

**REDUCING COMPLEXITY
IN THE MOST COMPLEX ENVIRONMENTS**



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PE6950CUSTOMER00CT06

The New 4-Socket Server from Dell™





INTRODUCING THE NEW DELL™ POWEREDGE™ 6950.

THE SIMPLE SOLUTION FOR COMPLEX ENVIRONMENTS

The technology challenges facing today's businesses are as immense as they are immediate:

- Increasing datacenter and systems management complexity
- Real-time, full-time data availability and service needs of "always open" businesses
- Increasing application performance requirements
- Demands for higher system scalability and reliability
- Inflexible proprietary technologies
- Complex and time-consuming systems management
- Climbing power consumption and costs
- Requirements to optimize datacenter ROI and real estate
- High total cost of ownership

In short, there is no time for downtime. There is no letup in competition. The economic pressures are unrelenting. And failure is not an option. It is for environments like these that Dell developed the new PowerEdge 6950.

Do More With Less

The PowerEdge 6950 delivers exceptional performance up to a 20% reduction in power consumption¹, providing an ideal solution for demanding enterprise applications such as database, server consolidation, virtualization, and migration from costly RISC-based systems. And its industry-standard hardware and software commonality help to ensure flexibility and interoperability, while simultaneously reducing complexity.

¹ Based on AC power measurements using an Extech 380803 Power Analyzer taken during the peak load of the SPECjbb2005 benchmark test performed by Dell Labs in August 2006 on a PE6950 with four dual core AMD Opteron™ 8220 SE (2.8Ghz) processors, 32GB 667Mhz DDR2 memory and Windows Server 2003 Enterprise x64 Edition+SP1 OS as compared to a PE6850 with four dual core Intel Xeon 7140 3.4Ghz (Tulsa) processors, 16GB 400Mhz DDR2 memory and Windows Server 2003 Enterprise x64 Edition+SP1 OS. Actual power consumption will vary based on configuration, usage and manufacturing variability.

ONE SERVER, TWO DATABASE SOLUTIONS

The Dell™ PowerEdge™ 6950 supports both major databases—Microsoft® SQL Server™ 2005 and Oracle® Database 10g.

Microsoft® SQL Server™ 2005

The new PowerEdge 6950 offers a complete solution for SQL Server 2005, including the servers, storage, systems management, services and SQL Servers software from one single source.

The 6950, running SQL Server 2005, is perfect for such applications as CRM (Customer Relationship Management), financial management and ERP (Enterprise Resource Planning).

Oracle® Database 10g

Dell offers 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.

Tested and validated stacks are available for the new PowerEdge 6950 with Oracle Database 10g, helping to minimize risk and complexity, with fast, efficient implementation and a single point of contact for all support issues.

THE RIGHT SIZE STARTS WITH THE RIGHT SERVER

Consolidation

Server consolidation is a restructuring of an organization's infrastructure for the purpose of reducing costs and improving control by optimizing the resource requirements. Your ROI advantages from server consolidation with the Dell PowerEdge 6950 can be considerable and include:

- Reduced hardware costs - Fewer servers, software licenses, server locations and simplified server administration reduce overall IT costs
- Improved control and manageability of servers - IT standardization helps administrators better manage their server environment while ensuring high availability and security
- Improved service levels and efficiency of operations - Increased product reliability and performance enables you to focus more on your business and less on IT

Dell has the right tools, products, and services to help you address the key stages of consolidation—logical, physical, workload and application—including the critical first step of preparing a business analysis to determine an estimated return on investment achievable from the effort.

Our PowerEdge server family meets the needs for high performance, serviceability/manageability, and flexibility dictated by consolidation requirements. And Dell's system management portfolio, which includes Dell's OpenManage™ software, enables centralized management and simplified operations.

Dell simplifies the process of consolidating your server infrastructure based on industry best practices. We focus on environments providing high potential return from consolidation—Microsoft® Windows® 2003 File/Print and Exchange 2003, SQL database, server-based computing and web servers.

Our comprehensive approach to server consolidation helps you accelerate productivity by delivering customized systems, software and just the right services to simplify management, improve utilization and cost-effectively scale your IT infrastructure.

SEE WHAT YOU'VE BEEN MISSING

Virtualization

Dell Virtualization Solutions with the PowerEdge 6950 can help you improve operational efficiency and lower overall operating costs. By working with key partners – such as VMware, Microsoft, Red Hat and Novell – Dell is leading the industry in driving standardization and enabling the virtual infrastructure.

Quantifiable results that are easy to see

Whether your goal is consolidation, improved utilization, operational continuity or increased agility, Dell's Virtualization Solution can help you succeed.

And even better with Services

Dell's IT infrastructure services professionals can help you achieve the full benefits of virtualization technology with solutions that provide:

- Flexibility in your selections of hardware, software and services components
- Ease of integration within your existing IT infrastructure
- Modular deployment options matched to your business and budget requirements



SIMPLY BETTER

As one of Dell's 9th generation servers, the PowerEdge 6950 is part of the most focused server strategy in the industry with single, dual, and quad-socket servers that feature more commonality than any other server family. By consistently driving industry-standard technologies deeper into the data center, Dell continues to reduce complexity for customers while increasing value. Here's how:

ERP WITH SAP

Enterprise Resource Planning (ERP) systems integrate and automate business practices associated with the operations or production aspects of a company. This includes manufacturing, distribution, shipping, billing, inventory management and human resource systems.

The Dell™ PowerEdge™ 6950 Server is designed to help you maximize the benefits of ERP through Dell's partnership with the industry leader, SAP.

Dell and SAP work together. SAP provides an open, collaborative e-business platform, while Dell offers the scalable enterprise environment that can put the advantages of the direct model to work for your business. Dell and SAP focus on joint development to help provide ease of configuration and quicker time-to-deployment to fit your business-critical needs.

In 2005, Dell was awarded the SAP Pinnacle Award for Excellence in Customer Satisfaction and Support. For the second time. This award is given to the top SAP Technology and Software Partners recognized through a survey of SAP customers worldwide.

SAP Pinnacle Award
Winner 2004

Conquer Complexity

- Dell extends its 9th generation features into its newest quad-socket server
- Hardware consistency helps IT resources spend less time with day-to-day server management and more time on projects that contribute to the bottom line and help companies gain a competitive edge

Secure the Right Solution

- The PowerEdge 6950 was engineered to keep critical, enterprise applications running around the clock with clustered solutions fully tested and certified by Dell and leading operating system and application providers
- Dell Professional Services designs and implements solutions that help provide high availability for business-critical applications

Maximize Your Resources

- The PowerEdge 6950 delivers outstanding price/performance with up to a 20% reduction in power consumption¹

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PowerEdge
6950

OPTIMIZED FOR PERFORMANCE

For the PowerEdge™ 6950, we started with the AMD Opteron™ processor, but we didn't end there. We designed the PowerEdge 6950 to optimize virtualization and database application performance with the latest high performance technologies for quad-socket servers including AMD-V™, DDR2 memory and PCI-Express. The result is:

- Electrical-, thermal- and socket-compatibility with the Quad-core processors available next year. This provides customers a seamless upgrade path to Quad-core capability and allows them to increase computing capacity without altering their datacenter infrastructure
- SAS hard drives are designed to increase data transmission through serialization while increasing reliability
- PCI-Express I/O delivers high performance Ethernet, RAID, and Fibre Channel interconnect while helping to provide investment protection for future technologies
- PERC 5/E and PERC 5/i provide configuration with RAID levels 0, 1, 5, 10, and 50
- The enabled TCP/IP Offload Engine (TOE) is designed to provide increased performance for PowerEdge servers that are running Windows Server™ 2003 SP1, by offloading the TCP/IP traffic from the host processor to an integrated NIC processor

From Dual Core to Quad Core, Seamlessly

The PowerEdge 6950 supports the newest AMD Opteron™ 8000 Series processors that offer a seamless upgrade path from dual-core to quad-core in the same thermal envelope to help leverage existing investments. The result is greater performance and drop-in scalability to quad-core that will help you keep pace with data growth and scale with new user loads.

So when it's time to move from dual to quad-core applications, you'll not only be ready, you'll be ahead.

It's just one more example of Dell's commitment to bringing you relevant and proven business-ready technology. And of providing you with greater flexibility in building solutions to meet your business needs—whatever the workload or work environment.

THE POWEREDGE EDGE

IT at Your Command

Business-ready solutions that help your business gain ground.

Dell PowerEdge servers empower IT managers to triumph over day-to-day challenges and muster their resources to the highest advantage for their business.

Conquer Complexity

Win the operations battle with servers that are easier to buy, deploy, manage and maintain.

- Easier to buy, thanks to the Dell direct model
- Easier to deploy and manage with Dell's systems management software and tools.
- Industry-leading software commonality drives down the complexity of software updates.
- Innovative hardware features and hardware commonality simplify maintenance and service.
- Dell's comprehensive service and support options reduce the complexity of resolving issues, helping you get the best performance out of each system.

Secure the Right Solution

Partner with the experts to match business-ready technologies with your unique needs.

- Partner with a proven enterprise leader, who can help you match and customize the right server solution with your needs
- Dell offers a range of PowerEdge servers that can be tailored to match your application and business needs
- Get a solution you can count on to meet your unique needs

Maximize Your Resources

Get more performance for your money — now and over the life of your server.

- Work directly with Dell to custom configure your enterprise solution, so you're only paying for what you need, allowing you to get more out of your investment
- Get the most relevant advanced technology that enables you to make the most of your datacenter's performance
- Dell PowerEdge servers continue to deliver industry-leading price/performance



CONTROLS WHAT OTHERS CAN'T.

Dell also offers a robust portfolio of monitoring and management solutions to ensure that Dell™ PowerEdge™ servers are performing at their best. So you can minimize TCO and maximize ROI.

Dell Enterprise Support Services

Dell Enterprise Support Services is a modular suite of four bundles, Platinum Plus, Gold, Silver and Basic which combine alternative levels of technical phone support, on-site services¹, and account management features designed to address increasing levels of system uptime.

Platinum Plus and Gold Support provide Dell's highest levels of server and storage support:

Platinum Plus Enterprise Support: Dell's most comprehensive level of support which combines rapid response and resolution for critical issues with customized account planning and reporting to proactively improve uptime. This level of support is appropriate for servers that are being used in datacenters and mission critical environments.

Gold Enterprise Support: Provides 7x24 rapid response and resolution of critical issues including escalation management and on-site Emergency Dispatch procedures to quickly restore operations. This level of support is appropriate for servers that are being used for email systems, database applications and virtualization.

Dell™ OpenManage™

Dell™ OpenManage™ features a comprehensive set of deployment, monitoring, and change management tools that provide greater flexibility and security for managing Dell PowerEdge servers.

Dell/EMC Maintenance Service

Dell/EMC Maintenance Service is designed to keep your storage systems current and healthy, and includes periodic health checks, software and system updates and upgrades, along with how-to assistance for configuring or installing SAN components.

Enterprise Command Center (ECC)

Dell's Enterprise Command Centers (ECCs) located in the United States, China, Ireland, Japan and Malaysia help meet your critical IT needs with prompt, comprehensive resolutions to solve for your complex problems. Based on the crisis management best practices of crisis centers such as 911, the ECC uses industry-leading, real-time technologies to speed problem resolution, efficiently route spare parts and direct expert technicians to your site. Access to the ECC comes with Platinum Plus, Gold and Silver levels of Enterprise support.

Comprehensive Dell Storage Portfolio

Dell's storage portfolio is designed to operate seamlessly with PowerEdge servers and provides an expansive range of scalability and functionality for growing organizations. Dell offers a choice of connectivity options, including direct-attached storage expansion enclosures, network-attached storage servers, storage area networks based on either Fibre Channel and iSCSI, and tape backup and archive systems.

Expansion Enclosures

Dell PowerVault™ disk storage enclosures extend the storage capacity of a PowerEdge server by connecting to a host-based RAID controller. The PowerVault™ MD1000 maximizes the performance of today's mainstream business applications—such as Microsoft® Exchange and SQL Server and the PowerVault™ 220S uses proven technology to support high availability clustering.

Storage Area Networks (SAN)

A storage area network addresses issues related to managing and protecting storage in a multi-server environment. Dell offers two classes of networked disk arrays: the Dell/EMC AX-series (for up to 10 servers and up to 6.0TB of information) and the Dell/EMC CX and CX3-series (for up to 256 servers and 239TB).

Tape Backup and Archiving

External tape racks, autoloaders and modular libraries enable information to be backed up and archived for long-term data retention. The PowerVault portfolio of disk, autoloaders and libraries offers a range of options that let you choose the type and number of tape drives along with the most appropriate amount of storage based on your policies and requirements.



¹ Services may be provided by third-party. Technicians will be dispatched if necessary following phone-based troubleshooting. Subject to parts availability, geographical restrictions and terms of service contract. Service timing dependent upon time of day call placed to Dell. U.S. only.