

# DELL POWEREDGE 1950 SERVER



**In a 1U form factor, the Dell™ PowerEdge™ 1950 delivers the right combination of computing power and redundancy in an ultra-dense chassis. With dual-processor performance, next generation manageability and platform commonality, it is ideal for edge-of-network, infrastructure, SAN front-end, thin client-server and High Performance Computing Clusters (HPCC) applications.**

## **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 2950 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 1950 Delivers Performance in a Space-Conscious Form Factor**

The Dell PowerEdge 1950 server provides exceptional performance and availability for organizations that require high-powered processing capability in a space-constricted data center. The rack-dense 1U server features 64-bit, Quad-Core Intel Xeon processors and the latest in chipset, memory and I/O technology. The result is incredible performance and scalability to handle heavy workloads today and in the future without data center sprawl.

The Dell PowerEdge 1950 includes twice the memory capacity of 8th generation servers with up to 32GB of fully-buffered DIMM memory which allows scalability and greater performance, especially in virtualized workloads. PCI-Express™ I/O slots support high performance Ethernet, RAID, InfiniBand and Fibre Channel interconnects while helping to provide investment protection for future technologies. Finally, Serial Attach SCSI (SAS) hard drives can deliver some of the highest possible performance available with the next generation storage technology while SATA drive options offer greater value for systems that rely on internal or external storage and fiber channel storage options.

## **Availability to Help Maximize Uptime Without Sacrificing Density**

Now you don't have to compromise space for redundancy and availability. The Dell PowerEdge 1950 server maximizes redundancy with hot-plug redundant power supplies, hot-plug hard drives accessible through the front of the server and redundant cooling. It also includes dual embedded Gigabit NICs and PCI slots on separate buses for flexible expandability. Additionally, optional integrated RAID controller with battery-backed cache offers improved reliability and system uptime.

## **Manageability for Reduced Complexity**

The Dell PowerEdge 1950 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 1950





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## 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 absolute execution. That's 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](http://www.dell.com/services).

Services vary by region.

[www.dell.com](http://www.dell.com)

## FEATURES DELL™ POWEREDGE™ 1950 SERVER

<b>Form factor</b>	1U rack height
<b>Processors</b>	Up to two Quad-Core Intel Xeon 5300 sequence processors at up to 2.66GHz; Up to two Dual-Core Intel Xeon 5100 sequence processors at up to 3.0GHz; Up to two Dual-Core Intel Low Volt Xeon 5148 processor at 2.33GHz; Up to two Dual-Core Intel Xeon 5000 sequence processors at up to 3.0GHz
<b>Front side bus</b>	Intel Xeon 5300 Sequence: Dual Independent 1066MHz or 1333MHz; Intel Xeon 5100 Sequence: Dual Independent 1066MHz or 1333MHz; Intel Xeon 5000 Sequence: Dual Independent 667MHz
<b>Cache</b>	Intel Xeon 5300 Sequence: 2x4MB; Intel Xeon 5100 Sequence: 4MB; Intel Xeon 5000 Sequence: 2x2MB
<b>Chipset</b>	Intel 5000X
<b>Memory</b>	256MB/512MB/1GB/2GB/4GB Fully Buffered DIMMs (FBD) in matched pairs; 533MHz or 667MHz; 8 sockets for support up to 32GB
<b>I/O slots</b>	Two slots on separate PCI buses with either PCI Express riser with two x8 lane slots or PCI-X riser with 2 x 64-bit/133MHz slots
<b>Drive controller</b>	Optional PERC 5/i integrated SAS/SATA daughtercard controller with 4 port SAS 5/i integrated SAS controller (no RAID)
<b>RAID controller</b>	Optional PERC 5/i integrated SAS/SATA daughtercard controller with 256MB cache, PERC4e/DC, PERC 5/e adapter
<b>Drive bays</b>	Two options: Two hard drive chassis with 2 x 3.5" SAS (10K/15K) or SATA (7.2K) drives or four hard drive chassis with 4 x 2.5" SAS (10K) drives; Peripheral bays: 1 slim optical drive bay with choice of optional CD-ROM, optional DVD-ROM or combo CD-RW/DVD-ROM
<b>Maximum internal storage</b>	Up to 600GB: two 300GB hot-plug 3.5" SAS (10K RPM); Up to 1.5TB: two 750GB hot-plug 3.5" SATA (7.2K RPM)
<b>Hard drives<sup>1</sup></b>	2.5" SAS (10K RPM): 36GB, 73GB; 3.5" SAS (10K RPM): 73GB, 146GB, 300GB; 3.5" SAS (15K RPM): 36GB, 73GB, 146GB; 3.5" SATA (7.2K RPM): 80GB, 160GB, 250GB, 500GB, 750GB SATAu
<b>Internal storage</b>	Optional bootable CD-ROM; 2 x 3.5" hot-plug SAS (10K and 15K) or SATA (7.2K) drives; 4 x 2.5" hot-plug 10K SAS drives
<b>External storage</b>	Dell PowerVault™ 22xS, PowerVault MD1000, Dell/EMC products
<b>Tape backup options</b>	Internal: none External: PowerVault DAT 72, 110T, 114T, 122T, 124T, 132T, 136T, 160T and ML6000
<b>Network interface card</b>	Dual embedded Broadcom® NetXtreme II™ 5708 Gigabit <sup>2</sup> 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.
<b>Power supply</b>	670W, optional hot-plug redundant power (1+1)
<b>Availability</b>	Hot-plug hard drives; hot-plug redundant power; redundant cooling; ECC memory; Spare Row; Single Device Data Correction (SDDC); /PERC 5/i integrated daughter card with battery-backed 256MB DDR2 cache; high availability failover cluster support; DRAC5
<b>Video</b>	Embedded ATI ES1000 with 16MB memory
<b>Remote management</b>	Standard Baseboard Management Controller with IMPI 2.0 support; optional DRAC5 for advanced capabilities
<b>Systems management</b>	Dell OpenManage™
<b>Rack support</b>	4-post (Dell rack), 2-post and 3rd party Versa rails, sliding rails and Cable Management Arm
<b>Operating systems</b>	Microsoft® Windows® Server™ 2003 R2, Standard, Enterprise & Web Editions, x64 R2; Standard & Enterprise editions; Red Hat™ Linux® Enterprise v4, ES & WS EM64T, ES & WS; SUSE™ Linux® Enterprise Server 9 EM64T

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

<sup>2</sup> This term does not connote an actual operating speed of 1GB/sec. For high speed transmission, connection to a Gigabit Ethernet server and network infrastructure is required.

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