



Dell PowerEdge R910

The Dell™ PowerEdge™ R910 provides performance and reliability in a scalable 4U, four-socket server perfect for large workload consolidation or max virtualization machine density.

With Intel® reliability, availability and serviceability (RAS) features, internal dual SD modules for hypervisor redundancy and sophisticated systems management, the PowerEdge R910 can save you valuable time and minimize downtime for mission-critical workloads.

Purpose-built for reliability

Dell's "one-touch" process ensures one person is responsible for an entire server build, which results in better quality control. Every fully configured Dell server is tested (and re-tested) before it leaves the factory, providing customers with a fully configured and tested ready-to-deploy server.

With Intel advanced RAS features, never before seen in an industry-standard server, the PowerEdge R910 can automatically monitor, report and recover from hardware errors to maintain data integrity and keep mission-critical services online. The internal dual SD modules provide failover at the hypervisor, a design feature based on customer reliability feedback. You spoke. Dell listened.

Efficient infrastructure

Performance resources, power efficiency, I/O and memory scalability are essential to maximizing workload in the data center. Delivering the exceptional performance of Intel® Xeon® processors, the R910 offers up to 1TB of DDR3 memory, and 2 x 10Gb Optional LOM with ten PCI Express® (PCIe) slots to help consolidate inefficient workloads.

The R910's energy-efficient design includes Energy Smart technologies with power management features that enable power capping, power inventory and power budgeting within your specific environment. Logical layout of the internal components aids with airflow direction, helping to keep the server cool.

Intelligent platforms, connected foundations

The PowerEdge R910 follows the eleventh generation PowerEdge behavioral specifications with the same system design commonality and usability true to the entire portfolio. All eleventh generation servers are designed to make the user experience easier while saving time and money.

Simplified systems management, without compromise

The Dell OpenManage™ systems management portfolio includes Integrated Dell Remote Access Controller 6 (iDRAC6) 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 installed.

OpenManage iDRAC with Lifecycle Controller integrates and connects to leading third-party systems management solutions (such as those from Microsoft, VMware, and BMC Software), so users can maintain a single point of control and capitalize on an existing systems management investment. OpenManage simplifies the lifecycle of deploying, updating, monitoring, and maintaining Dell PowerEdge servers.

Dell Services

Dell Services can help reduce IT complexity, lower costs and eliminate inefficiencies by making IT and business solutions work harder for you. The Dell Services team takes a holistic view of your needs and designs solutions for your environment and business objectives while leveraging proven delivery methods, local talent and in-depth domain knowledge for the lowest TCO.

The PowerEdge R910 is easy to deploy, better to manage and maintain. Designed to save customers time and money to focus on what matters most, their people and business.

Feature	PowerEdge R910 Technical Specification	
Form factor	4U rack	
Processors	Eight-core Intel® Xeon® processor 7500 series Ten-core Intel Xeon processor E7-4800 and E7-8800 product families	
Processor sockets	4	
Frontside bus or HyperTransport	Intel QuickPath Interconnect (QPI)	
Cache	Up to 30MB	
Chipset	Intel E7510	
Memory ¹	Up to 2TB (64 DIMM slots): 1GB/2GB/4GB/8GB/16GB/32GB DDR3 up to 1333MT/s	
I/O slots	Up to 10 PCIe 2.0 slots + 1 storage slot: Standard: 7 PCIe 2.0 slots (2 x4, 4 x8, 1 x16) Two x4 slots Four x8 slots One x16 slot	Optional: 10 PCIe Gen2 Six x4 slots Four x8 slots One storage x8 slot
RAID controllers	Internal controllers: PERC H200 (6Gb/s) PERC H700 (6Gb/s) with 512MB battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache External controllers: PERC H800 (6Gb/s) with 512MB of battery-backed cache; 512MB, 1GB Non-Volatile battery-backed cache	External HBAs (non-RAID): 6Gbps SAS HBA SAS 5/E HBA LSI2032 PCIe SCSI HBA
Drive bays	Up to sixteen hot-plug 2.5" SATA SSD, SAS, nearline SAS, or SATA drives	
Maximum internal storage ¹	Up to 16TB	
Hard drives	Hot-plug hard drive options: 2.5" SATA SSD, SAS (15K, 10K), nearline SAS (7.2K), SATA (7.2K), SAS 512e (15K) Solid state storage cards: Fusion-io® 160GB ioDrive PCIe solid state storage card Fusion-io 640GB ioDrive Duo PCIe solid state storage card Fusion-io 320GB ioDrive Mono PCIe solid state storage card	Fusion-io 640GB ioDrive Mono PCIe solid state storage card Fusion-io 1.28TB ioDrive Mono PCIe solid state storage card
Communications	Embedded NICs: 1GbE or 10Gb embedded NIC options with iSCSI offload Broadcom® 5709c 4-port (4 x 1GbE) Embedded NIC or Broadcom 57711 4-port (2 x 10GbE + 2 x 1GbE) Embedded NIC + Broadcom 5709c Optional NICs: Broadcom 57710 Single Port 10GbE NIC, Copper CAT6 PCIe-8 Intel DA 10GbE NIC, Dual Port, Optical, PCIe-8 Intel 10GbE Single Port 10GbE NIC, Copper, PCIe-8 Broadcom NetXtreme® II 5709 Gigabit NIC with TOE and iSOE, Quad Port, Copper, PCIe-4, (Low Profile option) Broadcom 5709 Dual Port 1GbE NIC with TOE PCIe-4, (Low Profile option)	Broadcom 5709 Dual Port 1GbE NIC with TOE iSCSI, PCIe-4, (Low Profile option) Broadcom NetXtreme II 57711 10GbE NIC with TOE and iSOE, Dual Port, SFP+, PCIe-8 Intel Gigabit ET NIC, Dual Port, Copper, PCIe-4, (Low Profile option) Intel Gigabit ET NIC, Quad Port, Copper, PCIe-4, (Low Profile option) Brocade® CNA Dual-port adapter Emulex® CNA iSCSI HBA stand up adapter OCE10102-IX-D Emulex CNA iSCSI HBA stand up adapter OCE10102-FX-D Brocade CNA BR1020 QLogic QLE2660 FC16 Single-channel HBA, PCIe 3.0 x4 QLogic QLE2662 FC16 Dual-channel HBA, PCIe 3.0 x4
Power supplies	Hot-plug redundant PSUs: 4 x 750W (Energy Smart PSU) (or) 4 x 1100W (High Output PSU)	
Availability	Hot-plug hard drives, hot-plug redundant power, hot-plug redundant fans, ECC memory, internal dual SD module, redundant cooling	
Video	Matrox® G200 with 8MB memory	
Remote management	iDRAC6 Express	iDRAC 6 Enterprise with vFlash media optional
Systems management	Dell OpenManage™ BMC, IPMI 2.0 compliant Unified Server Configurator	Lifecycle Controller enabled through optional iDRAC6 Express, iDRAC6 Enterprise, and vFlash media Microsoft® System Center Essential (SCE) 2010 v2
Embedded Hypervisor	Optional Dual-Media Redundant Hypervisor	
Rack support	ReadyRails™ sliding rails with optional cable management arm for 4-post racks (optional adapter brackets required for threaded hole racks)	
Operating systems	Microsoft® Windows Server® 2012 Microsoft Windows Server 2008 SP2, x86/x64 (x64 includes Hyper-V®) Microsoft Windows Server 2008 R2 SP1, x64 (includes Hyper-V) Microsoft Windows® HPC Server 2008 Novell® SUSE® Linux Enterprise Server Red Hat® Enterprise Linux®	Virtualization options: VMware® vSphere® and ESXi™ Microsoft Hyper-V, a server role in Microsoft Windows Server operating systems Citrix® XenServer® Red Hat Enterprise Virtualization® For more information on the specific versions and additions, visit Dell.com/OSsupport .
Featured database applications	Microsoft SQL Server® solutions (see Dell.com/SQL) Oracle® database solutions (see Dell.com/Oracle)	

¹ GB 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 models available

OEM Ready platforms are grab-and-go products for OEM customers delivering a fast and simple path to a custom-branded solution. For more information, please visit Dell.com/OEM.

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