

# Dell and VMware:

The Simple, Fast and Smart Way  
to Virtualize Business-Critical Applications

## An Easier Way to Virtualize Business-Critical Applications

For over ten years, Dell and VMware have invested thousands of hours in joint engineering, architectural design and reference architecture development. As a result, our virtualization solutions are optimized, validated and tightly integrated. They are simple to deploy. And they are delivered within a best-practices framework to ensure that your virtualized infrastructure meets the high standards your business demands.

## DELL: ALSO A VMWARE CUSTOMER

Dell doesn't just deliver integrated VMware solutions to customers. Dell IT has also implemented VMware virtualization in its own internal global IT organization.

- Over 10,000 virtual machines deployed
- Achieved over \$150M in operational savings
- Reduced application deployment time from 45 days down to 4

In today's technology-driven environment, business agility depends on IT agility. But for many organizations, the potential business value of information technology has become trapped within traditional IT infrastructures that are too rigid, costly and complex to keep up with the pace of real-time business.

As a result, most IT organizations spend 70-80 percent of their time and budget just "keeping the lights on," leaving little time to innovate or support strategic business initiatives. With users demanding faster response times, and management demanding lower costs, organizations need a better strategy. A key factor to achieving business agility and an efficient enterprise lies in striving to allocate 50% or more of IT's time and budget toward strategic initiatives. A critical element to achieving this end goal is the ability for IT to virtualize their business-critical applications.

In fact, even if you've begun virtualizing your data center to address sprawl and realize some initial capex savings, you may still face operational challenges such as the need to meet Service Level Agreements (SLAs) and availability requirements for your most critical production applications. By virtualizing your business-critical applications, you'll resolve these issues. Your IT organization will begin to drive operational savings and strategic value to your business.

Dell /VMware integrated solutions address the challenges associated with virtualizing business-critical applications. They deliver the foundation that your IT organization needs for a simple, fast, smart path to begin or expand your virtualization journey to business-critical applications and the cloud.

## The Benefits of Dell Next Generation Computing Solutions with VMware

With integrated virtualization solutions from Dell and VMware, you can run your business-critical applications with confidence. We'll help you lay the groundwork for enterprise cloud computing, allowing you to focus on strategic IT, transform your IT capabilities, and more effectively support your business.

**Maximize ROI.** By providing an easier way to virtualize business-critical applications, our solutions help your organization realize the value of virtualization more quickly.

**Resource elasticity.** Quick resource provisioning and efficient utilization, combined with scalability and flexibility, enable you to respond more nimbly to business requests.

**Cost reductions.** Our solutions help you consolidate and standardize your IT infrastructure. You'll reduce operating and maintenance costs. Your data center power and cooling requirements will drop.

**Streamlined management.** Manage your entire virtualized infrastructure—whether it is deployed as private cloud, public cloud, hybrid cloud or personal cloud resources—from a single management console.

**Boost the business value of IT.** Through automation and improved manageability, Dell Next Generation Computing Solutions free your IT resources from time-consuming, manual processes. IT staff can focus on innovation and improving service levels.

#### KEY HIGHLIGHTS

##### What's New in VMware Cloud Infrastructure Technology?

VMware's continued technology innovation has further enhanced its virtualization capabilities to better support your business-critical applications.

Expect massive scalability for the largest applications and databases. Create virtual machines with up to:

- 32 vCPUs
- 1 TB of memory
- and support for up to one million IOPS

You'll also achieve simpler and more affordable business continuity with improvements in:

- VMware® vSphere™ High Availability (HA)
- VMware Data Recovery
- VMware® vCenter™ Site Recovery Manager™ (now includes VMware vSphere Replication for multi-site implementations)

Dell is optimized to provide end-to-end support for all of the above new capabilities in their suite of hardware and service offerings.

## Business Ready Virtualization Streamlines Your Path to Strategic IT and Business Agility

Dell and VMware's integrated virtualization solutions give you a clear, streamlined path to IT infrastructure virtualization.

Powerful, open, integrated and easy-to-use, these solutions provide a foundation for on-demand, highly available and highly secure cloud-based computing environments.

### Dell and VMware Cloud Infrastructure

- **One Virtualization Package.** Dell vStart is an open, affordable solution that features Dell PowerEdge™ Servers, VMware® vSphere™, Dell's award-winning EqualLogic™ and Compellent storage, and unique Dell server and storage management plug-ins for VMware® vCenter™. This highly scalable solution is delivered pre-racked, pre-cabled, pre-tested and pre-configured so customers can minimize capital costs while driving efficiency and reducing complexity in your business-critical application stacks
- **Availability.** VMware vSphere helps IT organizations ensure business continuity and prevent data loss with always-on IT capabilities such as automated failover, zero-downtime maintenance, virtual machine fault tolerance and cost-effective data protection.
- **Deployment.** VMware vSphere Auto Deploy is a new deployment and patching model for new VMware vSphere hosts running VMware ESXi hypervisor. Deploy more VMware vSphere hosts in minutes and update them more efficiently. Combined with Dell vStart and Dell management plug-ins for VMware vCenter, organizations can be up and operational faster and more efficiently than ever before.
- **Application performance.** VMware vSphere can boost application performance by nearly 50 percent with dynamic, automated, policy-based resource allocation.
- **Scalability.** Virtual machines can now grow four times larger (up to 1 TB) than in any previous version of VMware vSphere to support even the largest business-critical applications in your virtualized environment.

### Dell Storage

Dell EqualLogic, Compellent, and Dell PowerVault™ storage are simple, affordable, and expandable. Integrated with VMware vSphere, these solutions deliver unprecedented visibility and control over business-critical assets.

- The Dell EqualLogic PS Series works seamlessly with VMware® vCenter™ Site Recovery Manager™ (SRM) to provide affordable enterprise disaster protection and recovery by simplifying and automating workflows.
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- Advanced storage virtualization and auto replication within the array help to reduce storage capacity and administration requirements while delivering optimized failover across wide area networks.

The latest generation of **Dell PowerEdge Servers**, pre-installed with **VMware vSphere**, deliver up to 168 percent faster performance than previous generation servers.

- Dell Compellent speeds storage provisioning for virtual machines and provides a continuous shared storage pool available to all virtual machines. It streamlines virtual machine and storage management with VMware vCenter integration; minimizes the disk capacity required for virtual machine clones; and automates disaster recovery with a VMware vCenter SRM adapter.
- VMware vSphere Storage Distributed Resource Scheduler (DRS) improve management and enables more efficient use of storage resources through grouping, placement and balancing.
- Profile-Driven Storage identifies 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.
- Dell storage and VMware vCenter SRM deliver automatic failback: applications can move back and forth between sites automatically, without having to set up a new recovery plan for each step. Ensures coordinated recovery with tight integration between storage arrays and VMware vCenter Site Recovery Manager.

### **Dell Management Plug-ins for VMware vCenter**

Dell management plug-ins for VMware vCenter offer centralized management from a single console, achieving unprecedented visibility and control over business-critical systems.

- Policy-based management tools let you “set it and forget it” to improve service levels while greatly reducing cost and effort.
- VMware® vCloud™ Director can be added seamlessly to deliver advanced cloud capabilities, enabling customers to deliver secure, catalog-based services to business units across the enterprise.

### **Dell Services and ProSupport**

Dell and VMware’s integrated virtualized solutions are backed by deployment services, including setup of VMware vSphere, Dell Management Plug-ins for VMware vCenter, and Dell EqualLogic storage. Dell ProSupport four-hour support across all solution elements gives you a single point of contact for your entire solution, from hardware and software through deployment services.

### **For More Information**

Interested in learning more?

- Virtualizing Business-Critical Applications with VMware:  
<http://www.vmware.com/solutions/business-critical-apps/index.html>
- Virtualizing Business-Critical Applications: A First Step on the Journey Toward the Cloud (IDC White Paper):  
[http://campaign.vmware.com/imgs/campaigns/business\\_critical\\_apps/phase2/assets/IDC\\_WP\\_Virt-BusCritApps\\_Critical\\_Step.pdf](http://campaign.vmware.com/imgs/campaigns/business_critical_apps/phase2/assets/IDC_WP_Virt-BusCritApps_Critical_Step.pdf)
- Dell VMware Partnership:  
<http://www.vmware.com/dell>