

Redefining the Economics of Enterprise Storage

Name

Title



#DellST14



We believe that redefining the economics of Enterprise Storage helps businesses to grow and thrive

Customers will have access to technology solutions that work harder for them

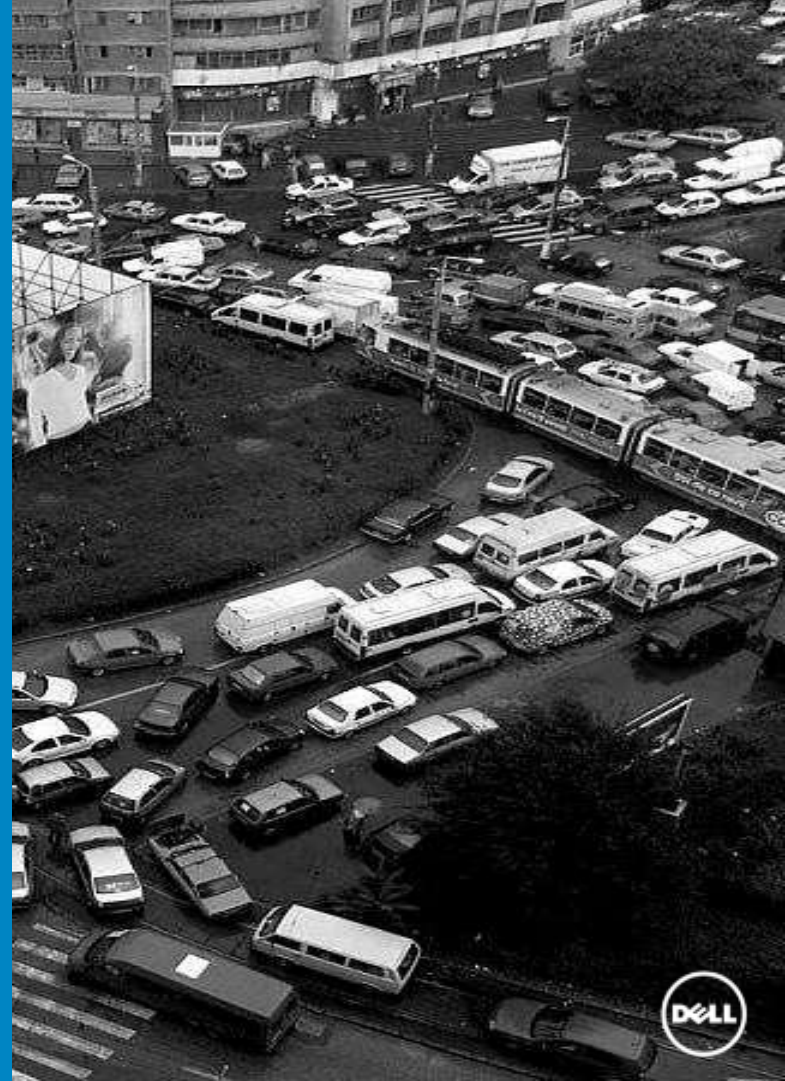
Complex and costly legacy

1. Fixed and predictable Storage array upgrade & migration cycles
2. Software re-licensing required with each upgrade or usage change
3. Data rigidly coupled to hardware
4. Capacity overprovisioning required to meet SLA's
5. Storage not part and optimized for a broader datacenter/cloud ecosystem



Storage Industry Trends

1. Budget constraints continue
2. Growth in unstructured data
3. Technology dramatically changing traditional storage architectures
4. Seeking to build upon virtualization for incremental efficiency
5. Need to leverage data to make better business decisions

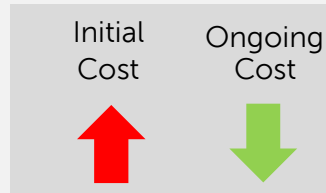


Economic control

Operational Efficiency

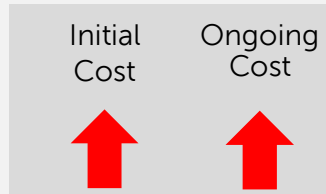
The new proprietaries

Expensive solutions where operational savings are consumed by high costs with a lock-in penalty



Legacy systems

Complex and costly monolithic systems that lock in and don't scale



Redefined economics

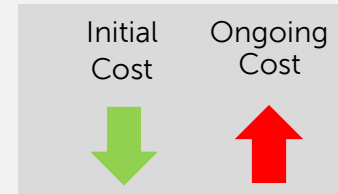


Open systems and solutions that are delivering superior value with clear customer benefits



Commodity systems and services

Low-cost commodity components with no solutions value-add



Performance/Value



Customer benefits

A

Acquire, deploy, and grow Storage on demand

B

Adapt seamlessly to changing business needs

C

Intelligently manage data assuring business continuity

Delivering superior value

Dell Storage strategy

1

Harness **state-of-the-art** technologies to deliver **innovative, simple** and **affordable** solutions

2

Deliver **workload-driven** architectures that are **flexible** and **modular**

3

Accelerate **software** and **service** integration

Redefining the economics of Enterprise storage





Our strategy in action

-

Flash for the price of disk

Redefining the Economics of
Enterprise Storage

Dell Solutions Tour 2014

- **56% lower cost on disk**
- **90% latency reduction**
- **75% lower cost versus the competition**

- Dell moves hot data to Flash with industry's first MLC/SLC intelligent tiering

- It improves performance for data-intensive applications and OLTP workloads

- It gives you the best performance at lowest cost



Businesses seek new ways to enhance datacenter efficiency

Evolutionary

Revolutionary

Server-side storage

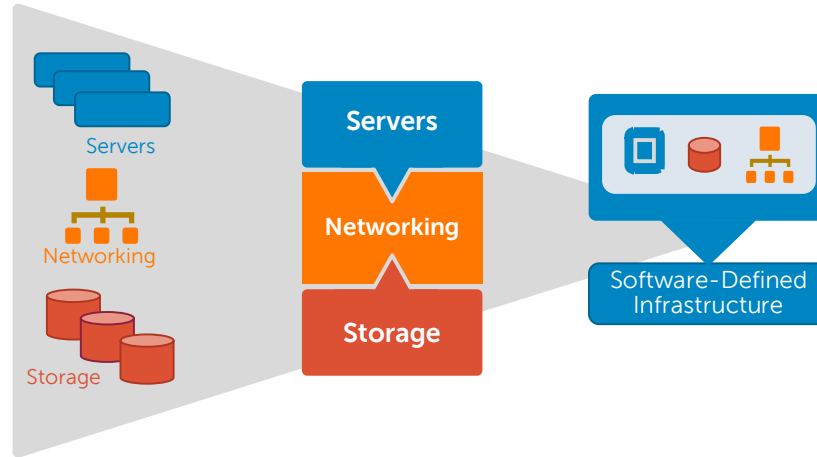
External SANs

Virtualized Storage

Physical Appliances

Virtual Appliances

Converged Solutions



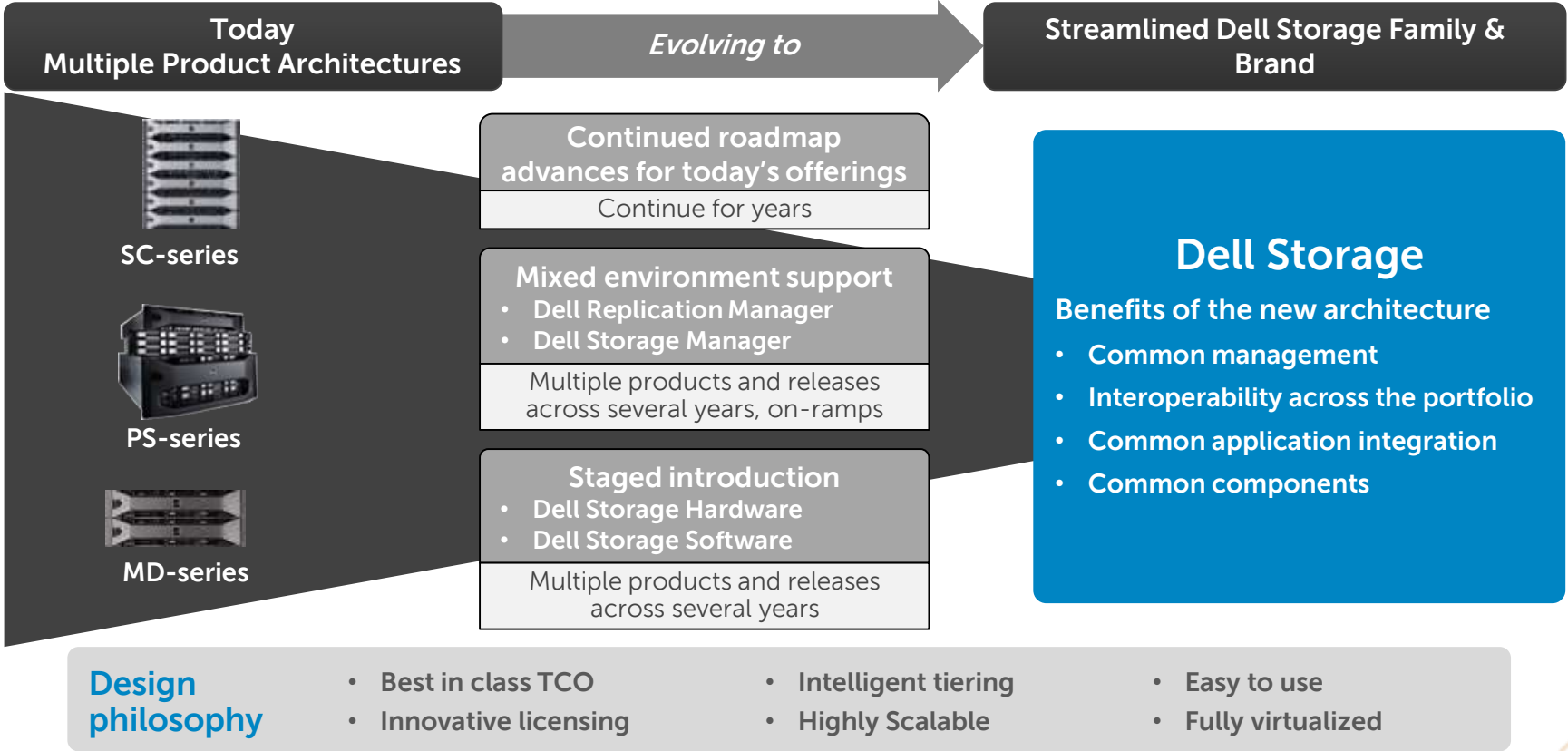
Hyper Converged

Scalable solutions for private cloud and XaaS

Software-only solutions

There is no one-size-fits-all solution and Dell has you covered both ways

Continuing to Redefine the Economics of Enterprise Storage



Introducing the Dell Storage SC4020



All-in-one solution

Dual controllers, plus 24 drive slots in 2U

Up to **72%** lower cost
than competing arrays for pure
flash solutions*

Extends the advantages of enterprise storage to small and mid-sized deployments

Enterprise Performance

- Optimized for 100% FLASH or hybrid SSD/HDD configurations

Best-in-Class Intelligence

- Advanced levels of automation and control, auto-tunes your datacenter

Unprecedented Value

- Compact footprint ideal for SME standalone or ROBO deployment. Highly efficient multi-protocol solution

the must talk about topic....

Software Defined Storage (SDS) is newest CIO agenda topic.

It is related to Software defined Networking and Software defined Datacenter.

There is a need for:

- Understanding - education
- Business benefits - value proposition
- Seeing opportunities - positioning
- Minimizing risks - services





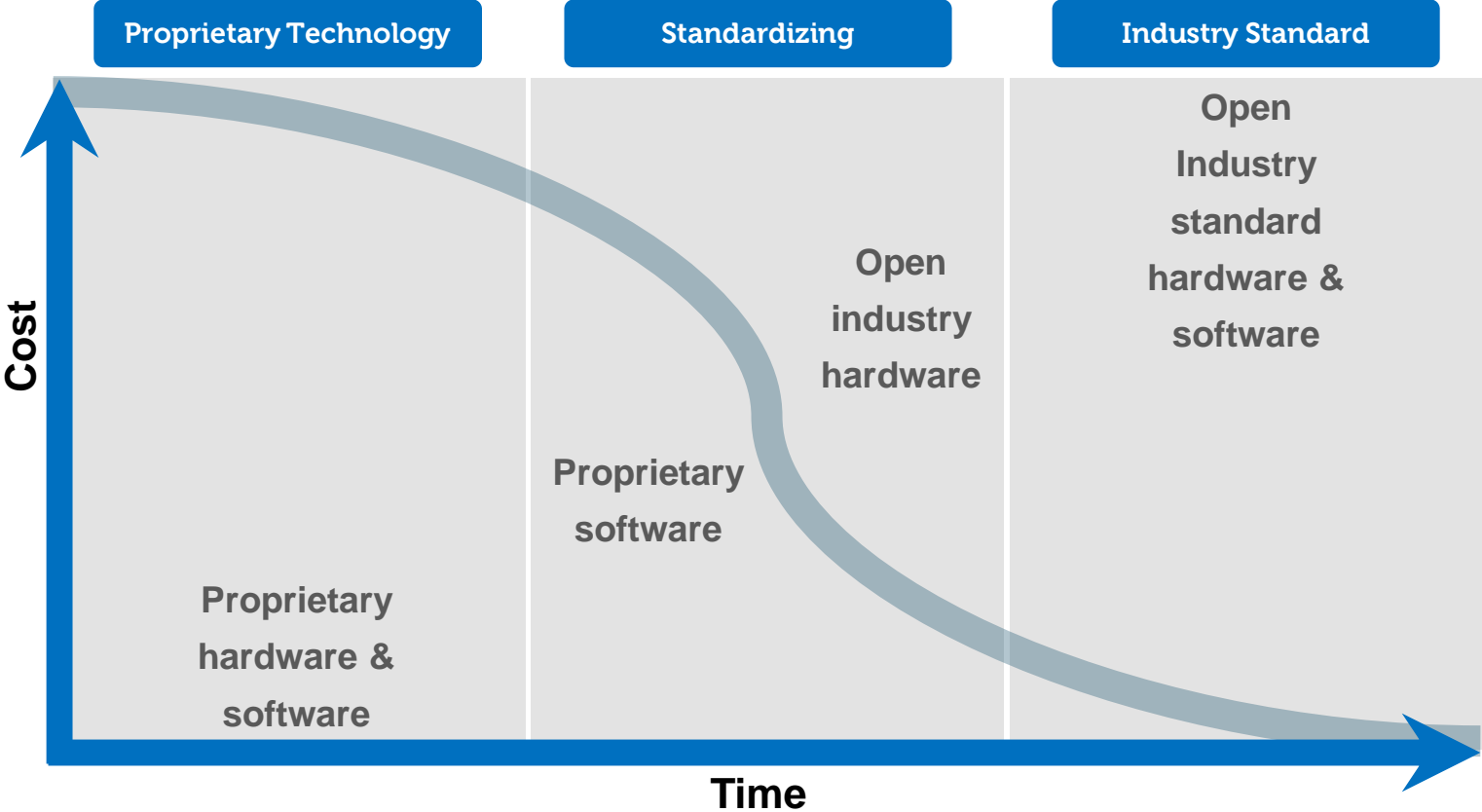
Software defined not that well defined....

“To help clarify the market and reduce confusion, IDC has put a stake in the ground by clearly defining software-based storage and developing the industry's first comprehensive taxonomy supporting this definition. “

IDC Press Release, April 15, 2013
“IDC Brings Clarity to Software-Based/Software-Defined Storage Markets”

<http://www.idc.com/getdoc.jsp?containerId=prUS24068713>

What is happening?



Right data, right place, right time, right cost

Standardisation

Affordable Storage



Dell MD-Series

MD3-Series of dense arrays are highly reliable with versatile scalability that help customers significantly increase storage capacity without enlarging data center's footprint.

Hardware abstraction

Storage Virtualization



Dell PS-Series

PS-Series is fundamentally changing the way enterprises think about purchasing and managing storage. Built on an advanced, peer storage architecture, PS simplifies the deployment and administration of consolidated storage environments

Multi purpose hardware and software

Intelligent Data Placement



Dell SC-Series

SC-series of automated intelligence manages a virtualized, scalable pool of disks for block and file to maximize performance to lower Total Cost of Ownership. Performance and capacity requirements through automated intelligent data placement, keeping hot data on high performance drives and cold data on large capacity optimization

Software Defined Storage

Storage Virtualization



Dell SDS-offerings

Software-defined storage separates storage hardware from the software that manages the storage infrastructure. The software enabling a software-defined storage environment provides policy management for feature options such as deduplication, replication, thin provisioning, snapshots and backup



Dell Software Defined Storage offerings

Software Defined Storage

Storage Spaces



OpenStorage



Virtual SAN



Storage Server



Unified & Distributed



Big Data



Object Storage



OpenStack



Web-Scale
Converged



Dell XC Series Web-Scale Converged Appliances



Converged
storage and
compute



Highly distributed,
shared nothing
software



High
performance
x86 hardware



Massive and linear
scale-out
architecture

Solutions details

- Dell PowerEdge servers with Nutanix Software
- Bundles for multiple virtualized workload types
- Dell Installation & Implementation
- ProSupport w/ Collaborative Nutanix Support

Target Markets

- Simple, scalable & high performance for VDI
- Departmental virtualization
- Multi-hypervisor environments and migrations

Customers should
not worry about
building the ship,
but about sailing
to the right
destination



Redefining the economics of Enterprise Storage





Let's get
started



#DellST14

Meet with Dell subject matter experts at the
Solutions Showcase

Complete your Solutions Showcase evaluations

Schedule a post-event Whiteboard Session to
address your specific requirements. Contact your
account team for details.

Visit

www.Dell.com/PowerEdge
www.Dell.com/Storage
www.Dell.com/Networking
www.Dell.com/optimize



Thank You

Maake Asante Shukria Dhanyavadagalu
Manana Dankon
Maaururu Biyan
Grazas
You
Kia Ora
Merci

Arigato Gracías Mochchakkeram
Grazie Tingki
Tack Taiku
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谢谢
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