

Redefining Office IT

PowerEdge VRTX

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PowerEdge VRTX

Agenda

- Customer benefits
- Product Overview
- Use cases
- Summary



PowerEdge VRTX
deskside orientation with front
bezel



Pervasive IT concerns in stand-alone offices & distributed ROBO

Complexity

- Complexity due to disparate hardware
- Hardware sprawl and lack of space

Inefficiency

- IT cost and TCO
- System downtime for maintenance
- Remote systems management inconsistent with data center tools

IT Rigidity

- Insufficient scalability to handle performance spikes
- Power compatibility
- High noise levels



VRTX – Making the complex simple



Current environment
Complex, Inefficient, Rigid



PowerEdge VRTX
Simple, Efficient, Versatile



PowerEdge VRTX – Financial Benefits

Delivering outstanding savings and TCO to drive business success

Compare to legacy tower servers:

- 26% lower 5-year TCO
- \$21K savings
- 33 month payback period



Can be deployed as a tower or rack for remote offices or datacentre environments

Compare to public cloud:

- 63.9% lower 5-year TCO
- \$172K savings
- 13 month payback period

Plug in the specifics of *your* IT environment into the PowerEdge VRTX TCO tool

<http://www.dell.com/PowerEdgeVRTXTCOTool>

to see how VRTX can deliver financial benefits to your business



PowerEdge VRTX – Customer-inspired design

- Office-optimized dimensions, acoustics, and security
- Virtualization-ready
- Scalable, integrated shared storage to harness data explosion
- Simplified systems management
- Simplified networking to fit small business budgets
- Highly available and easy to service
- Flexible installation with both rack and standalone options.



VRTX desk-side orientation



VRTX rack orientation



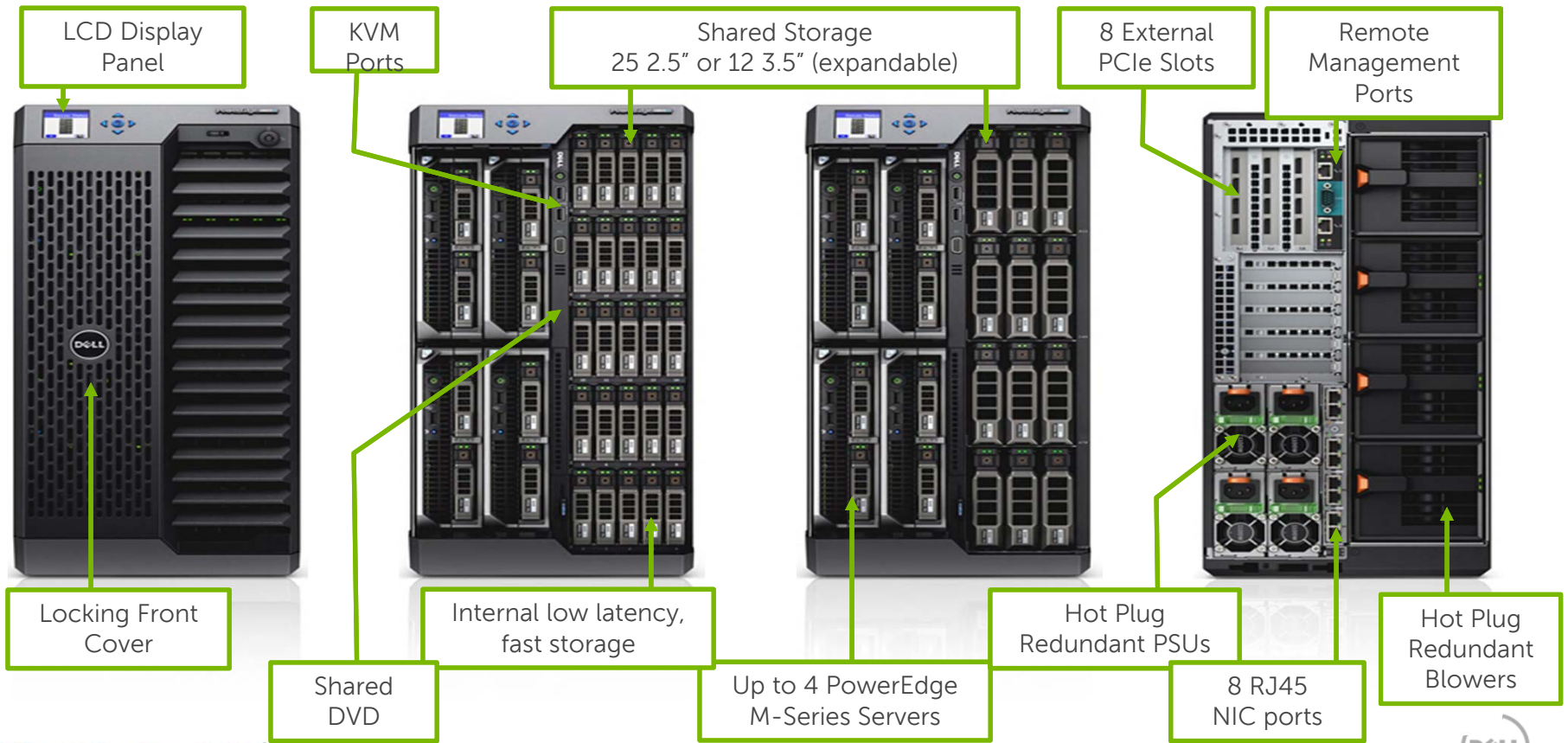
VRTX – Tailor configurations to specific needs

- **Compute and Storage integration**
 - 5U Tower Chassis (Rackable)
 - Up to 4 server nodes, hot plug and serviceable
- **Shared Storage:** Huge capacity with 12 x 3.5" or 25 x 2.5" hot plug HDDs
 - SAS, NLSAS, or SAS SSD hot plug drives
 - Optional redundant PERC for RAID controller failover inside the chassis
- **Integrated networking – Ethernet:** 1GbE internal switch module
 - Optional Pass-Thru Module
 - Optional dual port or quad port 10GbE NIC on server nodes
- **Flexible, expandable I/O – 8 PCIe slots**
 - 3 full height / full length
 - 5 low profile / half length
- **High Availability - Redundant PERCs/PSUs/Fans/Blowers:** 1100W AC (2+1, 3+1, 2+2)
- **Full Systems Management capabilities:** Simple/Easy-to-use
 - Consistent with Chassis Management Controller in the data center
- **Office level acoustics & power** (100V - 240V)



PowerEdge VRTX with 4 half-height server nodes and 25 2.5" HDD

PowerEdge VRTX – Front & Rear Views



PowerEdge VRTX – flexible installation



VRTX rack orientation with front bezel



VRTX rack orientation



VRTX in data center rack

- Standardize on same platform in offices and data center
- Upright orientation out on the office floor; Rack-mountable in 5u of space in IT closet or data center
- 100V – 240V AC power (DC in future)
- Consistent management at ROBO sites and in data center



Drive performance with VRTX server nodes

- Feature-rich, 2-socket, half-height M520 & M620 and 4- socket, full-height M820 server nodes combine superb **performance** with exceptional **flexibility**
- No compromise, enterprise-class high availability features
 - First to market with dual SD cards for **redundant hypervisors**
 - Many **RAID options** tailored to specific needs
 - Optional **hot plug** and swappable power supply units, HDD's and fans in the VRTX chassis
- Comprehensive, **intelligent systems management**



PowerEdge M520



PowerEdge M620



PowerEdge M820



PowerEdge VRTX shared storage

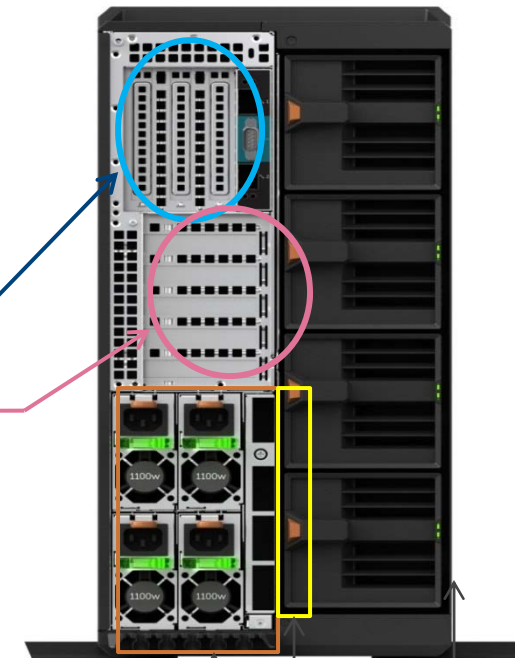


- Reduces cost by eliminating external storage, and thus also the cabling, powering and management of external storage
- Enables Live Migration in a virtualized environment, inside the chassis
- All 4 server nodes have access to the full storage space
- Internal, low latency, fast storage
- Choice of up to 12 x 3.5" or 25 x 2.5" HDD
- Optional redundant PERC for high availability RAID controller failover inside the chassis
- Grow at your own pace, up to 48TB storage capacity inside the chassis

VRTX - simplified, versatile networking and I/O

- **Simplified networking and I/O**
 - Integrated networking ports and industry-standard PCI slots reduce costs
- **8 Flexible PCIe slots**
 - 3 full height/full length PCI slots
 - 5 small form factor slots
 - Support for external JBOD enables storage expansion outside the chassis
- **Versatile network options**
 - Internal 1GbE 8-port pass-through module
 - Internal 1GbE 24-port switch

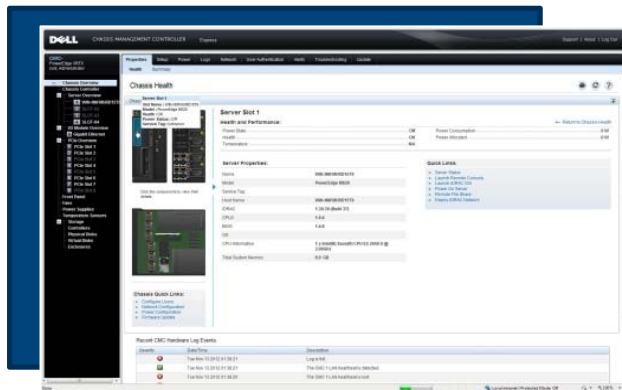
PowerEdge VRTX rear view



- Up to 4 hot plug redundant PSU's
- 8 RJ45 ports
- Up to 4 hot plug redundant blowers



VRTX simplifies systems management, too



Chassis Management
Controller for VRTX

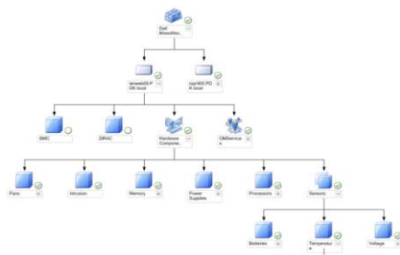


Chassis Management Controller (CMC) for PowerEdge VRTX

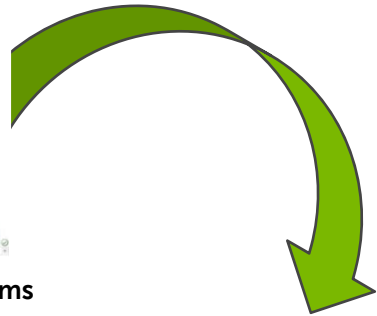
- Reduces complexity by converging management of server nodes, storage, networking and power into a **unified tool, presented in a single console**
- Intuitive, easy to use GUI reduces potential for error
- **Consistent with CMC used in the data center**, allowing IT Administrators to use what they know and reduce training time



Rapid assessment of remote system health



Traditional tree view of remote systems



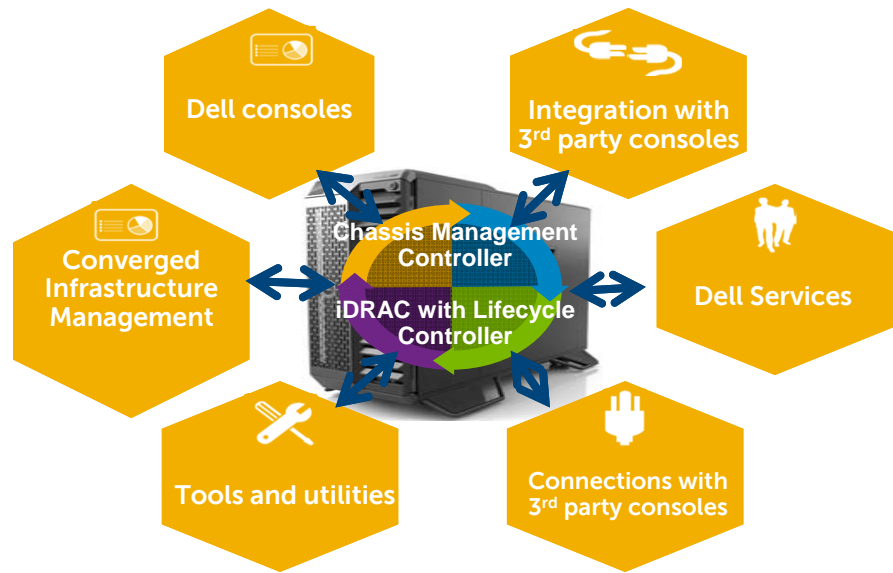
Geographical View for PowerEdge VRTX

Geographical View for PowerEdge VRTX

- Industry-first geographical view of distributed VRTX systems
- Rapid, at-a-glance identification of remote system location and health status via color-coded icons
- Easy to use and intuitive compared to traditional "tree" hierarchical view
- Seamlessly linked to OpenManage Essentials to perform management tasks



VRTX systems management – Levels of Control



Single office locations

- CMC converges management of servers, storage and networking

Datacenters

- CMC complemented by full suite of OpenManage tools including iDRAC7 with Lifecycle Controller
- Integrated with 3rd Party ecosystems (Microsoft, VMWare, BMC Software)

Remote management of multiple VRTX systems in multiple offices:

- OpenManage Essentials monitors and manages VRTX
- Geographical View – maps VRTX location and health status



Solutions ecosystem driving universal appeal



PowerEdge VRTX – new capabilities

✓ Additional server node choices

Drive Tier 1, back-end workloads with 4-socket, full height M820 server node featuring huge memory capacity, wide network bandwidth, and low latency Express Flash storage

✓ Next-level data protection inside the chassis

Optional redundant PERC provides high availability RAID controller failover inside the chassis

✓ Enhanced system management

Continued feature set parity between CMC in the data center and CMC on VRTX ensures system management consistency and simplicity

✓ Expanded support for VDI

Support for optional GPU enables VDI in ROBO



PowerEdge M820
full height, 4-socket
server node



PowerEdge VRTX Case Study: McKesson Medical Imaging

Picture Archiving and Communication
System (PACS) for Healthcare

**"VRTX is the ideal platform for our
PACS system because it provides all
the critical technology in one package
to run our applications in a virtualized
environment, and provide the
resiliency needed in critical diagnostic
environments."**

*Dirk De Keersmaecker,
PACS Infrastructure Product Manager*





PowerEdge VRTX Case Study: Cadac Group The Netherlands

"The beauty of the Dell PowerEdge VRTX chassis is that we gained a complete solution for our remote site, including servers, storage, networking and cabling."

"The entire infrastructure was up and running in no more than one day... The proof of concept was so successful, we left the solution running exactly as it was."

*Paul Smeets
Chief Technology Officer, Cadac Group*



Award-winning innovation delivers benefits



PowerEdge VRTX wins
IT Pro Innovation Award
on day of launch!



Dell PowerEdge VRTX



*InfoWorld "2014 Technology
of the Year - Best Server"*



PowerEdge VRTX
PC Pro "Server of the Year" for 2013



PowerEdge VRTX
CRN Server of the Year

Best in Show

Interop Japan

5/5 stars

Business Computing World, UK

"Dell PowerEdge VRTX stands alone
addressing IT demands of remote and
small offices"

Enterprise Strategy Group



PowerEdge VRTX wins
InfoWorld.com "Editor's
Choice" award



PowerEdge VRTX – Benefits Summary



Visit the Dell expo and
explore VRTX

