# Software Defined Storage POV

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# Software-defined storage is an emerging paradigm

- a technology that decouples the basic elements of a storage system

## Multiple Architectures

- HyperConverged/ CompuStorage
- Physical Appliance
- Software-only
- Virtual Appliance

## Customer expectations

- Data Services - Management, Automation and Orchestration
- Flexibility
- Cost
- Scalability
- Reliability

# Businesses seek new ways to enhance datacenter efficiency

## Evolutionary approach

- Server-side storage
- External SANs
- Virtualized Storage
- Physical Appliances
- Virtual Appliances
- Converged Solutions

### Customer Values

+ Investment protection
+ Mature technology
+ Pervasive IT skillset
+ Ease of deployment
+ Performance - dedicated processing
+ Capacity efficiency

## Revolutionary approach

### Customer Values

+ Deployment flexibility
+ Acquisition cost
+ Potential merger of IT admin opex
+ Scale-out scalability
+ Opensource
+ Compustorage simplicity
+ New service model

- Hyper Converged
- Scalable solutions for private cloud and XaaS
- Software-only solutions

Note: There are exceptions on both sides

**There is no one-size-fit-all solution**

# Software-defined, defined by you

## Broadest, most aggressive approach keeps your options open

1 Evolve your IT with enhanced flexibility and orchestration

2 Deploy web-scale converged appliances

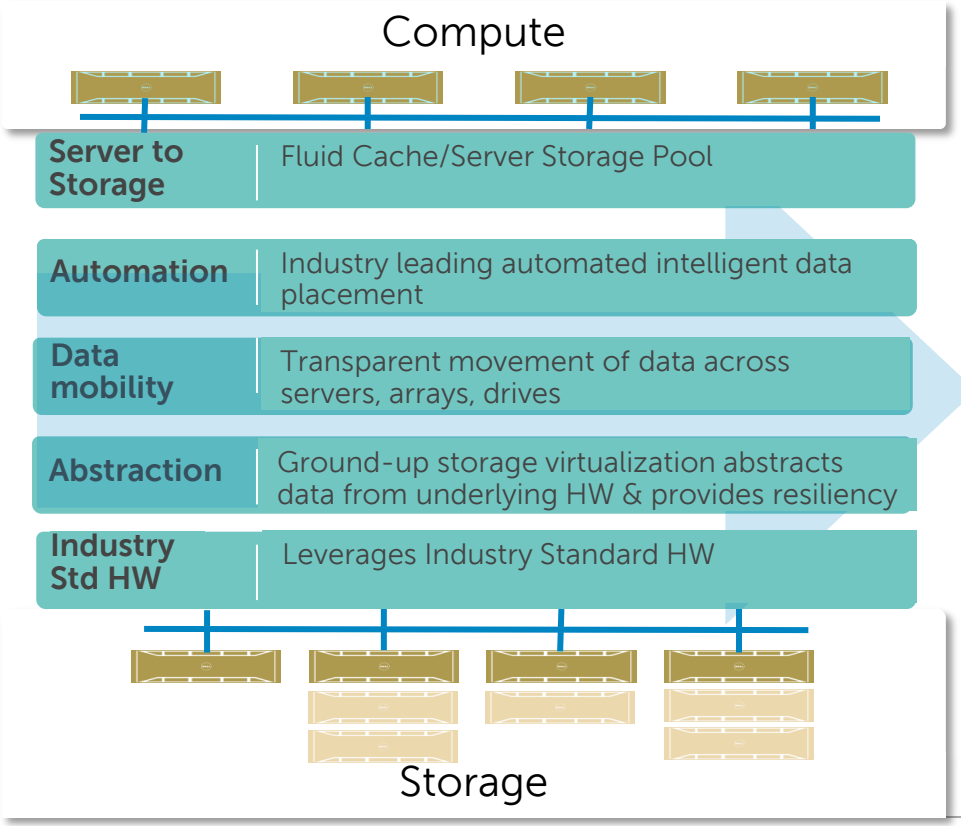
3 Deliver XaaS faster and more efficiently with hypervisor-integrated and open source solutions

**Your path**

**Our platform**

**Best computing platform • Modern, single storage stack • Industry-standards, open approach • Broadest partner ecosystem**

# Drive Dell's leadership in modern storage solutions




- **Next Generation Abstraction**
  - Software-Defined Abstraction for improved flexibility
- **Next Generation Orchestration**
  - Integration into orchestration frameworks (OpenStack, VMware, Microsoft, Dell ASM)
  - RESTful APIs
  - MultiTenancy and Quality of Service
- **Next Generation Data Mobility**
  - Federation- data movement across arrays

# Differentiated partner solutions

- Enterprise-class infrastructure
- Optimized hardware and monitoring
- Appliances and bundled solutions
- End to end solution architectures
- Global services and support

NUTANIX

Storage Spaces

nexenta

redhat

ceph

vmware VSAN

# Introducing 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

## Offer details

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

## Target Workloads

- Simple, scalable & high performance for VDI
- Mid-market virtualization for departmental/branch offices
- Multi-hypervisor environments and migrations

# Value Proposition of SDS varies by business objective

## Performance-intensive workloads

- Mission-critical

**Databases & ERP**
- Oracle
- SAP
- SQL Server

## Price-Performance workloads

- Business-critical

**Unified communications**
- Exchange, Lync
- File, print, web
- VMware, Citrix, Hyper-V

## Cost-optimized workloads

- Non-mission critical & hosting

**Backup/DR, Content & Hosting**
- Archive
- Hosting

**Evolutionary**

Investment protection
Mature technology
Pervasive IT skillset
Ease of deployment
Dedicated performance
Capacity efficiency

**Revolutionary**

Deployment flexibility
Acquisition cost
Scale-out scalability
Opensource
Compustorage simplicity
New service model

FluidCache

Dell Storage PS

Dell Storage SC

Dell Storage FS

NUTANIX

hadoop**

redhat ceph

Storage Spaces

nexenta

vmware VSAN

caringo

openstack**

** - End-to-end infrastructure stacks

# Questions