

## Dell EMC PowerEdge server portfolio Power your innovation with ours.





# Dell EMC PowerEdge server portfolio: platforms and solutions

As the foundation for a complete, adaptive and scalable solution, the 13th generation of Dell EMC PowerEdge servers delivers outstanding operational efficiency and top performance at any scale. With its next-generation servers, Dell EMC is making server innovations more affordable and accessible, putting more power into the hands of more people than ever before.





- Next-generation Dell EMC
   PowerEdge server technologies
- OEM-specific programs
  - Dell EMC OEM XL program
  - Dell EMC ProSupport for OEM
  - Carrier-grade servers
- Dell EMC PowerEdge platforms: traditional infrastructure
  - Dell EMC PowerEdge rack servers
  - Dell EMC PowerEdge tower servers

## • Dell EMC PowerEdge platforms: converged infrastructure

- Dell EMC PowerEdge FX Series
- Dell EMC PowerEdge VRTX
- Dell EMC PowerEdge blade servers
- Dell EMC PowerEdge C Series

## • Dell EMC's comprehensive enterprise solutions portfolio



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# Next-generation Dell EMC PowerEdge server technologies

The 13th generation of Dell EMC PowerEdge servers brings you powerful server solutions to accelerate your business. In our most advanced lineup of rack, tower and shared infrastructure platforms to date, you get peak performance, versatile configurations and zero-touch deployment while being lifecycle optimized and transition friendly, with our XL Program. All of our Dell EMC OEM products are supported by dedicated OEM-specific services.

#### Build scalable, adaptable solutions

Create and build on the world's most manageable servers, inspired by OEM customers. The flexible, adaptable portfolio of Dell EMC PowerEdge servers can be used as modular building blocks to create an agile, future-ready infrastructure for your unique market offerings.

#### Manage from anywhere with more automation and new access options

Accelerate time-to-production with simplified, at-the-box automated deployment using iDRAC Direct. Improve efficiency and reduce maintenance time with user-defined automation.

### Increase performance with scalable, efficient in-server storage

Versatile, powerful in-server storage allows you to accelerate performance with flexible configurations designed to maximize the efficiency of your solutions.



Dell EMC PowerEdge servers: the industry's latest technologies combined with Dell EMC's unique innovations

- New OEM-inspired features Give global customers what they need with unprecedented storage density and flexibility, multi-PERC (PowerEdge RAID Controller) support in our performance PowerEdge, dual-mode capability throughout PERC solution stacks, reduced complexity for global customers, and improved features and systems management access.
- More processing power The Intel<sup>®</sup> Xeon<sup>®</sup> processor E5-2600 v4 product family gives a boost to virtualized environments and performance-hungry business applications.
- High-capacity, low-power memory DDR4 memory technology accelerates your solutions.
- Scalable, efficient local storage Wide range of in-server storage options enables all-flash configurations, in-box hybrid tiered solutions and low-cost dense-capacity platforms, matching server-based storage with application requirements for best performance and value.
- Simplified, intelligent management Accelerate time-to-production with simplified at-the-box management, automate deployment and updates, and improve efficiency with user-defined automation to reduce maintenance time and eliminate repetitive tasks.
- Energy efficiency Innovative power and cooling technologies such as Dell EMC Fresh Air 2.0 allow data centers to run at constant temperatures of up to 40°C/104°F, reducing cooling demands and enabling significant operational cost savings.
- Lifecycle optimization The Dell EMC OEM XL program offers enhanced predictability around hardware configurations so you can better control resources and manage your product lifecycles.

#### Create unique solutions with Dell EMC OEM programs.



Dell EMC OEM Solutions has a variety of programs that make it easier to utilize Dell EMC-trusted hardware and services as part of your solution. Using Dell EMC's Tier 1 technology as the foundation, Dell EMC OEM Solutions will work with your team to customize the system most appropriate for powering your intellectual property, including:



#### Dell EMC OEM server appliance branding

Put your brand on the Dell EMC PowerEdge servers in your solution portfolio. From bezel to BIOS, your Dell EMC-powered solution can look as if it was designed, built, delivered and supported by your company.



#### Dell EMC OEM software branding

When it comes to customizing your solution, personalizing the system behavior beneath the hardware is a key element. That's why Dell EMC OEM Solutions delivers enhanced software branding, customization and configuration by using a simplified and standardized "framework" approach.

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#### Dell EMC OEM-Ready program

Get to market fast with a unique idea. The Dell EMC OEM-Ready program lets you start with a brandless look and quickly customize standard platforms and server appliances to display the look and feel you want to bring to market.



#### Dell EMC OEM XL program

Increase efficiencies and reduce cost. The Dell EMC OEM XL program is a subset of OEM-Ready platforms chosen for their ability to provide stability, longevity, visibility and support.

By managing the design, manufacturing, distribution and support of the hardware, we give you more time to focus on your customers and bring the optimal solution to market — a solution backed by Dell EMC quality and global service.

#### Dell EMC PowerEdge rack and tower servers



## Dell EMC PowerEdge rack servers

Performance, availability and density with rack-optimized designs



These 1-, 2- and 4-socket rack servers are designed to reduce complexity in building and managing solutions. Dell EMC PowerEdge rack servers deliver excellent performance, functionality and outstanding reliability while ensuring superior customer value.

## Dell EMC PowerEdge tower servers

Excellent performance, extensive capacity for growth and simplified management



These 1- and 2-socket tower servers deliver powerful performance, extensive expandability and reliability.

## Dell EMC PowerEdge rack servers

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Platform	Description	Processor(s)	Memory	PCI slots	Communications	Hard drives	OEM platform options
R930	Compute-intensive 4U, 4-socket rack server designed for demanding enterprise applications and featuring industry-leading internal storage and memory scalability to optimize application performance.	Intel Xeon processor E7-4800 v4, E7-8800 v4 product family; up to 24 cores per socket	Up to 96 DDR4 DIMMs Up to 1866MT/s	10 PCle 3.0	4 x 1GbE 2 x 10GbE	<ul> <li>Up to 24 x 2.5" HDDs hot-plug 12Gb/6Gb SAS HDD or SAS/ SATA SSD</li> <li>Up to 8 Express Flash NVMe PCIe SSDs</li> </ul>	OEM-Ready
R830	Powerhouse 2U, 4-socket rack server designed for database applications, scale- out virtualization and VDI environments. Ideal for mainstream and mid-market customers standardized on a rack form factor.	Intel Xeon processor E5-4600 v4 product family, up to 22 cores per socket	Up to 48 DDR4 DIMMs Up to 2400MT/s	6 PCle 3.0	4 x 1GbE 2 x 10GbE	<ul> <li>Up to 16 x 2.5" HDDs</li> <li>Up to 8 x 2.5" HDDs</li> </ul>	OEM-Ready
R730xd	Performance 2U, 2-socket rack server that offers highly dense, flexible storage options – including in-box tiering and a massive internal storage capacity designed for future scale-out. Carrier- grade configuration available.	Intel Xeon processor E5-2600 v4 product family; up to 22 cores per socket	Up to 24 DDR4 DIMMs Up to 2400MT/s	6 PCle 3.0	4 x 1GbE 2 x 10GbE	<ul> <li>18 x 1.8" + 8 x 3.5" + 2 x 2.5" (back)</li> <li>24 x 2.5" HDD + 2 x 2.5" (back)</li> <li>24 x 2.5" HDD</li> <li>24 x 2.5" HDD + 4 x 3.5" (internal) + 2 x 2.5" (back)</li> <li>12 x 3.5" HDD + 2 x 2.5" (back)</li> <li>12 x 3.5" HDD + 2 x 2.5" (back)</li> <li>12 x 3.5" HDD + 2 x 2.5" (back)</li> <li>Up to 4 NVMe Express Flash PCle SSDs</li> </ul>	OEM-Ready OEM XL Carrier-grade telecom
R730	Performance 2U, 2-socket rack server that delivers tremendous functional flexibility with a combination of compute power, large memory and very fast storage. Carrier-grade configuration available.	Intel Xeon processor E5-2600 v4 product family; up to 22 cores per socket	Up to 24 DDR4 DIMMs Up to 2133MT/s	7 PCle 3.0	4 x 1GbE 2 x 10GbE	<ul> <li>Up to 16 x 2.5" HDDs</li> <li>Up to 8 x 3.5" HDDs</li> <li>Up to 4 optional GPU accelerators</li> </ul>	OEM-Ready OEM XL Carrier-grade telecom

## Dell EMC PowerEdge rack servers



Platform	Description	Processor(s)	Memory	PCI slots	Embedded NICs	Hard drives	OEM platform options
R630	Performance 1U, 2-socket rack server that delivers incredible density across a range of resources enabling highly flexible data center scaling. Carrier-grade configuration available.	Intel Xeon processor E5-2600 v4 product family; up to 22 cores per socket	Up to 24 DDR4 DIMMs Up to 2400MT/s	3 PCle 3.0	4 x 1GbE 2 x 10GbE	<ul> <li>Up to 24 x 1.8" HDDs or 10 x 2.5" HDDs or 8 x 2.5" HDDs</li> <li>Up to 4 NVMe Express Flash PCle SSDs</li> </ul>	OEM-Ready OEM XL Carrier-grade telecom
R530	Powerful 2U, 2-socket rack server designed for core medium business databases and applications, and for consolidation and virtualization.	Intel Xeon processor E5-2600 v4 product family; up to 18 cores per socket	Up to 12 DDR4 DIMMs	5 PCIe slots, including 3 PCIe 3.0	1 dual-port 1GbE NIC	・ Up to 8 x 3.5" HDDs	OEM-Ready
R430	1U, 2-socket rack server that delivers performance, density and internal expandability for customized workloads.	Intel Xeon processor E5-2600 v4 product family; up to 20 cores per socket	Up to 12 DDR4 DIMMs	2 PCle 3.0	4 x 1GbE LOM	<ul> <li>Up to 10 x 2.5" SATA only</li> <li>Up to 8 x 2.5" SAS, SATA, SSD</li> <li>Up to 4 x 3.5" SAS, SATA, SSD</li> </ul>	OEM-Ready
R420xr Rugged Server	Enterprise-class, short-depth, 1U 2-socket rugged rack server built for military, telecom and harsh environments constrained by size, weight and power.	Intel Xeon processor E5-2400 v2 product family; up to 8 cores per socket	Up to 12 DDR3 DIMMs	Up to 2 PCle 3.0	1 dual-port 1GbE LOM	• Up to 4 x 2.5" SAS or SATA SSD	OEM-Ready Long life Carrier-grade telecom
R330	1U, 1-socket rack server with extensive internal storage capacity and enterprise-class high-availability features.	Intel Xeon processor E3-1200 v5 product family, Intel Core i3, Intel Pentium	Up to 4 DDR4 DIMMs	2 PCle 3.0	2 x 1GbE LOM	<ul> <li>4 x 3.5" cabled plus optional 2 x 1.8" SSD cabled or 4 x 3.5" hot-plug or 8 x 2.5" hot-plug</li> </ul>	OEM-Ready OEM XL
R230	1U, 1-socket entry rack server that delivers performance with expandable internal storage capacity.	Intel Xeon processor E3-1200 v5 product family, Intel Core i3, Intel Pentium	Up to 4 DDR4 DIMMs	2 PCle 3.0	2 x 1GbE LOM	<ul> <li>2 x 3.5" cabled or</li> <li>4 x 3.5" cabled or</li> <li>4 x 3.5" hot-plug</li> </ul>	OEM-Ready OEM XL

## Dell EMC PowerEdge tower servers



Platform	Description	Processor(s)	Memory	PCI slots	Embedded NICs	Hard drives	OEM platform options
T630	High-performance 5U, 2-socket rackable tower server with a versatile mix of configuration options, performance and scalability, and massive internal storage capacity.	Intel Xeon processor E5-2600 v4 product family; up to 22 cores per socket; up to 4 GPU accelerators	Up to 24 DDR4 DIMMs	6 PCle 3.0 1 PCle 2.0	4 x 1GbE 2 x 10GbE	<ul> <li>Up to 32 x 2.5" or 18 x 3.5" HDDs</li> <li>Up to 4 optional PowerEdge Express Flash PCle SSDs</li> </ul>	OEM-Ready
T430	Rackable 2-socket tower server that delivers performance, expandability and reliability with room to grow in a quiet office setting.	Intel Xeon processor E5-2600 v4 product family	Up to 12 DDR4 DIMMs	6 PCle 3.0	2 x 1GbE LOM	Up to 4 x 3.5" cabled SAS or SATA drives, or up to 8 hot-plug 3.5" drives, or up to 16 hot-plug 2.5" SAS or SATA drives	OEM-Ready
T330	Rackable 1-socket tower server with extensive internal storage capacity and enterprise-class, high-availability features.	Intel Xeon processor E3-1200 v5 product family, Intel Core i3, Intel Pentium	Up to 4 DDR4 DIMMs	4 PCle 3.0	2 x 1GbE LOM	・ 8 x 3.5" hot-plug	OEM-Ready
T130	Compact, quiet and reliable 1-socket tower server with ample performance headroom, data storage capacity and I/O bandwidth to grow.	Intel Xeon processor E3-1200 v5 product family, Intel Core i3, Intel Pentium	Up to 4 DDR4 DIMMs	4 PCle 3.0	2 x 1GbE LOM	・ 4 x 3.5" cabled	OEM-Ready

### Dell EMC PowerEdge converged infrastructure



Individually tailored IT platform for enterprise data centers



With a revolutionary design, the Dell EMC PowerEdge FX Series integrates servers, DAS storage, networking and management in a 2U chassis.

#### Dell EMC PowerEdge VRTX

Integrated solutions platform for remote and branch offices



A converged platform designed from the ground up, the Dell EMC PowerEdge VRTX integrates servers, storage, networking and management into a single office-optimized chassis to deliver greater simplicity, efficiency and versatility.

#### Dell EMC PowerEdge M Series

Dense modular IT with central management



Designed for data centers in need of maximum density, efficiency and manageability, the Dell EMC PowerEdge M Series integrates servers, storage, networking and management into a single chassis to deliver greater simplicity, efficiency and versatility.

#### Dell EMC PowerEdge C Series

Flexible, scale-out cloud and HPC solutions



A complete portfolio of hyperscale-inspired shared systems capable of housing multiple server nodes, the Dell EMC PowerEdge C Series is optimized for distributed workloads, ultra-dense scaled-out environments and cloud deployments.

#### Dell EMC PowerEdge FX chassis

Platform	Description	Power supplies	Cooling fans	I/O modules	Management modules
FX2		Choice of up to 2 hot-pluggable power supplies	8 hot-pluggable, redundant fan modules	Up to 2 pass-through I/O modules (standard), IOAs (optional) for simpler cabling, east/west traffic and LAN/SAN convergence	Choice of rack or chassis management (CMC), integrated, redundant management fabric

### Dell EMC PowerEdge FX server nodes

Platform	Description	Server nodes	Memory	PCIe slots	Communications	Supported drives
FC830	Full-width, 4-socket server with massive memory scalability, expandable storage and powerful processing. Great for core applications and cutting-edge virtualization.	Up to 4 Intel Xeon E5- 4600 v4 processors; up to 22 cores per socket	Up to 48 DDR4 DIMMS (1.5TB) Up to 2400MT/s	Access to 4 PCle slots, up to 8 in certain configurations	Two NDCs supporting up to 2- or 4-port 10Gb or 4-port 1Gb	• Up to 8 x 2.5" HDD/ SSD or 16 x 1.8" SSD
FC630	Half-width 2-socket server best suited for hosting virtualization or running business intelligence applications and databases — ideal for private clouds; up to 4 in a 2U FX2 chassis.	Up to 2 Intel Xeon E5- 2600 v4 processors, up to 22 cores per socket	Up to 24 DDR4 DIMMs Up to 2400MT/s	Access to 2 PCle slots, up to 4 in certain configurations	One NDC supporting up to 2- or 4-port 10Gb or 4-port 1Gb	• Up to 2 x 2.5" HDD/ SSD or 8 x 1.8" SSD
FC430	Ultra-dense 2-socket, quarter-width mainstream server, ideal for distributed environments requiring multi-node reliability and efficiency, with an alternate version for low latency.	Up to 2 Intel Xeon E5- 2600 v4 processors; up to 18 cores per socket	Up to 8 DDR4 DIMMS ( 256GB) Up to 2400MT/s	Access to 1 PCIe slot, up to 2 in certain configurations	LOM: 2 x 10GbE or 2 x 1Gb (optional InifiniBand version)	<ul> <li>Up to 2 x 1.8" SSD or 1 x 1.8" SSD (with an InfiniBand port)</li> </ul>
FM120×4	Half-width server block that houses 4 separate microservers and provides a high- density, low-cost solution that is ideal for web serving and dedicated hosting, up to 4 in a 2U FX2 chassis (16 servers).	Each microserver has a single Intel Atom <sup>™</sup> C2000 processor, up to 8 cores.	Up to 2 DDR3 DIMMs Up to 1600MT/s	No PCle support	2 x 1Gb LOMs	<ul> <li>Up to 2 x 1.8" SSD or 1 x 2.5" HDD/SSD</li> </ul>

#### Dell EMC PowerEdge FX storage block

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Platform	Description	Server nodes	Memory	PCIe slots	Communications	Supported drives
FD332	Half-width storage block that enables up to 16 small form factor (SFF) 2.5" storage devices; up to 3 x FD332 per FX2 chassis.	PowerEdge RAID Controller 9 (PERC9), pass-through I/O; single or dual SAS controllers; mix and match for dual controllers (RAID/non-RAID)	N/A	N/A	N/A	<ul> <li>Up to 16 x hot-plug</li> <li>2.5" HDD/SSD</li> </ul>

### Dell EMC PowerEdge VRTX

Platform	Description	Server nodes	Memory	PCIe slots	Embedded NICs	Supported drives
VRTX	Tower or 5U rackable platform that integrates up to 4 server nodes, storage, networking and management into a compact chassis optimized for office environments.	Up to 4 x 2S, half-height M520 server nodes Up to 4 x 2S, half-height M620 or M630 server nodes Up to 2 x 4S, full-height M820 server nodes Or a combination of server nodes	Dependent upon chosen server nodes	3 full-height and 5 half-length	1GbE internal switch module (standard) with 16 x 1GbE ports and 8 external ports Ethernet pass- through module with 8 external ports (optional)	<ul> <li>Up to 12 x hot-plug</li> <li>3.5" SAS or SSD drives</li> <li>or up to 25 hot-plug</li> <li>2.5" SAS or SSD drives</li> </ul>

#### Dell EMC PowerEdge M1000e blade chassis



Chassis	Description	Power supplies	Cooling fans	I/O modules	Management modules
	10U fully modular blade enclosure for up to 8 full-height, 16 half-height or 32 quarter-height Dell EMC PowerEdge blade servers.	Choice of up to 6 hot-pluggable power supplies	9 hot-pluggable, redundant fan modules	Up to 6 I/O modules for 3 redundant fabrics; a choice of switches from Dell EMC, Cisco®, Brocade® and Mellanox®	1 standard or 2 redundant Chassis Management Controllers (CMCs); optional integrated KVM switch for "crash cart" management

#### Dell EMC PowerEdge blade servers

Platform	Description	Processor(s)	Memory	PCI slots	Embedded NICs	Hard drives	OEM Platform options
M830	Full-height, 4-socket blade server delivers exceptional performance and scalability for core business applications or consolidated environments. Up to 8 in an M1000e.	Intel Xeon E5-4600 v4 product family; up to 22 cores per socket	Up to 48 DDR4 DIMMs Up to 2400MT/s	4 PCle 3.0 mezzanine I/O expansion slots	1 x 2 or 4 port 10Gb or 4 port 1Gb modular SNA	<ul> <li>4 x 2.5" hot-plug HDD/SSD or 2 x</li> <li>2.5" PCle SSD and</li> <li>2 x 2.5" HDD/SSD or 12 x 1.8" hot-plug SSD</li> </ul>	N/A
M630	Half-height 2S blade server designed for maximum performance, high density and power efficiency. Up to 16 in an M1000e chassis. Carrier-grade configuration available.	Intel Xeon processor E5-2600 v4 product family up to 22 cores per socket	Up to 24 DDR4 DIMMs Up to 2400MT/s	2 PCle 3.0 mezzanine I/O expansion slots	1 x 2 or 4 port 10Gb or 4 port 1Gb modular SNA	<ul> <li>Up to 2 hot-plug 2.5" SAS, SATA, SSD drives or up to 4 x 1.8" SSD drives</li> </ul>	Carrier-grade telecom

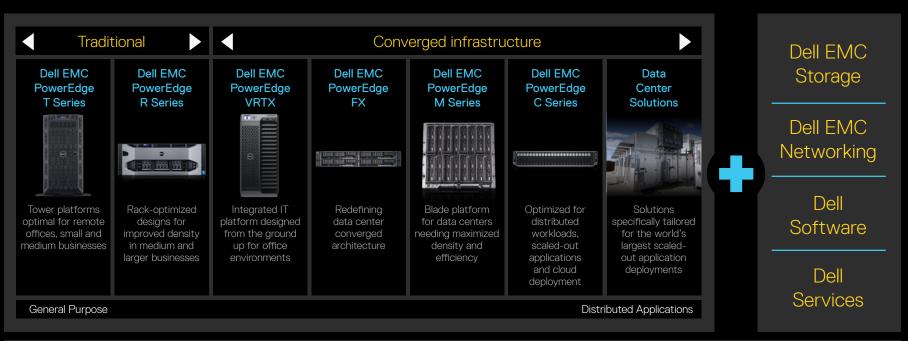
## Dell EMC PowerEdge C Series

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Platform	Description	Processor(s)	Memory	PCIe slots	Communications	Supported drives
	Purpose-built, ultra-dense 1U rack server with industry-leading GPU compute capabilities to accelerate the most demanding HPC workloads flexibly and efficiently.	Up to 2 x Intel Xeon processor E5-2600 v4 product family Supports up to 4 300W NVIDIA® Tesla® GPUs or Intel Xeon coprocessors	Up to 16 DDR4 DIMMs Up to 2400MT/s	Up to 2 x low-profile PCle 3.0 (rear)	2 x 1GbE LOM Additional 1GbE, 10GbE or InfiniBand options available	<ul> <li>Up to 2 x 1.8" SATA SSD boot drives</li> <li>Optional data drive tray supports up to 4 x 2.5" SAS/SATA drives</li> </ul>
C6320	Ultra-dense, 4 x 2-socket independent server nodes in shared 2U chassis, optimized for HPC and scale-out workloads and hyperconverged solutions.	Intel Xeon processor E5- 2600 v4 product family; up to four 2-socket servers	Up to 16 DDR4 DIMMs Up to 2400MT/s	1 x 16 PCle 3.0 half- height, half-length 1 x 8 PCle 3.0 mezzanine	2 x Intel 82599ES 10GbE (SFP+) Additional 1GbE, 10GbE or InfiniBand options available	<ul> <li>24 x 2.5" or</li> <li>12 x 3.5"</li> <li>SASA/SATA hard</li> <li>drive options</li> </ul>

# Dell EMC's comprehensive enterprise solutions portfolio: workload-optimized solutions for any size enterprise



## The Dell EMC PowerEdge server portfolio is the foundation of a comprehensive enterprise systems portfolio that includes:

- Intelligent, self-optimized and auto-tiered SAN, NAS and DAS storage solutions
- · Comprehensive suite of networking products for campus LANs, data centers and wireless networks
- Enterprise software for data center and cloud management, data protection, information management, mobile workforce management and security
- · Professional services that simplify assessment, design, implementation, management and maintenance

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