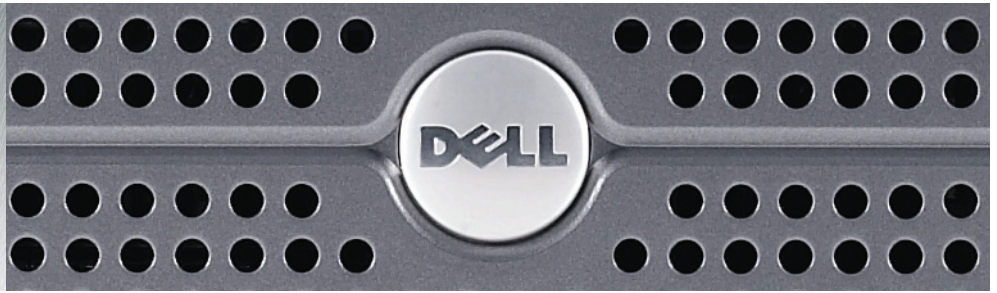


DELL POWEREDGE 2950 SERVER



In a rack-optimized 2U form factor, the Dell™ PowerEdge™ 2950 server delivers an excellent balance of outstanding performance, availability and flexibility for growing network infrastructure applications as well as web, messaging, database and file/print consolidation.

Dell's Innovative 9th Generation PowerEdge Servers

Through innovative hardware design, software commonality and continued focus on fewer system updates, Dell's 9th generation PowerEdge servers help reduce the complexity involved in managing data, whether you are a large enterprise or a small business. These servers are designed to a Dell™-developed Behavioral Specification that defines consistent hardware layout and user interaction across all server models in this and future PowerEdge generations. Plus, a shared master system image with 1950 and 2900 enables updates to BIOS, system drivers, firmware, operating systems and applications from one easy-to-copy template for simplified software management. Featuring the latest Intel® Xeon® processors, the 9th generation PowerEdge servers offer the power and performance you expect from Dell.

Dell PowerEdge 2950 Packs Flexibility and Storage Capacity in 2U Format

The Dell PowerEdge 2950 Server offers configuration flexibility in a 2U chassis for organizations that require space-conscious internal storage capacity rather than an external storage system. Six internal hard drive bays provide up to 1.8TB¹ of internal storage helping to conserve valuable data center space while supplying enough storage space to accommodate growing applications.

Designed to help organizations keep up with changing requirements, the server includes several embedded functions, like dual Gigabit NIC's and integrated SAS storage controller, which allows three available PCI Express™ slots. These enable flexible expansion to support a wide variety of data center workloads.

High Performance and Availability to Maximize Uptime

The Dell PowerEdge 2950 server supports up to two of the latest dual-core Intel Xeon processors and the Intel 5000X chipset. These latest processors provide increased performance and performance/watt². With the new capability to support eight 2.5" SAS drives, the 2950 also provides enough room to stripe data onto multiple drives for high performance in demanding environments.

Additionally, exceptional memory throughput and capacity is achieved with as much as 32GB of fully-buffered DIMM memory. The server includes PCI Express technology for excellent I/O throughput, and TCP/IP Offload Engine (TOE) which offloads the TCP/IP processing to a dedicated processor on the embedded NIC's for CPU performance gains. And with features like hot plug power supplies/fans, RAID configurations with battery backed cache, and an internal tape drive option for local data backup, the Dell PowerEdge 2950 helps ensure your data is protected and accessible.

Manageability for Reduced Complexity

The Dell PowerEdge 2950 server is equipped with a Baseboard Management Controller (BMC) that includes a complete set of tools that monitors server hardware, alerts you when server faults occur and enables basic remote operations. For environments with servers located in secure data centers or in sites with no IT staff, Dell offers an optional feature for PowerEdge servers, the Dell Remote Access Controller (DRAC). Operated through a Web-based graphic user interface, DRAC can enable remote access, monitoring, troubleshooting, repair and upgrades independent of the operating system status. Common software with the same family of PowerEdge 9th generation servers further helps simplify management. Plus, the Dell Behavioral Specification means one familiar platform for less complex deployment, management and serviceability as well as lower Total Cost of Ownership (TCO) over multiple generations of PowerEdge servers.



Dell PowerEdge 2950



DELL IT INFRASTRUCTURE SERVICES

Dell brings pure execution to IT Services. The planning, implementation and maintenance of your IT infrastructure deserves nothing less. Variability in execution can compromise user productivity, IT resources and ultimately, your reputation. By leveraging our heritage of process driven excellence, Dell Services can deliver a smarter way.

We don't claim to do everything. We focus on IT infrastructure services. And we take a customer led approach, grounded in the philosophy that you know your business better than anyone. That's why Dell does not try to take key business decisions out of your hands, or lock you into more than you need. Instead, we apply our world-class process management and "no excuses" culture to deliver what customers today most need – flexibility and repeatable quality. That's pure execution. That's Pure Dell.

Assessment, Design and Implementation Services

IT departments are continually challenged to evaluate and implement new technologies. Dell's assessment, design and implementation services can restructure your IT environment to enhance performance, scalability and efficiency while helping to maximize your return on investment and minimize disruption to your business.

Deployment Services

System deployment is a necessary evil that plagues nearly every organization. You must deploy new systems to help improve performance and meet user demand. With Dell's deployment services, we help simplify and speed up the deployment and utilization of new systems to maximize uptime throughout your IT environment.

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 simplifies the end of life processes for IT equipment in a way that can maximize value for customers.

Training Services

Arm your employees with the knowledge and skills they need to be as productive as possible. Dell offers comprehensive training services which include hardware and software training, as well as PC skills and professional development classes. With Dell training you can help improve system reliability, maximize productivity and reduce end user requests and downtime.

Enterprise Support Services

With Dell, you can get maximum performance and availability of your Dell server and storage systems. Our Enterprise Support services offer proactive maintenance to help prevent problems as well as rapid response and resolution of problems when they do occur. We have built a robust global infrastructure that offers multiple levels of enterprise support for systems throughout your infrastructure.

To help you get the most from your Dell systems, visit www.dell.com/services.

Services vary by region.

FEATURES DELL™ POWEREDGE™ 2950 SERVER

Form factor	2U rack height
Processors	Up to two Dual-Core Intel® Xeon® 5000 sequence processors with up to 3.73GHz clock frequency
Front side bus	667MHz or 1066MHz
Cache	2x2MB L2 per processor
Chipset	Intel 5000X
Memory	256MB/512MB/1GB/2GB/4GB Fully Buffered DIMMs (FBD) in matched pairs; 533MHz or 667MHz; 8 sockets for support up to 32GB
I/O channels	Six total: three PCI slots, either PCIe riser with three PCI Express slots (one 1 x 4 and two 1 x 8) or two PCI-X 64-bit/133MHz and one PCI Express 1 x 8 slot; 2x embedded Gigabit NICs; management port with optional DRAC5
Integrated storage controller	PERC 5/i (optional): SAS 3.0 Gb/s RAID controller with Intel IOP333 processor and 256MB cache; SAS 5/i (base): 4 port SAS controller with ARM966 processor (does not support RAID)
Add-in RAID controller	Optional PERC 4e/DC (dual-channel PCI Express RAID controller); Optional PERC 5/E adapter for external RAID storage
Drive bays	3 hard drive base options: 8 x 2.5" Hard Drive Option: 2.5" HD Option: up to 8 SAS HDs (10K) 4 x 3.5" Hard Drive Option: 3.5" HD Option: up to 4 SAS (10K/15K) or SATA (7200) drives 6 x 3.5" Hard Drive Option: 3.5" HD Option: up to 6 SAS (10K/15K) or SATA (7200) drives Peripheral bay options: Floppy Drive, DAT72 Tape Drive (not available with 6 x 3.5" hard drive base) Slim optical drive bay with choice of CD-ROM, DVD-ROM or Combo CD-RW/DVD-ROM
Maximum internal storage	Up to 1.8TB
Hot-Plug hard drives¹	2.5" SAS (10k rpm): 36GB or 73GB hot-plug hard drives; 3.5" SAS (10k rpm): 73GB, 146GB, 300GB hot-plug hard drives; 3.5" SAS (15k rpm): 36GB, 73GB, 146GB hot-plug hard drives; 3.5" SATA (7.2k rpm): 80GB, 160GB, 250GB hot-plug hard drives ²
Internal storage	4 or 6 x 3.5" hot-plug SAS drives (10K and 15K) /SATA drives (7.2K) or 8 x 2.5" hot-plug (10K) SAS drives
External storage	Dell PowerVault™ 22xS, PowerVault MD1000, Dell/EMC products
Tape backup options	Internal: PV100T (DAT 72) with multibay External: PowerVault DAT 72, 110T, 114T, 122T, 124T, 132T, 136T, 160T and ML6000
Network interface card	Dual embedded Broadcom® NetXtreme II™ 5708 Gigabit Ethernet NIC with fail-over and load balancing. TOE (TCPIP Offload Engine) supported on Microsoft Windows Server 2003, SP1 or higher with Scalable Networking Pack. Optional add-in NICs: Intel® PRO/1000 PT Dual Port Server Adapter, Gigabit, Copper, PCI-E x4; Intel® PRO/1000 PT Single Port Server Adapter, Gigabit, Copper, PCI-E x1; Intel® PRO/1000 PF Single Port Server Adapter, Gigabit, Optical, PCI-E x4; Broadcom® NetXtreme™ 5721 Single Port Gigabit Ethernet NIC, Copper, PCI-E x1; Broadcom® NetXtreme II™ 5708 Single Port Gigabit Ethernet NIC w/TOE, Copper, PCI-E x4
Power supply	Standard 750 Watt hot-plug power supply; Optional redundant 750 Watt hot-plug power supply; Auto-switching universal 110/220 Volts
Availability	Hot-plug hard drives; hot-plug redundant power; hot plug redundant cooling; ECC memory; Spare Row; Single Device Data Correction (SDDC); PERC 5/i integrated daughtercard with battery-backed cache; high availability failover cluster support; DRAC5; support for internal tape device; tool-less chassis; cluster support
Video	Embedded ATI ES1000 with 16MB memory
Remote management	Standard Baseboard Management Controller with IMPI 2.0 support; optional DRAC5 for advanced capabilities
Systems management	Dell OpenManage™
Rack support	4-post (Dell rack), 2-post and 3rd party Versa rails, sliding rails and Cable Management Arm
Operating systems	Microsoft® Windows Server 2003 R2, Standard, Enterprise and Web Edition, x64, Standard and Enterprise Edition; Microsoft® Windows® Storage Server 2003 R2, Workgroup, Standard, Enterprise Edition; Red Hat® Linux® Enterprise v4, ES and ES EM64T; SUSE Linux Enterprise Server 9 EM64T, SP3

¹ For hard drives, GB means 1 billion bytes, actual capacity varies with preloaded material and operating environment and will be less.

² Based on testing performed by Dell Labs in May 2006 using the SPECintb2000 benchmark on a PE2950 with two dual core Intel Xeon 5080 (3.73GHz Dempsey) processors, 4x1GB 533MHz FBD memory, 2x SAS 73GB/15K rpm HDDs, Windows Server 2003 Enterprise 64-bit Edition OS as compared to a PE2850 with two dual core Intel Xeon 2.9GHz (Paxville) processors, 4x1GB 400MHz DDR2 memory, 2x SCSI 36GB/15K rpm HDDs, and Windows Server 2003 Enterprise x64 Edition OS. Actual performance and power consumption will vary based on configuration, usage and manufacturing variability.

³ 250GB SATA hard drive support in Q3CY06.

⁴ This term does not connote an actual operating speed of 1 Gb/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required. Dell is not responsible for errors in typography or photography. Dell, the Dell logo and PowerEdge are trademarks of Dell Inc. Intel is a registered trademark and Xeon is a trademark of Intel Corporation. PCI Express is a trademark and PCI-X is a registered trademark of PCI-SIG. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims proprietary interest in the marks and names of others. © Copyright 2006 Dell Inc. All rights reserved. Reproduction in any manner whatsoever without the express written permission of Dell Inc. is strictly forbidden. For more information contact Dell. May 2006.