Virtualized Tier-1 applications have special requirements

Many organizations want to extend the benefits of virtualization to transactional workloads like Microsoft® Exchange and SQL Server®, but assuring performance, availability, and protection of these applications and data sets within the virtual data center are not well understood and can be a major barrier to adoption. Providing adequate performance, data protection and quick recovery for Tier-1 applications have been illusive due to limits within the underlying infrastructure. Gains made by virtualizing the data center are gated by the ongoing requirement to maintain application-specific physical server deployments.

In response to the challenge of protecting mission critical, Tier-1 Microsoft® applications in complex virtualized environments, organizations are exploring a multi-level approach, implementing data protection at both the virtual machine and the application layers. Unfortunately, the cost, complexity and technical limitations of this approach risks undermining the very gains achieved through virtualization.
Dell EqualLogic PS Series SANs integrate with VMware and Microsoft platforms for Tier-1 application support

Through advanced integration with VMware® and Microsoft® platforms, Dell™ EqualLogic™ PS Series SANs enable the availability, protection, performance, ease of management and seamless scalability required to support virtualized Tier-1 applications. Dell has invested thousands of engineering hours to drive cost and complexity out of vSphere 4-based virtual infrastructures and Microsoft® SQL and Exchange servers running on them, to dramatically simplify operations and better accommodate application robustness within a cloud computing environment.

Through this integration, the evolution of the cloud takes a giant leap forward. Intelligence on the PS Series arrays effectively virtualizes storage infrastructures, while enabling tighter integration between virtualized servers and storage via vSphere’s vStorage APIs. This helps offload performance-hungry operations from the hypervisor to the SAN, reducing management overhead and increasing overall performance and scalability. For application data protection in a vSphere environment, Auto-Snapshot Manager/Microsoft® Edition (ASM/ME) integrates the PS Series with tier-1 via Microsoft® VSS.

Advanced SAN integration enables automated data protection for VMs and Tier-1 applications

Advanced integration among the Dell, VMware and Microsoft® platforms empower two features included standard with the PS Series arrays—Auto-Snapshot Manager/VMware® Edition (ASM/VE) and Auto-Snapshot Manager/Microsoft® Edition (ASM/ME).

• ASM/VE—Included at no additional cost or license fees, ASM/VE coordinates with VMware vCenter Server to take hypervisor-aware SAN-based snapshots of a particular VM or group of VMs. This enables automated and scalable protection and recovery of VMs. Enhancements available in ASM/VE include selective restore capabilities and integration with the PS Series’ Auto-Replication feature, for advanced data protection and disaster recovery for the cloud.

• ASM/ME—Also included without additional cost or license fees, ASM/ME provides an extra layer of data protection for mission-critical Tier-1 applications running in a vSphere environment. ASM/ME enables backups and restores of Microsoft® Hyper-V™ Server virtual machines, NTFS File Systems, Microsoft® SQL Server datasets and Microsoft® Exchange Server datasets that are fast, online and application-consistent.

Dell accelerates time to value with validated application workloads and configurations

Dell is committed to driving the cost and complexity out of virtualization, and to helping you accelerate adoption and achieve cost savings sooner. As part of this commitment, Dell now offers engineer-tested, pre-built virtualization configurations based on VMware vSphere 4.1. These business-ready configurations can be deployed as designed or customized to meet individual requirements. Dell’s Business-Ready Virtualization Configurations feature:

• Simplified design, ordering, and deployment of virtual infrastructure
• Integration completeness and production readiness
• Best practices recommendations and guidelines
• Power consumption measurements for typical virtualized infrastructure environments

Through this strategic partnership, Dell and VMware deliver a powerful, integrated virtual infrastructure that can offer outstanding levels of control and simplicity. This frees IT staff to focus on delivering services that differentiate the business. Dell simplifies IT, and we’ve made virtualization technology simpler and easier than ever before with the integration of EqualLogic and vSphere 4.1.

Dell’s enterprise solutions, including EqualLogic iSCSI SANs, PowerEdge Virtualization Optimized Servers and Global Infrastructure Consulting Services (GICS) can help organizations confidently deploy, manage and protect their Tier-1 Microsoft® applications within a VMware vSphere environment.

Simplify your Storage at www.dell.com/PSseries