



PowerEdge R420

A two-socket, 1U rack server, the Dell PowerEdge R420 delivers mainstream performance and density.

The Dell PowerEdge R420 is a two-socket, 1U rack-mount server offering an aggressive entry-price point combined with internal expandability, enabling configurations to be tailored to specific workloads and user requirements, and supporting growth through the life of the server. The R420 is an excellent fit for departmental email, workgroup collaboration, web hosting, e-commerce and file and print in space-constrained environments and in departmental or remote sites of large businesses and public organizations. The R420 is also highly attractive for compute-intensive applications in space-constrained areas, as well as high-performance computing (HPC) workloads. Consistent worldwide support makes it appealing to multinational businesses and organizations.

Performance, reliability and confidence

The R420 features the extensive performance of the Intel® Xeon® processor E5-2400 and E5-2400 v2 product families. Powerful processors alone, however, are not enough to deliver balanced performance. Compute power must be combined with sufficient memory and I/O bandwidth to prevent performance bottlenecks. The R420 complements its processors with 12 DIMMs and two PCI Express® (PCIe) 3.0-enabled expansion slots, providing a substantial memory footprint and wide I/O bandwidth to support both memory-intensive and data-intensive applications and databases. These combined technology features are also necessary to support consolidated and virtualized environments. To protect your virtualized workloads, the R420 offers dual SD media, making your hypervisors redundant and failsafe. Other reliability and availability features include up to four 3.5-inch or eight 2.5-inch hot-plug hard drives, both hardware and software RAID options, and redundant, hot-plug power supplies.

Enterprise-wide systems management

PowerEdge embedded management technology, Integrated Dell Remote Access Controller 7 (iDRAC7) with Lifecycle Controller, helps IT administrators manage Dell servers in physical, virtual, local and remote environments — agent-free or with a systems management software agent installed. **iDRAC7 Enterprise** features include a multi-administrator virtual console, virtual media and remote file share that enable IT admins to operate servers “as if they were there,” ensuring secure access to servers from anywhere in the world.

OpenManage Essentials, a comprehensive monitoring and management console available as a no-charge software download, simplifies and automates basic hardware management tasks while Dell SupportAssist helps you maintain a healthy and productive environment.

PowerEdge R420

- Intel Xeon E5-2400 and E5-2400 v2 processors
- Up to eight 2.5-inch hot-plug hard drives
- Up to 12 DIMMs with RAS
- PCIe 3.0-enabled expansion slots
- Easy-to-use systems management features

Feature	PowerEdge R420 technical specification	
Form factor	1U rack	
Processors	Intel® Xeon® processor E5-2400 and E5-2400 v2 product families	
Processor sockets	2	
Internal interconnect	Intel QuickPath Interconnect (QPI) link: 6.4GT/s; 7.2GT/s; 8.0GT/s	
Cache	2.5MB per core; core options: 4, 6, 8, 10	
Chipset	Intel C602	
Memory ¹	Up to 384GB (12 DIMM slots); 2GB/4GB/8GB/16GB/32GB DDR3 up to 1600MT/s	
I/O slots	2 PCIe slots: With 2 processors: <ul style="list-style-type: none"> 1 x16 PCIe slot with x16 bandwidth, 3.0, half-length, half-height 1 x16 PCIe slot with x16 bandwidth, 3.0, half-length, full-height 	With 1 processor: <ul style="list-style-type: none"> 1 x8 PCIe slot with x4 bandwidth, 2.0, half-length, half-height 1 x16 PCIe slot with x16 bandwidth, 3.0, half-length, full-height
RAID controller	Internal controllers: PERC S110 (SW RAID), PERC H310, PERC H710, PERC H710P External HBAs (RAID): PERC H810 External HBAs (non RAID): 6Gbps SAS HBA	
Drive bays	Up to eight 2.5" hot-plug SSD, SAS, or SATA or up to four 3.5" hot-plug SAS, SATA, or SSD	
Maximum internal storage ¹	Up to 16TB	
Hard drives	Hot-plug hard drive options: 2.5" SATA, nearline SAS, SAS (15K, 10K), SAS SSD, SATA SSD 3.5" SATA, nearline SAS, SAS (15K)	Cabled hard drive options: 3.5" SATA, nearline SAS, SAS (15K) Self-encrypting drives available
Embedded NIC	Broadcom® 5720 dual-port 1Gb LOM	
I/O adapter options	1Gb Ethernet: Broadcom 5720 dual-port 1Gb NIC Broadcom 5720 quad-port 1Gb NIC Intel I350 dual-port 1Gb stand-up adapter Intel I350 quad-port 1Gb stand-up adapter 10Gb Converged Ethernet: Brocade® BR1020 dual-port 10Gb CNA QLogic® QLE8262 dual-port 10Gb DA/SFP+ Broadcom 57810S dual-port 10Gb Base-T CNA Broadcom 57810S dual-port 10Gb DA/SFP+ CNA	10Gb Ethernet: Intel X520 dual-port 10Gb DA/SFP+ server adapter Intel X540 dual-port 10Gb Base-T adapter FC8/FC4 HBA: QLogic QLE2460 4Gb single-port FC HBA QLogic QLE2462 4Gb dual-port FC HBA QLogic QLE2560 8Gb single-port t FC HBA QLogic QLE2562 8Gb dual-port FC HBA Emulex® LPe-12000-E 8Gb single-port FC HBA Emulex LPe-12002-E 8Gb dual-port FC HBA Brocade 815 8Gb single-port FC HBA Brocade 825 8Gb dual-port FC HBA
Power supplies	Platinum efficiency 550W and 350W (for 1 processor only); Silver efficiency cabled 550W, auto-ranging power supplies	
Availability	High-efficiency, hot-plug, redundant power supplies; hot-plug hard drives; TPM; dual internal SD support; fan fault tolerance; optional bezel; luggage tag; ECC memory, interactive LCD screen; ENERGY STAR® compliant	
Remote management	Basic management (default), iDRAC7 with Lifecycle Controller, iDRAC7 Express (upgrade), iDRAC7 Enterprise (upgrade), 8GB vFlash media (upgrade), 16GB vFlash media (upgrade)	
Systems management	IPMI 2.0 compliant Dell OpenManage Essentials Dell OpenManage Mobile Dell OpenManage Power Center	Dell OpenManage Integrations: <ul style="list-style-type: none"> Dell OpenManage Integration Suite for Microsoft System Center Dell OpenManage Integration for VMware® vCenter Dell OpenManage Connections: <ul style="list-style-type: none"> HP Operations Manager, IBM Tivoli® Netcool®, and CA Network and Systems Management Dell OpenManage Plug-in for Oracle® Database Manager
Rack support	ReadyRails™ II sliding rails for toolless mounting in 4-post racks with square or unthreaded round holes or tooled mounting in 4-post threaded hole racks, with support for optional toolless cable management arm. ReadyRails static rails for toolless mounting in 4-post racks with square or unthreaded round holes or tooled mounting in 4-post threaded and 2-post (Telco) racks.	
Operating systems	Microsoft Windows® Server® 2012 R2 b (includes Hyper-V®) Microsoft Windows Server 2012 (includes Hyper-V) Microsoft Windows Server 2008 R2 SP1, x64 (includes Hyper-V) Microsoft Windows Small Business Server 2011 Novell® SUSE® Linux Enterprise Server Red Hat® Enterprise Linux®	Virtualization options: Citrix® XenServer® VMware vSphere® ESXi™ Red Hat Enterprise Virtualization® For more information on the specific versions and additions, visit Dell.com/OSsupport .
OEM-ready version	From bezel to BIOS to packaging, your servers can look and feel as if they were designed and built by you. For more information, visit Dell.com/OEM .	

¹ GB equals 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

Global services and support

Reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. You can count on Dell for end-to-end solutions to maximize your performance and uptime. A proven leader in Servers, Storage and Networking, Dell Enterprise Solutions and Services deliver innovation at any scale. And if you're looking to preserve cash or increase operational efficiency, Dell Financial Services has a wide range of options to make technology acquisition easy and affordable. Contact your Dell Sales Representative for more information.

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