

Dell HPC Solutions



Agenda

1

Dell PowerEdge 12G Servers

2

Dell PowerEdge C

3

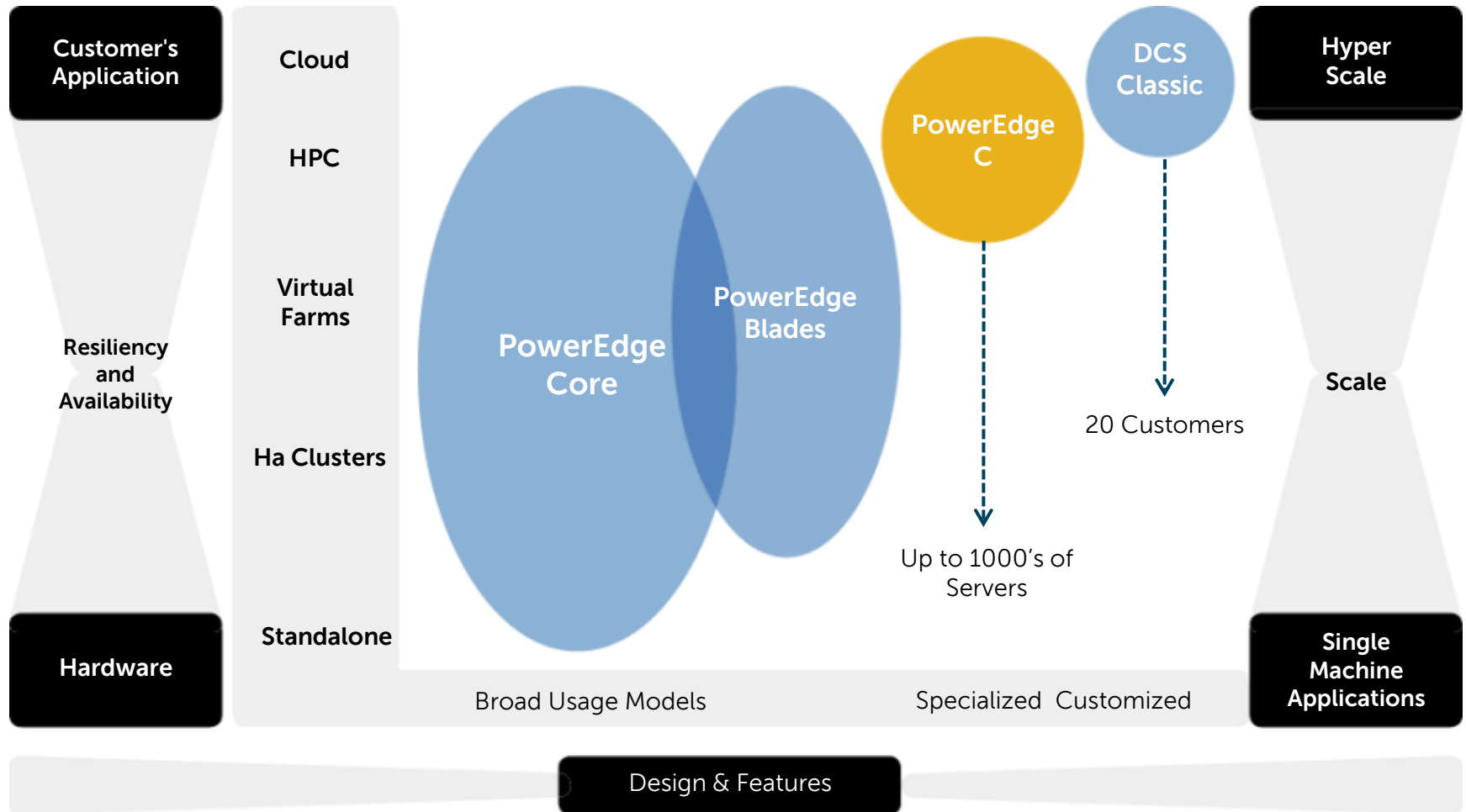
Dell Storage NFS

4

Q & A



Meeting Specific Customer Needs with the Industry's Broadest Server Portfolio



Please note the diagram is conceptual and not to scale



Un ampio portafoglio di server Dell Power Edge

Server tower



T110 II



T320, T420

SMB 1S and 2S



T620

Scalable 2S

Server blade



M420, M520, M620, M820, M910, M915

Dense 2S to scalable 4S



M1000e

Modular servers

Server rack



R520, R515

SMB and Storage
Optimized



R720, R715,
R820, R815

Scalable 2S and 4S/2U



R620

Dense 2S/1U



C6220, C5220, C5125

Cloud storage and
multi-node optimized



R210II, R320, R420, R415

SMB 1S and 2S (1U and 2U)



R910

Highly scalable 4S/4U



R720xd

Storage optimized 2S

New 12G

11G

Server AMD



PowerEdge Modular Servers

Four Socket Full-Height



PowerEdge M1000e
Up to 32 blade servers



PowerEdge M915
AMD Opteron
512GB RAM (24)



PowerEdge M910
Intel XEON 7500
1TB RAM (32)



PowerEdge M820
Intel XEON E5-4600
1.5TB RAM (48)

Two Socket Quarter-Height

New!



PowerEdge M420
Intel XEON E5-2400
192GB RAM (6)

Two Socket Half-Height



PowerEdge M620
Intel XEON E5-2600
768GB RAM (24)



PowerEdge M520
Intel XEON E5-2400
384GB RAM (12)

Two Socket Special Purpose



PowerEdge M610X
Intel XEON 5600
192GB RAM (12)
2 x16 Gen2 PCIe Slots



PowerEdge M420

Designed for exceptional computational density

Processors	Up to Two Eight-Core Intel Xeon E5-2400 Series
Chipset	Intel C600
Memory	Up to 6 DIMMs support up to 192GB DDR3 RAM (6 x 32GB DIMMs)
Hard Drives	2x1.8" Hot Plug Hard Drives (SSD)
RAID	PERC H310
I/O Mezzanine	Optional PCIe x8 Gen 3 Mezzanine Card Slots for: •Dual & Quad Port 1Gb Ethernet •Dual Port 10GbE CEE/FCoE CNAs •Dual Port QLogic & Emulex 8Gb FC •Dual Port Mellanox QDR/FDR InfiniBand
Embedded Networking	Dual-port 10Gb Broadcom CNA
Persistent Storage	Redundant SD Media for Failsafe Virtualization
Management	Dell OpenManage iDRAC7 Express w/ Lifecycle Controller (Enterprise Optional)



FLEXI/O Options

Dell M-series provides complete, snap-in FlexI/O scalability down to the switch interconnects. FlexI/O technology is the foundation of the M1000e I/O subsystem.

Up to 6 I/O modules for maximum throughput and redundancy.

Ethernet (1GbE & 10GbE)

Enhanced Ethernet (CEE/DCB)

Fibre Channel

InfiniBand



PowerEdge Select Network Adapter

PowerEdge M620, M820, M710HD, M915

Modular LAN On Motherboard (LOM)

- The PowerEdge Select Network Adapter is a flexible version of a conventional LAN on Motherboard (LOM), the 1st of its kind in the industry! Its modular design enables it to be changed or upgraded.

What it is

- **M620**
 - One 2x10GbE Broadcom, Intel or Qlogic CNA
- **M820**
 - Two 2x10GbE Broadcom, Intel or Qlogic CNA
- **M710HD**
 - Single 4x1GbE or 2x10GbE Broadcom CNA up to Two
- **M915**
 - Two Broadcom 2x1GbE or two 2x10GbE CNA



Why it's important

- A Modular LOM allows enhanced integrated connectivity flexibility, providing even more options for customers whose networking or bandwidth needs change over time. This unique deployment capability also allows Dell to provide up to 8 x 10GbE ports in a single full-height blade for the greatest I/O density available.



Mezzanine IO Card Options

Ethernet



Broadcom NetXtreme II
5709 Quad Port Ethernet



Broadcom NetXtreme II
5709 Dual Port Ethernet
with TOE & iSCSI Offload



Intel Gigabit ET Quad
Port with Virtualization
technology & iSCSI
Initiator

10Gb Ethernet



Broadcom NetXtreme II
57711 Dual Port 10Gb
Ethernet with TOE &
iSCSI Offload



Intel X520 (82599)
10GbE KX4 w/CEE & DCB
iSCSI Initiator
SR-IOV

Converged Ethernet



QLogic QME8142
Dual Port 10Gbps
Converged Network Adapter
w/ FCoE & iSCSI Initiator



Intel X520 (82599)
10GbE KX4 w/CEE & DCB
iSCSI Initiator, SR-IOV
Converged Network Adapter
FCoE



Emulex OCm10102-F-M
Dual Port 10Gbps
Converged Network Adapter
w/ FCoE & iSCSI Initiator



Brocade BR1741M-k
Dual Port 10Gbps
Converged Network Adapter
w/ FCoE & iSCSI Initiator

Infiniband



Mellanox QDR & DDR ConnectX
Dual-Port Dual Data Rate (QDR & DDR)
InfiniBand Host Channel Adapters (HCA)

Fibre Channel



QLogic QME2572
8Gb Fibre Channel I/O Card



Emulex LPe1205-M
8Gb Fibre Channel I/O Card



M-Series I/O Modules

10Gb Converged

Dell Force10 MXL 10/40GE
PowerConnect M8024-k
Dell M8428-k
Pass Through-k



8/4Gb Fibre Channel

FC SAN Module
Brocade M5424
Pass Through FC8/4



1Gb & 1/10Gb Ethernet

PowerConnect M6220
PowerConnect M6348
Cisco Catalyst
Pass Through 1Gb



FDR/QDR InfiniBand

Mellanox M4001F
Mellanox M4001T
Mellanox M4001Q



Dell Force10 MXL 10/40GbE Blade Switch

High performance full-featured 1/10/40GbE Layer 2 & Layer 3 switch blade



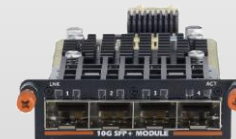
Dell Force10 MXL 10/40GbE Blade Switch

Internal server facing ports	Max 32 x GbE/10GbE
External ports	- 2x40GbE fixed ports - Two optional Flex I/O modules
Stacking	40GbE ports
OS	FTOS

- ✓ Robust and scalable I/O performance, low latency and high bandwidth
- ✓ Support for native 40GbE ports
- ✓ Supports stacking up to six units
- ✓ Open standards-based feature rich Enterprise FTOS
- ✓ Converged Ethernet and FCoE transit support

Flex I/O

- 4-port SFP+ module
 - 1GbE & 10GbE ports
 - 10GbE optical & DAC copper twin-ax
- 4-port 10GBASE-T module
 - 2X more than M8024-k
 - 1GbE & 10GbE ports
- 2-port QSFP+ module
 - 2 x 40GbE ports
 - 10GbE support using breakout cables



40GbE QSFP+ Transceiver & Cables

- 40GbE QSFP+ transceivers
- 40GbE QSFP+ to 4xSFP+ direct attach breakout cable
- 40GbE QSFP+ direct attach cable



Mellanox 4001Q

QDR InfiniBand Switch

- For high performance computing (HPC) and low latency applications
- Available in redundant switch configuration for fully non-blocking InfiniBand solution
- Links with Mellanox ConnectX3, ConnectX2 or ConnectX mezz cards

Internal Ports	16
External Ports	16
Bit Rate	40Gb/s
Data Rate	32Gb/s
Speed	QDR
Form Factor	Single Wide IOM

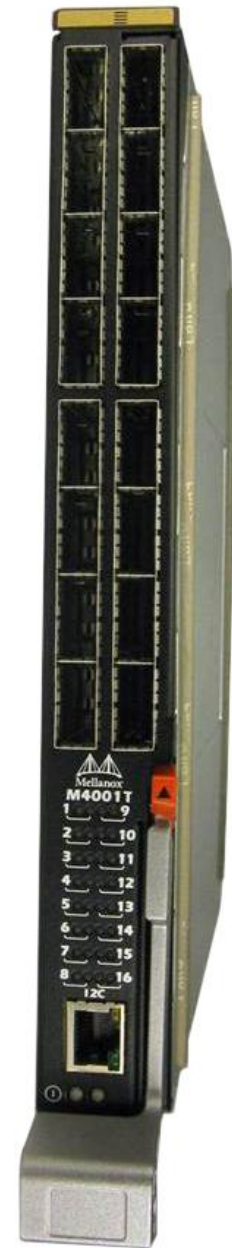


Mellanox 4001T

FDR10 InfiniBand Switch

- Same data rate as QDR 40Gb/s but there is less overhead in FDR10 so the data rate is 40Gb/s where for QDR it is 32Gb/s
- For high performance computing (HPC) and low latency applications
- Available in redundant switch configuration for fully non-blocking InfiniBand solution
- Links with Mellanox ConnectX3, ConnectX2 or ConnectX mezz cards

Internal Ports	16
External Ports	16
Bit Rate	40Gbp/s
Data Rate	40Gbp/s
Speed	FDR10
Form Factor	Single Wide IOM

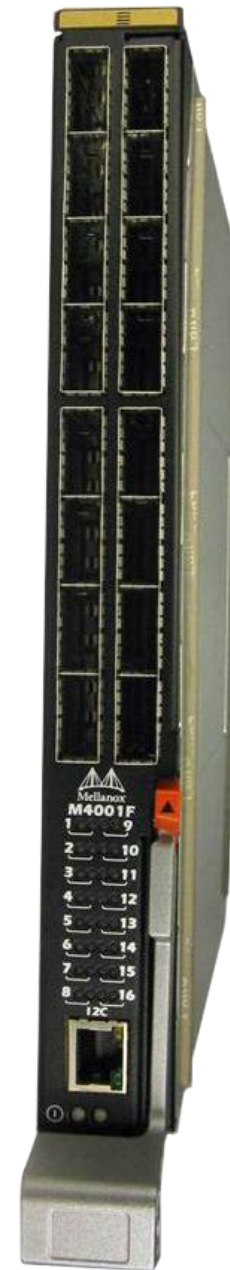


Mellanox 4001F

FDR InfiniBand Switch

- For high performance computing (HPC) and low latency applications
- Available in redundant switch configuration for fully non-blocking InfiniBand solution
- Links with Mellanox ConnectX3, ConnectX2 or ConnectX mezz cards

Internal Ports	16
External Ports	16
Bit Rate	56Gb/s
Data Rate	56Gb/s
Speed	FDR
Form Factor	Single Wide IOM



Dell PowerEdge 12th generation servers

Accomplish More

- No compromise on virtualization with **maximum memory density**
- Get more throughput with major **I/O performance enhancements**
- Get faster results with **innovative Express Flash PCIe SSDs**
- Accelerate HPC and VDI through **integrated GPU technology**

Improve efficiency

- Manage anywhere anytime with **agent-free server management**
- Reduce maintenance time with **auto-update for replacement parts**
- Control cooling costs with better **power monitoring and control**
- Tailor your network to your applications with **fabric flexibility**

Ensure business continuity

- Protect data in motion using **best in class RAID**
- Access the most vital information quicker via **storage tiering**
- Protect data at rest with malware resistance and **faster encryption**
- Keep data safer with firmware signing and **encrypted credentials**



Turn data into insights faster with solid state disks

Express Flash drives: better performance, availability & serviceability



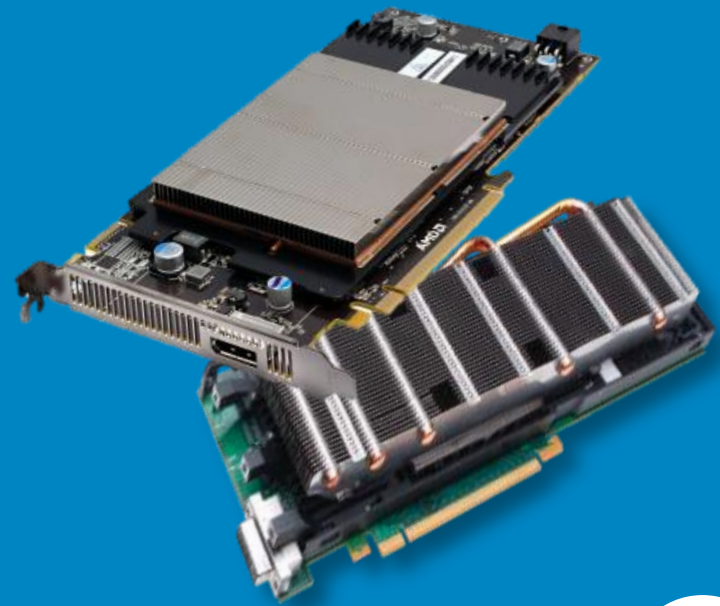
Express Flash PCIe SSDs:

- Provide tiered storage option to support high I/O throughput
- Save Critical PCIe Slot space by moving drives from the back to the front
- A single Express Flash drive can deliver >500X more IOPs than rotating media
- Flash based, low latency, high performance storage
- Have 2-3X performance of standard SAS SSDs
- Connect directly via PCIe



Speed up your Computations

Wide range of Graphics Processing Unit (GPU) options



Integrated Graphics Processing Units

- Accelerate performance in a wide range of applications – up to 8X faster
- Especially beneficial in HPC, VDI and medical imaging environments
- High-performance, many-core processing – over 1000 cores on some GPU cards
- Internal or external options offered
- The T620 with 4 internal GPU's and the R720 in a 2U form factor with 2 double wide GPUs will be especially powerful configurations



Management and Support

Remote management without agents & interruption

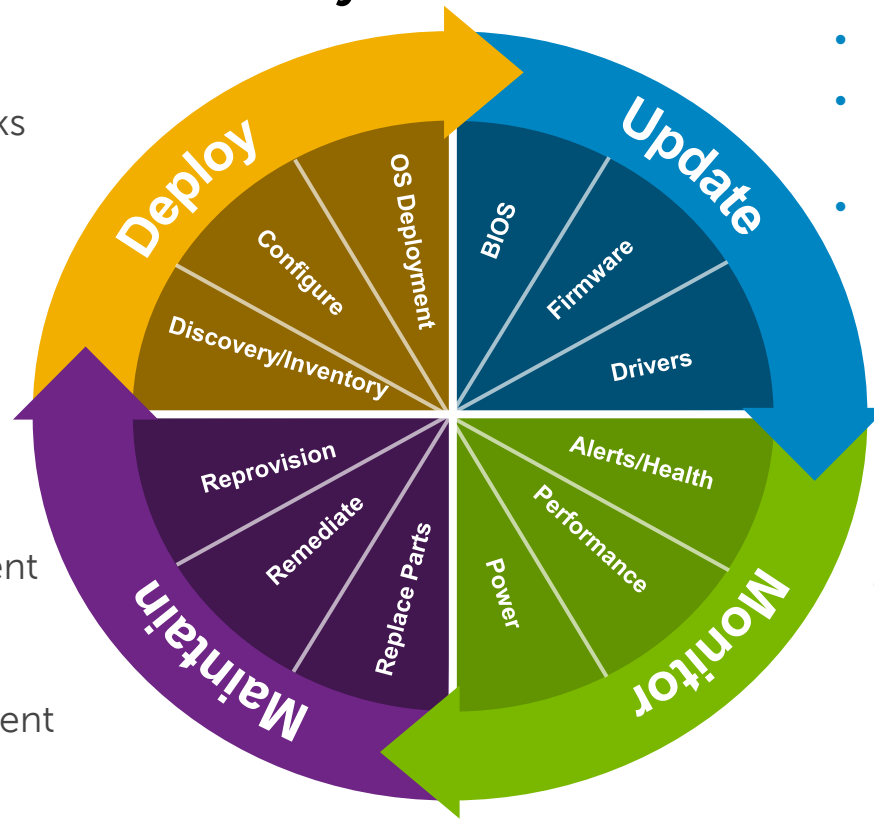
iDRAC7 with Lifecycle Controller

Speedy deployment and simplified setup

- Auto-discovery
- Embedded driver packs
- Automated remote configuration

Increased uptime

- Component replacement and reconfiguration
- Roll-back capabilities
- Motherboard replacement in hours, not days



Change management made easy

- Component level selection
- Automated tracking with lifecycle logging
- Update schedules that suit your schedule requirements

Independence from agent-based monitoring

- Consistency in managing systems
- OS agnostic and no wasted CPU cycles

PowerEdge C



Today's PowerEdge C Portfolio

Monolithic

1U 2S RACK
POWEREDGE C1100



2U 2S RACK
POWEREDGE C2100



Shared Infrastructure

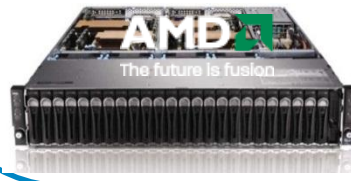
3U PCIe EXPANSION
CHASSIS
POWEREDGE C410X



2U SHARED
INFRASTRUCTURE
POWEREDGE C6220



2U SHARED
INFRASTRUCTURE
POWEREDGE C6105



2U HIGH
PERFORMANCE
POWEREDGE C6145



Microserver

3U SHARED
INFRASTRUCTURE
MICROSERVER
POWEREDGE C5220



3U SHARED
INFRASTRUCTURE
MICROSERVER
POWEREDGE C5125



Purpose-built for scale-out rack deployments, large homogenous cloud/cluster application environments where density is required and the software stack provides platform availability and resiliency



PowerEdge C1100

Designed to meet the demands of the densest data center environments

HIGH MEMORY CLUSTER OPTIMIZED COMPUTE NODE



Great for: power and space sensitive customers requiring maximum memory flexibility

- 1U, 2S Intel 5500 chipset
- Intel 5500/5600 CPUs
- 18 x DDR3 RDIMM
- 4 x 3.5" or 10 x 2.5" HDD (SAS/SATA/SSD)
- 6Gb SAS support
- 2 x GbE Intel 82576 (Kawela)
- 1 x 16 Gen II (full-height/half-length)
- 2 x 4 Gen II daughtercard slots
- 8-Port LSI SAS mezzanine (6Gb)
- Dual Port 10GbE Intel 82599
- IPMI 2.0 management
- iKVM, DCMI, PXE support
- Single or redundant PSU
- Intel Node Manager compliant



PowerEdge C2100

A data monster with the most drives and the most memory in a 2U

HIGH PERFORMANCE ANALYTICS AND CLOUD SERVER



Great for: Scale-out data center environments where memory and storage density matter most: Hadoop, Map/Reduce, Web analytics, database

- 2U, 2S Intel 5500 chipset (<100W processors)
- Xeon 5500/5600 series CPUs
- 18 x DDR3 RDIMM
- 12 x 3.5" + 2 internal 2.5" HDD
- 6Gb SAS support
- 2 x GbE Intel 82576 (Kawela)
- 2 x 8 Gen II (full-height/half-length)
- 2 x4 Gen II daughtercard slots
- 8-Port LSI 6Gb SAS
- Dual Port 10GbE Intel 82599
- IPMI 2.0 management
- iKVM, DCMI, PXE support
- Single or redundant PSU
- Intel Node Manager compliant



PowerEdge C6105 Server

Capacity, power efficiency and flexibility in an eco-friendly package

COST AND POWER EFFICIENT, SHARED INFRASTRUCTURE SERVER



Great for: Hyperscale-inspired building block for scale-out Web 2.0, hosting, cloud builders, and HPC applications where core count, cost and power efficiency are key

- Up to 4 server nodes in 2U
- 2S AMD Opteron 4100 series (Std./HE/EE) series CPUs (35-95W processors)
- AMD 5670 chipset
- 12 x DDR3 RDIMMs
- 24 x 2.5" or 12 x 3.5" HDD
- 2 x GbE Intel 82576 Kawela
- 1 x16 GenII (low-profile/half-length)
- 1 x8 Gen II (custom mezzanine slot)
- IPMI 2.0 management
- iKVM, DCMI, PXE support
- Hot-swap server nodes & HDD
- Redundant 1100W power supplies
- 470W and 750W options



PowerEdge C6145 Server

High performance, work-horse with I/O scalability in an efficient 2U

HIGHEST PERFORMING, SHARED INFRASTRUCTURE SERVER IN THE WORLD*



Great for: Power-house building block for HPC applications, video rendering, virtualization, and EDA workloads demanding large core count, high memory density, and massive I/O expansion

- Up to 2 server nodes in 2U
- 4S AMD Opteron 6000 series (Std./HE/SE) series CPUs (65-105W processors)
- AMD 5670 chipset
- 32 x DDR3 RDIMMs
- 24 x 2.5" or 12 x 3.5" HDD
- 2 x GbE Intel 82576 Kawela
- 3 x16 GenII (low-profile, half height/half-length)
- Micro SD for Embedded Hypervisor
- 1 x8 Gen II (custom mezzanine slot)
- Dedicated x16 HIC Card
- IPMI 2.0 management
- iKVM, DCMI, PXE support
- Hot-swap server nodes & HDD
- Redundant 1100W power supplies std.
- 1400W option



Why PowerEdge C Microservers?

High Compute Density

- Up to 12 independent 1-socket server nodes in a 3U chassis
- Higher density than comparable blade-based products

Shared Infrastructure

- Shared power means more efficient power utilization
- Shared cooling for a lower cost to cool

Highly Serviceable

- Power supplies, interconnect, and servers are all cold-aisle accessible
- Hot-swap server nodes for increased availability

SHARED INFRASTRUCTURE CHASSIS FOR MAXIMUM EFFICIENCY AND DENSITY



- **4x the density** of traditional 1U servers
- **75% less to cool** than traditional 1U servers
- **150% more dense** than half height blades
- **Shared infrastructure** consumes less floor space, power and cooling
- **92% efficient** hot-plug redundant power supplies



PowerEdge C5220

Density, performance and efficiency in a low cost package

CLOUD AND HOSTING OPTIMIZED, SHARED INFRASTRUCTURE SERVER



Great for: Hyperscale-inspired building block for dedicated hosting, Web 2.0 environments, and cloud builders where power/density is key

- Up to 8 or 12 server nodes in 3U
- 1 x Intel Xeon E3-1200 Series CPU
- 4 x DDR3 UDIMMS ECC
- 2 x 3.5" or 4 x 2.5" HDDs
- 2 x Intel 1GbE 82580DB Ports
- 1 x8 Mezz options with 8-sled
- Integrated SDHC Card Reader
- N+1 1400W power supplies
- IPMI 2.0 Management
- iKVM and PXE Support
- Individually Serviceable Nodes
- All Cold-Aisle Serviceable
- Shared Power and Cooling Infrastructure
- [Intel® Intelligent Power Node Manager](#)



PowerEdge C5125

Density, performance and efficiency in a low cost package

DEDICATED HOSTING OPTIMIZED, SHARED INFRASTRUCTURE SERVER



Great for: Hyperscale-inspired building block for dedicated hosting and Web 2.0 environments, where power/density/dollar is key

- Up to 12 server nodes in 3U
- 1 x AMD AM3 CPU (Athlon II, Phenom II)
- 4 x DDR3 UDIMMS ECC
- 2 x 3.5" or 4 x 2.5" HDDs
- 2 x Intel 1GbE 82576EB Ports
- N+1 1400W power supplies
- IPMI 2.0 Management
- iKVM and PXE Support
- Individually Serviceable Nodes
- All Cold-Aisle Serviceable
- Shared Power and Cooling Infrastructure



Why PowerEdge C410x?

See Results Faster

- 21 TFLOPs of computing throughput in single precision performance per server
- Configs up to 16 GPUs so you can set the right ratio to maximize application performance

Mix and Match Flexibility

- Enables 1-8 servers to attach to up to 16 PCIe devices
- PCIe devices can include GPUs, IB cards and more

Highly Serviceable

- The only PCIe expansion chassis to provide up to 3x the uptime as competing chassis
- Hot-add serviceable GPUs
- Hot-plug redundant power supplies and fans

**PCI e EXPANSION CHASSIS
CONNECTS 1-8 HOSTS TO 1-16PCIe**



Save

- 25% more density
- 31% less weight
- 11% less the cost of additional switches, racks and energy over the NVIDIA S2050



PowerEdge C410x PCIe Expansion Chassis

Maximizing space, weight, energy and cost efficiency, with unprecedented flexibility

PCIe EXPANSION CHASSIS CONNECTING 1-8 HOSTS TO 1-16 PCIe



Great for: HPC including universities, oil & gas, biomed research, design, simulation, mapping, visualization, rendering, and gaming

- 3U chassis, 19" wide, 143 pounds
- PCI express modules: 10 front, 6 rear
- PCI form factors: HH/HL and FH/HL
- Up to 225W per module
- PCIe inputs: 8PCIe x16 IPASS ports
- PCI fan out options: x16 to 1 slot, x16 to 2 slot, x16 to 3 slot, x16 to 4 slot
- GPUs supported: NVIDIA M2050, M2070, M2070Q, M2075, M2090
- Thermals: high-efficiency 92mm fans; N + 1 fan redundancy
- Management: On-board BMC; IPMI 2.0; dedicated management port
- Power supplies: 4 x 1400W hot-plug, high efficiency PSUs; N+1 power redundancy
- Services vary by region: IT Consulting, Server and Storage Deployment, Rack Integration (US only), Support Services



PowerEdge C6220 Server

Ultimate Compute Performance in a dense 4-in-2U package

ULTIMATE PERFORMANCE SHARED INFRASTRUCTURE SERVER



Great for: Dense compute in HPC, Web 2.0, cloud and data analytics

Max performance with E5-2600

- 82% performance increase with SpecFP
- Up to 135W support
- Double the I/O bandwidth with PCI Express Gen3

Shared Infrastructure for ultimate energy efficiency

- Chassis saves 100W over previous generation
- Validation at ambient temperatures above 35C

More configuration flexibility

- 2-node options for more I/O and storage
- Mixed sled configurations
- Flexible HDD assignment



PowerEdge C6220 Server

Ultimate Compute Performance in a dense 4-in-2U package

ULTIMATE PERFORMANCE FOCUSED SHARED INFRASTRUCTURE SERVER

Great for: Hyperscale-inspired building block for high-performance cluster computing (HPCC), Web 2.0, and data analytics environments where performance is key

C6220 Feature	Detail
Processor/socket	Intel Xeon E5-2600
Chassis/compute	2U / 4xCPU (32 cores) Streamlined C6000 series shared infrastructure chassis for increased efficiency 4-node or 2-node versions available
Memory	16 x DIMMs @ 1600MHz, up to 512GB/node, 2+TB/chassis
I/O	4-node: 1 x PCIe x16 Gen3 + 1 x PCIe x8 Gen3 (mezzanine) 2-node: 2 x PCIe x16 Gen3 + 1 x PCIe x8 Gen3 (mezzanine)
Storage	Up to 24 x 2.5-in. or 12 x 3.5-in. hot-swap HDDs With flexible node assignment
Management	Embedded BMC with IPMI 2.0 support with 1 x 10/100 Mbps RJ45 connector, Intel Node Manager 2.0 compliant
RAS	Hot-plug server nodes and HDDs, and platinum-efficiency PSUs
GPU support	Full x16 external support, including for C410x PCIe expansion chassis



Dell HPC Storage

Simplified
Reliable
Cost Effective



PowerVault MD Family



MD 3200 / 3220



MD 32X0i / 3220i



MD 3600i / 3620i



MD 3600f / 3620f

6Gb SAS

- Great for virtual environment using simple shared DAS
- Integrated rack solutions
- Single room data centers / Small server consolidation
- High processing power with no tolerance for latency

1Gb iSCSI

- Low cost IP SAN
- Smaller departmental SAN use
- Tier 2 server consolidation with limited IO requirements
- Centralized backup of remote locations with host-based replication

10Gb iSCSI

- High performance IP SAN
- Helps to simplify infrastructures
- Existing iSCSI implementations
- New server deployments

8Gb FC

- High performance FC SAN
- Helps to simplify infrastructures
- Existing FC implementations
- New server deployments
- Remote data backup implementations with host-based replication

Virtualization, Cloud Computing, and Clustering

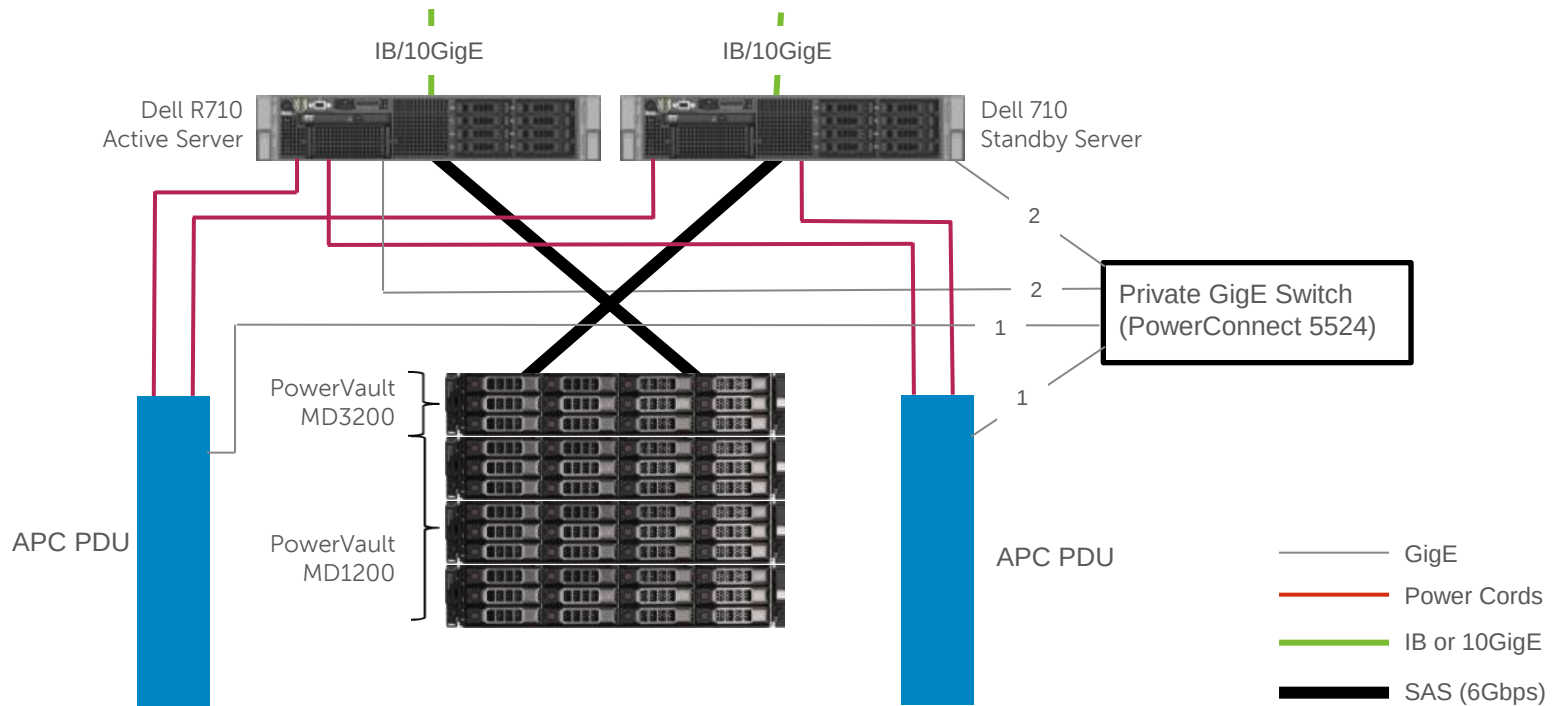


The Dell HPC NFS Storage Solution

- **Takes the guesswork out of NFS configurations**
 - Appliance approach to inexpensive NFS solutions
- **Range of capacity:**
 - 2TB – 96TB in a single namespace
- **Good performance**
 - 60 MB/s to 1.45 GB/s from NFS Gateway
 - 6Gbps SAS, optional IB or 10GigE
 - Tuned storage and file system configurations
- **Cost Effective**
 - Configurations from \$0.72/GB *on down*
- **Easy to install**
 - Dell configuration and deployment
- **NFS Gateway**
 - Dell PowerEdge™ R710
 - › Extreme reliability, cost effectiveness, expandability
- **Storage**
 - Dell Powervault™ MD1200
 - › Great performance (6 Gbps SAS), reliability, and \$/GB

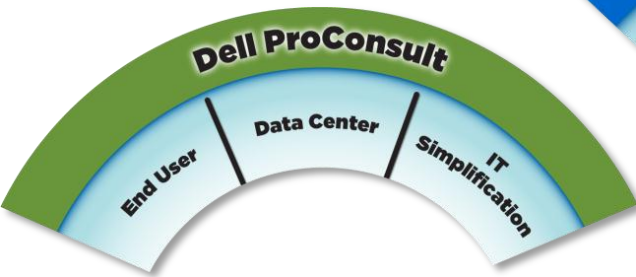


NSS-High Availability (NSS-HA) Architecture



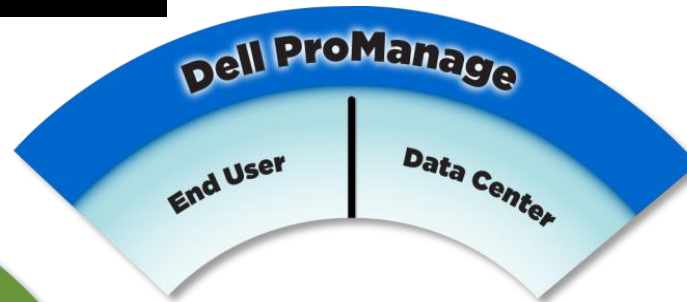
- Two PowerEdge R710s configured in active/stand-by serving a single file system
- HA requires the ability to shut-down a misbehaving server
 - Private network for heartbeat and control (including power control)
 - Plug power into controllable PDU's
 - Enterprise iDRAC is the primary fencing device used to control misbehaving server
 - APC PDU is the secondary fencing device
- HA software shuts down server and cuts power to it

HPC SERVICES PORTFOLIO



ProConsult

- Workshop
- Assessment
- Design
- Implementation



ProManage

- Custom Factory Integration
- Rack Integration
- Onsite Deployment
- Migration



ProSupport

- HPC Expert Center
- Enterprise Command Center
- OS and firmware support
- Complex issue resolution
- Configuration assistance
- Third-party collaboration and support
- Case management
- Specialized Onsite Services
 - Parts Locker



Open Research Solutions Require Partners

panasas



intel

Microsoft

redhat.

DataDirect
NETWORKS

DELL

{ Platform
Computing

Mellanox
TECHNOLOGIES

QLOGIC

AMD
The future is fusion

Altair

nVIDIA.

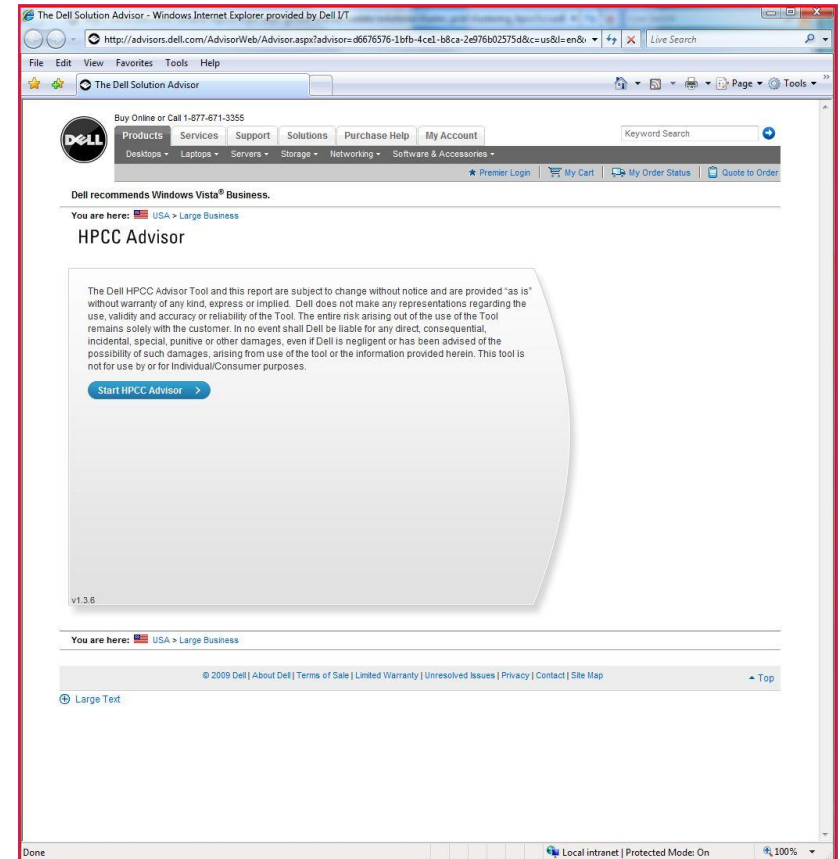


Dell HPC Resources



HPC Solution Advisor:

- Online Configuration Tool
- Gathers user requirements
 - OS type
 - Optimize for performance, power or density
 - Desired sustained or theoretical performance
- Baseline BOM for Dell Solutions
 - *Great sizing resource*



<http://dell.com/hpc>



To Learn More

- Dell NFS Storage Solution (NSS)
 - [NSS webpage](#)
 - [Dell HPC NFS Storage Solution Guide](#)
 - [Dell HPC NFS Storage Solution Guide – High Availability Configurations](#)
 - [Dell HPC NFS Storage Solution – Extra Large Configuration](#)
 - [Dell NFS Storage Solution Deployment Service description brochure](#)
 - [Dell NFS Storage Solution – High Availability Configurations Deployment Service description brochure](#)

www.dell.com/hpc

www.dellhpc solutions.com

www.hpcatdell.com



Q & A





The power to do more