Editions

VMware Infrastructure 3 Starter is a virtualization software suite for small or remote work environments – ideally for small businesses, departments or branch offices. For example, an insurance company with a large network of agent offices may use VMware Infrastructure 3 Starter to standardize the few servers in each office on the same virtualization platform as the corporate data center. VMware Infrastructure 3 Starter may also be used by smaller businesses to get started with virtualization.

VMware Infrastructure 3 Starter includes:

- ESX Server 3 with the following limitations:
 - » No Fiber Channel or iSCSI SAN storage
 - » Cannot be deployed on a server with more than four physical CPUs or 8GB of physical memory).
- VirtualCenter Agent (Note: VirtualCenter Agent is no longer sold separately).
- Virtual Machine File System (VMFS) with the following limitations:
 - » Can be used on local storage only (since the version of ESX Server in VMware Infrastructure Starter does not include SAN storage)¹

VMware Infrastructure 3 Standard is an enterprise-class infrastructure suite designed to deliver the highest levels of performance, scalability and robustness for mission critical applications. Standard is similar to the previous Virtual Infrastructure Node (VIN) bundle, with the notable exception of VMotion. VMotion is available in VMware Infrastructure 3 Enterprise and can also be purchased separately as an add-on to VMware Infrastructure 3 Starter or Standard.

VMware Infrastructure 3 Standard includes:

- ESX Server 3 (with no limitations)
- VMFS
- Virtual SMP (up to 4-way)
- VirtualCenter Agent

VMware Infrastructure 3 Enterprise is the industry’s first full Infrastructure virtualization suite designed to deliver unprecedented capabilities for the dynamic, automated and self-optimizing data center. In addition to all of the components and functionality of Standard, Enterprise includes VMotion and several new products:

- ESX Server (with no limitations)
- VMFS
- Virtual SMP (up to 4-way)
- VirtualCenter Agent
- VMotion
- VMware HA, which provides easy to use, cost effective high availability for applications running in virtual machines.
- VMware DRS, which dynamically allocates and balances computing capacity across a collection of hardware resources aggregated into logical resource pools.
- Consolidated Backup, which provides an easy to use, centralized facility for LAN-free backup of virtual machines.

VMware Infrastructure Acceleration Kit is the new name for the current Virtual Infrastructure Starter Kit and includes:

- VMware Infrastructure 3 Enterprise for 8 processors
- VirtualCenter Management Server
- 1 P2V Assistant 2 Starter Edition
- Gold Support and Subscription for all included products

¹ VMFS in VMware Infrastructure Starter does not use the advanced clustered file system and distributed journaling functionality that allows multiple installations of ESX Server to simultaneously access the same virtual machine storage. This functionality is only available in Standard and Enterprise editions where ESX Server can be connected to a SAN.

Table 1 illustrates the editions of VMware Infrastructure 3 and their respective component products

Table 1 VMware Infrastructure 3 Editions and Pricing

	Starter	Standard	Enterprise
ESX Server 3	<p style="text-align: center;">✓</p> <ul style="list-style-type: none"> • NAS or local storage only (license restricted) • Limited to servers with up to 4 physical CPU up to 8GB physical memory (EULA restricted) 	✓	✓
VMFS	<p style="text-align: center;">✓</p> <ul style="list-style-type: none"> • On local storage only • No cluster file system 	✓	✓
VirtualCenter Agent	✓	✓	✓
Virtual SMP		✓	✓
VMotion			✓
HA			✓
DRS			✓
Consolidated Backup			✓
Price per 2 processors	\$1,000	\$3,750	\$5,750
SnS Gold/Platinum	\$675 / \$805	21% / 25%	21% / 25%

ESX Server, VirtualCenter Agent, Virtual SMP were previously sold separately. These three products are now integrated into the VMware Infrastructure 3 editions and are no longer available as separate products. VMFS is also not available for purchase as a stand-alone product. ESX Server 3, VMFS and VirtualCenter Agent are now included in all editions (although ESX Server 3 in the Starter edition is limited in functionality and deployment) and Virtual SMP is included in the Standard and Enterprise editions.

A la Carte Products

In addition to the VMware Infrastructure 3 editions above, several products are still available as separate a la carte products.

Table 2 A la Carte Products for VMware Infrastructure 3

Name	Priced per
VMware VirtualCenter Management Server	Server/Installation
VMware VMotion	2 Processors
VMware HA	
VMware DRS	
VMware Consolidated Backup	

VirtualCenter Management Server must be purchased separately and is required to implement VirtualCenter. VMotion, VMware HA and VMware DRS can be purchased separately as add-ons to VMware Infrastructure 3 Starter or Standard. Consolidated Backup can be purchased as an add-on to VMware Infrastructure 3 Standard only (this is not available for the Starter edition).

Capacity Pricing Per Two-Processors

In the past, ESX Server, Virtual SMP, VirtualCenter Management Server, Virtual Center Agent, VMotion and the “Virtual Infrastructure Node” (VIN) bundle were sold with separate part numbers (SKUs) for 2-, 4-, 8- and 16-CPU configurations. If a customer wanted to re-deploy the products on a server with different number of processors than the original server, the customer had to go through a manual Software Destruction Agreement process to swap licenses.

In order to provide additional flexibility to customers, and allow them to easily deploy VMware products on any mix of servers, the pricing model for VMware Infrastructure 3 has changed. Customers can now purchase computing capacity in two processor increments. Computing capacity can be deployed and re-deployed on any combination of servers up to the number of processor licenses purchased.

Example:

Customer VirtualCo purchases 10 processors of capacity for VMware Infrastructure 3 Enterprise. VirtualCo can then deploy those licenses on any of the following combinations of servers:

- Five 2-processor servers
- Three 2-processor servers and a 4-processor server
- Two 4-processor servers and one 2-processor servers
- One 8-processor server and one 2-processor server

VirtualCo can redeploy these licenses on any of these server configurations without contacting VMware or a channel partner to swap licenses.

Support and Subscription Options for VMware Infrastructure 3

For VMware Infrastructure, VMware is introducing a new Support and Limited Subscription (SLS) offering and changing how prices are calculated for both Support and Subscription (SnS) and Support and Limited Subscription. These changes will reduce the total cost of support for customers.

Support and Limited Subscription (SLS)

Support and Limited Subscription (SLS) is priced at 16% and 20% of list price for Gold and Platinum support, respectively. Under SLS, customers get full technical support, new minor product releases and bug fixes on the major product release train at the time of the purchase (i.e, if a customer purchases VMware Infrastructure 3 with SLS, the customer will be entitled to ESX Server 3.x and VirtualCenter 2.x minor releases and fixes but not to major releases ESX Server 4 or VirtualCenter 3). Major product upgrades are not included under SLS– customers on SLS must purchase those separately.

A major product release is defined as a change in the first integer of the product version number, as shown in Figure 1.

Figure 1 Major and Minor Releases

Major vs. Minor Release - Example



VMware Infrastructure 3 will become VMware Infrastructure 4 when either ESX Server or VirtualCenter have a new major product release. In other words, when ESX Server 3.0 switches to 4.0 OR when VirtualCenter 2.0 switches to 3.0, VMware Infrastructure 3 will switch to VMware Infrastructure 4.

Component products that are included in VMware Infrastructure 3 will retain their respective versioning. VMFS, Virtual SMP, inherit the version number of ESX Server. VirtualCenter Agent, VirtualCenter Management Server, VMotion, VMware HA, VMware DRS and Consolidated Backup inherit the version number of VirtualCenter.

Example:

At the time of purchase, Customer Acme Inc. opts for SLS on their VMware Infrastructure 3 Enterprise licenses. Acme Inc. will automatically get access to all ESX 3.x and VirtualCenter 2.x but not to ESX 4.0 or VirtualCenter 3.0 (either or these upgrades would result in a VMware Infrastructure 4 release.)

All customers who opt for SLS will be required to purchase an upgrade separately to obtain the next major release of products for which they have SLS.

Prices for upgrading to a new major release of VMware Infrastructure for customers on SLS or customers without any type of support and subscription contract will be established at the time of such release. VMware reserves the right to determine the pricing of upgrades to new major product releases, and that pricing may make it more economical for customers to purchase SnS rather than to purchase the cheaper SLS option and pay for major product releases a la carte. While SLS may offer customers some upfront savings compared to SnS, the combined cost of SLS plus a la carte upgrades to new major releases may be higher than SnS.

Several new policies will apply to SLS, including but not limited to the following:

- Customers must decide whether they want SLS or SnS at the time of purchase. Subsequent upgrades from SLS to SnS are not allowed until customers on SLS purchase the next major release separately. In other words, if a customer opts for SLS, this decision cannot be revisited before a new major release.
- All purchases and most upgrades of VMware Infrastructure require the purchase of one year of either SLS or SnS. The only exception is for customers who are no longer current on SnS and purchase a la carte upgrades (these upgrade prices are explained in the section on upgrades and entitlements). In these cases, some form of support and subscription is recommended but not mandatory.

New Calculation for SnS and SLS

Support and Subscription offerings for VMware Infrastructure 3 SLS and SnS will be calculated on the list price of any part number, including the part numbers that represent bundles of multiple products (e.g., VMware Infrastructure editions) rather than on the sum of the prices of individual products. This policy is different from the current practice of calculating SnS for the VIN bundle, which is based on the sum of the individual components of the VIN.

VMware Infrastructure 3 SnS Entitlements & Upgrades

This section describes the various SnS entitlements and upgrade paths for existing and new customers.

Definitions:

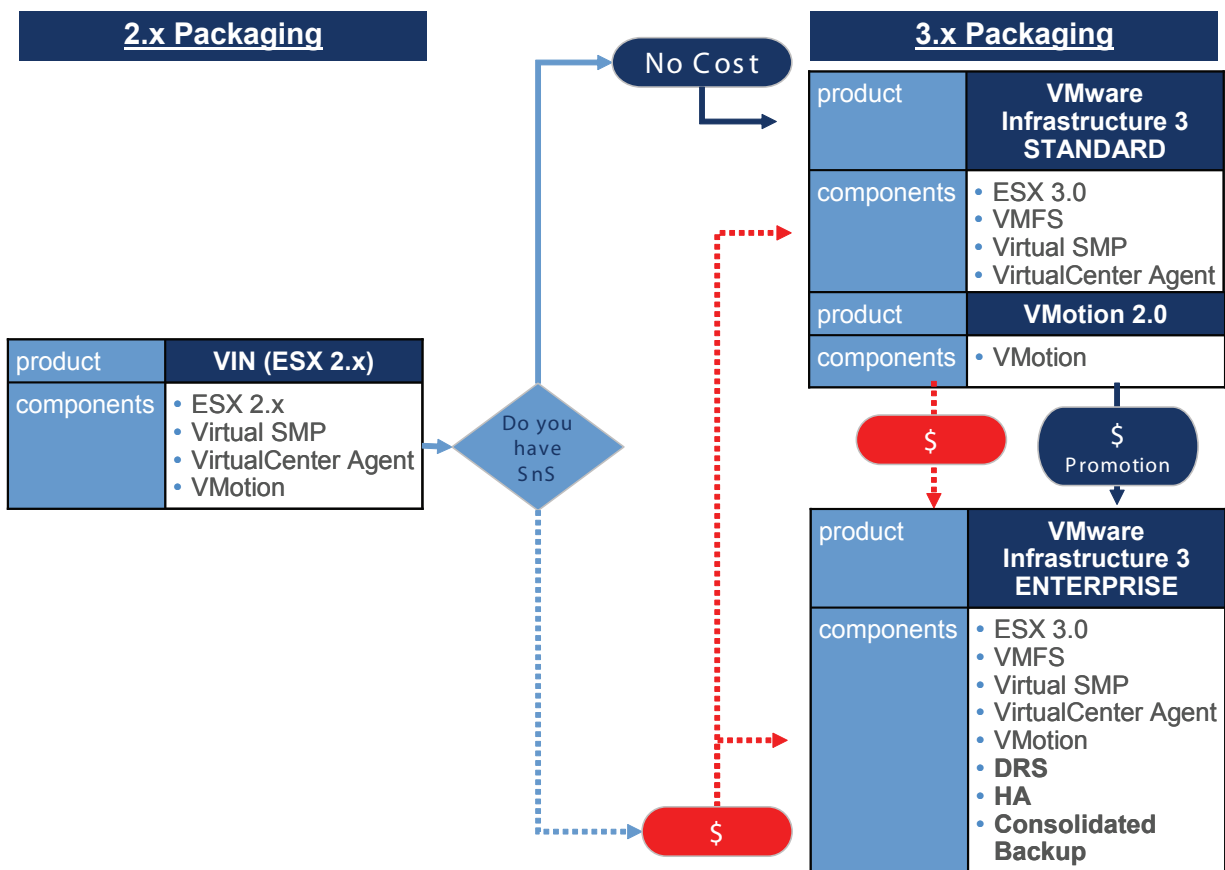
SnS Entitlements: Upgrades to a new product version received at no additional charge under the Subscription component of SnS. For example, customers with valid Support and Subscription are entitled to receive any new major and minor releases made generally available by VMware. For such customers, moving from ESX Server 2 to ESX Server 3 is an entitlement, and does not entail an additional charge.

Upgrades: Upgrades to a different product or a new product version to which a customer is not entitled under SnS for an additional fee. For example, moving from VMware Infrastructure 3 Standard to Enterprise is an "upgrade" and will entail an additional charge. Note that this definition is different than an upgrade as defined in a Support and Subscription contract.

Virtual Infrastructure Node (VIN) Customers

ESX Server 3 VIN customers who are current on SnS will automatically receive VMware Infrastructure 3 Standard and VMotion (a la carte) under their existing contracts. Note that these are the same components that comprise the current VIN. Figure 2 illustrates this entitlement path as well as upgrade options and pricing.

Figure 2 SnS Entitlement and Upgrade Paths for ESX Server 2.x VIN Customers



ESX Server 2.x VIN customers with valid SnS can upgrade from VMware Infrastructure Standard to Enterprise for at a significant discount through the end of 2006.

ESX Server 2.x VIN customers who are no longer current on their SnS contracts can purchase an upgrade to VMware Infrastructure 3 Standard and VMotion 2.0 or to VMware Infrastructure 3 Enterprise separately.

Example:

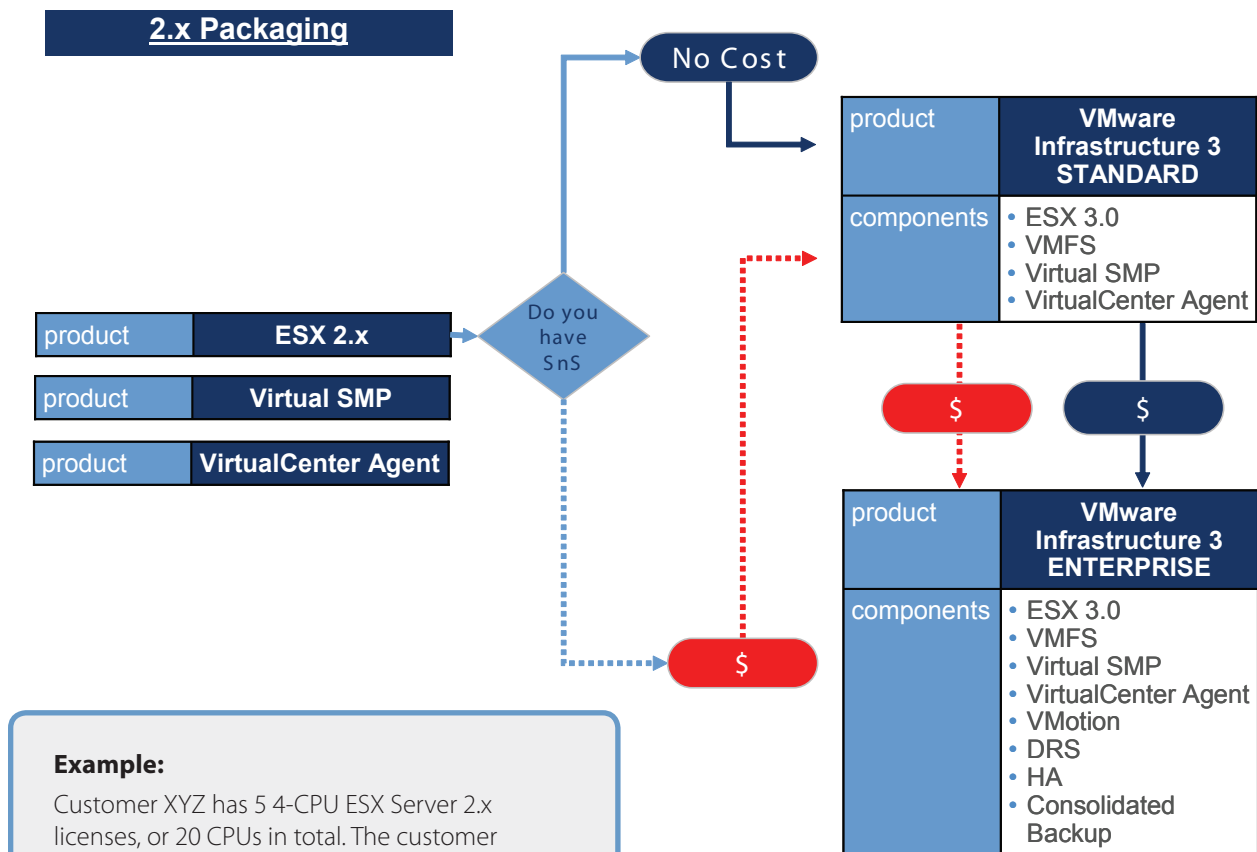
Customer XYZ has 10 4-CPU VINs and current SnS for all of these licenses. The customer is automatically entitled to VMware Infrastructure 3 Standard plus VMotion at no additional charge. In summary, the customer owns 10x4 =40 processors worth of VIN, and the customer will receive activation codes for 40 processors (twenty 2-processor licenses) of VMware Infrastructure 3 Standard and 40 processors (twenty 2-processor licenses) of VMotion.

The customer then may want to purchase upgrades for each of these twenty 2-processor licenses. The 40 processors of capacity purchased may be deployed on any number of servers with any configuration of CPUs within the aggregate limit of 40 processors.

ESX Server 2.x Customers

Customers who purchased ESX Server 2.x a la carte and have valid SnS will automatically receive VMware Infrastructure 3 Standard under their existing contracts. Because VMware Infrastructure 3 includes both Virtual SMP and VirtualCenter Agent, all customers who purchased ESX Server 2.x only and have valid SnS, will now receive Virtual SMP 3 and VirtualCenter Agent 2 automatically, even if they had not purchased these products previously. ESX Server 2.x customers who do NOT have valid SnS contracts can purchase an upgrade to VMware Infrastructure 3 Standard separately. Figure 3 illustrates this entitlement path as well as upgrade options.

Figure 3 SnS Entitlement and Upgrade Paths for ESX Server 2.x Customer



Example:
 Customer XYZ has 5 4-CPU ESX Server 2.x licenses, or 20 CPUs in total. The customer does NOT have valid SnS, but would like to upgrade these licenses to VMware Infrastructure 3 Standard. Customer XYZ must purchase 10 upgrades at to upgrade all 20 processors of capacity (5 hosts x 4 processors). As with other VMware Infrastructure 3 purchases and upgrades, these 20 processors of capacity may be re-deployed as necessary on 2-CPU, 4-CPU or other size servers as required.

VirtualCenter Customers

Customers who purchased VirtualCenter Management Server or VMotion as separate products and have valid SnS will automatically receive updated version 2.0 products. Customers who do NOT have valid SnS contracts must pay to upgrade VirtualCenter Management Server and/or VMotion

GSX Server Customers

All GSX Server customers may upgrade to VMware Infrastructure 3 Starter at no license cost. This is not an automatic entitlement – customers must order this upgrade. SLS or SnS is required for the first year for Starter.

GSX Server customers may also expand their deployment with VMware Server, which can be downloaded at <http://www.vmware.com/download/server/>. VMware Server is expected to be generally available in July of 2006 and will continue to be a free download. At that time, VMware Server SnS will be available for \$350 and \$450 for Gold and Platinum Support, respectively.

Upgrades among VMware Infrastructure 3 Editions

Customers of VMware Infrastructure 3 may purchase an upgrade to a higher VMware Infrastructure edition. For example, VMware Infrastructure 3 Starter customers can upgrade to either Standard or Enterprise.

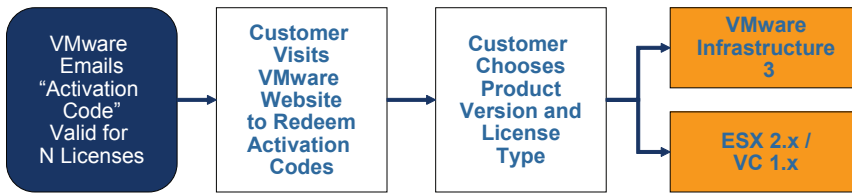
Access to Previous Version Product and License Keys

The VMware Infrastructure 3 price list will replace existing part numbers for ESX Server, Virtual SMP, VirtualCenter Management Server, VirtualCenter Agent, VMotion and the Virtual Infrastructure Node (VIN) on June 5, 2006. Previous part numbers for those products will no longer be available for sale after June 5, 2006 and new orders will be placed for VMware Infrastructure 3 only.

VMware will honor quotes issued under the old packaging and pricing for a reasonable period of time after June 5, 2006. Customers will prefer pricing under VMware Infrastructure 3 as SnS prices are reduced and VirtualCenter Agent and Virtual SMP, which were previously sold a-la-carte, are now included in VMware Infrastructure editions.

Customers who purchase VMware Infrastructure 3 will be able to access previous versions of ESX Server and VirtualCenter (i.e. ESX Server 2.5 and VirtualCenter 1.3) and receive the respective license keys. This capability will enable existing VMware customers to be able to expand existing VMware deployments on ESX Server 2.5 and VirtualCenter 1.3 before they are ready to upgrade to the versions of these products. The previous version license keys will be available via a license activation portal which will offer the choice of downloading VMware Infrastructure 3 license files or previous version license keys, as shown by Figure 5.

Figure 4 License Fulfillment Options for Existing VMware



Customers

Customers will receive an activation code by e-mail that includes all of the licenses included in an order. Instructions in this e-mail will direct customers to enter this activation code on a VMware Web site where they can choose whether to obtain a VMware Infrastructure 3 license file or ESX Server 2.x / VirtualCenter 1.x license keys. If a VMware Infrastructure 3 customer initially downloads ESX Server 2.x / VirtualCenter 1.x license keys, the customer can go back to the license activation portal at any time and download a license file for VMware Infrastructure 3 products at no additional charge.

VMware Infrastructure 3 Adopts New Licensing Mechanism

VMware Infrastructure 3 will use FlexNet licensing server from Macrovision to allow customers to flexibly deploy products and manage their licensing. Instead of product serial numbers, VMware Infrastructure will use activation codes and license files to manage licensing centrally.

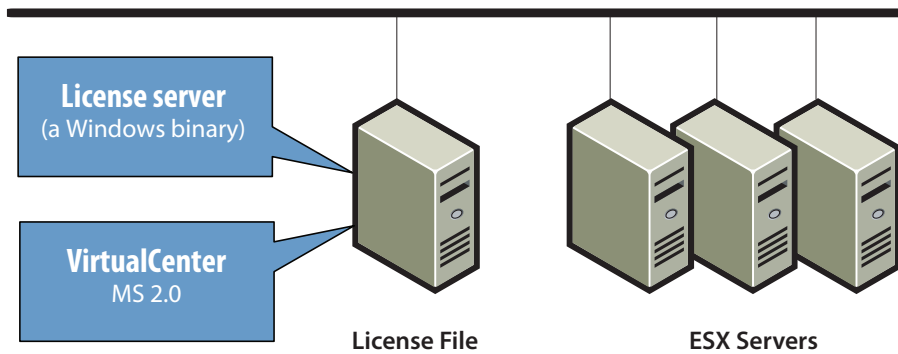
This new functionality offers several benefits to VMware Infrastructure 3 customers. FlexNet licensing improves the process of licensing new hosts, conducting product upgrades and reallocating capacity on the fly. For example, the licensing server automatically decreases the number of licenses available when a new ESX Server host is added to a customer's environment. Upgrades are much easier as there is no need to manually re-install license keys on individual hosts.

The default configuration for VMware Infrastructure is to install and configure the license server on the same system as VirtualCenter 2.0. All licenses are captured in a single license file that centrally manages licenses. License capacity purchased is tracked and dynamically allocated/re-allocated to servers in 2-processor increments.

If a customer already owns a FlexNet licensing server from a different software purchase, the customer can use that server for VMware products as well.

Figure 6: Centralized License Management using FlexNet licensing server.

Figure 5 Centralized License Management using FlexNet Licensing Server

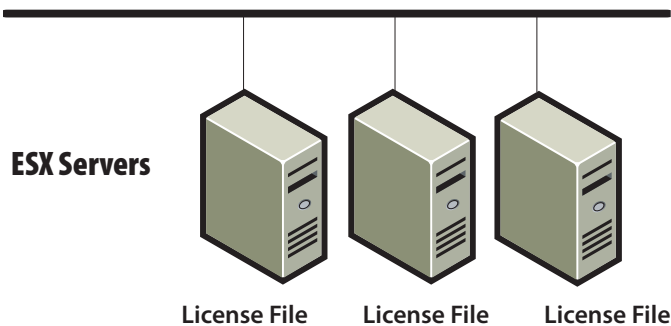


No single point of failure with centralized licensing. Once configured, VirtualCenter and ESX Server installations remain fully functional even if the licensing server is unavailable. This default configuration ensures that the ESX Server installations running in production environments will continue to operate even when disconnected from the license server.

Decentralized licensing option. Although the recommended licensing option is to manage all VMware Infrastructure licenses centrally with the licensing server, licenses may also be managed on individual hosts. This option requires individual license files for each ESX Server. This approach is suitable for small environments that do not use VirtualCenter or for customers who prefer a decentralized approach to license management.

Figure 6 Decentralized License Management

For more information on FlexNet licensing, please refer to the VMware Infrastructure 3 Installation and Configuration Guide.



Summary

VMware Infrastructure 3 pricing, packaging and licensing changes represent significant improvements to how VMware customers buy, deploy and manage VMware products.

- VMware Infrastructure 3 is packaged in three distinct editions to simplify the decision-making and purchasing process.
- Newly introduced Support and Limited Subscription (SLS) gives customers more flexibility and choice.
- Capacity pricing and centralized license management provide customers with more flexibility and simplify how VMware Infrastructure 3 is purchased and deployed.
- Current customers on SnS will receive new versions of products to which they are entitled and a cost-effective path to VMware Infrastructure 3 Enterprise.
- Upgrade paths from existing products and among new offerings make it easy and affordable for customers to move from one VMware offering to another.

Got Questions?

If you have additional questions regarding VMware Infrastructure 3 pricing, packaging, and licensing, please contact your reseller or a VMware sales representative.



VMware, Inc. 3145 Porter Drive Palo Alto CA 94304 USA Tel 650-475-5000 Fax 650-475-5001 www.vmware.com
© 2006 VMware, Inc. All rights reserved. Protected by one or more of U.S. Patent Nos. 6,397,242, 6,496,847, 6,704,925, 6,711,672, 6,725,289, 6,735,601, 6,785,886, 6,789,156, 6,795,966, 6,880,022, 6,961,941, 6,961,806 and 6,944,699; patents pending. VMware, the VMware "boxes" logo and design, Virtual SMP and VMotion are registered trademarks or trademarks of VMware, Inc. in the United States and/or other jurisdictions. All other marks and names mentioned herein may be trademarks of their respective companies.

