COVER STORY

10

Virtualization Enters the Mainstream
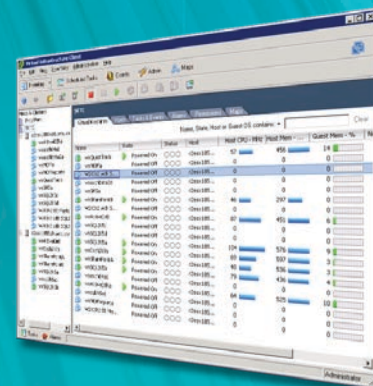
By Jeanne Feldkamp, Deb McDonald, and Tom Kolnowski

Once an isolated island reserved for test and development, virtualization is unlocking untapped server, storage, and networking resources. Today, standards-based server virtualization is changing the tides with efficient cost-benefit models enabled by reduced IT infrastructure costs, simplified management, and unprecedented business response.

17 **STEP BY STEP**

Upgrading to VMware Infrastructure 3 on Dell PowerEdge Servers

By Todd Muirhead

VMware Infrastructure 3 can offer significant performance enhancements on ninth-generation Dell PowerEdge servers. The Dell Enterprise Technology Center demonstrates how administrators can leverage the portability of virtual machines to perform a rolling upgrade to VMware Infrastructure 3, helping minimize downtime during the transition.

Achieving Balance-Sheet Business Value with Server Virtualization

Transforming administration-intensive physical data centers into cost-effective virtualized infrastructures is not something most organizations do every day. By drawing on best practices culled from successful customer engagements around the world, Dell Infrastructure Consulting Services can help organizations optimize IT resources, simplify server management, and sustain value across the overall IT infrastructure.

Now Playing: Dell Datacenter of the Future Podcast Series

When planning a virtualized server environment, many businesses don't realize how complex it can be to address the storage component. Why? Because there is so much data in so many places. "Improving Storage in a Virtualized Server Environment" explores how iSCSI factors into the equation with cost-effective, easy-to-manage connections that enhance virtual machine mobility. For more information, visit **www.dell.com/podcast**.

EDITOR'S COMMENTS

FEATURE SECTION: VIRTUALIZATION IN THE MAINSTREAM

SEE IT HERE FIRST ▶

more

online

Virtualization in the Mainstream

Microsoft Exchange Server 2003 Performance on VMware ESX Server 3

By Kong L. Yang and Aravind Pavuluri

Before virtualizing critical systems such as Microsoft Exchange servers, enterprises should understand how those virtual machines might perform compared with a dedicated physical server.

Running Microsoft Virtual Server 2005 R2 on Microsoft Cluster Service

By Mike Kosacek

Running Microsoft Virtual Server 2005 Release 2 (R2) on a Microsoft Cluster Service platform can help mitigate hardware failures by providing high-availability features for virtualized clusters.

Simplifying DRAC 5 Deployment with the Dell OpenManage Deployment Toolkit

By Zain Kazim and Alan Daughetee

The Dell OpenManage Deployment Toolkit includes utilities for the Microsoft Windows Preinstallation Environment and Linux OS to help simplify Dell Remote Access Controller 5 (DRAC 5) deployment.

Configuring the DRAC 5 to Use the Microsoft Active Directory Standard Schema

By Raghavendra Babu and Deepak Panambur

DRAC 5 firmware version 1.20 supports the standard Microsoft Active Directory schema, without requiring the schema extension necessary for previous firmware versions.

Optimizing RAID Storage Performance with the SAS-based Dell PERC 5

By Dustin Sorenson and Leticia Olivarez

The Serial Attached SCSI (SAS)–based Dell PowerEdge Expandable RAID Controller 5 (PERC 5) is designed to significantly increase performance over previous-generation SCSI-based PERCs.

Simplifying Dell Systems Management with Dell OpenManage Connection Plug-ins

By Sanjeev Kumar Singh and Neeraj Sharma

Dell OpenManage Connection plug-ins are designed to simplify the monitoring and management of Dell hardware by integrating Dell systems data and applications into third-party management software.

Updating Microsoft Windows Server 2003 on Dell PowerEdge Servers

By Bhushan Gavankar

Deploying Service Pack 2 for Microsoft Windows Server 2003 R2 on Dell PowerEdge servers can enhance data center security, reliability, and productivity.

An Introduction to DDR InfiniBand

By Rinku Gupta, Vishvesh Sahasrabudhe, Toby Sebastian, and Rizwan Ali

The increasingly popular InfiniBand high-speed interconnect now supports both single data rate (SDR) and double data rate (DDR) transmission, with DDR providing significantly increased speeds.

Minimizing Downtime During Large Database Migrations with Oracle Data Guard

By Kai Yu and David Bryan Mar

By using Oracle Data Guard and Oracle Recovery Manager, administrators can minimize downtime and help maintain application availability during database migrations.

Your Information, Your Way

The *Dell Power Solutions* articles on this page are available exclusively online at **www.dell.com/powersolutions**. Plus: Check the *Dell Power Solutions* Web site for our early-release articles, how-to's, implementation studies, and expert tips you won't find anywhere else.

Need specific subject matter at your fingertips? Search our **Related Categories** index and then visit full-text articles from current and back issues online. Can't wait? For real-time access to content as soon as it's posted, subscribe your favorite RSS (really simple syndication) reader to the feed at the *Dell Power Solutions* Web site or **www.dell.com/rss**.

GUIDED TOUR · page 91

Unified Messaging with Microsoft Exchange Server 2007

By Farrukh Noman and Suman Kumar Singh

Implementing the Microsoft Exchange Server 2007 Unified Messaging feature to integrate e-mail, voice mail, and fax messages requires configuring and coordinating multiple systems. This article discusses the basic components of Unified Messaging infrastructures and explains how administrators can deploy them in their own data centers.

TALK BACK

We welcome your questions, comments, and suggestions. Please send your feedback to the *Dell Power Solutions* editorial team at **us_power_solutions@dell.com**.

ADVERTISER INDEX

DELL POWER SOLUTIONS

WWW.DELL.COM/**POWERSOLUTIONS**

About Dell

Dell Inc., headquartered in Round Rock, Texas, near Austin, listens to its customers and delivers innovative technology and services they trust and value. Uniquely enabled by its direct business model, Dell is a leading global systems and services company and No. 34 on the Fortune 500 list. For more information, visit our Web site at www.dell.com.