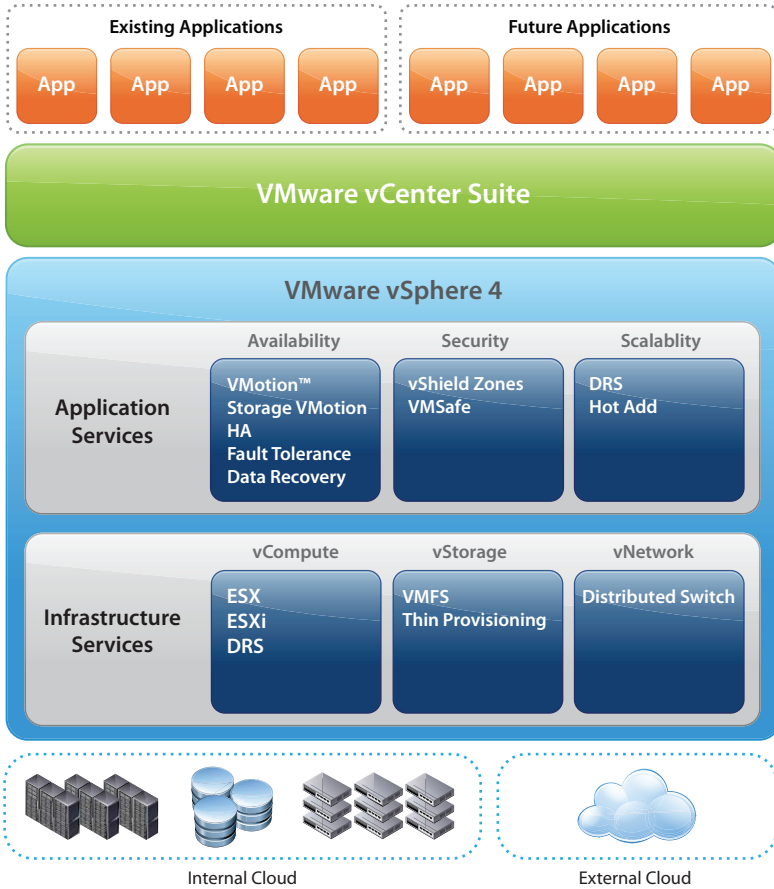


VMware vSphere 4, the industry's first cloud OS



Benefits of VMware Virtualization

Efficiency

- Decrease capital costs and maximize IT efficiency
- Reducing the complexity of management and Administration of IT infrastructure by: consolidation ratio 1:15 and optimization of server, storage and network efficiency
- The "greening" of data center operations by reducing energy costs

Control

- Improved control of IT Service Level Automation
- Streamlined IT processes and more flexibility
- Control over the service levels of your applications with enhanced availability and security features

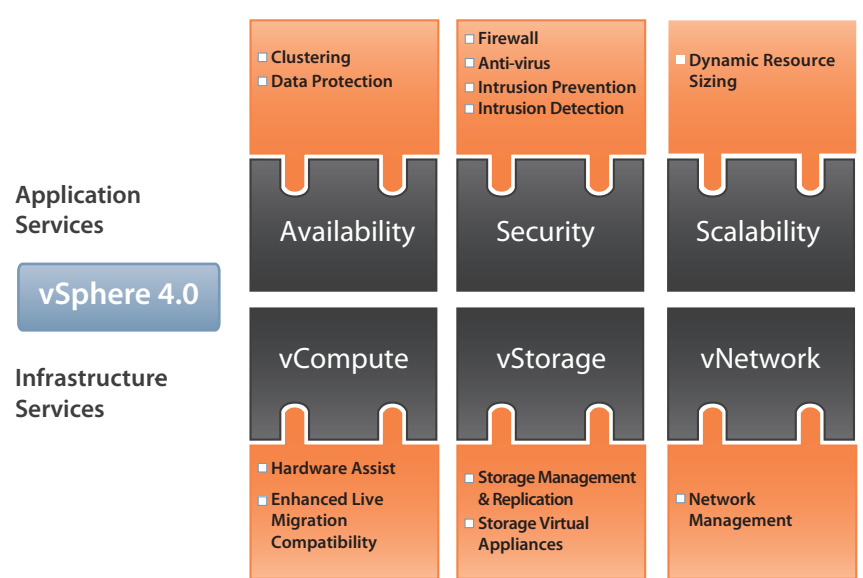
Choice

- Free choice/independence from hardware, operating system, service providers for current and future applications

IT challenges today

- Costs of existing IT infrastructure
- Service-level rise (management, flexibility and security)
- Reacting quickly to changing business requirements
- Reliability of IT infrastructure for the Enterprise

Integration of VMware vSphere™



Solutions for Small and Midsize Businesses

Update Manager	Data Recovery
VC Agent	High Availability
4-way vSMP	Update Manager
VMware ESXi OR VMware ESX	VC Agent
vCenter Server for Essentials (up to 3 servers)	4-way vSMP
ESSENTIALS¹	VMware ESXi OR VMware ESX
Intel SKU# VMW4ESS Intel MMU# 904791 (\$ 995*)	vCenter Server for Essentials (up to 3 servers)
	ESSENTIALS PLUS¹
	Intel SKU# VMW4ESSPLUS Intel MMU# 904792 (\$ 3,624**)

¹ Complete packages: :
 • licenses for three physical servers (with a maximum of 2 processors per each 6 cores and 256 GB of RAM)
 • License for central management server
¹ **These packages can not be decoupled. The individual components can not be used with other editions vSphere. License upgrade is not possible.**

vSphere 4 Editions



Basic consolidation of laboratories and small IT environments	Thin Provisioning	High availability products for the protection of critical production applications	vShield Zones	Management of critical production applications in large-scale	Host Profiles	10
	High Availability		Data Recovery		Distributed Switch	9
	Update Manager		Fault Tolerance		DRS / DPM	8
VCB / vStorage APIs	Hot Add	VMotion™	Storage VMotion™	7		
VC Agent	Thin Provisioning	Thin Provisioning	vShield Zones	6		
4-way vSMP	High Availability	High Availability	Data Recovery	5		
VMware ESXi OR VMware ESX	Update Manager	Update Manager	Fault Tolerance	4		
6 Physical Cores / CPU 256 GB Physical Memory	VCB / vStorage APIs	VCB / vStorage APIs	Hot Add	3		
STANDARD	VC Agent	VC Agent	VMotion™	2		
Intel SKU# VMW4STD	4-way vSMP	4-way vSMP	Thin Provisioning	1		
Intel MMU# 904793	VMware ESXi OR VMware ESX	VMware ESXi OR VMware ESX	High Availability			
(\$ 1,068* / CPU)	12 Physical Cores / CPU 256 GB Physical Memory	12 Physical Cores / CPU 256 GB Physical Memory	Update Manager			
	ADVANCED	ADVANCED	VCB / vStorage APIs			
	VMW4ADV	VMW4ADV	VC Agent			
	904797	904797	4-way vSMP	0		
	(\$ 2,717* / CPU)	(\$ 2,717* / CPU)	VMware ESXi OR VMware ESX			
			12 Physical Cores / CPU No License Memory Limit			
			ENTERPRISE PLUS			
			VMW4ENTPLUS			
			904800			
			(\$ 4,229* / CPU)			

vSphere Features

vSphere Feature	What is it?	What are the benefits?
0 VMware vSMP (8-way)	• Allows a single virtual machine to use up to 8 virtual CPUs at a time (this was previously 4 vCPUs in VI3)	• Allows for the most compute intensive applications to be run as virtual machines
1 VMware vStorage Thin Provisioning	• Defers the allocation of storage to virtual machines until it is needed • Uses monitoring and alerting capabilities to trigger proactive procurement of storage	• Reduces storage costs by over 50 % in virtual environments
2 VMware VMotion™	• Live migration of virtual machines from one server to another without disruption to users	• Minimizes the need to schedule application downtime due to server maintenance
3 VMware Hot Add	• Allows CPU and memory to be added to running virtual machines without disruption or downtime • Allows virtual HBAs and NICs to be added to or removed from virtual machines without disruption or downtime	• Allows applications to be given additional resources without disruption or downtime
4 VMware Fault Tolerance	• Provides zero-downtime and zero-data-loss continuous availability in the case of hardware failures	• Eliminates even the smallest of disruptions in the event of hardware failures • Simple to set up • Can be used with any application 1
5 VMware Data Recovery	• Provides backup to disk and simple recovery at a file or image level for small environments	Provides a simple, cost-effective data protection solution for small environments
6 VMware vShield Zones	• Enforces corporate firewall security policies at the application level in a shared environment, while still maintaining trust and network segmentation of users and sensitive data	• Simplifies application security • Allows more efficient use of firewalls in cluster environments comprising different types of applications
7 VMware Storage VMotion™	• Live migration of virtual disks from one storage location to another without disruption to users • New, simple administrator interface	• Minimizes the need to schedule application downtime due to storage maintenance
8 VMware DRS VMware DPM	• DRS continuously monitors virtual machines and physical servers to optimally align compute capacity to application requirements based on business priorities • DPM optimizes DRS clusters for the lowest possible power consumption	• Automated matching of application demand to computing resources • Simplified operational management and higher levels of utilization in virtual environments • Up to an additional 20 % reduction in power costs with DPM
9 VMware vNetwork Distributed Switch	• Provides a central datacenter level aggregated control point for virtual machine networking • Enables the use of third party virtual switches such as Cisco Nexus 1000v in vSphere environments	• Simplified provisioning and administration of virtual machine networking • Enhanced security and monitoring for virtual machines migrated via VMware VMotion through maintenance and migration of port runtime state
10 VMware Host Profiles	• Allows creation of "golden" profiles of ESX hosts and their application to existing or new hosts	• Simplifies the provisioning and configuration management of ESX hosts
Performance and Scalability	• 255GB of RAM in virtual machines (previously 64 GB) • 64 cores and 512GB of physical RAM supported by ESX hosts • Over 8,900 database transaction transactions per second per virtual machine – sufficient to run annually the entire transaction traffic of VISA • 3x increases in network transmit throughput increase over VI 3.5; Increased MS SQL Server throughput efficiency by 20 % • Increased Citrix XenApp throughput by 30 %; Increased iSCSI throughput by up to 10x2	• Allows the most intense and critical applications to benefit from all the advantages of virtualization without a noticeable impact to users

Have a question? Send to: systembuilder@vmware.com

Useful Links:

Intel and VMware Alliance Page
<http://www.vmware.com/partners/intel/vmware-intel-portal.html>
 VMware System Builder
<http://www.vmware.com/partners/programs/system-builder>

VMware for SMB
http://www.vmware.com/solutions/smb/smb_home.html
 Intel ESAA
<http://www.intel.com/cd/channel/reseller/asm-na/eng/products/server/424422.htm>

* VMware suggested retail price and must be sold with Intel Server Product TM