

Driving  
**STANDARDS.**  
Developing  
**SOLUTIONS.**  
Delivering  
**SCALABILITY.**



**DELL** in the **ENTERPRISE.**



# A Direct Path to Success — That's Pure Dell

At Dell, we choose to do business in the purest way possible: through our direct delivery model that enables you to easily establish a two-way dialog between your IT staff and Dell. And with a complete portfolio of products, services and solutions that are founded on industry-standard technology. With Dell, there are no hidden agendas. No middlemen. And no excuses. Just pure IT solutions that allow you to reap the benefits of open innovation. Such as simplified systems management. Dynamic and modular scalability. Quick access to breakthrough technology. Low acquisition and operating costs. Fast return on your IT dollar. With Dell, it's all possible.



## A Commitment to Open Innovation

In the last decade, there's been a major shift in IT strategy — with companies moving away from locked, proprietary technology and focusing on flexible systems built on open standards. As one of the industry's leading proponents of standardization, it's no surprise that Dell has developed an entire IT strategy — The Scalable Enterprise — around open standards. By leveraging our IT expertise and dedication to standards-based technology, Dell can develop an infrastructure that empowers you to:

- **Simplify operations** through integrated, automated systems management and common images and components.
- **Improve utilization** by consolidating systems, implementing virtualization and enabling high availability.
- **Cost-effectively scale** with a modular approach that leads to dynamic, pay-as-you-grow deployment.

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## Dell's Scalable Enterprise Strategy

Our strategy is pragmatic. It's practical. It's pure. At Dell, we concentrate on the IT issues that affect your IT organization — today. We offer solutions that address your current IT challenges, then we help you prepare for the future. It's all accomplished through industry-standard technology and a focused approach to IT infrastructure products and services. By applying Dell's strategy, you are in control. Not an army of consultants. At Dell, "Scalable Enterprise" is not just the name of our strategy, it's what we help your organization become.



## Discover the Dell Difference

Dell is uniquely qualified to understand the specific IT needs of today's enterprise. Because each and every day, we talk directly to tens of thousands of customers around the world. We ask questions. We get to know their needs. And then we get to work, partnering with industry leaders to develop innovative products, services and solutions that are built on open standards and backed by Dell's excellent support. Over the years, we've found that the best way to serve our customers is by listening to them. By eliminating the middlemen. By being direct. That's the Dell difference. That's pure Dell.







## Products

Dell products and enterprise strategy are designed with **reliability** and scalability in mind, so you can easily and cost-effectively add IT components as your needs change. And since Dell products are built on **industry standards**, you can confidently manage a datacenter that maximizes interoperability and optimizes your current and future IT investments. With rigorous engineering, manufacturing and testing processes, it's no surprise that Dell is a product **leader** in performance and high availability.



## Cox Communications Chooses Dell for Its Mission-Critical Applications

### Challenge

With the digital entertainment and communications markets in a state of hyper-growth and dynamic change, Cox Communications has to stay on its toes. The company's rapid growth and turn-on-a-dime attitude have put a great deal of pressure on the Cox Communications IT staff to provide technological underpinnings for new services dreamt up by marketers, integrate the disparate datacenter holdings of acquisitions and, of course, do it all for less money.

### Solution

Cox Communications had long relied on Dell servers as its standard for nearly eight years, including for such applications as its primary web sites. The team performed two thorough studies aimed at determining how smart, cost-effective and reasonable it would be to migrate its beefier, mission-critical applications to Intel® architecture-based Dell servers running the Red Hat® Enterprise Linux® Advanced Server operating system.

### Benefits

The outstanding partnership relationships between Dell, Intel, Oracle® and Red Hat ensured successful, rapid rollout of the first 50 servers and a mission-critical ERP solution. The new architecture delivers smooth, incremental scalability, expected savings of 50 percent and increased business agility.

"We ran an extensive set of tests with Dell servers running the Red Hat Enterprise Linux Advanced Server operating system. The performance and reliability of the Dell servers were outstanding under even the heaviest loads, and the economics were pretty compelling."

– Tom Guthrie,  
Vice President of Operations for  
Cox Communications,  
December 2005



# Dell Is Setting the Server Standard

A lot has changed since Dell first entered the enterprise market more than a decade ago. The industry has evolved toward a standards-based approach to technology. Servers have become the heart and brains of today's enterprise IT. And we are poised to become the world's leading x86 server vendor. Today, as we move into our ninth generation of server technology, we continue to set the industry standard through a robust portfolio of reliable, high-quality servers designed to reduce complexity and deliver superior value.

## Dell's Complete Server Portfolio

When it comes to servers, one size does not fit all. That's why Dell offers a choice in server performance, functionality and form factors. Whether you need a blade, rack or tower, you can rely on Dell to provide a wide range of innovative technologies backed by a company-wide commitment to quality and reliability.

## Designed to Reduce Complexity

Dell continually delivers server technology designed for high performance, ease of use and overall efficiency.

- Serve as the driving force behind standards-based systems management — offering full deployment, monitoring and change management functionality, free of charge with all PowerEdge™ servers.
- Provide common images and components with its servers — helping to simplify management and cut costs.
- Offer tested, certified and ready-to-deploy configurations for leading applications — including Microsoft® Exchange, Microsoft SQL Server, Oracle® Database and SAP®.

## Built to Provide Superior Value

How can Dell consistently offer a low acquisition cost without sacrificing quality or performance? It comes down to our industry-leading supply chain and direct business model. We don't cut corners. We cut inefficiencies. And you reap the rewards.





## Driving Commonality into the Server Environment

We've spent the last decade building commonality into our server family with the specific goal of simplifying management and maintenance, while reducing cost and complexity.

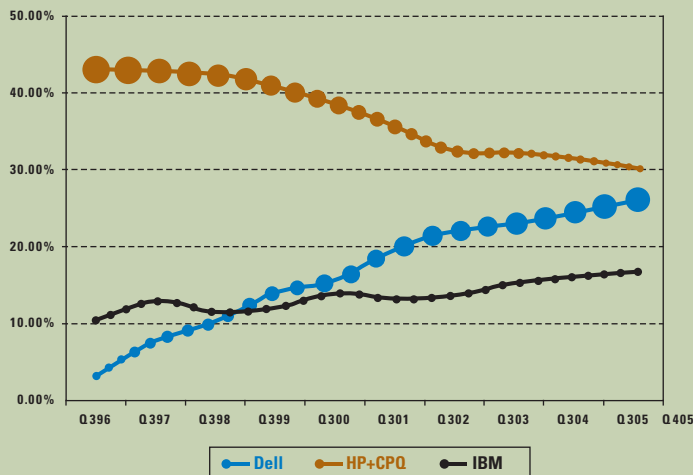
- **ImageWatch™** — Dell provides a road map of upcoming software changes, allowing you to better plan updates.
- **Block updates** — By delivering scheduled changes, we can help minimize the number of updates you make each year.
- **Image commonality** — By reducing the number of overall images in our server line, we have reduced the time required for image maintenance.
- **Component commonality** — Our servers share common components (memory, hard drives, management cards and more), which help improve efficiency during build and servicing.
- **Management commonality** — PowerEdge servers are managed through a common interface to help maximize efficiency and streamline management.

## An Ongoing Commitment to Reliability and Quality

Dell goes to great lengths to ensure that quality and reliability are engineered into each and every PowerEdge server.

- A 130,000-square-foot test facility focuses exclusively on delivering the most reliable servers possible.
- Our direct model is designed to help us detect, diagnose and resolve quality issues faster than our competitors.
- Verify that each supplier meets our stringent quality standards.
- Every Dell server is tested (and re-tested) before it leaves the factory.
- Our "one-touch" process is designed to ensure one person is responsible for the entire server build, resulting in greater quality control.
- We track configurations of every product down to the component level, which allows us to quickly and easily analyze product performance and take corrective action when needed.
- Dell engineers regularly conduct failure analyses and incorporate lessons learned into the development process to ensure that PowerEdge servers are continually performing at peak levels.

Worldwide x86 Server Unit Share (IDC)\*



\*Source: IDC Worldwide Quarterly Server Tracker, February 2006

Over the last 10 years, Dell has grown faster than any major server vendor. In fact, Dell is currently the #1 x86 server vendor in the U.S. and #2 worldwide.



# A Dell Server for Your IT Needs

IT Project	Recommended Dell Server
<p><b>Virtualization</b></p> <p>Virtualization allows you to divide up the resources of a single server, create multiple virtual servers and can help you to achieve better utilization of existing IT assets. Virtualization stresses all areas of the system — from processor to memory and I/O.</p>	<ul style="list-style-type: none"> <li>• PowerEdge™ 1950/1955/2950</li> <li>• PowerEdge 6850</li> </ul>
<p><b>Database backend, ERP, CRM</b></p> <p>These servers demand the highest performance and scalability to run the applications that organizations rely on to run their businesses. Quad processors, plenty of memory, I/O expandability and the highest levels of availability are all key requirements.</p>	<ul style="list-style-type: none"> <li>• PowerEdge 6800/6850</li> </ul>
<p><b>E-mail/messaging</b></p> <p>These applications deliver productivity through communication and collaboration. Dual-socket processing power helps deliver the best price/performance for these applications and storage expandability.<sup>1</sup></p>	<ul style="list-style-type: none"> <li>• PowerEdge 1800/1950/1955</li> <li>• PowerEdge 2900/2950</li> </ul>
<p><b>High-performance computing cluster or web farm</b></p> <p>These applications harness the performance of multiple systems that work in harmony with each other to deliver distributed performance. Because redundancy is handled at the application level, a value-focused, rack-dense server makes the best choice.</p>	<ul style="list-style-type: none"> <li>• PowerEdge SC1425</li> <li>• PowerEdge 1955</li> </ul>
<p><b>Web serving</b></p> <p>FTP and web applications require high I/O throughput to move data out to end users around the globe. Web applications require more processing power, so dual Xeon® processors or even better dual-core Xeon processors can stay ahead of the servers' needs.</p>	<ul style="list-style-type: none"> <li>• PowerEdge 830/850</li> <li>• PowerEdge 1800/1950</li> <li>• PowerEdge 2900/2950</li> </ul>
<p><b>Network infrastructure</b></p> <p>The glue that holds your network together — DHCP, DNS, domain controllers, gateways, Microsoft® Active Directory® and security applications. Affordable performance and high availability help minimize interruptions to network operations.</p>	<ul style="list-style-type: none"> <li>• PowerEdge 830/850</li> <li>• PowerEdge 1800/1950</li> <li>• PowerEdge 2900/2950</li> </ul>
<p><b>File/print sharing</b></p> <p>The traditional backbone of the network is resource sharing, which promotes productivity and efficiency for organizations. I/O throughput is the key as large amounts of data get passed back and forth.</p>	<ul style="list-style-type: none"> <li>• PowerEdge 830/850</li> <li>• PowerEdge 1800/1950</li> <li>• PowerEdge 2900/2950</li> </ul>

## Did you know?

- Dell supports dual-core processors in its PowerEdge line.
- Dell offers a well-balanced solution for multi-core platforms, focusing on the complete holistic platform.
- Dell has been at the forefront of delivering industry-leading technology that helps set the pace for the rest of the industry.

<sup>1</sup>Results are based on the MMB3 benchmark results posted at <http://www.microsoft.com/exchange/evaluation/performance/default.asp> as of May 12, 2006.

# Dell PowerEdge 1955 Blade Server

The PowerEdge 1955 delivers on the promise of high-density computing by offering complete server-class features combined with a density advantage over traditional rack servers. With great performance per square foot of rack space and up to 43%<sup>2</sup> better density compared to traditional 1U rack servers, this high-performance, dual-socket and ultra-dense blade server helps solve many challenges that organizations face today in the datacenter, including:

- Intense scrutiny on capital expenditures
- Limited real estate
- Increased workload for IT resources
- Inadequate power and cooling
- Unmanageable cable sprawl

PowerEdge 1955



The PowerEdge 1955 follows on the strong foundation set by the PowerEdge 1855, which has received positive reviews from customers, analysts and the media alike, including Forrester, IDC, eWeek and InfoWorld.

## PowerEdge 1955

Dual-socket, ultra-dense, high-performance blade server delivers maximum power per square foot of rack space. The PowerEdge 1955 is ideal for virtualization, distributed web environments, network infrastructure and terminal services. When compared to a 1U rack server, the PowerEdge 1955:

- Has 43% less physical space required for equal processing power.
- Is designed for quick and easy install, management and service.
- Can reduce network, power and KVM cable sprawl by up to 70%.
- Helps improve power and thermal efficiency per server.

In addition to housing a server, the blade server enclosure also houses many shared resources, including power, cooling, networking and storage. These shared resources help drive datacenter density and deliver a lower TCO through the life of the blade server enclosure.

- Brocade SilkWorm 3014 Fibre Channel switch
- McDATA 4314 Fibre Channel switch
- Topspin InfiniBand Pass-Through
- PowerConnect™ 5316M network switch
- Cisco Catalyst Blade Switch 3030

<sup>2</sup>Sixty PowerEdge 1955 blade servers can reside in one 42U rack versus 42 1U servers.

# Dell Rack Servers

Dell can help you simplify your IT operations by rack-mounting servers and minimizing the required floor space. With new rack server technology, you can install virtually any industry-standard 19" rack-mountable network equipment into Dell racks through our adherence to the IEEE standards for rack mounting. Unique cabling, power, UPS and management console options help to round out the rack-mount offering, providing a complete solution for consolidation of servers and maximization of datacenter floor space.

## Did you know?

Dell offers a complete portfolio of rack-dense servers to meet a wide variety of needs:

- 1U servers deliver highly dense platforms for web, network infrastructure or SAN-connected applications.
- 2U servers deliver a balance of rack density with expansive internal storage capacity for growth.
- Ultra-dense blade servers maximize datacenter computing space without demanding a premium price for that density.
- Rack-mountable, high-performance and four-way servers provide the horsepower to run business-critical applications in a compact 4U chassis.
- Tower servers can also be rack-mounted, allowing for more expansive internal storage and I/O options to meet particular application needs.

## PowerEdge™ 850

**Single-socket, affordable and rack-dense web and infrastructure server for any size organization**

Ideal for web serving, development server, remote applications and file/print sharing.

- Aggressively priced.
- Flexible processor choices to match applications.
- 1U rack-mount chassis for maximum density.
- Fully manageable both locally and remotely.

## PowerEdge 1950

**Dual-socket, rack-dense 1U server that delivers next-generation performance**

Ideal for web applications, SAN compute node, network infrastructure, database front-end and e-mail/messaging.

- Dual-core processors deliver scalability for future application needs.
- 1U rack-mount chassis for maximum density.
- Redundancy to help increase uptime.
- Common system image with PowerEdge 2900/2950 to help reduce management costs.



PowerEdge 1950

## PowerEdge SC1425

The dual-socket, rack-dense PowerEdge SC1425 is an ideal platform for technical computing, HPCC and distributed web environments where redundancy is delivered at the cluster level instead of at the individual server level. Designed with a dual Xeon® processor architecture and expandable memory options to handle the high-performance needs of HPCC applications or web architectures, the PowerEdge SC1425 delivers affordable, scalable performance in a compact 1U chassis.



## PowerEdge 2950

**Dual-socket, rack-optimized 2U server for high performance combined with a balance of configuration flexibility and rack density**

Ideal for network infrastructure, database, e-mail/messaging and Internet applications.

- Internal expandability to meet the needs of today and the future.
- Dual-core processors deliver scalability for future application needs.
- 2U rack-mount chassis balances density with configuration flexibility.
- Common system image with PowerEdge 1950/2900 to help reduce management costs.



PowerEdge 2950

## PowerEdge 6850

**Quad-socket rack server that delivers value in high-performance database and server consolidation solutions**

Ideal for database, virtualization, ERP and UNIX® migration.

- Affordable, scalable performance in a compact 4U chassis.
- Expandable memory options to handle high-performance needs.
- Smooth transition from 32-bit to 64-bit applications.
- Manageability and serviceability designed for ease of use.



PowerEdge 6850

“The Dell platform has always been easy to manage, highly available and very efficient. But the Dell PowerEdge 6850 servers have proven to be real lifesavers. It’s amazing how fast and easy to manage they are.”

— Jacob Matusevich, Manager of Networks and Server Technology, Welch’s, January 2005

# Dell Tower Servers

Whether you need an entry-level tower server to meet your file/print needs or a more advanced server for business-critical applications, Dell offers a range of value and performance towers to meet your ever-changing server requirements. For IT departments looking for simple, powerful computing along with direct pricing, Dell PowerEdge™ value tower servers are a smart choice. Dell PowerEdge performance tower servers are designed for flexibility and high availability with a range of useful features, such as hot-pluggable drives, tool-less chassis and high-performance Intel® processors. No matter which tower server you choose, you can rest assured knowing that every Dell server leverages our industry-standard technology and direct model efficiency.

## PowerEdge SC430

**Single-socket tower server combines value and technology for customers demanding the best performance in a single-processor server**

Ideal for file/print, shared Internet access and general-purpose applications for small businesses.

- Multiple processor options to deliver the performance needs of any small business.
- Exceptional value for small businesses replacing a peer-to-peer network.
- Simple to set up and manage.

## PowerEdge SC1420

**Dual-socket value tower server that brings cost-effective performance and expandability to small businesses**

Designed to address the needs of a small business for a file/print, small workgroup, e-mail, web or dedicated application server.

- Provides performance and deployment flexibility at an outstanding value.
- Simple to set up and manage.



PowerEdge SC430

**“As we moved to the Dell servers and switches, we realized immediate performance results.”**

**— Navarrow Wright, CTO,  
BET Interactive, April 2005**



PowerEdge 2900

### PowerEdge 2900

**Dual-socket performance tower server that delivers high performance, scalability and availability for departmental applications**

Ideal for e-mail (messaging), application server, database and web server.

- Low TCO — common image with PowerEdge 1950/2950.
- High performance for demanding applications.
- Smooth transition from 32-bit to 64-bit applications.
- High uptime and configuration flexibility.
- Comprehensive systems management.

### PowerEdge 830

**Single-socket, general-purpose tower server that provides many of the performance features found in higher-end systems**

Ideal for file and print sharing, e-mail, remote/branch office, retail POS and web server.

- Cost-effective solution for remote offices.
- High performance and availability.
- Smooth transition from 32-bit to 64-bit applications.
- Provides easy accessibility and serviceability.
- Comprehensive systems management.

### PowerEdge 1800

**Dual-socket, entry-level tower server delivers a balance of performance and affordability**

Ideal for e-mail (messaging), application server and web serving.

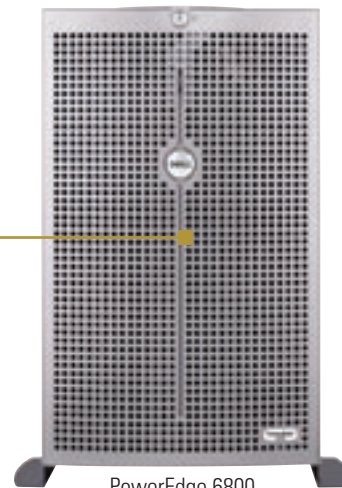
- High performance for I/O-intensive applications.
- Smooth transition from 32-bit to 64-bit applications.
- High-availability features for maximum uptime.
- Provides easy accessibility and serviceability.
- Comprehensive systems management.

### PowerEdge 6800

**Quad-socket tower server delivering value in high-performance database solutions**

Ideal for database, ERP and UNIX® migration.

- Enough internal scalability to be completely self-contained.
- Designed to optimize high-performance applications.
- Engineered to help keep information accessible around the clock.
- Tested to work as part of a complete enterprise solution.
- Comprehensive systems management.



PowerEdge 6800

# Dell Systems Management for Servers

**With Dell Systems Management, you can simplify operations by integrating hardware management into best-of-breed systems management applications. Dell works to ensure that our systems are the most manageable in the industry. Our leadership in systems management standards bodies and our inclusion of those standards in our systems help ensure that our customers have the best management tools, highest levels of flexibility and choice when building their systems management infrastructures. Dell server, storage, networking and client management solutions are designed to help simplify and automate the administration of your technology resources, allowing you to better control your IT investments and the proliferation of tools needed to manage those resources.**

## **Flexibility, Simplified Environments and Choice**

At Dell, we focus on providing our customers with the most manageable systems in the industry.

- At the center of our management capabilities, the Dell OpenManage™ suite of management applications delivers comprehensive hardware management tools.
- For customers seeking a fully integrated solution, tightly integrated management suites from Altiris®, Microsoft® and Novell® allow deployment, management and patching of your entire IT environment — from bare metal through applications.
- If you are utilizing large enterprise frameworks like HP OpenView, CA Unicenter and more, we offer connections that allow our systems to be managed in those environments as well.

Bottom line, Dell offers more flexibility and supports your choice of management tools for your hardware, operating systems and applications.





## Comprehensive Hardware Management Tools

Dell OpenManage delivers comprehensive deployment, monitoring and patch management capabilities for Dell hardware at no additional cost to our customers. Our open approach to management allows your solution to scale to our integrated partner management suites or full-scale enterprise frameworks. You receive the proactive management information and control you need to optimize deployment, health status monitoring, fault recovery, change management and more.

- **Industry standards** — By championing open standards within the industry, we give you greater choice in the selection of your systems management solution and provide more flexibility to meet your specific requirements.
- **Open manageability** — Our instrumented server platforms can be integrated seamlessly with most standards-based management tools and consoles.
- **Strong partnerships** — Dell partners with industry-leading companies to deliver integrated, best-in-class technologies, services and management applications to provide cost-effective, comprehensive systems management functionality.
- **Integrated hardware and software management** — Dell's close partnerships with Altiris, Microsoft and Novell enable the deployment of fully integrated management solutions for Windows®, Linux® or heterogeneous environments, allowing customers to manage their Dell hardware, operating systems and applications from a single integrated application of their choice.

## Servers Are at the Heart of Your IT Infrastructure

Fast, efficient, cost-effective server management is a top priority for today's IT managers. Even more challenging is the broad selection of management tools available on the market. At Dell, our focus on systems management combined with our partnerships with leading management application suppliers allow our customers to choose the best-of-breed applications — without sacrificing control over Dell hardware.

Dell's approach to systems management helps provide:

- Simplified server operations and management by using tools already in place to manage other IT areas.
- Reduced overall IT costs by eliminating multiple consoles, training requirements and complexity.
- Improved IT response time in deploying necessary software changes through tested automation and patch management tools.
- Maximized performance of servers throughout the complete system lifecycle — from bare metal deployment to maximizing your applications' performance and availability.

## Take Control of Systems Management

Dell's OpenManage products suite and integrated partner applications deliver a variety of robust, flexible systems management tools for businesses of any size. Our leadership in implementing server instrumentation and integration with most management applications enable IT administrators to proactively control server operations with the industry's leading tools. By driving the development and certification of industry-standards technologies through our leadership positions in major standards organizations, Dell is working to ensure that your management choices of today continue to meet your business needs of tomorrow.

# A New Era in Storage

How did Dell become the fastest-growing storage vendor in the world?\* By helping our customers solve today's toughest storage challenges with a complete enterprise offering that includes:

- Innovative, reliable, easy-to-use storage products built on industry standards.
- A complete array of systems management software and services to optimize performance.
- The unsurpassed value leadership of Dell to help lower your total cost of ownership.

When you look at everything we have to offer, it's no wonder that more and more companies are choosing Dell as their storage partner.

\*Source: IDC Worldwide Quarterly Disk Storage Systems Tracker, December 2005

## A Product for Virtually Every Storage Need

At Dell, we've developed a comprehensive portfolio of industry-leading products to answer virtually all of your product needs — from tape automation to data archiving and backup to a single SAN array that supports up to 256 servers and a capacity of up to 239TB. Plus, we are continually working on the next wave of innovation.

## World-Class Service and Support

Let the experts at Dell help you maximize the performance of your Storage Area Network (SAN) with Dell/EMC Maintenance Services. This service includes periodic health checks, software and system updates, upgrades and how-to assistance for configuring or installing SAN components. Dell's world-class services and industry-leading software are all designed to help you simplify storage management, enhance availability and improve utilization across your entire IT infrastructure. With Dell, it's not just better storage. It's a better storage experience.

## Driving Value into Every Storage Product We Deliver

It's no secret. Dell storage products are engineered to provide superior value. Dell has reduced the cost of networked storage by 91% in the last four years — tangible evidence of our commitment. Our idea of value goes beyond the initial acquisition costs. We also work to ensure that our systems are easy to use and install by taking such steps as offering HBAs pre-installed in our servers for easier deployment in a SAN environment. In addition, Dell and EMC collaborated to introduce the world's easiest customer-installable SAN solution.

"I began this hardware evaluation thinking long-term, not just about what I needed today. That's one of the reasons this Dell solution appeals to me. I'm not going to be throwing out the AX100 next year because a better solution comes along. I'm good to go!"

— Matt Frederickson, District Supervisor of Technology, Council Rock School District, January 2005

## Dell Storage Solutions

Need to solve a particular storage challenge? Let the experts at Dell implement a solution that's right for you.

- Storage management
- Storage consolidation
- Business continuity
- Data archiving for regulatory compliance



## Dell and EMC: A Partnership in Storage

Dell and EMC have a long-standing partnership built on a mutual commitment to industry standards. Together, Dell and EMC have joint-engineered a number of award-winning products, such as the AX150 — the world's easiest customer-installable SAN solution. As this successful partnership continues, you can expect even more storage innovations from Dell and EMC, two companies that are driving the next generation of storage innovation.

	Relevant Technology	Customer Experience	Value Leadership
Dell/EMC Storage Arrays	<ul style="list-style-type: none"> <li>• Provides advanced information management</li> <li>• Offers broad OS and platform support</li> </ul>	<ul style="list-style-type: none"> <li>• Includes a robust value-added software suite</li> <li>• Enables server integration</li> </ul>	<ul style="list-style-type: none"> <li>• Helps lower your total cost of ownership</li> <li>• Provides upgrade investment protection</li> </ul>
Dell PowerVault™ Storage	<ul style="list-style-type: none"> <li>• Developed on standards-based technology</li> <li>• Works within PowerEdge™ environments</li> </ul>	<ul style="list-style-type: none"> <li>• Helps reduce management complexity</li> <li>• Leverages server commonality</li> </ul>	<ul style="list-style-type: none"> <li>• Offers industry-leading price and performance</li> <li>• Provides hardware investment protection</li> </ul>

**Dell has built innovation, support and value leadership into our complete suite of storage products.**

# Dell/EMC Storage Arrays

Dell has a true partnership with EMC, a world leader in enterprise storage, and is uniquely positioned to deliver an impressive portfolio of award-winning storage solutions spanning hardware, software and services. Now in their third generation, the new Dell/EMC CX3 series is designed to deliver end-to-end 4Gbit performance and forms the core of a scalable enterprise infrastructure that is easy to deploy, manage and upgrade.

“Since installing the Dell/EMC SAN, we have been able to quickly and painlessly add storage capacity to accommodate the growing history of incoming calls.”

— Ishmael Carlo, CTO,  
NEXT Financial Group, Inc.,  
May 2005



## Dell/EMC CX3-80

**One of the industry's most powerful, mid-tier networked storage platforms**

Sets a new standard for scalable SAN arrays with more processing power and greater capacity than top-tier competitors' products. Establishes a performance standard with true end-to-end 4Gbit architecture and storage processors.

- Can be configured with between 5 and 480 drives.
- Provides simultaneous support for up to 256 highly available servers to help simplify storage consolidation.
- Packs up to 239TB of raw capacity into a single array — an ideal system for heavy database applications.



Dell/EMC CX3-80

## Dell/EMC CX3-40

**High performance. Large capacity. Outstanding value.**

Delivers an ideal blend of performance and scalability perfect for high-availability clusters running Microsoft® Exchange or other messaging software for several thousand users, as well as for data warehousing and compute-intensive applications. Available with FC and iSCSI support for maximum flexibility and investment protection.

- Scales up to 119TB of raw capacity.
- Can be configured with between 5 and 240 drives.

## Dell/EMC CX3-20

### First in a line of advanced disk arrays

The third-generation CX3-20 is designed to deliver superior performance and scalability while being fully upgradable to either the CX3-40 or CX3-80 — without needing to remove data. Available with FC and iSCSI support for maximum flexibility and investment protection.

- Scales up to 59TB of raw capacity.
- Can be configured with between 5 and 120 drives.

## Dell/EMC CX300

### Small in size, big in capacity

This entry point in the Dell/EMC CX series is ideal for cost-effective Microsoft Windows®, Linux®, Novell® NetWare® and UNIX® workgroup SAN and DAS solutions.

- Scales up to 27TB of raw capacity.
- Can be configured with between 5 and 60 drives.
- Offers the ease of management and performance needed to run file/print, e-mail, light database and web services applications.

## Dell/EMC AX150 and AX150i

### Easy-to-install storage array offering Fibre Channel or iSCSI connectivity

Ideal for small organizations and workgroups that want an easy-to-use, cost-effective storage solution, without compromising performance and availability.

- Connects as many 10 servers in a few simple steps or use as Direct Attached Storage (DAS).
- Offers single or dual Fibre Channel or iSCSI controllers.
- Provides up to 6TB of shared storage and is supplied with all necessary software, including snapshots and management, at no extra cost.



Dell/EMC AX150i

# Dell PowerVault™ Storage

Leveraging the latest industry standards, Dell delivers a comprehensive portfolio of storage products that help you cost-effectively optimize the management and protection of information on PowerEdge™ servers. From Network Attached Storage (NAS) to Direct Attached Storage (DAS) to tape backup, Dell PowerVault storage products offer proven performance and reliability backed by Dell's commitment to simplicity and scalability.

## Network Attached Storage (NAS)

### Dell Storage Servers

**The easy-to-use, pre-configured file-sharing solution for IT environments of any size**

Based on Microsoft® Windows® Storage Server 2003 R2, a Dell Storage Server provides a central point on the network where users can store files and share them with others.

- In as little as 15 minutes, file and print sharing capabilities can be easily deployed in a small office environment.
- With networking communications pre-installed, Windows, Macintosh®, UNIX®/Linux® and Novell® clients can be served in a snap.
- Dell Storage Servers are built on the PowerEdge 830, PowerEdge 2900 and PowerEdge 2950 to meet a range of storage file needs.
- Up to 8.4TB of SCSI or SATA disk storage can be configured externally with the PowerVault 220S or Dell/EMC AX150.



PowerVault 745N

## Direct Attached Storage (DAS)

### PowerVault 220S Disk Expansion Enclosure

**Storage expansion for one PowerEdge server or a pair of clustered PowerEdge servers**

This storage enclosure houses up to fourteen 3.5" U320 SCSI disk drives in a single rack enclosure. For more than two decades, SCSI has been a mainstay in the enterprise and is used today mainly for storage expansion on legacy servers.

- Supports up to 4,200GB of raw capacity when 300GB U320 SCSI disk drives are used.
- Can connect to two servers for shared storage or for high-availability clustering.
- Requires a PERC 4 RAID controller — sold separately — to provide disk protection, storage configuration and enclosure management utilities.

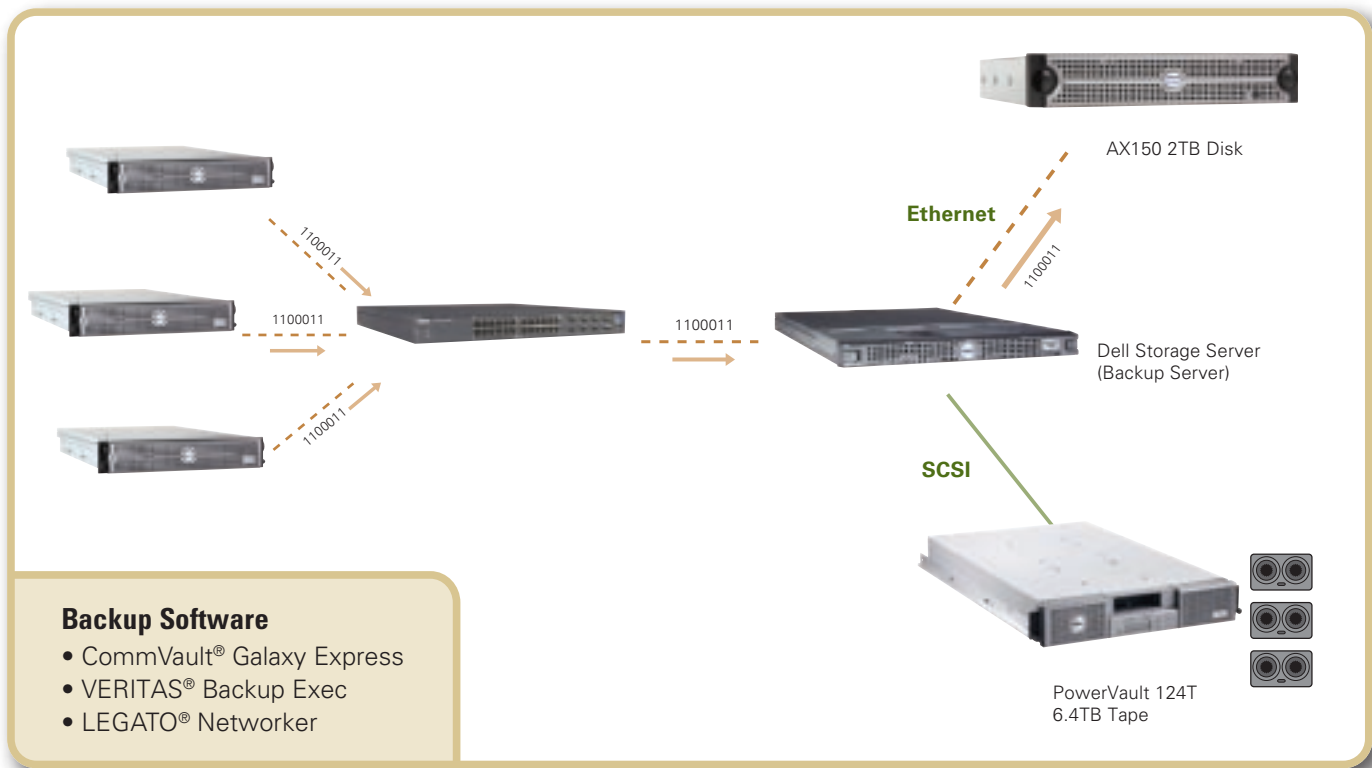
### PowerVault MD1000 Modular Disk Expansion Enclosure

**The latest generation storage expansion enclosure for PowerEdge servers**

This modular storage enclosure houses up to fifteen 3.5" SAS disk drives in a single rack enclosure. SAS, the latest advancement in proven SCSI technology, is well equipped to handle the growing performance and capacity requirements of today's mainstream business applications, such as Exchange and SQL, running on a single PowerEdge server.

- Supports up to 7,500GB of raw capacity when 500GB SATA disk drives are used.
- Available with high-performance 15,000 RPM or high-capacity 10,000 RPM SAS and SATA drives.
- Requires a PERC 5 RAID controller, sold separately, that enables three expansion enclosures — up to 45 drives — to be daisy-chained for added storage capacity and spindle scalability.
- Alternately, a single enclosure can be split between two servers, with eight drives assigned to one server and seven drives assigned to a second server.

## Dell's Disk-to-Disk-to-Tape Solution



Ideal for high-capacity environments, Dell's Disk-to-Disk-to-Tape Solution is a cost-effective, reliable storage alternative that meets the need for long-term protection while helping to reduce management time.

### Did you know?

In just four years, Dell has reduced the SAN entry price by 91% and the cost to back up 3TB of data by 83%.

- As recently as 2002, a Dell/EMC FC4500 with 1TB of storage cost nearly \$89,000 list (or \$89/GB).
- As of June 2006, the AX150i costs \$6,160 list for 1TB (or \$6.16/GB).
- Driving down the costs of technology is often referred to as the "Dell Effect."

# Dell PowerVault™ Tape Automation

## Five Tenets of the Dell PowerVault ML6000 Family

**1. Modular expandability**

**2. Intelligent architecture**

**3. Non-disruptive scalability**

**4. Performance and reliability**

**5. All from a single source: Dell**



PowerVault ML6020 CM

## PowerVault ML6010 Modular Tape Library

A SAN backup solution for customers who require proactive monitoring to reduce overall management time.

- A 5U tape library.
- Provides library partitioning for improved flexibility.
- Offers proactive monitoring and remote diagnostics to help reduce service calls and shorten resolution time.
- Includes intuitive service wizards and e-mail home features to help eliminate unplanned downtime.

## PowerVault ML6020 CM and ML6030 CM Modular Tape Libraries

An enterprise SAN backup solution with capacity-on-demand scalability for customers who need proactive monitoring and reduced management time.

- ML6020 CM is a 14U tape library consisting of a 5U control module and a 9U expansion module.
- ML6030 CM is a 23U tape library consisting of a 5U control module and two 9U expansion modules for additional capacity.
- Provides capacity-on-demand slot activation license keys, starting with 36 slots and has an option to activate up to 218\* slots without interrupting operation.
- Includes proactive monitoring and remote diagnostics to help reduce service calls and shorten resolution time.
- Provides library partitioning to help improve flexibility.
- A single, continuous robot services all drives and media for advanced reliability and easier operation.

\*Capacities may vary depending on configuration.



### PowerVault 124T Tape Autoloader

**For small organizations and remote offices looking to protect the data on their workgroup servers**

Supports VS160, LTO™-2-L and LTO-3.

- Offers an expandable architecture and magazine design that enables customers to quickly manage and add tape cartridges for growing datacenter needs.
- Provides customers with quick and simple scalability with up to 16 tape cartridges in a space-saving, 2U form factor.
- Provides cost-effective, reliable backup with remote management using any web-based browser.



PowerVault 124T

### PowerVault 132T Tape Library

**Ideal solution for entry-level, SAN-based backup and archiving**

Supports LTO-2 and LTO-3.

- Helps you back up your information quickly, utilizing two drives and up to 24 LTO-3 cartridges.
- Delivers astonishing performance and up to 9.6TB (LTO-3), 4.8TB (LTO-2) or native capacity to handle the increasing storage demands of mid-size to large enterprises.
- Provides exceptional management technology to help monitor and manage your library remotely via a web browser.
- Can also be used for SAN backups with an optional embedded 2Gb/s Fibre Channel router.



PowerVault 132T

# Dell PowerVault™ Tape Drives

## PowerVault 100T/110T Tape Drives

A full range of internal or external tape drive technologies to meet a variety of data protection needs

Support DAT72, VS160, LTO™-2-L, LTO-2 and LTO-3.

- Enable you to meet specific workgroup needs with its expansive functionality — internal or external form factors.
- Provide a range of performance, capacity, expandability, compatibility and affordability options.

## PowerVault 114T Tape Rack Enclosure

Ideal for customers who require multi-drive, rack-optimized data protection that can be externally connected to a server

Enables you to utilize DAT72, VS160, LTO-2-L, LTO-2 and LTO-3.

- Designed specifically for backing up rack-optimized PowerEdge™ servers and PowerVault storage servers.
- The dual-drive design can back up as much as 800GB of native data when configured with two LTO-3 drives in just 2U of rack space.



PowerVault 114T

### Did you know?

Dell has a complete team of industry experts on hand to meet all of your storage needs, including:

- 200+ Dell Certified Enterprise Installation Engineers
- 780+ SAN implementation experts
- 600+ storage/server support and technical account resources



"We are deploying an infrastructure for multimedia. As we move into the streaming content era, we need much higher levels of bandwidth availability. Dell PowerConnect™ switches give us the speed we need."

— Keith Rajeki, IT Infrastructure Manager, Golden Gate University, March 2005

## Dell Tape Media

### Highly reliable, competitively priced tape media

Supports Travan 40, DDS4, DAT72, DLTtape™ IV, DLTtape VSI, SDLTape™ 1, Ultrium™ LTO, Ultrium LTO-2, Ultrium LTO-3 and Ultrium LTO-3 WORM.

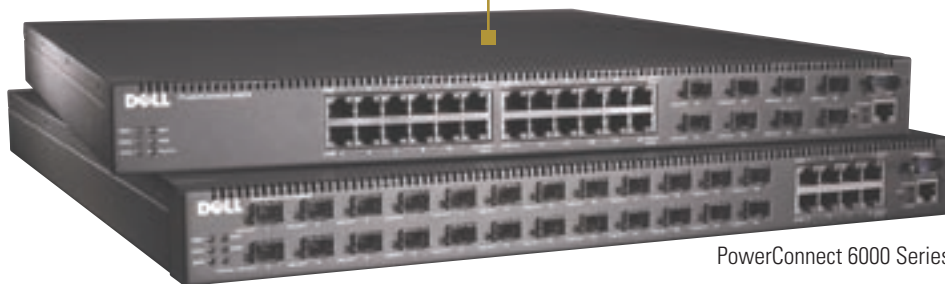
- Designed to keep your data safe and accessible.
- Tested and recommended to work on PowerVault tape backup products.
- Backed by Dell technical service and support.



## Dell PowerConnect Switches

Dell offers a breadth of network switch offerings, each designed to deliver the ultimate in reliability, scalability and affordability.

- **PowerConnect 2700 Series** — High-performance, unmanaged Gigabit Ethernet switches that can easily convert to web-managed switches with a push of a button.
- **PowerConnect 3400 Series** — Secure, stackable Fast Ethernet switches with PoE options deliver an affordable, enterprise-class solution for your edge-of-network applications requiring speed, availability and management.
- **PowerConnect 5300 Series** — Enterprise-class, fully managed Gigabit Ethernet switches provide exceptional price-performance ratios, a secure networking platform and advanced network management features.
- **PowerConnect 6000 Series** — Layer 3 enterprise-class Gigabit Ethernet switches offer a powerful solution for bandwidth-intensive networks requiring high availability and resiliency.



PowerConnect 6000 Series

# Dell Systems Management for Storage

## Meet Today's Storage Management Challenges

**In today's data-rich IT environment — where information is crucial to your organization's success — there is increasing pressure to effectively protect and preserve your information. At the same time, organizations are under tremendous pressure to reduce expenses in an environment where the data volume doubles every 18 to 24 months.**

**For organizations looking to implement a scalable, high-performance, cost-effective information management solution, Dell provides a product portfolio that enables you to improve access and control through centralized and simplified storage management. Dell offers a wide range of tools that automates the management of data across your entire IT infrastructure — so you can take control of your information, whether it is directly attached to a server or stored within a dedicated networked environment.**

**"Dell really understands the value of enterprise scalability. With our networked Dell storage solution, we have been able to maximize storage utilization, simplify storage management, and improve our backup and restore processes."**

**— Glenn Dalton, PC, LAN and Telecommunications Manager, Cox New England, April 2005**

## Dell OpenManage™ Server Administrator Storage Management

Simplified management of both internal and external disk drives on a PowerEdge™ server is controlled through a management interface known as Dell OpenManage Server Administrator Storage Management. Providing a complete set of disk configuration and other essential management utilities, Dell OpenManage Storage Management is included with a Dell PERC RAID controller that you configure inside a PowerEdge server.

## EMC Navisphere® Management Suite

Navisphere Management Suite provides an easy way to provision Dell/EMC arrays installed throughout your enterprise. Because it utilizes a familiar Microsoft® Windows® Explorer-style interface, you don't need extensive training. With Navisphere Management Suite, you can:

- Easily create and configure RAID groups and LUNs.
- Mask and control data access across multiple heterogeneous hosts.
- Simplify storage provisioning and allow dynamic configuration changes as business needs require.
- Efficiently allocate read/write cache memory for each storage processor without interrupting access to data.



## EMC VisualSAN® Software

- Enables proactive management of your entire storage network — including Dell/EMC arrays, PowerVault™ tape drives and PowerEdge servers.
- Allows you to react immediately to problems as they occur in order to maintain high availability.
- Provides a real-time, at-a-glance view of your SAN environment with detailed information on all SAN components available through drill-downs.
- Helps simplify storage management and provisioning through active management capabilities, such as zone control and LUN masking.

## EMC MirrorView™ Software

EMC MirrorView helps gain productivity while maximizing data availability through advanced synchronous and asynchronous remote disaster recovery between CLARiiON® systems.

- Enables faster disaster restart through failover to an alternate site.
- Integrates with EMC SnapView™ snapshots for advanced protection.
- Array-based solution does not use any server cycles or LAN bandwidth.
- Easily managed from within EMC Navisphere management software.

## EMC SnapView Software

Cost-effectively accelerate backup and recovery through economical, disk-based “instant restore” of production data. SnapView creates point-in-time snapshots and full-copy business continuance

volumes (clones) of production data for non-disruptive backup. Restore applications and data in seconds versus the hours often required for traditional tape-based methods. SnapView can help you:

- Enhance application uptime through fast, easy restoration of data.
- Gain operational efficiencies by enabling multiple servers or users access to copies of production data — without affecting production.
- Accelerate application development by providing the most current data for testing.

## EMC VisualSRM (Storage Resource Management) Software

Knowing what information to keep is as important as having enough space to keep it. SRM is an industry-recognized strategy to organize data with methods and tools to classify data, automate processes and migrate information across assets. Identifying, moving and even removing files that are rarely used, inappropriate for a work environment or consume undue amounts of disk space can help draw more value from your storage infrastructure.

Potential benefits of SRM include:

- Simplified storage provisioning.
- Reduced downtime due to disk space consumption.
- Lower total cost of ownership.
- Increased storage utilization and return on investment.
- Tracking and reporting on capacity and utilization.

# A Company Founded on Computer Leadership

Dell introduced its first computer system of its own design in 1985. And the company has been revolutionizing the way companies purchase computers ever since. In 15 years, Dell has gone from a little-known computer start-up in Austin, Texas, to being ranked #1 in global share in 2000. The reason? Our fast and efficient direct-delivery model. Our drive for continued price-performance leadership. Our unrelenting focus on industry standards. Our commitment to developing and delivering IT innovation at every turn.

This unique combination of offerings has enabled Dell to continually deliver enterprise products and services that define the industry standard.

## An Expansive Portfolio of Proven Products

Dell offers a complete portfolio of enterprise client products to address a full range of business requirements and customer usage models. From the high-performance, multi-core Dell Precision™ workstations to the sleek Latitude™ notebooks to the next-generation OptiPlex™ desktops, Dell's enterprise client family integrates some of the latest technologies to deliver outstanding performance, reliability and security.

## Designed to Withstand the Bumps and Bruises of Business

During the development phase, Dell computer systems undergo thousands of hours of testing. This enables us to validate designs and ensure that Dell systems are protected against a variety of bumps, drops and shakes, temperature extremes and even liquid spills on keyboards.

## Dell Notebooks and Desktops Receive Top Honors

In a recent survey by Frost & Sullivan, Dell was voted most reliable desktop manufacturer for the second year in a row and most reliable laptop manufacturer for the third year in a row. The results of this April 2006 survey revealed that Dell was judged by the majority of participating North American CEOs as being the company that offers the most reliable laptop and desktop computers. Dell was also declared best in overall quality, price vs. performance and customer service for both notebooks and desktops.

## High-Performance Workstations to Meet Today's Demanding Applications

When it comes to the highly specialized world of workstations, one size does not fit all. To help meet the unique needs of today's workstation users, Dell segments our workstation products into vertical markets. As part of our design process, we partner with many of the software companies that design today's complex applications. This enables us to create workstations that are tested, certified and optimized for software applications that define a variety of markets and industries, including:

- Mechanical computer-aided design
- Architecture, engineering and construction
- Digital content creation, video and audio editing
- Digital content creation, animation
- Oil and gas
- Financial
- Life sciences and imaging
- Software development



“Most of our work is very processor-intensive, so having Dell Precision workstations equipped with the latest dual-core Intel® processors is a big competitive advantage for us.”

— Marc Bourbonnais, Lead 3D Technical Director, Hybride Technologies, February 2006

# Dell Precision™ Workstations

Like all our other enterprise products, Dell Precision workstations are built on industry standards with an intense focus on delivering the latest performance-enhancing technology, like multi-core processing, 64-bit computing and OpenGL graphics — at a price every organization can afford. As part of our ongoing commitment to the enterprise marketplace, we also partner with industry-leading software providers to help ensure that Dell Precision platforms and configurations are stress-tested, optimized and certified for many complex workstation-class applications.

## Dell Precision 490 Workstation

### Dual-socket performance and optimal scalability in a compact chassis

Offers robust features and technology for today, along with headroom to scale to the workstation applications of tomorrow and keep pace with your business. Available in desktop or mini-tower orientations in one convertible chassis, perfect for space-constrained environments.

- Provides an ideal solution in complex environments for compute-intensive applications like those used by CAD engineers, digital content creators, and financial traders and analysts.
- Delivers significantly increased processor performance today in multi-tasking and multi-threading environments with the latest dual-core Intel® Xeon® processors.
- Delivers the latest performance-enhancing technologies, including dual-core Xeon processors, 64-bit computing for large memory addressability and workstation-class OpenGL graphics.
- Offers flexible SAS and SATA storage and RAID options that enable improved performance and availability.
- Offers optimal reliability with a dedicated performance engineering team, working with ISVs and industry-standard benchmarks, to tune Dell Precision workstations with each application in the certification program for maximum performance.

## Dell Precision 690 Workstation

### Dual-socket workstation for maximum performance and scalability

Delivers robust performance and workstation reliability in a highly expandable and scalable chassis; ideal for extremely demanding environments.

- Provides an ideal solution for compute-intensive applications like those used by high-end CAD engineers, 3D digital content creators, life sciences and imaging, and oil and gas industry professionals.
- Delivers significantly increased processor performance in both multi-tasking and multi-threading environments with the latest dual-core Xeon processors.
- Delivers the latest performance-enhancing technologies, including dual-core Xeon processors, 64-bit computing for large memory addressability (up to 64MB) and fast, quad-channel, fully buffered DIMM memory architecture.
- Offers flexible SAS and SATA storage options and a variety of RAID options that enable improved performance and availability.
- Offers optimal reliability with a dedicated performance engineering team, working with ISVs and industry-standard benchmarks, to tune Dell Precision workstations with each application in the certification program for maximum performance.



## Dell Precision 380 Workstation

### Reliable, entry-level, single-socket workstation

Dell has redefined the entry-level workstation by improving key performance and reliability-enhancing features.

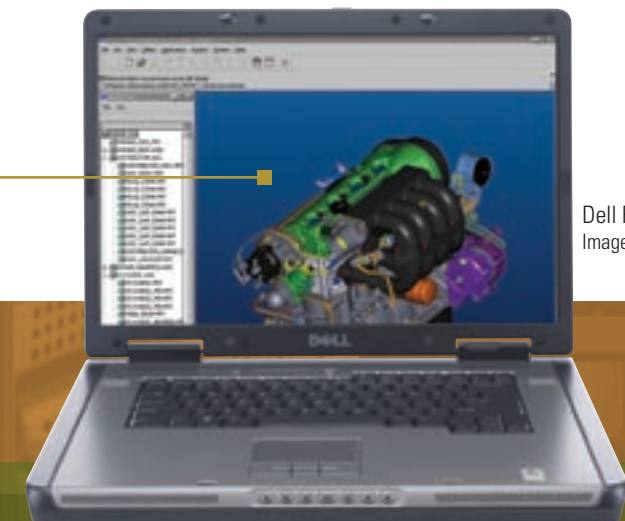
- Delivers fast processor, graphics and I/O performance today, based on a scalable architecture for tomorrow.
- Enables you to maximize productivity, product quality and time to market with application tuning (ISV certifications).
- Offers a choice of components designed to achieve an optimal balance of performance and price.

## Dell Precision M90 Workstation

### Impressive performance with notebook mobility

Empowers users to create, analyze and design anywhere, with best-in-class graphics capability and a widescreen display in a durable, mobile form factor.

- Offers true workstation functionality with high-performance NVIDIA® OpenGL graphics up to 512MB and a bright 17" wide-aspect display plus superior compute performance.
- Enables optimized, worry-free performance through certification of key CAD, DCC, GIS and MCAE applications as well as performance tuning.
- Presents an ideal solution for high-bandwidth users — such as engineers, designers, architects and digital content creators — who want to go mobile.



Dell Precision M90 Workstation  
Image courtesy of PTC Pro/ENGINEER



Dell Precision 380 Workstation

## Dell Precision M65 Workstation

### Dependable, entry-level mobile workstation

Allows engineers, architects and 3D graphics artists to reliably run workstation-class applications on a certified, mobile platform.

- Offers high-powered mobile functionality with assured workstation performance utilizing NVIDIA Quadro FX 512MB TurboCache 64MB ATI OpenGL graphics, a 15.4" display and the durability of a mainstream notebook.
- Provides long battery life for extended and productive work away from the office.
- Delivers peace of mind through comprehensive ISV certifications spanning a range of CAD, DCC, AEC, GIS and other workstation applications.

# Dell Latitude™ Notebooks

**Our new Dell Latitude notebooks are uncompromising travel companions optimized to keep you productive — no matter what the road throws at you. A direct product of Dell's focus on customer-centric innovation, new Latitude notebooks are engineered to exacting standards and tested against virtually every possibility to deliver the durability, connectivity, usability and security the road — and business travelers — demand.**

## **Latitude D820 Notebook**

### **Unyielding performance meets mobility**

The Latitude D820 redefines the performance of corporate notebooks by providing not only high-end graphics solutions for 3D applications, but also a mainstream graphics solution for those who require a 15.4" LCD for mainstream office applications.

- Clean and crisp industrial design that enhances a small and thin form factor.
- Next generation of Intel® technology.
- Excellent user security with three factors of authentication.
- Stay productive on the road with Mobile Broadband<sup>1</sup> and WiFi access.
- Uncompromised quality for years of reliable performance.
- Uses the Dell ExpressCharge™ technology and new enhanced Dell QuickSet™ software to provide great flexibility.



Latitude D820 Notebook

## **Latitude D620 Notebook**

### **Ideal blend of technology and mobility**

Dell's best-selling notebook, the Latitude D620 redefines the mainstream corporate notebook with an innovative, new widescreen design, excellent reliability, smart security and extended wireless options. Designed for users who require performance, mobility and convenience in the workplace. Starting at 4.41 lbs./2kg<sup>2</sup> with durable magnesium alloy construction.

- Enhanced user security with three factors of authentication and hard drive encryption.
- Quickly find a network, without opening your notebook with the Dell WiFi Catcher™.
- Stay productive on the road with Mobile Broadband<sup>1</sup> and WiFi access.
- Enables more productivity away from the office with a long battery life.
- Provides a choice of graphics to bring your 14.1" display to life.

<sup>1</sup>You must be a Verizon Wireless or Cingular subscriber. Actual connectivity is subject to wireless service provider's coverage area and may be affected by equipment, topography, signal strength, environment considerations and other factors. Service may vary significantly within buildings. Dell does not guarantee coverage.

<sup>2</sup>Starting weight of 4.41 lbs. for the D620 is with a 14.1" WXGA display, Intel GMA 950 graphics, CD-ROM and a six-cell battery. Weights vary depending on configurations and manufacturing variability.

## Latitude D410 Notebook

### Ultimate mobility, without compromises

The ideal enterprise notebook for business customers who require mobility with a less-than-4-pound notebook — without compromising performance, features or D-family compatibility.<sup>3</sup>

- Meets a customer's need for a thin, light and powerful notebook, adding incremental value with an improved battery life through the new optional cell battery.
- Features Dell's Strike Zone™ shock absorber and Tri-Metal™ magnesium alloy chassis for added protection.
- Includes advanced features such as Undock & Go™, ExpressCharge and QuickSet.
- Expands to a two-spindle system in one stylish form factor with the media base.
- Delivers optimal performance with up to 770 (2.13GHz) Intel Pentium® M Processor with a 12.1" XGA display and DDR2 memory.



Latitude D410 Notebook

## Latitude D520 Notebook

### Essential productivity at exceptional value

The enterprise notebook for customers who need availability, stability and configurability at an attractive price.

- Meets the needs of growing businesses focused on total cost of ownership with its common peripherals, proven reliability and award-winning service.
- Delivers enterprise-class manageability with global availability, ImageWatch™ disclosure and the Stable Image Assurance Program.
- Features Dell's Strike Zone shock absorber and Tri-Metal magnesium alloy chassis for added protection.
- Provides exceptional value through D-family commonality, D-family modules and common power supplies, and compatible with D/Port, D/View and D/Monitor stand.

## Latitude X1 Notebook

### Leading-edge mobility with distinctive style

Starting at 2.5 lbs.<sup>4</sup>, this stylish and compact enterprise notebook is designed for business customers who primarily value size, mobility and finish. Ideal customers include executives, early technology adopters and frequent travelers.

- Delivers advanced performance and quality in an ultra-light form with an industry-leading weight.
- Features wide-aspect 12.1" display, Dell ExpressCharge technology and Dell QuickSet software.
- Uses Dell's Strike Zone shock absorber to protect the hard drive and your data from the rough reality of mobility.
- Features Tri-Metal design that includes a magnesium alloy chassis, enhanced keyboard protection, and a sealed and stiffened keyboard.

<sup>3</sup>D410 starting weight of 3.79 lbs. (1.74kg) is with 12.1" display and a six-cell battery (53Whr). Weights vary depending on configurations and manufacturing variability.

<sup>4</sup>X1 starting weight of 2.5 lbs. with 12.1" display and 3 cell (27Whr) battery. Weights vary depending on configurations and manufacturing variability.

# Dell OptiPlex™ Desktops

Designed specifically for today's enterprise workplace environments, the Dell OptiPlex family of desktops offers the perfect combination of reliability, flexibility and affordability. From the value-driven OptiPlex 210L to the more stable and secure OptiPlex GX620 and GX520, these corporate desktops provide exceptional quality along with long-term value.

## OptiPlex GX520 Desktop

A robust mainstream business desktop offering the latest desktop technology and designed to deliver performance and reliability with low total operating costs.

- Intel® Pentium® D dual-core processors help improve performance while multi-tasking.
- Microsoft® Windows® XP64-enabled.
- Three BTX chassis options.
- Shares common HDD image and BIOS with the GX620, providing unsurpassed customer choice while minimizing complexity and ownership costs.

## OptiPlex 210L Desktop

A basic managed desktop with proven industry-standard technology for affordable desktop computing.

- Network-ready PC for basic office applications, such as e-mail, word processing, spreadsheets and web browsing.
- Two BTX chassis options.

## OptiPlex GX620 Desktop

The ultimate business desktop offering maximum performance and scalability to meet the demands of computing today and provides investment protection for the future.

- Intel Pentium D dual-core processors help improve performance while multi-tasking.
- Microsoft Windows XP64-enabled.
- Discrete video options including DVI and dual monitor support.
- Enhanced security with support for the TPM1.2.
- Three BTX chassis options.
- Shares common HDD image and BIOS with the GX520, providing unsurpassed customer choice while minimizing complexity and ownership costs.



OptiPlex GX620 Desktop

# Dell Systems Management for Enterprise Computing

## Complete Lifecycle Management Across Hardware and Software

IT administrators increasingly face the challenge of managing complex, multi-platform and multi-vendor computing environments. Workstations. Desktops. Notebooks. And all of the accompanying configurations, applications and updates.

To help optimize performance and simplify the management of your workstation, desktop and notebook hardware and software, Dell offers OpenManage™ for Client Management — a comprehensive and easy-to-use management solution that enables you to efficiently and cost-effectively deploy, manage, migrate and troubleshoot client systems — across your entire organization.

## OpenManage for Clients Is Designed to Provide Real-World Systems Management Benefits

- Simplify manageability in today's complex multi-vendor environments.
- Enable simple, automated capabilities.
- Optimize the performance of your IT infrastructure.
- Maximize the value of your IT investment.
- Helps reduce total cost of ownership.

## Standards-Based Flexibility Enables Advanced Management Control

OpenManage for Client Management is built on industry standards and interoperates with leading enterprise management applications. The OpenManage integrated tool suite helps preserve your existing IT investment and enables advanced management control over the entire lifecycle of your hardware and software.

### Did you know?

- **Dell provides 98% in same-day parts availability.**
- **Dell operates three manufacturing facilities in the U.S. alone.**
- **Dell engineers and product development groups design and develop innovative products and solutions in five design centers all over the world.**







## Services

At Dell, we believe an **outstanding** IT infrastructure breeds a healthier and vastly more **flexible** organization. Dell Infrastructure Services helps you get the most out of your technology infrastructure investments. Our **highly trained** experts specialize in planning, implementing and maintaining your standards-based systems and the environments in which they operate. We are **proud** of our track record for helping customers around the world increase the **reliability**, efficiency and productivity of their IT systems.





## Dell Servers, Storage and Services Supercharge the National Center for Supercomputing Applications

### Challenge

The National Center for Supercomputing Applications needed to build massive computing clusters to provide computing cycles to the academic research community — on budget and in record time.

### Solution

Deploy Dell PowerEdge™ servers with Intel® Xeon® processors running Linux® operating systems; Dell PowerConnect™ and Force10 Networks Force10 E1200 Ethernet switches; Dell PowerVault™ 220S SCSI storage enclosure and DataDirect 8500 Fibre Channel storage systems; Myricom Myrinet and Topspin InfiniBand high-speed interconnect solutions; Dell Implementation Services; and Dell HPCC Enterprise Support.

### Benefits

Dell Scalable Enterprise solutions help the supercomputing center respond rapidly to the needs of the science and engineering community as well as its industrial partners. A single-solution source for the creation and support of large-scale clusters enables simplified deployment and management.

“Most important to us was Dell’s willingness to engage in a project that was not strictly a plug-and-play type of installation. Tungsten’s success would require a major investment of time and effort for all parties involved. Dell’s dedication — combined with the expertise of its services organization — was ultimately what tipped the balance in their favor.”

– Brian Kucic, Senior Operations Manager,  
NCSA, February 2006



# Services

By concentrating on a finite set of customer-relevant IT Infrastructure Services, we are able to deliver a new level of expertise and quality — which means you can be better equipped to meet your ongoing IT challenges and maximize your investment in technology. We invite you to learn more about our service suites and how they could improve your own organization's performance.

Maximize your investment in technology with IT Infrastructure Services from Dell:

- Assessment, Design and Implementation
- Deployment
- Enterprise Support
- Training
- Asset Recovery and Recycling
- Client Support
- Managed Lifecycle

## Execution Without Excuses

In an era when many technology companies are trying to be all things to all people, we are truly passionate and focused on enabling high-performance IT infrastructures for our customers. To accomplish our mission, we have applied leading-edge science to the development and delivery of services. We believe our scientific approach enables us to provide the most consistent and valuable services experience in the industry.

### Did you know?

**Organizations around the world depend on Dell IT Infrastructure Services each and every day, including:**

- **9 of the world's largest companies**
- **The top 6 U.S. banks**
- **The top 3 Internet service companies**
- **Every branch of the U.S. military**
- **8 of the largest U.S. states**
- **8 of the 10 largest U.S. cities**
- **Leading universities and colleges**
- **The world's top 3 global retailers**

## Server and Storage Services

### Assessment, Design and Implementation Services

By utilizing our technical expertise and exceptional project management, you can plan, build and manage an IT infrastructure that takes full advantage of industry standards — and realize the benefits that come along with them. Simplified operations. Improved ROI. Increased utilization. Optimized performance. More control.

- **IT Architecture** — Dell can help you design and deploy a scalable, reliable and interoperable IT infrastructure. We can also help you ensure that adequate procedures are in place to help minimize or avoid data loss. And our systems management can help you increase IT staff productivity and simplify operations.
- **System Consolidation** — Let Dell help you consolidate your redundant or underutilized systems and accomplish amazing things. Reduce complexity and risk. Improve manageability and security. And maximize the return on your technology investment.
- **Software Migration** — Let us manage your next software migration project. We offer a variety of services to minimize downtime, increase business flexibility and simplify operations — without sacrificing performance.

### Deployment Services

For organizations looking to maximize their IT infrastructure while optimizing their IT resources, we offer a modular suite of proven services from the deployment experts at Dell.

- **Asset Discovery** — We will locate and identify assets, define what applications are loaded and in use, and determine current systems utilization rates.
- **Application Packaging** — Utilizing Dell's direct delivery expertise, we can optimize highly repeatable application packaging processes in order to help maximize speed, accuracy and efficiency.
- **Image Management** — Dell offers a variety of image management options to choose from, including cross-platform image builds, patch management and ongoing image maintenance.
- **Custom Factory Integration** — Let us integrate custom hardware and software on your systems while they're being built and provide asset tagging.
- **Installation** — Dell provides a range of installation services, from standard packaged services to highly customized engagements with dedicated program and project managers.

“Our entire business at Dell is built on the principle of execution without excuses. We bring this mindset to every relationship, and every product and service we deliver.”

—Kevin Rollins, CEO, Dell, Inc.



# Services

## Enterprise Support Services

At Dell, we understand that there's no such thing as a one-size-fits-all support program. That's why we offer multiple levels of support services, so you can choose a plan that matches your needs. With a robust, global infrastructure, Dell can help you:

- Optimize system availability and performance.
- Maximize speed to resolution.
- Minimize risk and complexity.
- Align your IT resources on more strategic issues.

Dell offers varying degrees of support to meet any and all of your enterprise IT needs:

- **Platinum Enterprise Support Service** — Combines proactive availability with 24x7 rapid response and resolution features to help maximize availability for large deployments.
- **Gold Enterprise Support Service** — We can provide 24x7 rapid response and resolution along with access to a Gold Technical Account Manager for critical and complex issues.
- **Silver Enterprise Support Service** — Gives you 24x7 access to advanced analysts for rapid troubleshooting of complex issues followed by on-site response service.\*
- **Dell/EMC Maintenance Service** — We can help ensure ongoing performance by providing scheduled maintenance "health" checks.

With five locations around the globe, Dell's state-of-the-art Enterprise Command Centers (ECCs) offer high-level, around-the-clock support for business-critical server and storage environments that demand optimum uptime. Dell's ECCs use industry-leading, real-time technologies to speed problem resolution, efficiently route spare parts and direct expert technicians to your site.

## Training Services

Dell offers an award-winning suite of training services taught by top-ranked faculty and staff and delivered through multiple methods — from traditional classroom training to self-directed online programs to virtual instructor-led courses. We also provide comprehensive and customizable training programs for end users, enabling you to train every user in your organization.

- **Dell Hardware Training and Certification** — We are the only source for Dell hardware training and certification programs.
- **Infrastructure Software Training and Certification** — Let our experts train and certify your staff on the infrastructure software critical to your business, such as Microsoft® Exchange Server and Red Hat® Enterprise Linux®.
- **PC Skills and Professional Development Training** — Not only do we offer training on the most popular end-user PC applications, we can also tailor professional skills development programs to fit your specific needs and help ensure that your staff keeps its competitive edge.
- **Learning Management** — This modular solution includes Dell hardware, a complete Learning Management System, technical support and the latest courseware covering enterprise applications, PC skills and professional development.



\*Service may be provided by a third party. Technician will be dispatched, if necessary, following phone-based troubleshooting. Subject to parts availability, geographical restrictions and terms of service contract. Service timing depends on time of day call placed to Dell. U.S. only.

## Asset Recovery and Recycling Services

Proper disposal, reselling and donation of computer equipment is a time-consuming task that typically falls to the bottom of many IT to-do lists. Dell offers a comprehensive suite of services to help you maximize your IT investments, minimize storage costs and meet environmental regulations.

- **Value Recovery** — Dell can properly assess your equipment and help you effectively recoup the value of your outdated technology.
- **Disposal/Recycling** — Avoid costly fines by letting the disposal experts at Dell help ensure that your equipment is recycled in a manner that complies with EPA guidelines.
- **Donation** — Dell works with school districts across the country to help underserved students learn new technology and earn refurbished Dell computers. We can also manage your charitable donations, ensuring they meet certain charitable criteria.
- **Redeployment** — Let our experienced staff conduct redeployment audits, perform data overwipes and return assets for reuse within your existing environments.
- **Employee Purchase** — Give your employees first right of purchase of your equipment in a third-party transaction between Dell's partner and your employee.
- **Lease Return** — Dell can work with a variety of leasing agencies to facilitate your next lease return.

## Desktop and Notebook Services

In addition to Deployment, Training, and Asset Recovery and Recycling Services, Dell also offers Client Support and Managed Lifecycle Services for your desktops and notebooks.

- **Client Support Services** — In today's IT environment, maximum end-user uptime is crucial. Dell provides fast, affordable support options for desktops and notebooks. Our suite of scalable support services ranges from rapid response and resolution of complex problems to basic phone support.
- **Managed Lifecycle Services** — Refresh planning, asset management and ongoing support are time-consuming, resource-intensive tasks. Dell delivers best-in-class execution and cost management by providing selective outsourcing solutions for your system deployment and technical support.

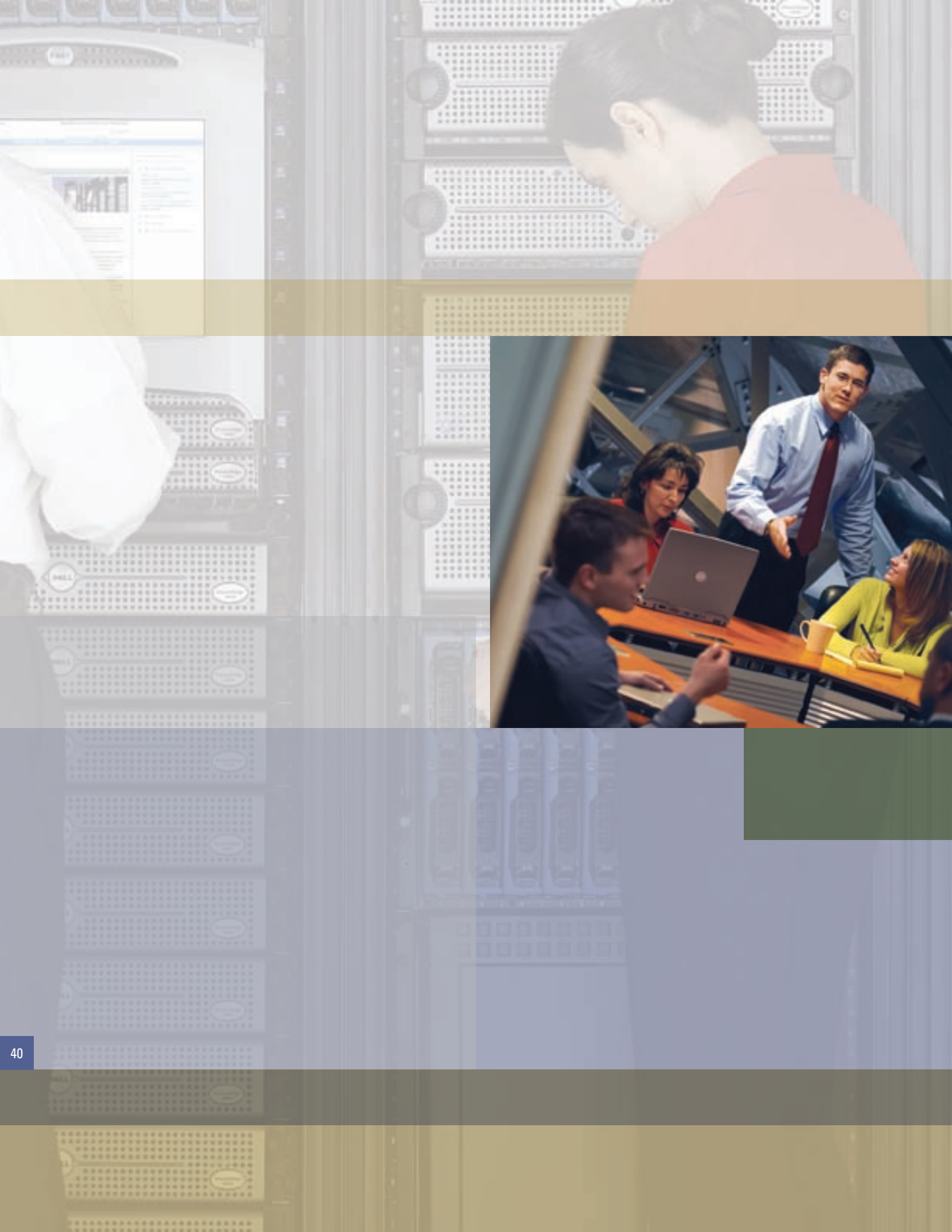
For more information, please refer to the Services companion brochure.

### Did you know?

- **Dell created the High Performance Computing Cluster at Cornell University.**
- **Each year, Dell manages more than 500 major enterprise migrations and consolidations.**
- **Dell has migrated more than 4 million Exchange and Active Directory® users, including more than 450,000 users for one customer alone.**
- **In a span of just three weeks, Dell implemented 160 servers and storage networks for one of the largest retailers in the U.S.**

Dell ranked #1 among hardware vendors in overall service and support satisfaction for 20 of the 21 quarters for which TBR has conducted the study.\*

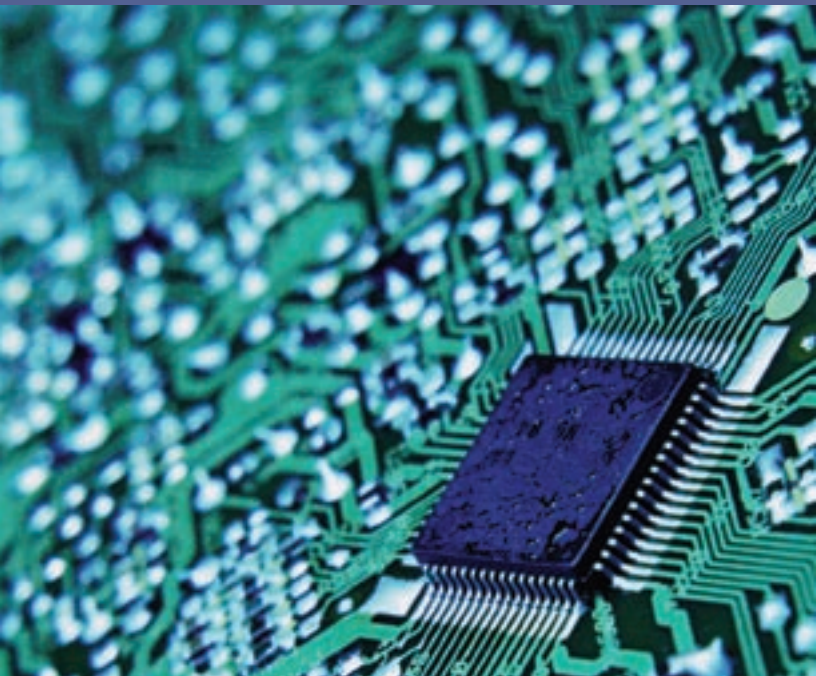
\*TBR, Inc. Corporate IT Buying Behavior and Customer Satisfaction Studies, Q305.





## Solutions and Partners

As the **driving force** behind the creation of standards-based technology, Dell is committed to delivering enterprise offerings that thrive in today's multi-platform environments. So it's no surprise that Dell works closely with **industry partners** to jointly develop solutions to some of today's toughest IT challenges, from systems management to virtualization to high-performance computer clustering. Together, Dell and its partners are helping you meet the current and future demands of enterprise IT with a complete portfolio of **total-scope solutions**.





## Together, Dell and VMware Deliver a Robust Virtualization Solution for National Semiconductor

### Challenge

National Semiconductor's IT department began experiencing problems with the company's existing hardware vendor, and needed to reduce the IT management burden, increase server utilization, facilitate disaster recovery and business continuity, reduce operational costs and improve cycle-time capabilities.

### Solution

The team sent out a request for proposal to three hardware vendors, including Dell. In a benchmark performed at the time, Dell came out on top, leading National Semiconductor to begin standardizing on Dell servers throughout the company. Additionally, using VMware® ESX Server,™ National Semiconductor placed a total of 32 virtual machines into production. Each server supports eight Windows® guest operating systems, and each guest operating system runs one Windows application — taking advantage of the capacity of each Dell PowerEdge™ server more fully than in the past.

### Benefits

VMware virtualization software on Dell servers helps National Semiconductor reduce costs, streamline IT management and improve cycle time while enhancing its ability to recover from failures, including disasters. Dell's partnership with VMware greatly adds to the potential benefits National Semiconductor can achieve with its implementation, including a predicted ROI savings of 33%.

“We chose Dell for three reasons: the outstanding reliability of its servers, cost that doesn't gouge our return on investment and the strength of Dell's partnership with VMware. For us, that represented the ultimate triumvirate. With Dell and VMware, we have been able to achieve a more robust environment that requires less management.”

— Bob Neuberger, Server, Storage and Database Manager, National Semiconductor, March 2005



## Solutions and Partners

At Dell, we think of enterprise solutions not as simple bundles, but as distinct combinations of Dell's world-class hardware and services along with best-of-breed software from Dell's industry partners — all working together to solve your IT challenges and drive down cost and complexity. It's this collaborative approach to solution development that enables Dell to offer best-of-breed solutions that are developed with industry partners, built on industry standards, and tested, delivered and supported through a single point of contact.

### The Freedom to Bring You the World's Best IT

As one of the industry's first and foremost proponents of open standards, Dell is uniquely positioned to do what most of our competitors can't — to develop truly open and productive alliances with some of the world's most advanced technology innovators. Microsoft.® Oracle.® Red Hat.® Novell.® SAP.® These are just a few of the partners Dell works with — day in and day out — in an ongoing effort to provide hardware and software solutions that can simplify operations, improve utilization and enable cost-effective scaling.

#### Did you know?

**At Dell, we don't compete with our software partners; we collaborate with them. Here are a few examples of how Dell and our partners help bring leading technology to the marketplace.**

- **We're building the next generation of datacenters.** Dell has joined forces with Oracle, EMC and Intel® on Project Mega Grid, an initiative to help define and standardize the core elements of tomorrow's enterprise infrastructure.
- **We're offering a new level of storage management.** Dell and EMC are driving standardization into storage management with SAN solutions that help simplify deployment and day-to-day operations.
- **We're changing the face of change management.** Dell is working with Microsoft, Novell and Altiris® to reduce complexity and increase choice — by integrating hardware and software change management functionality into industry-standard management systems.

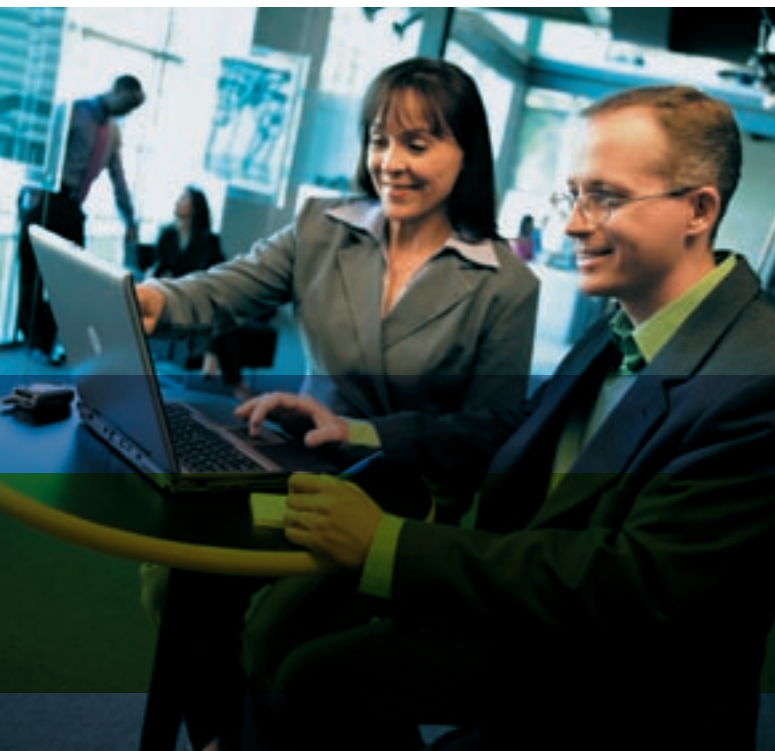
## A Collaborative Approach to Enterprise Solutions

Together, Dell and our alliance partners are defining the next generation of enterprise IT. By embracing open innovation, we bring best-in-breed solutions — spanning virtualization, HPCC, security management and more. Since Dell is not locked into proprietary technology or burdened by the inherent limitations of closed R&D, we can deliver a more agile and nimble portfolio of solutions that is:

- Defined by the needs of our customers.
- Built to deliver unhindered access to emerging innovations and the latest platform breakthroughs.
- Designed to optimize performance, simplify systems management and provide superior value.

“We were looking for a full-service supplier that was willing to serve as a single point of contact for the implementation and a single point of accountability for the duration of the solution. We needed to look no further than Dell.”

— Brad Shipp, Vice President of Information Technology, Cox New England, April 2005



## Solutions and Partners

### **Microsoft®**

Dell and Microsoft® have a long-standing partnership, founded on a mutual commitment to helping customers. Together, the two companies are jointly developing the next generation of systems management software for tomorrow's enterprise IT environments. To help you deploy and manage today's Microsoft-based systems, Dell offers unmatched software expertise. Our dedicated Microsoft sales team can help build solutions to bring together hardware, software and services from both companies. So at the end of the day, you can reap the benefits of a high-performance, high-availability and easy-to-manage IT infrastructure that drives productivity and value into the enterprise.

#### **Did you know?**

- **Dell is the largest distributor of Microsoft software worldwide.**
- **Dell is working closely with Microsoft to define the next generation of systems management software.**
- **Dell has an entire team of dedicated Microsoft Sales Support Specialists on staff to support all your hardware and software needs.**



“Our Microsoft and Dell solution has been entirely reliable, and we feel we now have a platform that will serve us well for years to come.”

— Joe Spakowicz, Manager of Technical Support and Operations, Paper Converting Machine Company, May 2005

## Dell's Solution for Microsoft Exchange Server 2003

Reasons you should team with Dell to get advice you can trust: Expertise, Reliability and Value, and Ease of Doing Business.

- Dell Services is one of the industry's strongest support resources. Our worldwide services network encompasses 52,000 technologists in 180 countries who have helped with the migrations of over 4 million Exchange and Active Directory® users.
- Dell's award-winning hardware provides a solid technology foundation that can help maximize the functionality of your Exchange Server 2003 solution.
- Dell's Exchange Advisor tool can help you determine which messaging solution is right for your organization by providing a recommended architecture, including hardware, software and services.

## Dell's Solution for Microsoft SQL Server 2005

Dell is the leader in Microsoft SQL Server 2005 price/performance and manageability, offering a complete solution — servers, storage, systems management, services and software.

- Dell PowerEdge™ servers lead the industry in TPC-C price/performance for SQL Server 2005, with new dual-core servers combined with Microsoft SQL Server 2005, providing up to a 37% performance increase.<sup>1</sup>
- Dell's complete solution delivers outstanding performance, essential availability, simplified management and superior value.
- Dell provides a broad range of services to plan, implement and maintain your SQL Server environment for optimum performance and uptime.
- Dell storage products, including redundant storage arrays and backup and recovery, enable high-availability configurations for database environments.

### Did you know?

- **The Dell Exchange Advisor can provide you with an end-to-end Exchange solution, including hardware, software and services.**
- **Dell holds the record-breaking #1 TPC-C benchmark position on Microsoft SQL Server 2005.<sup>2</sup>**
- **Dell is the only major systems vendor selected by Microsoft to OEM SQL Server 2005.**
- **Dell is the only systems vendor with an integrated systems management solution for SQL Server 2005.**
- **Dell is a two-time winner (2005 and 2004) of the *SQL Server Magazine* Readers' Choice Award for best server hardware.**

<sup>1</sup>Based on Dell February 24, 2005 (system availability on April 30, 2005) TPC-C submission of 28,122 tpmC (new order transactions per minute) vs. Dell September 2005 TPC-C submission of 38,622 tpmC. See [www.tpc.org](http://www.tpc.org) for more information.

<sup>2</sup>According to TPC-C price/performance results as of March 17, 2006. See [www.tpc.org](http://www.tpc.org) for more information.

## ORACLE®

As part of this unique partnership, Dell provides tested and validated Oracle® solutions for both Linux® and Microsoft® Windows® environments — including pre-engineered, validated and supported offerings such as servers, operating systems, Oracle software licensing, database and storage subsystems. In fact, Dell has hundreds of separate validated Oracle-on-Dell configurations with more than 100,000 installations worldwide. Dell's tested and validated Oracle solutions are designed to offer:

- **Minimized risk and complexity** — due to the pre-engineering involved in rigorously testing the various components of these solutions.
- **Fast, efficient implementation** — through a fixed-price, fixed-duration installation process.
- **Excellent reliability** — with Dell as the single point of contact for all support issues on validated solutions.
- **Significant price performance benefits** — Dell-based systems deliver up to seven times the performance for one-tenth the cost of proprietary UNIX® systems.<sup>1</sup>

### Did you know?

- **Dell holds the leading TPC-H price/performance position for Oracle Database 10g R2 in the 300GB space.<sup>2</sup>**
- **Dell runs our own mission-critical order systems on Oracle Database 10g.<sup>3</sup>**
- **Oracle develops their Linux and Microsoft Windows-based databases and applications on Dell PowerEdge™ servers.**
- **Dell is one of Oracle's top resellers worldwide.**

<sup>1</sup>Mainstay Partners, Business Benefit Series, "Dell Moves European Sales Operations to Oracle Enterprise Grid on Dell Systems," December 2004

<sup>2</sup>March 17, 2006 at [www.tpc.org/tpch/results/tpch\\_price\\_perf\\_results.asp](http://www.tpc.org/tpch/results/tpch_price_perf_results.asp)

<sup>3</sup>Mainstay Partners, Business Benefit Series, "Dell Consolidates European Support System with Oracle Enterprise Grid on Dell," December 2004



## Dell's Solution for

## Oracle Database 9i™/10g with Real Application Clusters

Dell delivers a complete Oracle database solution — tested and validated from the storage back end, through the switches, up to the servers on the front and all the firmware in-between. This includes extensive testing of the operating systems (Microsoft Windows and Linux) as well as the database and related patch sets. All through a single point of accountability.

- Fully validated 32-/64-bit Oracle solution stacks offer a turnkey solution that enables you to scale as your requirements grow.
- Standardizing your database environment on Dell can provide significant hardware cost savings versus proprietary Symmetric Multi-Processor (SMP) systems.
- Dell/Oracle Accelerator services delivered jointly by Dell and Oracle allow for rapid deployment of Oracle Database 10g to full production readiness.
- Oracle database solutions on Dell provide the ultimate in managed scalability, from a single node to eight nodes or more.

“The confidence that we have in the Dell and Oracle relationship for an Oracle grid computing infrastructure provided us with the assurance we needed to select Dell to become our sole hardware supplier.”

— Kenton Ho, Managing Director of IT,  
Perfit Computer Systems Group,  
December 2005





Dell and Red Hat® have joined forces to form the One Source Alliance, a unique partnership that unites Red Hat's leadership in the Open Source market with Dell's commitment to meeting the demand for Linux® — from the edge of the Internet to the heart of the enterprise. Together, Dell and Red Hat engineer and deliver solutions that provide optimized Linux server performance. Plus, as one of Red Hat's largest resellers, Dell is able to offer unsurpassed value and support for Red Hat environments, including cost-effective LAMP infrastructure implementations and simple, validated solutions for HPCC and Oracle®.

## Did you know?

- **Dell has a dedicated Linux development team that qualifies and validates Red Hat Enterprise Linux and SUSE® Linux Enterprise Server operating systems on Dell PowerEdge™ servers.**
- **According to IDC, Dell is ranked #2 worldwide for x86 server units shipped with Linux in Q3 2005.\***

\*IDC Worldwide Quarterly Server Tracker, November 2005

## Dell's Solution for **HPCC**

Dell's High Performance Computing Cluster (HPCC) solution is designed to power the most demanding commercial and scientific applications, while effectively utilizing finite IT resources. Dell helps simplify the design, deployment and management of HPCC clusters through a combination of industry-standard hardware and software, comprehensive services, and extensive engineering integration and testing. Dell starts by delivering a comprehensive and easily managed HPCC infrastructure built from Dell's award-winning server and storage products and industry-leading partner components. Each element is selected to optimize price-performance, scalability and our commitment to standards. Dell's HPCC partners include:

- Platform Computing for cluster management and job scheduling
- IBRIX for scalable cluster file system
- Red Hat and Microsoft® for operating systems
- Cisco, Extreme Networks and Myricom for interconnects

These modular hardware and software components are then integrated, tested and packaged to help expedite the design and deployment process. Dell Services complete the solution by providing HPCC expertise to help speed time to production and streamline ongoing support.







Since 1990, Novell® and Dell have worked together to consistently deliver innovative and robust solutions, including SUSE Linux Enterprise, on Dell's industry-leading PowerEdge servers. When combined, Dell and Novell provide some of the most cost-effective, reliable solutions for today's Linux-based systems, including your web, firewall and file/print environments. Plus, as one of the most experienced resellers of Novell products in the industry, Dell offers unlimited expertise, along with competitive pricing and full technical support.



As part of our ongoing commitment to promoting integrated virtualization solutions, Dell offers VMware® Virtual Infrastructure Software on Dell PowerEdge servers to help you to mitigate risk, optimize operational flexibility, and improve price and performance. For example, Dell's engineers have enabled the integration of Dell OpenManage™ with VMware VirtualCenter, allowing VMotion™ technology to "live migrate" virtual server hosts from one physical machine to another with no noticeable impact to the end user. To ensure that current and future virtualization solutions continue to align with Dell's Scalable Enterprise strategy, Dell and VMware engineers work together onsite at Dell headquarters.

## Dell's Solution for Virtualization

Working with key partners — such as VMware, Microsoft, Red Hat, Novell and XenSource — Dell is leading the industry to drive standardization and enable the virtualization infrastructure. The Dell Virtualization Solution includes:

- Fully integrated server, storage and systems management components.
- Services to help you plan, implement and maintain your server virtualization environment.
- Best practices, deployment guides and white papers to help simplify adoption.
- A single point of accountability — the entire solution is tested and supported by Dell.

**"Purchasing a new server, finding a place for it in the datacenter, configuring it and installing the requested software used to require as much as three weeks. With VMware on our Dell servers, we can get a server ready within two to three hours of the initial request. That's incredible."**

**— Brian Buege, Director of Networks and Computing Systems, University of Missouri-Rolla, April 2005**

## Solutions and Partners



Together, Dell and Altiris® offer a wide range of systems management solutions to enable automated management of both hardware and software. With offerings that span client, enterprise and professional services, collaborative solutions from Dell and Altiris can help you simplify operations while reducing cost and complexity. Since joining forces in 2002, Altiris and Dell have successfully launched Dell OpenManage™ Client Administrator and Altiris Management Suite for Dell Servers, two offerings that complement Dell's Scalable Enterprise strategy.

**“Altiris has been a critical component of increasing the efficiency of Dell IT and being able to contribute to the Dell initiative to increase overall company IT efficiencies.”**

**— Christopher Casias,  
Senior Systems Engineer,  
Wintel Engineering, Dell IT,  
December 2005**



With approximately 70% of new SAP® implementations deployed on industry-standard architecture, it's no surprise that more and more customers are choosing to deploy SAP on Dell hardware. Dell operates SAP Competency Centers on three continents to provide application validation, performance characterization and sizing configurations for the technical enablement of SAP on Dell. With so many Dell-SAP resources in place, Dell has become the smart choice for SAP customers looking for standards-based products that can deliver a new level of performance, reliability and manageability along with low maintenance costs.

### Did you know?

- **Dell was awarded the 2005 SAP Pinnacle Award for Excellence in Customer Satisfaction and Support for the second year in a row.**



Dell and Symantec® have partnered to provide enhanced security, archiving, and backup and recovery capabilities to Microsoft Exchange Server 2003.

Dell delivers a comprehensive management suite across the enterprise information lifecycle.

## Dell's Solution for Secure Exchange

Dell provides a complete, integrated offering for an Exchange messaging environment — giving customers Dell Expertise, Reliability and Value, and Ease of Doing Business.

- **Security** — Dell offers robust virus scanning and trusted message database protection with Mail Security 8200 Series for Exchange.
- **Archiving** — Dell provides adaptive archiving with PowerEdge™ servers and Enterprise Vault, enabling customers to easily capture, index and archive critical and compulsory data.
- **Backup and recovery** — Dell/Symantec offer leading-edge backup and recovery with BackupExec and NetBackup, allowing customers to automate routine database maintenance and lower administrative costs.
- **End-to-end solutions expertise** — Dell Services can provide assessment, design, deployment and support services to optimize your Exchange environment quickly, securely and affordably.

### Did you know?

- Dell is the only OEM of BackupExec.
- Dell Services is ranked #1 in the U.S. and #4 worldwide in IT hardware services revenue.\*
- Dell has a network of 52,000 skilled professionals in 180 countries around the world.
- Dell has migrated over 4 million Exchange and Active Directory® users, including over 450,000 users for one of the world's five largest companies.
- Dell manages over 500 major enterprise migrations and consolidations per year.

\*Technology Business Research, U.S. Buying Behavior Surveys Q305, November 2005



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