

solutions

Your guide to maximizing IT efficiency

dell.com/powersolutions

8 cover story

The smart money's on IT

How the Efficient Data Center drives sustainable growth

By Bryan Jones and Bill Goins

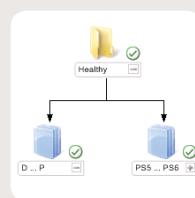
Imagine a data center where pooled servers, networking, and storage can be rapidly redeployed to meet changing needs; where business application developers can self-provision their workload deployments; and where optimized storage and intelligent infrastructure are the norm. Dell is helping organizations to unlock data center efficiency and work toward the goal of returning as much as 50 percent of the IT budget to drive business innovation.



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28 How storage deduplication technology pays off



56 Monitoring Dell storage in Microsoft System Center

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Designing for hyperscale computing

By Steven Croce, Brandon Draeger, and Buck Avey

Created for hyperscale environments such as private and public clouds, Web 2.0 and online gaming infrastructures, and high-performance computing, Dell™ PowerEdge™ C-Series servers provide outstanding performance in a dense, streamlined, eco-efficient design.

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Advancing server scalability and performance

By Armando Acosta and Robert Bradfield

Four-socket Dell PowerEdge R810 and PowerEdge R910 rack servers and PowerEdge M910 blade servers offer highly scalable processing power and memory capacity to help cost-effectively boost performance and expand virtualized environments, while other features help increase reliability and simplify administration.

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High performance in a compact design

Maximizing performance while making efficient use of available power and space can be critical in data center environments. The Dell PowerEdge R815 rack server with the AMD Opteron™ 6000 Series platform delivers four-processor performance in a compact, cost-effective 2U design.



96 Near-instant access without a full system boot



104 Boosting business efficiency running Oracle BI on Dell



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Tsumura & Company: Solving IT problems with server consolidation

By consolidating its infrastructure on virtualized Dell PowerEdge servers, Japanese herbal medicine leader Tsumura & Company has laid the groundwork for a dramatic reduction in ongoing server costs while ensuring that legacy applications can continue running years into the future.

features Solutions for the virtual era

28 How deduplication helps reduce the cost of backup and disaster recovery

By Kay Benaroch and Shane Jackson

Dell and EMC have teamed up to deliver efficient disk-based backup and recovery with integrated deduplication technology designed to make disk-based backups as cost-effective as tape-based backups.

34 Optimizing management efficiency with Dell/EMC NS storage

By Annette Cormier, Eric Cannell, and Brad Bunce

The Dell/EMC NS family of unified storage enables organizations to easily and cost-effectively consolidate both unstructured file-system data and structured application data into a single shared storage system—helping organizations control costs, streamline management, and enhance storage availability and performance.

39 Racking up data center efficiency

By Joyce Ruff

Designed to meet the needs of high-density data center environments, the Dell PowerEdge 4820 rack enclosure can hold and protect a wide range of IT equipment while supporting enhanced power management, efficient cooling, and simplified component storage and mounting.

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State of Delaware: Taming the e-mail beast with blades

Centralizing its e-mail systems on Dell PowerEdge blade servers and Dell EqualLogic™ storage helps the state of Delaware reduce total cost of ownership, streamline management, and cut downtime from days to minutes.



50 Storage optimization

Enhancing SAN self-management with Dell EqualLogic storage

By Tony Ansley and Mansour Karam

Dell EqualLogic arrays offer built-in intelligence to help simplify configuration—but operators may still miss important settings. Together, Arista and Dell have created a storage architecture that can automate configuration through switches running the Arista® Extensible Operating System (EOS®) platform.

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Dell KACE appliances:

Simplifying Windows 7 migrations

By Sendhil Jayachandran

For midsize organizations working with a diverse range of hardware and limited resources, making the move to the Microsoft® Windows® 7 OS can be a daunting challenge. The innovative Dell KACE™ family of appliances provides a simplified, automated, cost-effective way to design and carry out an end-to-end migration.



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Streamlining systems management with Dell Management Console 1.1

By Todd Rodgers and Tad Walsh

Dell Management Console powered by Altiris™ from Symantec™ consolidates multiple systems management tasks into a unified, easy-to-use console. Dell Management Console 1.1 enhances this functionality with features including power monitoring, out-of-band update capabilities for server BIOS and firmware, and automated warranty reporting.

Dell Power Solutions Magazine and special edition articles are also available online at dell.com/powersolutions. Check the

Dell Power Solutions Web site for early-release articles, how-to's, case studies, best practices, and expert tips you won't find anywhere else.

Power Solutions Digital Edition

Dell Power Solutions Digital Edition offers a comprehensive IT library at your fingertips—featuring powerful searches across archived issues and direct links to related resources. For instant accessibility, visit powersolutionsdigital.dell.com.

The screenshot shows a search results page for 'solutions for the virtual era'. The left sidebar has a 'Feature section' dropdown set to 'Virtualization'. The main content area displays several articles with titles like 'Dell Advanced Infrastructure Manager software allows IT departments to manage networking, storage, and servers—both physical and virtual—as a single resource pool.' and 'Intelligent infrastructure: Dell's intelligent infrastructure approach can help organizations optimize their existing data centers, whether on their own schedule, take advantage of cloud-based infrastructure, or move to a hybrid model to prepare their data centers for the future.' The right sidebar is titled 'Four pillars: Building the Efficient Data Center' and lists four categories: Intelligent Infrastructure, Simplified Infrastructure Management, Streamlined Application and Workload Management, and Dell Intelligent Data Management.

The screenshot shows the 'The Efficient Enterprise' section of the Dell Power Solutions website. The main headline is 'Invest in innovation. Not in the status quo.' with a sub-headline 'The Efficient Enterprise'. Below this is a sub-headline 'Free up 50% of your IT budget for innovation'. A text block explains that Dell is committed to helping companies like yours reduce \$200 billion of the resources spent every year on IT infrastructure to embrace the business challenges that can help your business excel. Another text block discusses the efficiency of Dell's 'PowerEdge' hardware. At the bottom, there are calls to action: 'Have Dell contact you by email or phone', 'Learn the Inside Scoop on Green IT', 'Cloud IT services market overview – real enterprise value or just vapor?', and 'Download Now'.

Efficient Enterprise framework

Take control of your data center with open, capable, and affordable solutions that help you focus on driving business innovation rather than just "keeping the lights on." For the full story, visit efficiententerprise.com.

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