



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.

Learn More at Dell.com/PowerEdge



©2013 Dell Inc. All rights reserved. Dell, the DELL logo, the DELL badge, PowerEdge, ReadyRails, and OpenManage are trademarks of Dell Inc. Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Dell disclaims proprietary interest in the marks and names of others. This document is for informational purposes only. Dell reserves the right to make changes without further notice to any products herein. The content provided is as is and without express or implied warranties of any kind.