Driving Value Through Innovation: Dell EMC PowerEdge and PowerSwitch

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Dell Technologies
Transforming the business

- Workforce Transformation
- Digital Transformation
- Security Transformation
- IT Transformation

Applications

- Cloud
- Infrastructure

Users

- Services
- Consumption
Modern IT Infrastructure is a competitive advantage

Modern IT Infrastructure

- Traditional and Emerging Workloads
- Flexible Cost Structure
- Comprehensive and Enduring Security
Accelerate Innovation with Dell EMC PowerEdge
Powered by Intel® Xeon® Scalable Processors

- Scalable Architecture
- Automated Management
- Integrated Security
Modernize your IT infrastructure

Maximize performance for diverse workloads
Offers flexibility with internal storage, 25GbE and accelerators
Boosts performance and efficiency with innovative designs
Provides a hybrid data center foundation

Scalable Business Architecture
Adapt and scale to your dynamic business needs

2nd Generation Intel® Xeon® Scalable processors
- Offers up to 40.9% performance increase¹
- Increases memory speed by 10% from 2666MT/s to 2933MT/s²

Intel® Deep Learning Boost
- Drives AI/ML/DL

Intel® Optane™ DC Persistent Memory
- Extract more value from complex data
- Higher performance storage for virtualization
- Up to 2.5x memory capacity increase³

¹Preliminary results on based on Dell EMC internal testing February 2019 comparing a PowerEdge R740 with Intel Xeon Scalable processors (first generation) Silver 4116 vs a PowerEdge R740 with 2nd Generation Intel Xeon Scalable processors Silver 4216 running SPECcpu2017 int_rate_base. Results will vary.

²Based on Dell internal analysis January 2019 comparing Intel Xeon Scalable processors 1st generation (Platinum and Gold) on select PowerEdge servers.

³Based on Dell internal analysis, January 2019 comparing select PowerEdge servers using Intel Optane DC Persistent Memory DIMMs and/or DRAM DIMMs vs just using DRAM DIMMs.
Modernize IT

DELL Technologies

IOI OLEOCHEMICAL

SAP
Effortlessly manage your IT infrastructure

Intelligent Automation

Automate to sustain and grow

OpenManage and iDRAC - on every PowerEdge server

Decrease deployment times by up to 96%¹

Efficient management at scale from 1 to 8000

Save up to 25% per year with efficient power management²

Fine-tune configurations for optimal performance and security

Save up to 25% per year with efficient power management²

Simplify management with iDRAC for Intel® Optane™ DC persistent memory and Intel® Optane™ SSDs

Out of band management

Discover

Monitor

Configure

Update

²Based on internal Dell EMC analysis of a 100 server installation
Automate IT
Infrastructure is Under Attack!

New PC malware loads before Windows, is virtually impossible to detect.

Hacker Claims To Push Malicious Firmware Update to 3.2 Million Home Routers

Apple deleted server supplier after finding infected firmware in servers

Hacked Cameras, DVRs Powered Today's Massive Internet Outage

Hacker Holes in Server Management System Allow ‘Almost-Physical’ Access

How hackers could attack hard drives to create a pervasive backdoor

“Nemesis” malware hijacks PC’s boot process to gain stealth, persistence

Researcher creates proof-of-concept malware that infects BIOS, network cards
Protect your business with Integrated Security

Cyber Resilient Architecture
- Protect, detect and recover
- Built-in Foundational Security
  In every PowerEdge Server

**2nd Generation Intel® Xeon® Scalable processors**
- Removes performance delays due to software patches
- Side channel security built in to the hardware of the processor

**Intel® Optane™ DC persistent memory**
- Helps speed restart and recovery times for high-capacity memory applications

- Robustly protect the server core from malicious attacks
- Stringent standards ensure component and operational reliability
- No compromise on performance for robust security
- Rapid OS/BIOS recovery

Stringent standards ensure component and operational reliability. No compromise on performance for robust security. Rapid OS/BIOS recovery.
Dell EMC PowerEdge
Powered by Intel® Xeon® Scalable Processors
An Open Networking revolution

Virtualization, automation

Server computing
- Proprietary management
- Hundreds of protocols
- Proprietary networking OS
- Proprietary hardware
- Proprietary ASICs

Cloud computing
- Standard automation tools
- Optional network controller
- Choice of networking OS
- Open standard hardware
- Merchant silicon

Mobile computing
- Mobile devices, mobile broadband

Client computing
- Proprietary networking OS
- Proprietary hardware
- Proprietary ASICs
Open Networking enabling transformation

Disrupting the fundamental economics of networking through open, standards-based technology disaggregation.

97% of transformed companies are committed to software-defined data center technologies including software-defined networking.

77% of transformed companies have implemented SDN.

SDN users are 4x more likely to have significantly faster time to market.

ESG Research: The Network’s Foundational Role in IT Transformation, May 2018
How does SDN enable transformation?
Manage, automate, and enable a smarter network

Data center

Dell EMC Open Networking leaf-spine fabrics

Dell EMC Open Networking Top of Rack Switches

- Compute Storage CI/HCI
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- Compute Storage CI/HCI
- Compute Storage CI/HCI

Campus and branch

Internet

Public / private clouds

Dell EMC Virtual Edge Platform

- VMware ESX
- ADVA

Campus switches and wireless
Dell EMC Networking portfolio
Powered by Intel® Technology

EDGE
Dell EMC SD-WAN Edge

CORE
PowerSwitch Family

CLOUD
Powered by PowerSwitch
Next steps

**Engage**
your Dell EMC representative for a deeper conversation about our solutions and services

**Visit**
A Dell Technologies solution center for proofs of concept or demonstrations

**Learn**
more about Dell EMC solutions and services
DellEMC.com/Servers
DellEMC.com/Networking