



Dell PowerEdge R420

A 2-socket, 1U rack server, the Dell PowerEdge R420 delivers mainstream performance and density.

The Dell PowerEdge R420 is a 2-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 specializing in 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-intense 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 and reliability combined for confidence

The R420 features the extensive performance of two Intel® Xeon® E5-2400 processors. 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, a role the R420 fills well. 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.

The PowerEdge server line

The PowerEdge family is engineered with the right combination of features and performance scalability to handle tough workloads for both large and small data center environments.

The Dell OpenManage™ systems management portfolio includes integrated Dell Remote Access Controller (iDRAC) with Lifecycle Controller. This embedded feature helps IT administrators manage Dell servers in physical, virtual, local and remote environments, operating in-band or out-of-band, with or without a systems management software agent. OpenManage also integrates and connects to third-party systems management solutions so you can maintain your single point of control and capitalize on your existing investment. OpenManage simplifies the lifecycle of deploying, updating, monitoring, and maintaining your Dell PowerEdge servers.

PowerEdge R420

- Intel Xeon E5-2400 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 product family	
Processor sockets	2	
Internal interconnect	Intel QuickPath Interconnect (QPI) link: 6.4GT/s; 7.2GT/s; 8.0 GT/s	
Cache	2.5MB per core; core options: 4, 6, 8	
Chipset	Intel C600 series	
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 two processors: <ul style="list-style-type: none"> • One x16 PCIe slot with x16 bandwidth, 3.0, half-length, half-height • One x16 PCIe slot with x16 bandwidth, 3.0, half-length, full-height With one processor: <ul style="list-style-type: none"> • One x8 PCIe slot with x4 bandwidth, 2.0, half-length, half-height • One 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) Self-encrypting drives available	Cabled hard drive options: 3.5" SATA, nearline SAS, SAS (15K)
Embedded NIC	Broadcom® 5720 Dual Port 1Gb LOM	
I/O adapter options	1Gb Ethernet: Broadcom 5720 Dual Port 1Gb NIC Broadcom 5729 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 X520 Dual Port 10Gb DA/SFP+ server adapter	10Gb Ethernet: Intel X520 Dual Port 10Gb DA/SFP+ server adapter 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 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 supply	Platinum efficiency 550W and 350W (for one processor only) power supplies Silver efficiency cabled 550W power supply, 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 and Dell Management Console Dell OpenManage Power Center Dell OpenManage Connections: <ul style="list-style-type: none"> • OpenManage Integration Suite for Microsoft® System Center • Dell plug-in for VMware® vCenter™ • HP Operations Manager, IBM Tivoli® Netcool®, and CA Network and Systems Management 	
Rack support	<ul style="list-style-type: none"> • 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 Microsoft Windows Server 2008 R2 SP1, x64 (includes Hyper-V® v2) Microsoft Windows® Small Business Server 2011 Novell® SUSE® Linux Enterprise Server Red Hat® Enterprise Linux®	Virtualization options: Citrix® XenServer® VMware vSphere® ESX™ and ESXi™ Red Hat Enterprise Virtualization® For more information on the specific versions and additions, visit Dell.com/OSsupport .

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

OEM-ready version available

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.

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