Dell Converged Solutions

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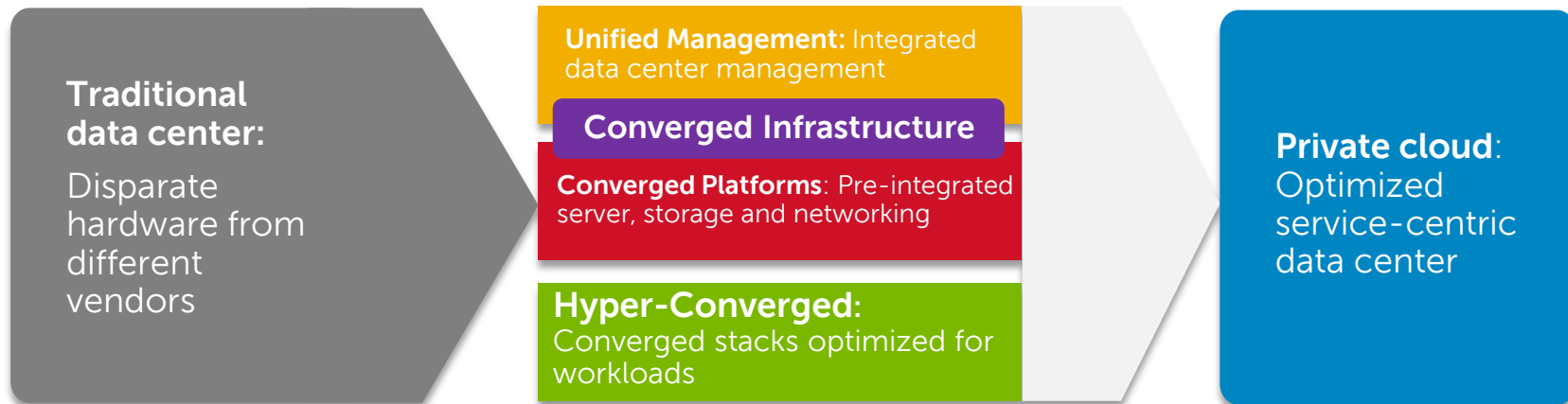
The drive toward convergence

Convergence and the path to modernization

- Datacenters are changing – Legacy IT is siloed and cannot deliver cloud-scale IT

- The move to Software Defined IT requires disruption of the traditional approach

- Modern workloads such as big data are breaking down barriers between IT silos

- IT users expect faster, cloud-like service from their datacenters

Traditional data center:

Disparate hardware from different vendors

Unified Management: Integrated data center management

Converged Infrastructure

Converged Platforms: Pre-integrated server, storage and networking

Hyper-Converged: Converged stacks optimized for workloads

Private cloud: Optimized service-centric data center

Customers tell us: Legacy IT in the modern era creates challenges

High costs of data center management	Not enough skilled staff	**Deploying workloads is time-consuming and difficult**
Difficult to ensure consistency	**Convergence** **can help**	**Workload deployment crosses multiple environments**
Rising complexity	Flexibility comes with price and performance compromise	**Lack of choice**

What is convergence?

Convergence:
The combination of two or more separate IT elements

Unified management

Cross platform management from a single console, enabling all infrastructure components to be managed though a single interface utilizing a common management and control framework

Converged infrastructure

A pre-integrated, certified system containing server hardware, disk storage systems, networking equipment and unified management software

Hyper-converged

A workload-optimized infrastructure system built on an architecture that tightly integrates compute, storage, networking and virtualization resources in a single box

No single converged solution solves everything for everyone

Wants

- Simplification via automation
- Performance
- Application optimization

Needs

- To reduce pain workload by workload
- Design guidance with flexibility
- Ability to customize and manage

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Wants

- Quick delivery
- Ease of scaling and management
- Faster deployment

Needs

- General-purpose infrastructure
- Low-risk prescriptive approach
- System simplicity and ease of support

The Dell Advantage

We don't believe in making your business needs fit our solutions...

ONE SIZE DOES NOT FIT ALL

...we provide a converged solution that is **tailored for your business**

Converge on your terms

Standards-based
No deliberate technology lock-in

Open approach
No intentionally closed ecosystems

Modular systems
No costly monolithic stacks

Flexible scaling
No forced constraints or rip-and-replace
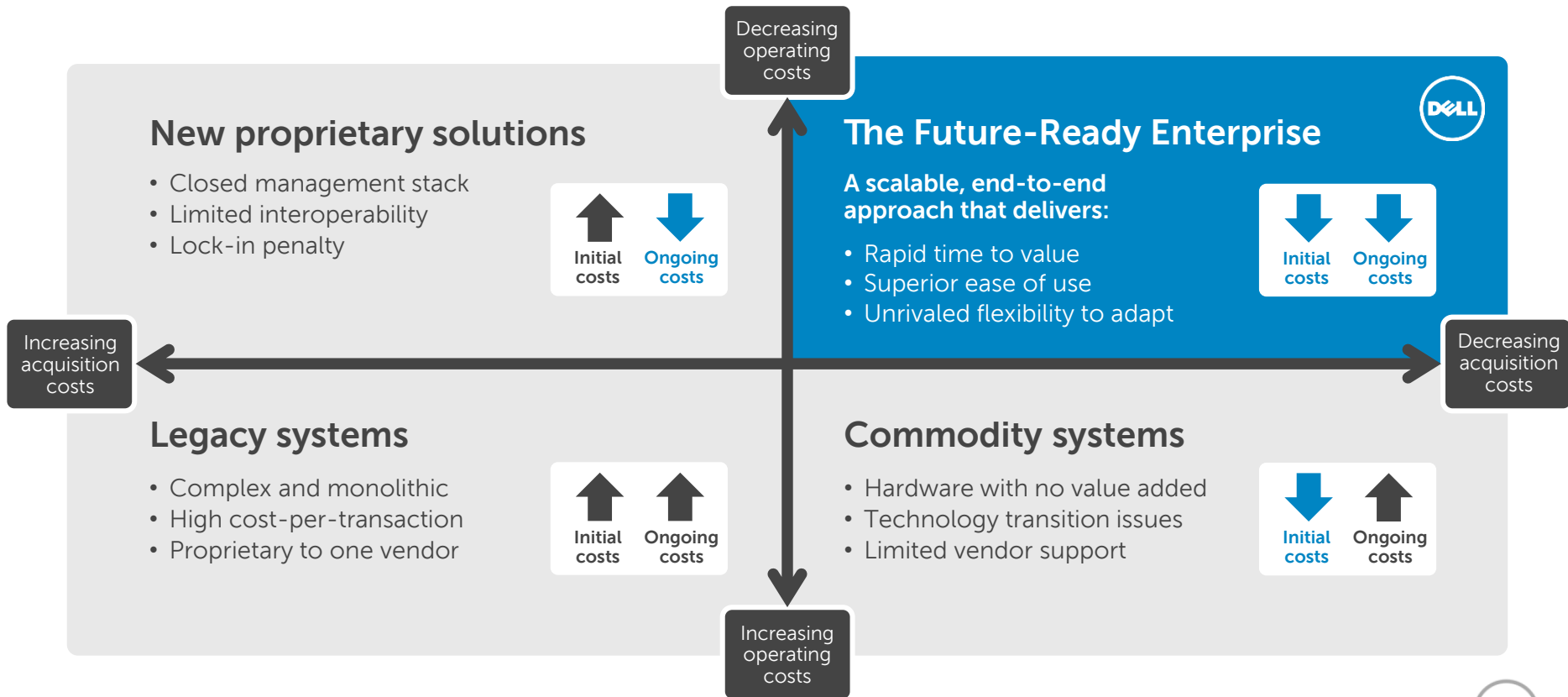
Modern portfolio
No vested interest in legacy systems

End-to-end solutions
No siloed viewpoint or hidden agenda

Dell is different

Our approach gives you better results

Decreasing operating costs

New proprietary solutions

- Closed management stack
- Limited interoperability
- Lock-in penalty

Initial costs ↑ **Ongoing costs** ↓

The Future-Ready Enterprise

A scalable, end-to-end approach that delivers:

- Rapid time to value
- Superior ease of use
- Unrivaled flexibility to adapt

Initial costs ↓ **Ongoing costs** ↓

Increasing acquisition costs ←

Decreasing acquisition costs →

Legacy systems

- Complex and monolithic
- High cost-per-transaction
- Proprietary to one vendor

Initial costs ↑ **Ongoing costs** ↑

Commodity systems

- Hardware with no value added
- Technology transition issues
- Limited vendor support

Initial costs ↓ **Ongoing costs** ↑

Increasing operating costs

Dell enables your Future-Ready Enterprise

Accelerate IT
with the **only**
converged solutions
tailored for your workloads
and **built for**
the software-defined era

What are your business needs?

Converged solutions

Unified management

Cross platform management from a single console, enabling all infrastructure components to be managed though a single interface utilizing a common management and control framework

Increases system flexibility and modularity without sacrificing performance

Converged infrastructure

A pre-integrated, certified system containing server hardware, disk storage systems, networking equipment and unified management software

Lowers total cost of ownership through simplification of systems management
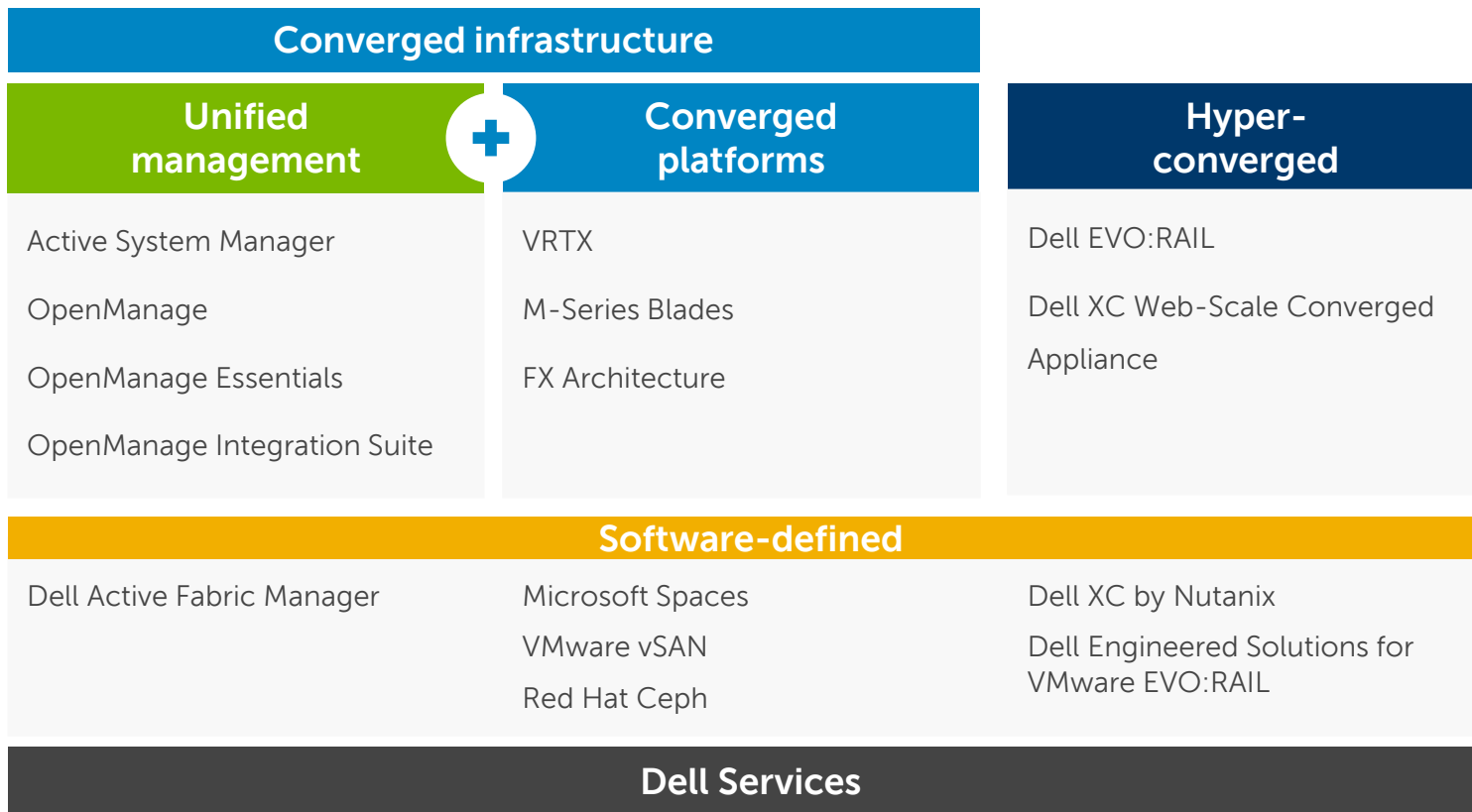
Hyper-converged

A workload-optimized infrastructure system built on an architecture that tightly integrates compute, storage, networking and virtualization resources in a single box

Speeds up and simplifies application deployment & time to value

Dell has a solution to fit your needs

Converged infrastructure		
Unified management **+**	**Converged platforms**	**Hyper-converged**
Active System Manager	VRTX	Dell EVO:RAIL
OpenManage	M-Series Blades	Dell XC Web-Scale Converged Appliance
OpenManage Essentials	FX Architecture	
OpenManage Integration Suite		

Software-defined		
Dell Active Fabric Manager	Microsoft Spaces	Dell XC by Nutanix
	VMware vSAN	Dell Engineered Solutions for VMware EVO:RAIL
	Red Hat Ceph	

Dell Services

Unified Management

Dell unified management solutions

Infrastructure Management consoles
OpenManage Essentials
OpenManage Mobile,
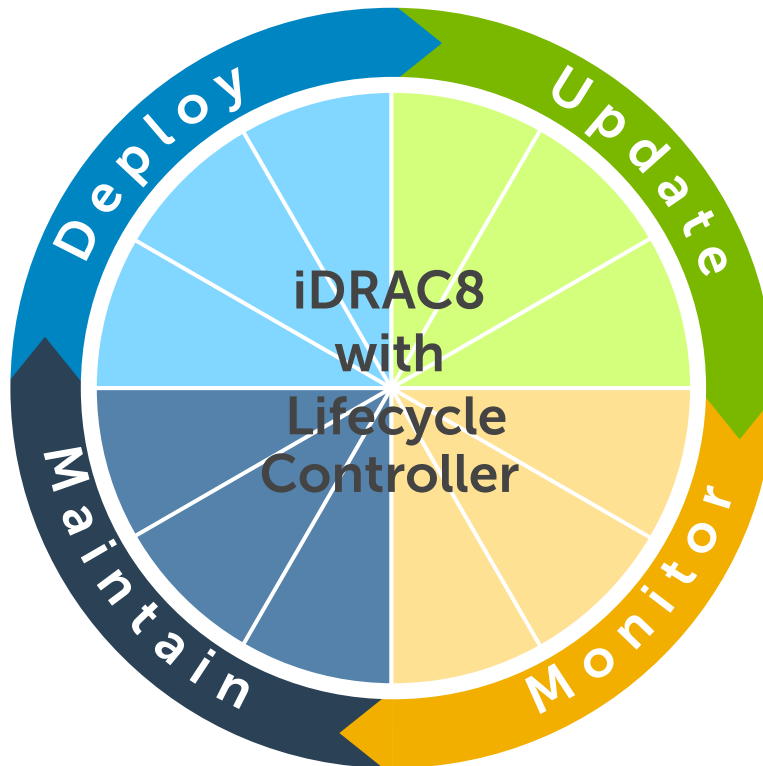Chassis Management
Controller,
Power Center

Advanced Management & Automation
Dell Active
System Manager

Tools and utilities
Repository Manager,
OpenManage Server
Administrator

Integrations for 3rd party consoles
Microsoft,
VMware,
BMC Software

Dell Services
Managed Services,
ProSupport Plus
Services with
SupportAssist

Connections for 3rd party consoles
CA, HP, IBM,
Oracle, Nagios

Deploy
Update
Maintain
Monitor

iDRAC8
with
Lifecycle
Controller

Converged Infrastructure

Converged infrastructure is the combination of:

Unified management

Converged platforms

Dell converged platforms: Innovative and diverse

PowerEdge VRTX

FX Architecture

M1000E Blades

Hyper-converged

Making web-scale simpler
Dell XC Series of Web-scale converged appliances

Dell PowerEdge Servers

+ **Powered by:**
NUTANIX®

Bringing simplicity, scale, and efficiency to enterprises through web-scale converged infrastructure

Web-scale

Converged compute and storage	All intelligence in software	Distributed everything	Self-healing system	Automation and Rich Analytics

Agility
Elasticity
Efficiency

Global Dell Service & Support

Pre-integrated, workload-specific configurations

Proven Dell 13th Generation high-performance x86 architecture

Dell Engineered Solutions for VMware EVO: RAIL

Engineered Solutions optimized for VMware EVO: RAIL
- Dell 2U/4 nodes of shared local storage
- Single support contact for hardware/software
- Value-added software, services and support

VMware EVO™: RAIL Software Bundle
- EVO: RAIL Rapid deployment, configuration, and management engine
- Compute, network & storage virtualization with vSphere & vSAN

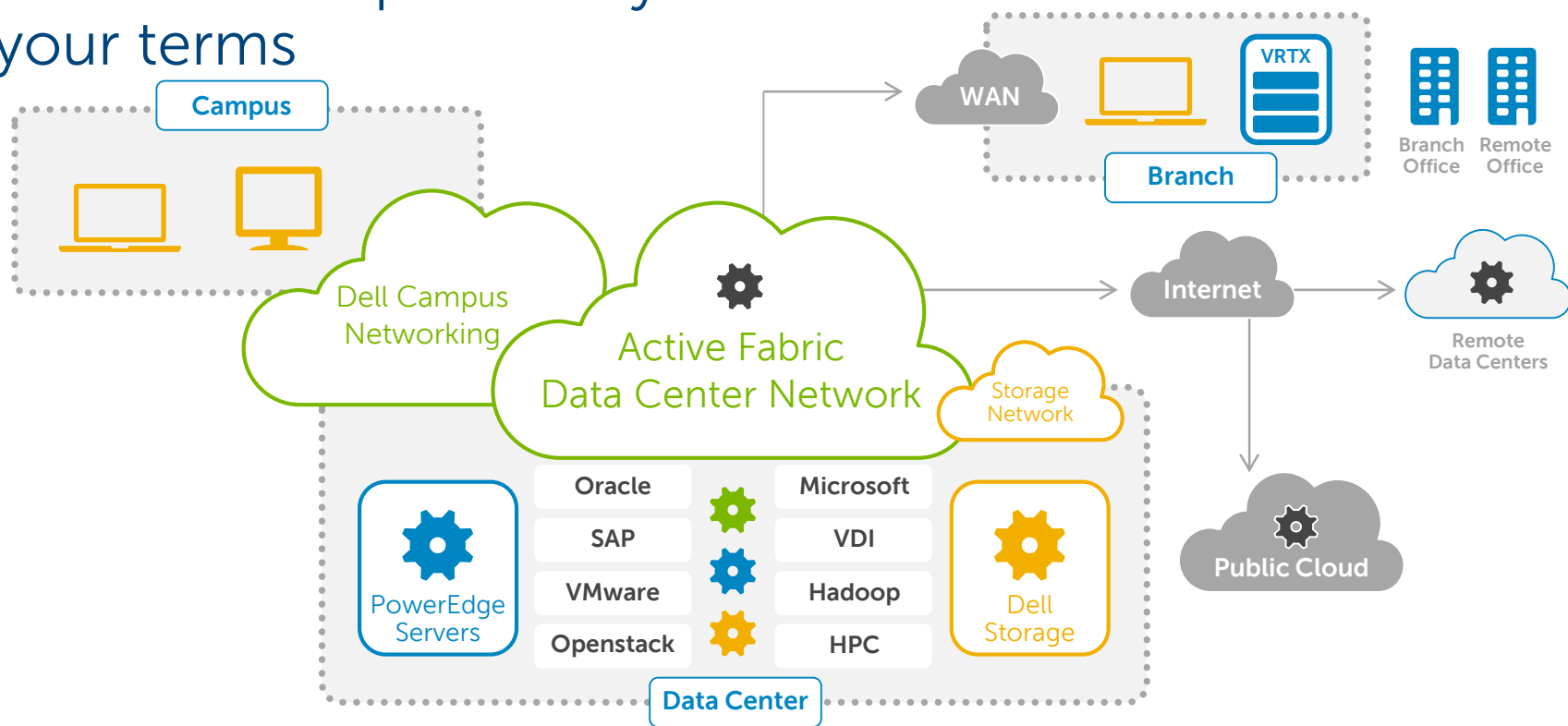**Virtual Infrastructure Edition**
Ideal for virtual infrastructure and general-purpose workload deployments

VMware Horizon Edition
Ideal for virtual desktop infrastructure (VDI deployments based on VMware Horizon)

End-to-end blueprints so you can transform on your terms

Campus

WAN

VRTX

Branch

Branch Office   Remote Office

Dell Campus Networking

Active Fabric Data Center Network

Storage Network

Internet

Remote Data Centers

PowerEdge Servers

Oracle	Microsoft
SAP	VDI
VMware	Hadoop
Openstack	HPC

Dell Storage

Public Cloud

Data Center

Unique, end-to-end solutions customized for you, to solve entire problems at any scale

Thank you