PowerEdge Tower Servers Portfolio Overview



Topics

- IT Trends
- Key IT challenges in SOHO, SMB and ROBO
- PowerEdge tower servers
- Why upgrade now?
- Next steps



IT Trends

- Improving business conditions drive demand for faster application performance and platform capacity for expansion
- Traditional deployment predominates, along with increasing interest in cloud deployment models
- Increasing IT complexity provokes demand for simplified platforms and solutions
- Virtualization is pervasive
- Continued challenges with operational factors and capital cost containment









Key IT Challenges in SMB, SOHO and ROBO

Performance

- peak performance
- response times
- data transfer

Efficiency

- deployment time
- monitoring and management complexity
- systems management tasks take too long

Versatility

- Capacity/expandability
- Adaptability to changing applications
- Virtualization-ready







Dell EMC PowerEdge tower servers Overcoming IT challenges in SMB and SOHO

Pain Point	Solution Requirements		
 Accelerated application performance to drive business success and Fast response times to ensure customer satisfaction Boost data throughput to gain insights faster 			
 Rapid and confident deployment so server can be turned over for produce faster Simple and intuitive monitoring and management Fewer steps to perform tasks manually, plus automation of tasks to sa save money and reduce potential for error 			
Versatility	 Internal capacity for expansion and growth, providing lengthy lifecycle, investment protection and improved ROI Configuration flexibility to changing application requirements and server repurposing Virtualization-ready for dynamically changing workloads 		

Designed by Customers, Engineered by Dell EMC

The PowerEdge tower server family











T20	T130	T330	T430	T630
Excellent first server for SOHO, the PowerEdge T20 helps users get organized, share information more efficiently, and become more productive. Available in optimized, fixed configurations only.	Outstanding first server or replacement server for SOHO, the PowerEdge T130 excels at productivity and collaboration applications, file sharing and data protection. Fully configurable.	Powerful and versatile 1-socket rackable tower server delivers performance, expandability and enterprise-class RAS capabilities, for SMB, departments and ROBO of large institutions, and OEM.	Helping to drive businesses and organizations forward, the PowerEdge T430 provides performance and scalability for non- disruptive growth.	Excellent platform for consolidation and virtualization, the PowerEdge T630 delivers ultimate 2-socket performance and extensive built-in room for growth.

Why refresh your installed servers now?

Dramatic **performance** gains → increased productivity

Faster response times → delight your users and customers

Headroom for your growing business or organization → grow at your own pace

Enhanced **availability** → more business uptime

Reduced cost of maintenance and new hardware warranty support

Flexibility with server OS support

Enhanced support for **virtualization** → consolidate more servers onto a single platform; less software licensing cost

Lower **power** utilization → reduced power bill

Latest **systems management** capabilities \rightarrow save time, save money, reduce potential for error

PowerEdge T630









PowerEdge T630 rackmount orientation

- Rackable tower server delivering ultimate 2-socket performance, versatility and availability, with built-in room for growth.
- Features powerful processors (Intel Xeon E5-2600 v4 product family), large memory capacity, wide I/O bandwidth, massive internal storage and support for internal graphical processing units (GPU's)
- Enterprise-class RAS capabilities, Quiet Office acoustics, and Fresh Air 2.0 capable
- Excellent solutions platform for Mail and Messaging (Exchange), Medical Imaging, Student Records, Consolidation, Virtualization, and budget-conscious HPC rendering.

PowerEdge T630

2S Tower server (5U rackable) ultimate performance, versatility & scalability

Overview

- Powerful, flexible, virtualization-ready 2S/5U rackable tower server
- Designed for mid-size offices, Remote & Branch Offices, and data centers
- Supports more HDD (up to 32) and more GPU's (up to 4) than any other PowerEdge server

Targeted Workloads

 Excellent platform for Mail & Messaging, File & Print, Database, Business Analytics & Intelligence, ERP, server virtualization, desktop virtualization and Medical Imaging.

Benefits

- Peak 2S performance, huge internal storage capacity, and ready for both server- and desktop virtualization
- Industrial strength reliability, availability and serviceability
- Easy lifecycle manageability with intuitive management tools
- Flexible tower- or rack installation; Fresh Air compliant; library quiet



Performance	Availability	Expandability, I/O, Storage
 2S Intel Xeon E5-2600 v4 processors (22 cores max each CPU; 44 total cores max per server) 	Redundant power supply units (PSU's)	 Internal storage capacity up to 32 x 2.5" or 18 x 3.5" HDD supporting up to 108 TB
 24 DIMM slots supporting DDR4 memory 	 Hot plug and swappable PSU's, HDDs and fans 	 Choice of RAID options for data protection and optimized performance
Support for up to 4 x optional 300W internal GPU	Dual SD card option for Failsafe	 Up to 4 optional Express Flash PCle SSDs
processing accelerators	Hypervisor	7 I/O slots: 6 x PCle Gen3 slots and 1 PCle Gen2 slot
 Optional Express Flash PCle SSDs provide extremely high IOPS vs. standard drives, to reduce 	 iDRAC8 Express or Enterprise with Lifecycle Controller, OpenManage 	2 x 1GbE LOMs
I/O bottlenecks	Elieoyole Controller, Openivianage	10 GbE network bandwidth

PowerEdge T630 – unmatched innovations



Store, manage and protect your data internally

Massive internal storage (up to 18 x 3.5" HDD or 32 x 2.5" HDD) rules out the cost, space and cabling for external storage devices, helps drive performance, and enables gradual growth through time

Accelerate with internal GPU's

Boost performance for medical imaging, seismic exploration and graphics rendering with support for up to 4 graphical processing units (GPU's)

Virtualize with confidence

Combine 24 DIMM slots of memory capacity with powerful processing and wide I/O bandwidth for effective virtualization. Optional dual, redundant SD cards enable Failsafe Hypervisors.

PowerEdge T630 - Intergenerational comparison

	T610	T620	T630
Processor	2 x Intel Xeon 5500/5600 series processors	2 x Intel Xeon E5-2600 product family	2 x Intel Xeon E5-2600 v4 product family
DIMM slots	12 x DDR3	24 x DDR3	24 x DDR4
Drive Bays	Up to 8 x 2.5" or 8 x 3.5" Hot pluggable	Up to 32 x 2.5" or 12 x 3.5" Hot pluggable Optional split backplane supporting 2 x non-redundant PERC controllers Optional 4 x PCIe SSD drives	Up to 32 x 2.5" or 18 x 3.5" Hot pluggable Optional split backplane supporting 2 x non-redundant PERC controllers Optional 4 x PCle SSD drives
PCI slots	5 PCIe slots: 2 x PCIe x8 3x PCIe x4 Gen 2	7 PCIe slots: 4 x PCIe x16 Gen3 2 x PCIe x8 Gen3 1 x PCIe x8 Gen2	7+1 PCle slots: 4 x PCle x16 Gen3 2 x PCle x8 Gen2 1 x PCle x8 Gen3 1 x PCle x8 Gen3
LOM	2 x 1GbE with TOE	2 x 1GbE	2 x 1GbE (Intel dual port 1GbE LOM)
Optional GPU's	N/A	Up to 4 internal GPU's	Up to 4 internal GPU's
Systems Management	Dell OpenManage; iDRAC6; Lifecycle Controller	Dell OpenManage; iDRAC7 with Lifecycle Controller	Dell OpenManage; iDRAC8 with Lifecycle Controller
Power Supplies	Redundant; hot-plug	Redundant; hot-plug	Redundant; hot-plug
Fans	Optional redundant; hot-plug	Optional redundant; hot-plug	Optional redundant; hot-plug

T630:

- More powerful processors
- Large memory footprint
- Massive internal storage
- Latest-generation PCIe Gen3 I/O slots
- Up to 4 PCIe SSD drives
- Up to 4 internal Graphical Processing Units (GPU's)
- Failsafe Hypervisors
- Quiet Office acoustics
- Fresh Air 2.0 capable
- Simplified systems management
- rack-mount model also available



PowerEdge T630 – Why upgrade now?



More powerful processors	Compute more, faster. Gain headroom for peak processing windows and for growth through time.
Large memory footprint	Deliver faster response times with data-in-memory. Extensive space for consolidation and virtualization.
Failsafe Hypervisors	Fault tolerant protection for virtualized servers to keep your business or organization up and running.
Massive internal storage	Scalable storage for data-intensive workloads and for growth through time.
More I/O slots, latest generation PCIe Gen3	Drive higher performance while avoiding I/O bottlenecks
Up to 4 PCIe SSD drives	Deliver higher performance with faster data transfer
Up to 4 internal GPU's	Drive high performance graphical rendering; also powerful co-processors for e.g. Desktop Virtualization
Quiet Office acoustics	"Library Quiet" for non-intrusive presence in office environments
Fresh Air 2.0	Operate in extended temperature ranges without chilled air – saves energy use and helps control expenses
Simplified systems management	Saves time, saves money and reduces potential for error
Rack-mount model also available	Installation flexibility with technology consistency – same server can go in offices and data centers

PowerEdge T630 – What the Press is saying

5 out of 5 stars and "Recommended" rating from IT Pro !!

"Capable of handling a wide range of workloads, it's an ideal choice for SMBs looking for high expansion and growth potential."







"Huge CPU core count; Massive storage potential; Superb build quality; Extensive management tools"

See the full article at: http://www.itpro.co.uk/server/23069/dell-poweredge-t630-review-13th-generation

PowerEdge T430

PowerEdge T430 with 8 x 3.5" HDD



PowerEdge T430 with 16 x 2.5" HDD



T430 Rackable orientation

2-socket tower server delivering balanced performance plus expandability for non-disruptive growth.

Features powerful Intel Xeon processors (E5-2600 v4 product family), sizeable memory capacity, wide I/O bandwidth, and extensive internal storage

Quiet Office acoustics, Enterprise-class RAS capabilities, and Fresh Air 2.0 capable

Excellent platform for workgroup collaboration, e-mail, file and print, web serving and small- to mid-size database applications. Highly attractive for Small and Medium Business server consolidation and virtualization.

PowerEdge T430 - Intergenerational comparison

	T410	T420	T430
Processor	2 x Intel Xeon 5500/5600 series processors	2 x Intel Xeon processor E5-2400 product family	2 x Intel Xeon processor E5-2600 v4 product family
DIMM slots	8 x DDR3	12 x DDR3	12 x DDR4
PCI Slots	5 PCle Gen 2	6 PCle slots: 4 x PCle Gen 3-enabled 2 x PCle Gen 2	6 x PCle Gen 3
Drive Bays	6 x 3.5" cabled or 6 x 3.5" hot swap or 6 x 2.5" hot swap and 2 x 5.25" bays for DVD/tape	4 x 3.5" cabled or 8 x 3.5" hot swap or 16 x 2.5" hot swap plus 3 x 5.25" bays for DVD/tape	4 x 3.5" cabled or 8 x 3.5" hot swap or 16 x 2.5" hot swap plus 3 x 5.25" bays for DVD/tape
Optional GPU	N/A	Up to 2 optional internal GPU's	Up to 2 optional internal GPU's
Power Supplies	Cabled or Optional Redundant (N+0 or N+1)	Cabled or Optional Redundant (N+0 or N+1)	Cabled or Optional Redundant (N+0 or N+1)
Cooling/Fans	NOT redundant or fault tolerant	Soft fault tolerant	Soft fault tolerant
LOM	Dual Broadcom 1GbE LOM	Dual Broadcom 1GbE LOM	Dual Broadcom 1GbE LOM
Remote Management	Basic management upgradeable to iDRAC6 Express or Enterprise	Basic management upgradeable to iDRAC7 Express or Enterprise	Basic management upgradeable to iDRAC8 Express or Enterprise

T430:

- Latest Intel processors
- DDR4 memory
- Failsafe Hypervisors
- Choice of hard drive form factors
- PCIe Gen3 I/O slots
- Quiet Office acoustics
- Fresh Air 2.0 capable
- Simplified systems management
- short 22" chassis
- rackable



PowerEdge T430 – Why upgrade now?



More powerful processors	Provide results faster. Gain performance headroom for peak processing windows and for growth through time.
DDR4 memory	Deliver faster response times with lower latency memory while experiencing enhanced energy efficiency. Extensive capacity for consolidation and virtualization.
Failsafe Hypervisors	Fault tolerant protection for virtualized servers to keep your business or organization up and running.
Sizeable internal storage	Large internal storage capacity supports larger data sets, growth through time, and consolidation. Save space and avoid the hassle of cabling, powering and managing an external storage device.
More I/O slots, latest generation PCle Gen3	Drive higher performance while avoiding I/O bottlenecks
Quiet Office acoustics	"Library Quiet" for non-intrusive presence in office environments
Fresh Air 2.0	Operate in extended temperature ranges without chilled air – saves energy use and helps control expenses
Simplified systems management	Saves time, saves money and reduces potential for error
Rackable	Installation flexibility with technology consistency – same server can go under a desk or counter in offices or in a rack in computer closets and data centers

PowerEdge T430 – unmatched innovations





Store, manage and protect your data internally

Extensive internal storage (up to 8 x 3.5" HDD or 16 x 2.5" HDD) rules out the cost, space and cabling for external storage devices, helps drive performance, and enables gradual growth through time

Server Virtualization with confidence

Combine 12 DIMM slots of memory capacity with powerful processing and wide I/O bandwidth for effective virtualization. Optional dual, redundant SD cards enable Failsafe Hypervisors.

Optimized for offices

Under-the-desk chassis depth and Quiet Office compliant for nonintrusive contribution to workplace productivity

PowerEdge T330 tower server









PowerEdge T330

- Powerful and versatile 1-socket rackable tower server
- Delivers greater performance, expandability and enterprise-class RAS capabilities compared to previous-generation server
- For SMB, departments and ROBO of large institutions, and OEM.
- Sizeable expansion enables excellent investment protection and enhance ROI
- Quiet Office acoustics
- Simple, intuitive local and remote management with OpenManage Essentials, iDRAC8 and Lifecycle Controller 3.0
- Compact tower form factor; 5u when racked.

PowerEdge T330 - Intergenerational comparison

	11G PE T310	12G PE T320	13G PE T330
Form Factor	Tower	Tower (Rackable)	Tower (Rackable)
Processor	Intel Xeon 3400 series Intel Celeron G1101 Intel Pentium G6950 Intel Core i3 500 series	Intel Xeon processor E5-2400 family Intel Xeon E5-1400 processor Intel Pentium 1400 processor family	Intel Xeon processor E3-12XX v5 family Intel Pentium
DIMM slots	6 x DDR3	6 x DDR3 (192GB max)	4 x DDR4 (64GB max)
PCI Slots	5 x PCle Gen 2	5 x PCle slots: 3 x PCle Gen 3-enabled 2 x PCle Gen 2	4 x PCIe Gen 3 slots
Drive Bays	4 x 3.5" cabled or 4 x 3.5" or 2.5" hot swap	4 x 3.5" cabled or 8 x 3.5" hot swap or 16 x 2.5" hot swap	 4 x 3.5" hot swap (also supports 2.5" in 3.5" hybrid drive carrier) 8 x 3.5" hot swap (also supports 2.5" in 3.5" hybrid drive carrier)
Optional GPU	N/A	Optional internal GPU	N/A
Power Supply	Cabled or Redundant (N+0 or N+1)	Cabled or Redundant (N+0 or N+1)	Cabled or Redundant (N+0 or N+1)
Cooling/Fans	Non-redundant / fault tolerant	Soft fault tolerant fans	Soft fault tolerant fans
LOM	Dual Broadcom 1GbE LOM	Dual Broadcom 1GbE LOM	Dual port Broadcom 1GbE LOM
Diagnostic	LCD or LED by chassis	LCD or LED by chassis	LCD or LED by chassis
Remote Management	Basic management upgradeable to iDRAC6 Express or Enterprise	Basic management upgradeable to iDRAC7 Express or Enterprise	Basic management upgradeable to iDRAC8 Express or Enterprise
Tower depth	20.4"	22"	22"

T330 compared to T320:

- Latest generation Intel E3-12XX v5 and Pentium processors
- DDR4 memory: 33% faster performance and more energyefficient than DDR3 (30% lower active power and 50% lower standby power)
- PCIe Gen3 I/O slots driving 2x the data throughput compared to Gen2
- Substantial internal storage expandability in both T320 and T330
- Quiet Office acoustics
- Simple, intuitive local and remote management with OpenManage and iDRAC8 with Lifecycle Controller
- Compact tower form factor; 5u when racked.



PowerEdge T330 – Why upgrade now?



More powerful processors	Provide results faster. Gain performance headroom for peak processing windows and for growth through time.
DDR4 memory	Deliver faster response times with lower latency memory while experiencing enhanced energy efficiency. Extensive capacity for consolidation and virtualization.
Failsafe Hypervisors	Fault tolerant protection for virtualized servers to keep your business or organization up and running.
Sizeable internal storage	Large internal storage capacity supports larger data sets, growth through time, and consolidation. Save space and avoid the hassle of cabling, powering and managing an external storage device.
More I/O slots, latest generation PCle Gen3	Drive higher performance while avoiding I/O bottlenecks
Quiet Office acoustics	"Library Quiet" for non-intrusive presence in office environments
Fresh Air 2.0	Operate in extended temperature ranges without chilled air – saves energy use and helps control expenses
Simplified systems management	Saves time, saves money and reduces potential for error
Rackable	Installation flexibility with technology consistency – same server can go under a desk or counter in offices or in a rack in computer closets and data centers

PowerEdge T330 – What the Press is saying



PowerEdge T330 with 8 x 3.5" HDD

"The Dell PowerEdge T330 is a tower-based unit that can be scaled out and placed into a rack arrangement – a design choice clearly aimed at satisfying both SMEs and remote offices in larger companies.

The T330 is also a powerful server, and can boost the performance of collaborative apps in small or home offices, increasing overall productivity." - Arantxa Asián, Muy Pymes (Spain)

"...All of the new models are scalable and provide an even better ROI to clients by improving production time and enhancing performance." – It Reseller (Spain)

PowerEdge T130 mini-tower server









PowerEdge T130

- Outstanding first server or replacement server for Small Office / Home Office (SOHO)
- Excellent for productivity and collaboration applications, file sharing, and data protection
- Mini-tower form factor vs. tower
- Substantial internal storage capacity permits extensive expansion, providing investment protection and enhanced ROI
- Simple, intuitive local and remote management with OpenManage and iDRAC8 with Lifecycle Controller

PowerEdge T130 - Intergenerational comparison

	PE T110 II	PE T130	
Form Factor	Tower	Mini Tower	
Processor	Intel Xeon E3-1200 v2 (4 cores) Intel Core i3-2100 family (2 cores) Intel Pentium	Intel Xeon E3-12XX v5 (4 cores) Intel Pentium Intel Core i3	
DIMM slots	4 x DDR3 (4 x 8GB = 32GB max)	4 x DDR4 (4 x 16GB = 64GB max)	
Drive Bays	6 x 2.5" HDD or 4 x 3.5" HDD	4 x 3.5" cabled	
PCI Slots	4 x PCle Gen 2	4 x PCle Gen 3	
USB ports	8 total (4 rear, 2 front, 2 internal)	8 total (6 rear, 2 front)	
Optional GPU	N/A	N/A	
Power Supply	One cabled power supply 305W	One cabled power supply 290W Bronze EPA	
Cooling/Fans	Non-redundant; Non-hot plug	Non-redundant; Non-hot plug	
LOM	1 x GbE LOM	2 x 1GbE LOMs	
Diagnostic	LED	LED	
Remote Management	Basic management	Basic management upgradeable to iDRAC8 Express or Enterprise	
Dimensions	16.5 inches / 41.8 cm high 7.5 inches / 18.9 cm wide 16.0 inches / 40.7 cm deep	14.1 inches / 36 cm high 6.9 inches / 17.5 cm wide 17.12 inches / 43.5 cm deep	

T130 compared to T110 II:

- Mini tower form factor vs. tower
- Latest generation Intel E3-12XX v5 and Pentium processors
- DDR4 memory: 33% faster performance and more energy-efficient than DDR3 (30% lower active power and 50% lower standby power)
- 2x memory capacity compared to T110 II (64GB vs 32GB)
- Substantial internal storage capacity in both T130 and T110 II
- PCIe Gen3 I/O slots driving 2x data throughput compared to Gen2
- 2 x 1 GbE LOMs
- Moved all USB ports external for quick and flexible attachment of devices
- Simple, intuitive local and remote management with OpenManage and iDRAC8 with Lifecycle Controller

PowerEdge T130 compared to T20



PowerEdge T20

- Mini-tower form factor
- Fixed configurations only
- User or Channel Partner installs OS
- User or Channel Partner installs options
- For tech-savvy users or channel partners comfortable with installing OS and options



PowerEdge T130

- Mini-tower form factor
- Fully configurable from factory
- OS installed at factory with initial order
- Options installed at factory with initial order
- Latest, PowerEdge 13G technologies

PowerEdge T130 – Why install now?



More powerful processors	Provide results faster. Gain performance headroom for peak processing windows and for growth through time.
DDR4 memory	Deliver faster response times with lower latency memory while experiencing enhanced energy efficiency. Extensive capacity for consolidation and virtualization.
Failsafe Hypervisors	Fault tolerant protection for virtualized servers to keep your business or organization up and running.
Sizeable internal storage	Large internal storage capacity supports larger data sets, growth through time, and consolidation. Save space and avoid the hassle of cabling, powering and managing an external storage device.
More I/O slots, latest generation PCIe Gen3	Drive higher performance while avoiding I/O bottlenecks
Quiet Office acoustics	"Library Quiet" for non-intrusive presence in office environments
Fresh Air 2.0	Operate in extended temperature ranges without chilled air – saves energy use and helps control expenses
Simplified systems management	Saves time, saves money and reduces potential for error

PowerEdge T130 – What the Press is saying

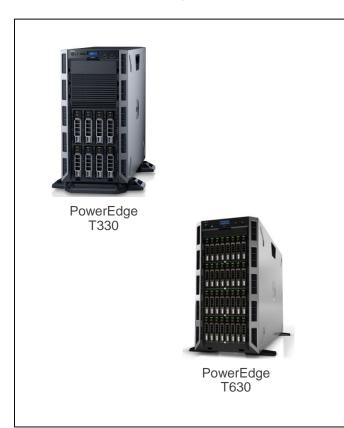


PowerEdge T130

"For the first time, Dell's entry-level PowerEdge T130 server comes pre-equipped with the Dell OpenManage system, which includes simple and intuitive tools that reduce provision time by up to 40%, enabling customers to easily manage their system." Kurt Pfeiler - LANline (Germany)

"Research carried out in the UK and US on behalf of Dell showed that the top issues facing SMBs are performance, hardware capacity and IT complexity. Dell hopes to address these issues with its new products, which the company claims provide increased performance, flexibility and efficiency to help SMBs prepare for future growth." – Jane McCallion, IT Pro (UK)

Enhancing your PowerEdge tower server



With a PowerEdge tower server as the workhorse in your infrastructure, enhance with:

Dell storage solutions

Dell networking



- AppAssure data backup and restore
- SonicWALL network security



- Dell Service & Support
- Partner OS's, hypervisors, and applications













Dell EMC PowerEdge tower servers

























- Greater application
- performance and faster response times
- Rapid and confident deployment,

 ✓ simple and intuitive on-going
- simple and intuitive on-going management
- Sizeable internal capacities for expansion and growth
- Servers, storage, networking and
- services from single vendor and authorized Channel Partners
- Extensive solutions ecosystem

Next steps



For more information:

- Visit dell.com/poweredge
- Contact your Dell EMC sales representative
- Contact your authorized Dell EMC Channel Partner

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