

THE DELL PRECISION™ R5400

The Dell Precision™ R5400 is a high performance dual socket 2U rack workstation that provides an industry-standard alternative to blade workstations providing fully scalable high performance graphics options.

A RACK WORKSTATION THAT IS BIG ON PERFORMANCE AND FLEXIBILITY

Looking for a high-end workstation that delivers world class performance and exceptional processing and graphics power but is engineered for a high density rack environment? Then look no further. Developed in close collaboration with hardware and software partners, the Dell Precision R5400 rack workstation delivers no compromise, high performance workstation technologies in a flexible 2U chassis – an ideal solution for centralizing critical customer data and workstation assets in secure locations (data-centers, OEM customer enclosures, etc.). This is particularly attractive for high performance clusters/render farms, crowded heat, and acoustically sensitive environments like financial trading or factory floors. Optimized for performance, reliability, and scalability in environments where space is at a premium, the Dell Precision R5400 lets you power through complex tasks with configuration options simply not available on blade workstations today.

VISUAL REALISM WITH HIGH-PERFORMANCE OPENGL GRAPHICS

Dell Precision offers an intelligent selection of high-performance graphics cards that can satisfy a range of customer needs, from outstanding OpenGL® 3D performance to dependable 2D performance. With its two PCIe x16 slots, the R5400 is well equipped to house high-performance graphics cards to help meet the toughest of visualization challenges. Select from a wide range of industry standard cards while retaining the option to change or upgrade at a later date.

OPTIMAL SCALABILITY IN A COMPACT 2U CHASSIS

The Dell Precision R5400 provides a highly scalable, cost-effective architecture that can easily be housed in a rack without the expense and potential redundant rack space associated with an enclosure for blades. Workstations address many different user needs and run a wide variety of applications using graphics and other industry standard cards. The flexibility of this rack workstation is enhanced by a choice of PCI, PCIx, or PCIe slot combinations in addition to the graphics slots making it easy to optimize for a particular solution.

PEACE OF MIND THROUGH ISV APPLICATION CERTIFICATION

Dell partners with leading ISVs to certify system and application compatibility to ensure optimized performance in demanding workstation environments. And, to assure access to the latest productivity enhancing technology solutions, Dell invests in the workstation ISV community by providing the hardware platforms needed to further multithreaded and 64-bit application development. By maintaining strong relationships with ISV application developers, Dell engineers can provide ongoing optimization and support, should you need it.

ADVANCED REMOTE ACCESS TO THE PERFORMANCE OF THE R5400

The full performance of the Dell Precision R5400 can be accessed by using the optional Dell FX100 Remote Access Device. As part of Dell's Flexible Computing initiative, this solution (host card and remote user portal) benefits from having dedicated hardware that leaves the workstation's CPU and network resources available to run the chosen applications. A more flexible and low-cost alternative to traditional wired KVM remote solutions, the FX100 can deliver an outstanding remote user experience (network infrastructure dependent). Please refer to the Dell FX100 Remote Access Device product brochure for more information on this world-class solution.

A NEW SOLUTION FOR SOME OLD CHALLENGES

The Dell Precision R5400, with the optional remote access solution, offers advanced relevant technologies designed to overcome some tough traditional challenges and succeed where other solutions have struggled to deliver:

- Centralizing critical data and applications in a secure location
- Eliminating the need for workstation users to be in inhospitable areas
- Enabling high-performance clustering using GPGPUs (General Purpose GPUs)
- Retaining benefits of a standards-based workstation
- Addressing the distance limitations of traditional wired KVM solutions with optional Dell FX100

DELL PRECISION™ R5400 RACK WORKSTATION	
System	
Processors	Dual-Core (6MB L2 cache) & Quad-Core (2X 6MB L2 cache) Intel® Xeon® Processors.
Operating Systems	Genuine Windows Vista® Ultimate 32Bit; Genuine Windows Vista® Ultimate 64Bit; Genuine Windows Vista® Business 32Bit; Genuine Windows Vista® Business 64Bit; Genuine Windows Vista® Ultimate Downgrade, XP Professional; Genuine Windows Vista® Ultimate Downgrade, XP Professional x64 Edition; Red Hat® Enterprise Linux WS v.5 EM64T. (Also certified to run Red Hat Enterprise Linux Version 4 64-bit.)
Chipset	Intel® 5400 chipset, which supports the latest generation of multi-core Intel® Xeon® Processors, advanced ECC memory, and scalable industry standard graphics and storage options.
Memory	Up to 32GB[1] quad-channel[2] architecture Fully Buffered DIMM 667MHz ECC memory; in 4 DIMM slots (when available).
Flash BIOS	BIOS 8MB flash memory for system BIOS; SMBIOS 2.5 support.
Graphics	Support for 2 PCI Express x16 graphics cards up to 150 watts including: NVIDIA® Quadro® FX 4600; Quadro FX 3700; Quadro FX 1700; NVIDIA Quadro FX570; NVIDIA Quadro NVS 290. All graphics cards support dual monitor configurations.
Hard Drives	The Dell Precision R5400 can be ordered with up to 2 SATA hard drives, with a potential capacity of 2.0TB[2]. And with RAID 0 or 1 options, you can configure your storage to meet your needs for storing extremely large files or helping improve performance with data-striping. SATA 3.0Gb/s 7200 RPM with 16MB DataBurst Cache up to 1.0TB[2]; SATA 3.0Gb/s 7200RPM with 8MB DataBurst Cache™ up to 320GB2; SATA 3.0Gb/s 10K RPM with 16MB DataBurst Cache up to 160GB[2] (when available).
Hard Drive Controller	The R5400 uses an Integrated SATA 3.0Gb/s controller that supports host-based (software) RAID 0, 1.
Network Controller	Dual Broadcom® NetXtreme 10/100/1000 Gigabit Ethernet controllers.
Audio Controller	Integrated High Definition Audio (Rev 1.0 Specification) with Sigmatel STAC9200 High Definition Audio CODEC and Intel ESB2's integrated AC97/ High Definition digital controller.
Standard I/O Ports	Six USB 2.0: two on front panel, three on back panel, and one internal; Two serial; Two PS/2; Two RJ-45; Stereo line-in and line-out on back panel.
Bays	2 internal 3.5" hard disk drive bays; 1 external 5.25" slim-line optical bay.
Slots	All full height and full length accommodated in two risers: Riser 1: Two standard PCIe x16 Gen 1 full length graphics slots each with 150W (300W total) Riser 2: Either: (1) PCIX 64-bit @ 100MHz; (1) PCIe x16, wired as x8 (default) Or: (1) PCIX 64-bit @ 100MHz; (1) PCI 32-bit; 5V
Chassis (2U Rack)	
Dimensions	27" (68.5cm) D x 17.5" (44.4cm) W x 3.4" (8.6cm) H without bezel attached.
Peripherals	
Monitors	Performance flat-panel displays, Dell UltraSharp™ widescreen and standard flat panel displays from 17" viewable to 30" viewable.
Keyboard	Dell Enhanced QuietKey USB. Enhanced Multimedia USB; Smart Card keyboard USB.
Mouse	Dell USB two-button mouse and Dell USB optical two-button scroll mouse.
Optional Speakers	Internal chassis speaker; Dell two- and three-piece stereo system; Dell sound bar for all flat-panel displays.
Storage Devices	
Optional Removable Storage	CD-RW/DVD Combo, DVD-ROM, DVD+/-RW, USB external Floppy Drive.
Optional Connectivity	IEEE 1394a card; Broadcom® NetXtreme 10/100/1000 Gigabit Ethernet controller PCI Express card.
Security	
Software	Trusted Platform Module 1.2 (TPM 1.2); Chassis intrusion switch; Setup/BIOS Password; I/O Interface Security.
Hardware	Front bezel key lock, top chassis cover lock
Environmental & Regulatory	
	You can find additional Safety Best Practices information on the Regulatory Compliance Homepage on www.dell.com at the following location: www.dell.com/regulatory_compliance.
Service & Support	
Base	3-Year Limited Warranty[3] with 3 years standard Next Business Day (NBD) on-site[4] parts replacement and 3 years NBD On-Site Service[4].
Recommended	Dell ProSupport is designed to rapidly respond to your business' needs, protect your investment and sensitive data, and provide enhanced proactive support services to help reduce risk and complexity within your IT environment.

SIMPLIFY YOUR WORKSTATION AT DELL.COM/Precision

Dell PCs use Genuine Microsoft® Windows.
1. Up to 1GB may not be available with 32-bit operating systems due to system resource requirements.
2. GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.
3. For a complete copy of our guarantees and limited warranties, please write Dell U.S.A. L.P., Attention: Warranties, One Dell Way, Round Rock, TX 78682.
For more information, visit . www.dell.com/warranty
4. May be provided by third-party. Technician dispatched, if necessary, following phone-based troubleshooting. Availability varies. See dell.com/servicecontracts for details.
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