What's New in VMware vSphere 5?

VMware® vSphere® is the industry-leading virtualization platform for building cloud infrastructures. It enables users to run business-critical applications with confidence and respond to business needs faster. vSphere accelerates the shift to cloud computing for existing datacenters and underpins compatible public cloud offerings, forming the foundation for the industry's only hybrid cloud model.

Infrastructure Services (Compute, Storage, and Network)

Compute

- **vSphere ESXi™ convergence**—vSphere 5 is converging on the ESXi hypervisor architecture. ESXi—the gold standard in hypervisors—enables vSphere users to leverage a thinner architecture, a more secure footprint, and a streamlined patching and setup model. For more information visit the ESXi and ESX info center at http://www.vmware.com/products/vsphere/esxi-and-esx/overview.html.
- **vSphere Auto Deploy**—Auto Deploy is a new deployment and patching model for new vSphere hosts running the ESXi hypervisor. Deploy more vSphere hosts in minutes and update them more efficiently than ever before.
- **New virtual-machine format (Version 8)**—The new virtual-machine format in vSphere 5 has several new features, including support for
  - 3D graphics for Windows Aero
  - USB 3.0 devices
- **Support for Apple products**—vSphere 5 supports Apple Xserve servers running OS X Server 10.6 (Snow Leopard) as a guest operating system.

Storage

- **vSphere Storage DRS**—Improve management and enable more-efficient use of storage resources through grouping, placement and balancing.
- **Profile-Driven Storage**—Identify the appropriate storage to use for a given virtual machine depending on service level. The result is a streamlined approach to selecting the correct storage and ensuring its delivery.
- **vSphere File System**—Leverage enhanced scalability and performance through a non-disruptive upgrade to the platform's latest clustered file system version.
- **vSphere Storage I/O Control**—Improve management and enforcement of service-level agreements (SLAs) through extension of limits and shares in Network File System (NFS) datastores.
- **vSphere Storage API Program**—Take advantage of extensions to the Array Integration API that support thin provisioning. Leverage the new Storage Awareness and Discovery API to interface with arrays when using the new vSphere Storage DRS and Profile-Driven Storage features.

Network

- **vSphere Network I/O Control**—New per–virtual-machine controls allow more-granular SLA enforcement.
- **vSphere Distributed Switch**—Improves visibility of virtual-machine traffic through NetFlow and enhances monitoring and troubleshooting through Switched Port Analyzer (SPAN) and Link Layer Discovery Protocol (LLDP) support.

Application Services (Availability, Security, and Scalability)

Availability

- **vSphere High Availability**—New architecture enables superior guarantees, simplified setup and configuration, and expanded scalability.
- **vSphere vMotion**—Migration of virtual machines over higher-latency network links is now supported.

Security

- **ESXi Firewall**—New service-oriented and stateless firewall engine restricts access to specific services by IP address or subnet. This is particularly useful for third-party components that require network access.

Scalability

- **Larger virtual machines**—Virtual machines can now grow four times larger than in any previous release to support even the largest applications. Virtual machines can now have up to 32 virtual CPUs and 1TB of RAM.

Management Services

Core Management

- **vSphere Web Client**—Access vSphere from any Web browser anywhere in the world.
- **VMware vCenter Server Appliance**—Run vCenter Server as a Linux-based virtual appliance.

Learn More

For information on upgrading to vSphere 5, visit the vSphere Upgrade Center at http://www.vmware.com/products/vsphere/upgrade-center/overview.html.

VMware, Inc. 3401 Hillview Avenue Palo Alto CA 94304 USA Tel 877-486-9273 Fax 650-427-5001 www.vmware.com