



Dell Technologies Partner Webinar Series 25-26: Modernized Data Center



Dell Technologies

Modernized Data Center

Compute
Core Storage
Unstructured Data
Networking
Data Protection

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DELLTechnologies



Dell Technologies Advantage



Modern Workplace

- World's smallest,¹ thinnest, most powerful commercial AI PCs²
- World's #1 monitors³
- Most manageable and secure commercial PCs⁴
- Leading in use of sustainable materials



Modern Data Center & Multi-cloud

- #1 servers⁵
- #1 external storage⁶
- #1 storage software⁷
- #1 Purpose-Built Backup Appliances⁸



Artificial Intelligence

- The world's broadest AI solutions⁹
- Open ecosystem that continues to grow with proven, validated solutions
- World's best management consulting firms – Forbes 2024



Security / Resilience

Industries most secure supply chain

Sustainability



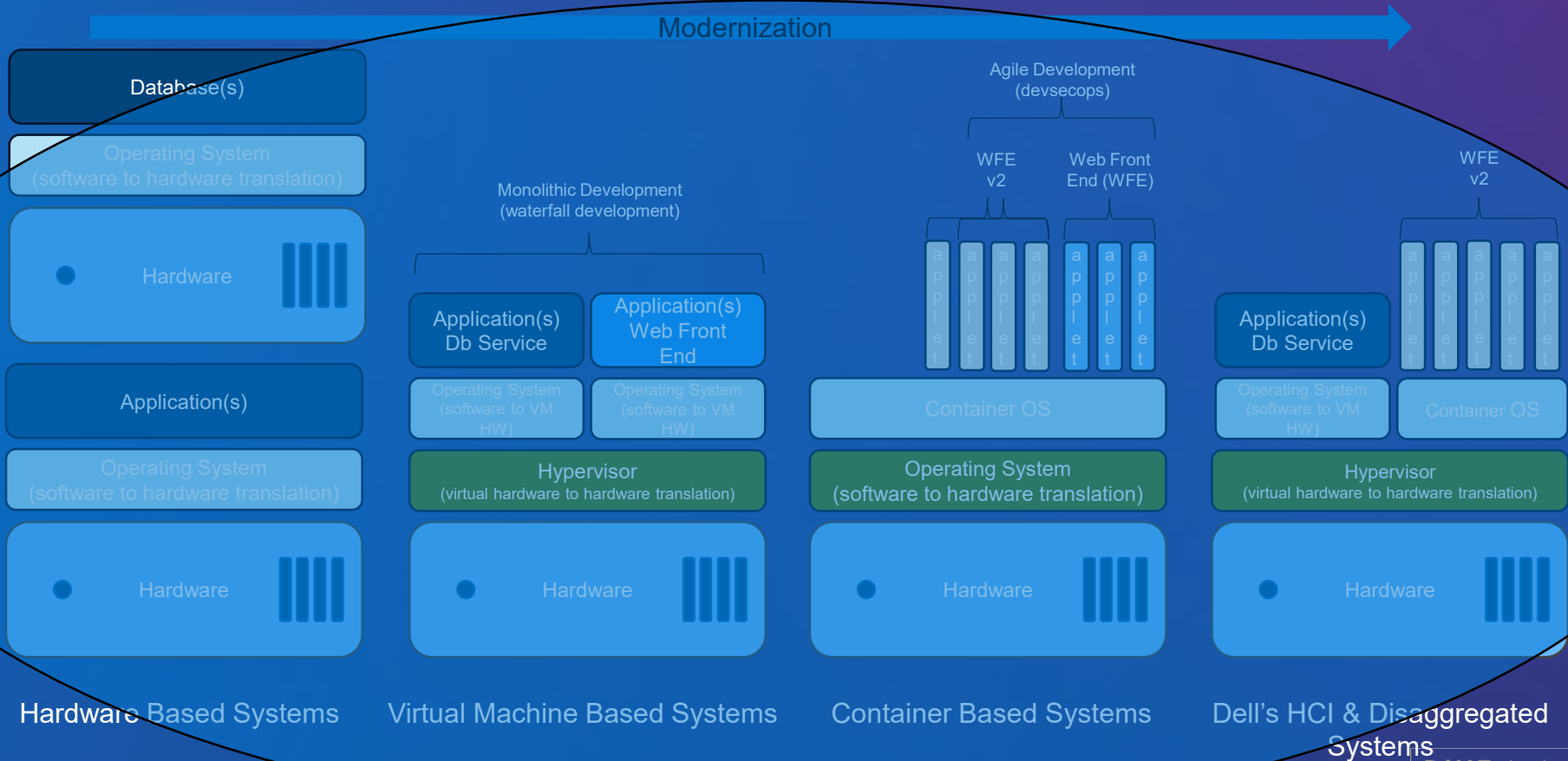
An industry leader in sustainable materials and packaging

EDGE

CORE

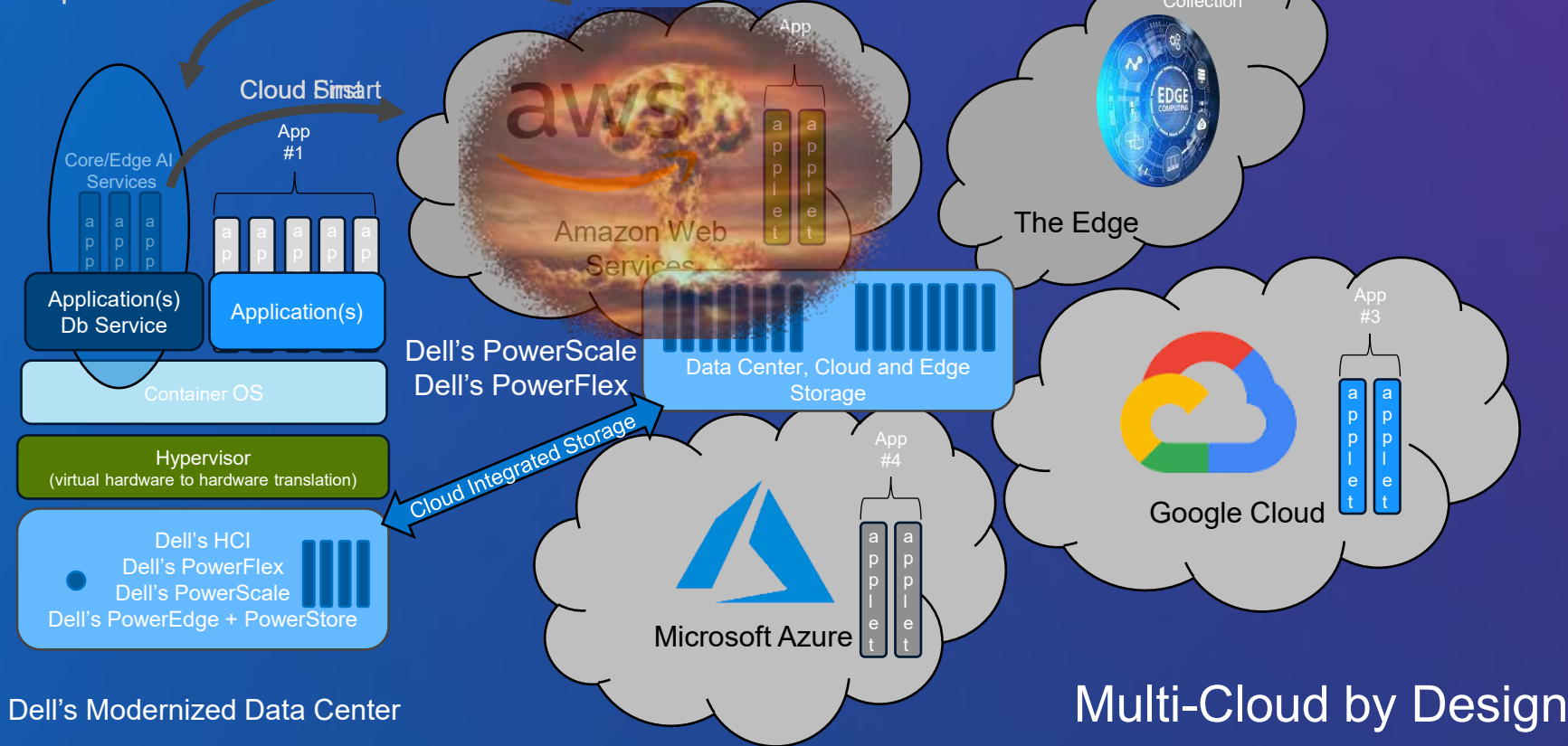
CLOUD

Information Systems – Physical to Virtual to Cloud



Cloud Native Applications (AI + Security + Compliance)

Re-patriotization



Overcoming the Challenges

COMPLEX

Hyperscalers don't typically advocate for multi-cloud

CHAOTIC

Repatriation is a reality if rising costs outweigh benefits

RISKY

Scattered data expands the attack surface

UNGOVERNABLE

Inability to meet compliance requirements

SLOW

Some critical apps not ideal for public cloud

Moving to **Multi-Cloud by default** creates

CHALLENGES

LIMITED

No vendor can be best at everything

SILOED

Public clouds are closed ecosystems

INCOMPATIBLE

Interoperability issues lead to lock-in

CUMBERSOME

Traditional models don't measure up to new expectations

UNPRODUCTIVE

Lengthy planning and overprovisioning

SUBOPTIMAL

On-premises vs. public cloud tradeoffs

COST INEFFICIENT

CAPEX rigidity or data gravity issues

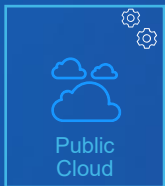
Dell's Vision – The Power of Choice: Deployment Models

All-In Public Cloud

When good enough works

STANDARD WORKLOADS

- Mobile applications
- Web / content hosting
- Analytics
- Software Development / DevOps



Application interdependencies across multicloud workload deployments, re-platforming costs, vendor lock-in risks

Multicloud

It's all about the workload



HEAVY WORKLOADS

- Traditional Workloads
- OLTP, DBMS, HPC
- Interdependent Workloads
- Repatriation Targets

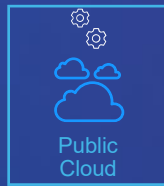


STANDARD WORKLOADS

- Mobile applications
- Web / content hosting
- Analytics
- Software Development / DevOps



Network



Control SLAs and control costs through dedicated – or sovereign - infrastructure. But application interdependencies, data egress, and network challenges drive risk

- Cost containment
- Performance, latency
- Security, compliance issues

Multicloud Sovereign-Adjacent

It's all about Interconnection & Locality



WORKLOAD OPTIMIZED

- Put the right workloads, in the right place, at the right time, without fear of crippling application interdependencies



SaaS
Providers
Partners
Suppliers

Solving for

- Performance, Latency
- Security, Compliance
- ...while reducing costs

SIMPLICITY

Take advantage of cloud experiences everywhere

CHOICE

Achieve better outcomes

CONSISTENCY

Simplify IT operations

FREEDOM

Avoid vendor lock-in

AGILITY

React quickly to capture new opportunities

ADAPTABILITY

Align technology with needs

FLEXIBILITY

Deploy resources in more ways

PREDICTABILITY

Pay-as-you-go transparency

Dell delivers multicloud by design

MODERN
CLOUD



MODERN
CONSUMPTION

CONTROL

Minimize risk and maximize performance on your terms

SECURITY

Protect against cyberattacks

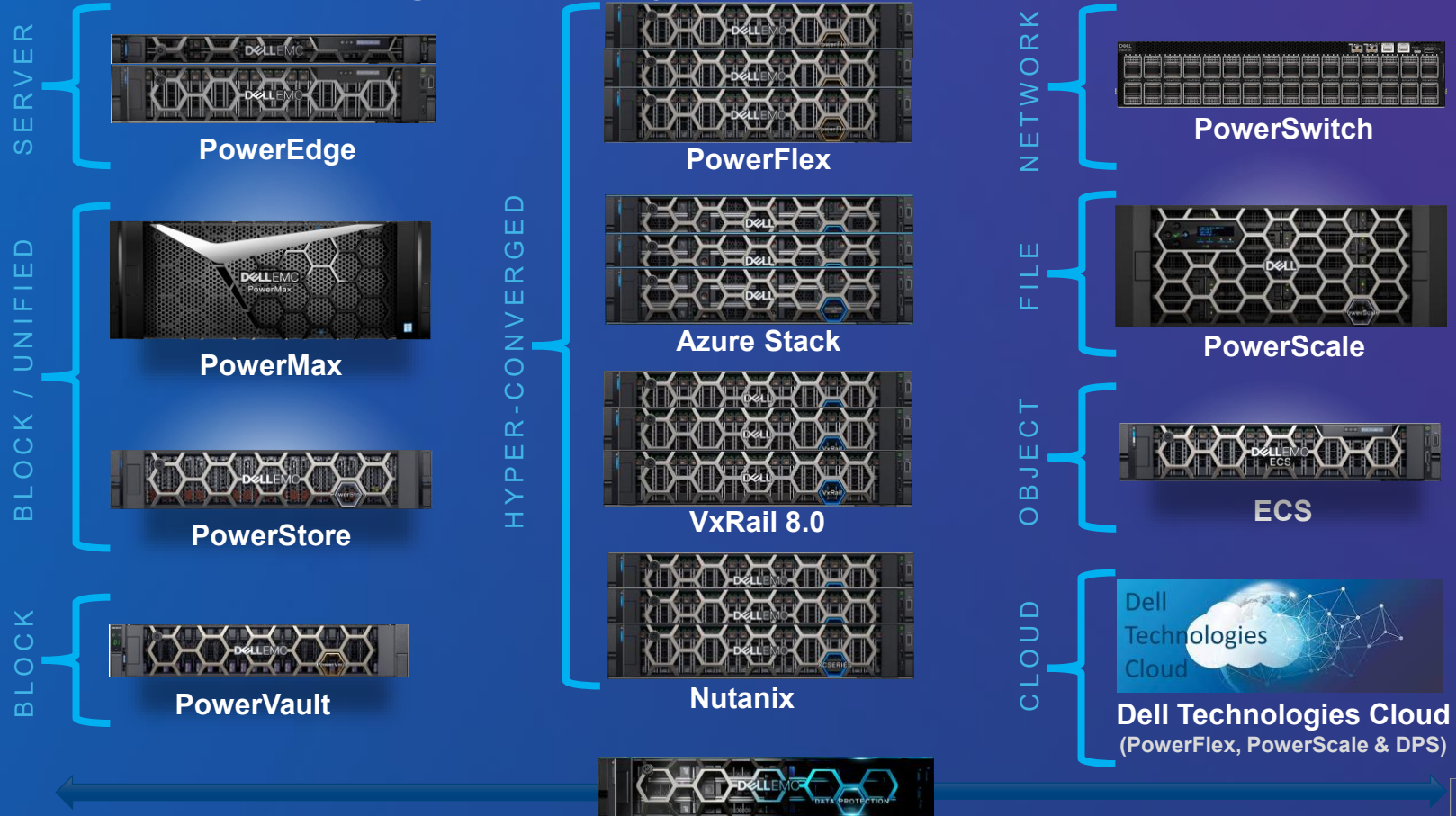
GOVERNANCE

Ease compliance obligations

PERFORMANCE

Achieve the speed you need

Dell Technologies – Hybrid Data Center Portfolio



PowerEdge Servers

Purpose-built | Intelligent | Cyber Resilient



**Purpose-
built**

**Scale AI, Edge &
Performance
Anywhere**



Intelligent

**Accomplish more
with Automation &
Improve Operational
Efficiencies**



**Cyber
Resilient**

**Accelerate Zero
Trust Adoption**

Dell PowerEdge 17th Generation - Purpose-built

XR-Series

Engineered for Extreme
Environments



R-Series

The Ultimate Data Center
Workhorse



XE-Series

AI Powerhouse for Extreme
Acceleration



T-Series

Enterprise-Class Computing,
Anywhere



PowerEdge R770 / R7725

Support for up to 28 Drives

- Up to 40 x EDSFF E3.S Gen5 NVMe
- Gen5 NVMe* & SAS4 support
- Rear Hot-Plug BOSS-N1 (2 x M.2 NVMe) for boot
- Next-gen hardware NVMe RAID

Support for high-speed and memory capacity

- Up to 32 DDR5 DIMMs
- Up to 6TB



2 Socket Capable

- Intel / AMD processors
- High-bandwidth memory CPUs

Support for GPU

- 2 x 450W (DW) or 6 x 75W (SW)

Flexible I/O

- Up to 8 x PCIe Slots
- Optional 2x OCP 3.0 slot

- Smart Cooling
- Designed for growing scale-out solutions and air-cooled support
- Industry-leading manageability and security

MAINSTREAM

Data Center (private cloud)

TARGET WORKLOADS



High Performance Scale-Out Databases

Architect for growth and scalability using high core count CPUs with the latest DDR5 memory technology, high-bandwidth networking and Gen5 based NVMe storage.



Next Level of Virtualization

6TB of memory combined with >192 cores of the latest generation Intel/AMD CPUs enables high-density virtualization in a 2S server..



AI Training

With the latest Gen5 PCIe enabled AMD GPUs and NVMe drives designed to offer the highest throughput on the largest datasets, customers benefit from reduced training cycles and faster AI deployments.

PowerEdge XE9780 / XE9785



8-way H100 SXM or
8-way B300 SXM



Intel / AMD
CPU



PCIe
Gen5



DDR5



NVMe
Gen5



8-way SXM GPU server that provides leading AI
performance in a dense air-cooled design

Purpose-built for the
most demanding AI –
ML/DL training, modeling
and simulation workloads

7U air-cooled design
chassis supports the highest
wattage next-gen
technologies in up to 35C
ambient

Massive flexibility with 8-
way B300 SXM or A100
SXM, 10 Gen5 x16 PCIe
slots, and up to 16 drives

AI / ML & HPC

Data Center
(private cloud)

TARGET WORKLOADS



High Performance Computing

Architect for growth and scalability
using high core count, 8x CPU
Capable, CPUs with the latest DDR5
memory technology, high-bandwidth
networking and Gen5 based NVMe
storage.



Accelerated AI Training

With the latest Gen5 PCIe enabled
NVIDIA GPUs and NVMe drives
designed to offer the highest
throughput on the largest datasets,
customers benefit from reduced
training cycles and faster AI
deployments.

Dell EMC PowerScale

The Leader in Scale-Out NAS for Unstructured Data



Simplicity at any scale

Add nodes in 60 seconds.
Auto-discover, auto-balance.
Migration-free design.



Any data anywhere

Flexible file and object access.
Software-defined architecture.
Extends to edge and cloud.



Intelligent insights

Intelligent software for all.
CloudIQ for infrastructure insights.
DataIQ for data insights.

PowerScale: Any data, anywhere

- Uniting the Core, the Cloud and the Edge



EDGE

Streaming data, real-time analytics



IoT, Surveillance, AI/ML workloads

CORE

Growth industries; GPU-powered



Healthcare, education, government, media

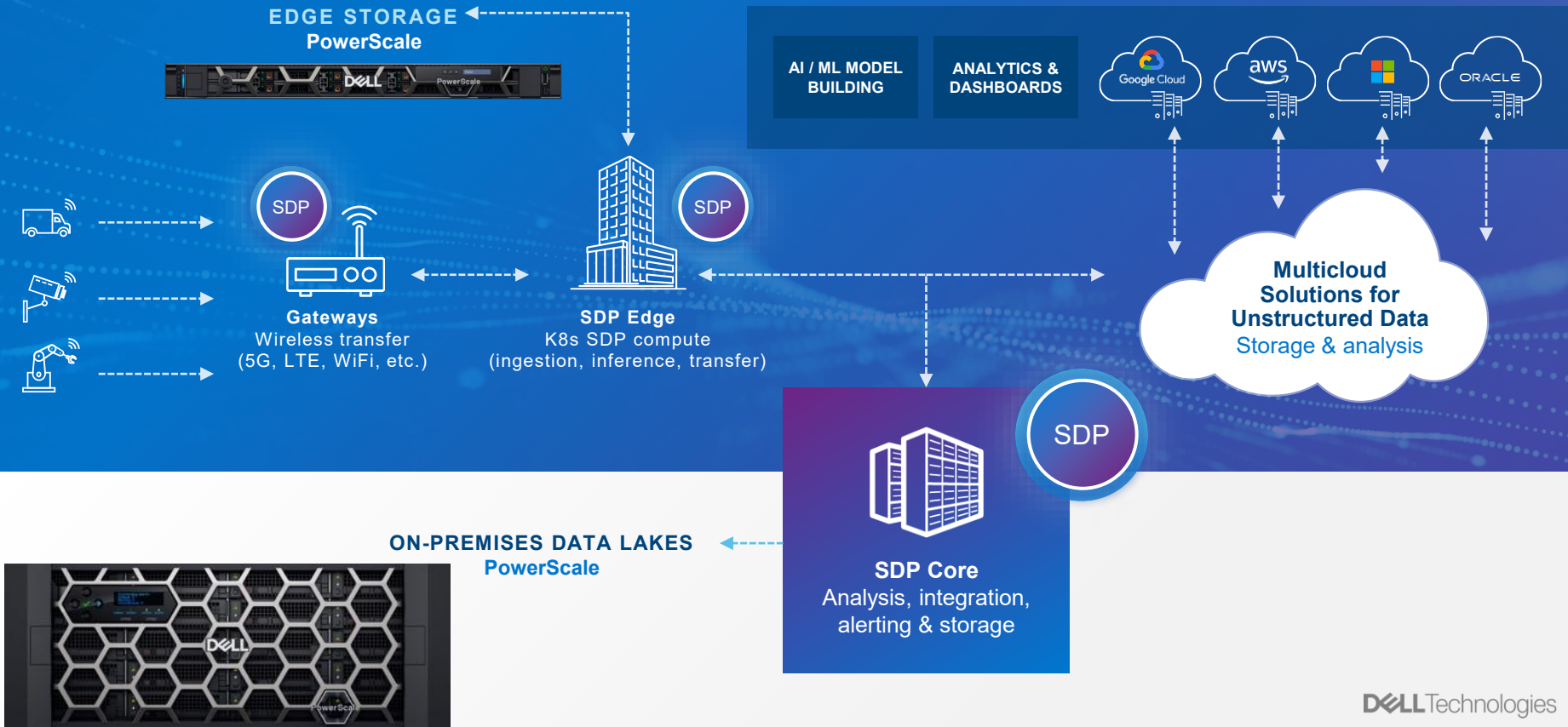
CLOUD

Extending file services in cloud



Cloud development, archives & DR

From edge, multi-cloud and to the core





PowerStore

Data-centric



Intelligent



Adaptable



Designed for the Data Era



Any Workload

Physical and virtual Apps and DBs, Containers and File



Performance Optimized

Scale up and scale out with end-to-end NVMe*



Efficiency Without Compromise

Always-on inline data reduction



Programmable Infrastructure

Streamlines development and automates workflows



Autonomous Appliance

Built-in automation and ML optimizes system resources



Flexible Architecture

Enables speed and application mobility



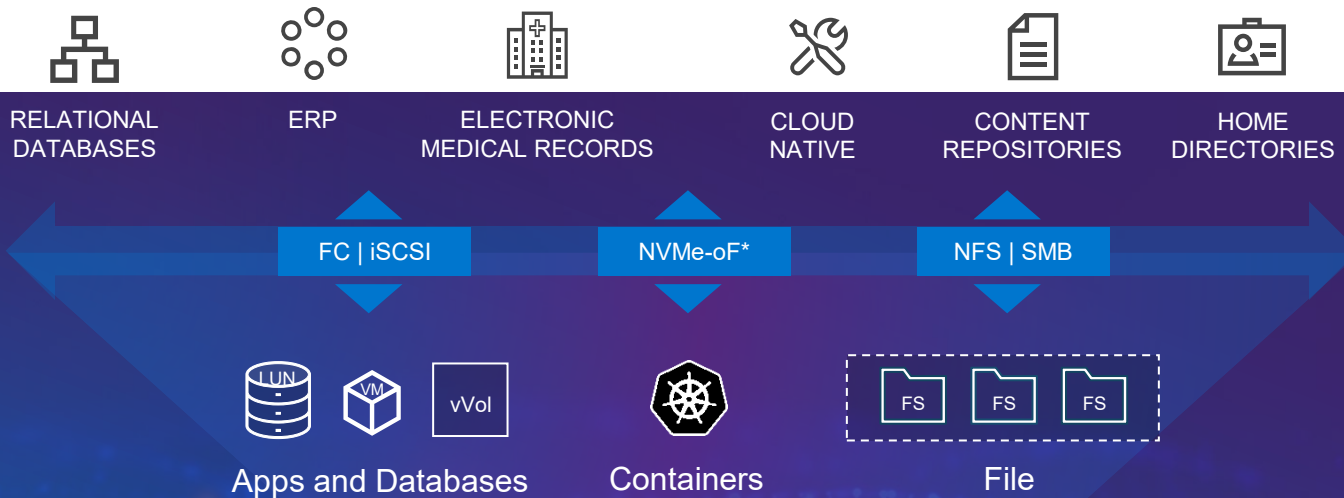
Flexible Deployment

Modernize the core, edge, and cloud without disruption

PowerStore – Any workload



Traditional and modern workloads



EDGE

PowerStore

CORE

CLOUD



Edge applications

Data Replication

Data-intensive applications

Block @ Equinix



PowerStore



Streaming data



PowerStore



Small footprint,
easy to deploy

Optimized for data
retention and flexibility

Data can be replicated
to core data center

PowerFlex – Universal Infrastructure

Flexibility unleashed



Harness Software



Fluidity



Performance



Scale

Embrace Change



Platform
Support



Consumption
Options



Deployment
Architectures



Public Cloud
Offerings

Deliver Predictability



Data
Services

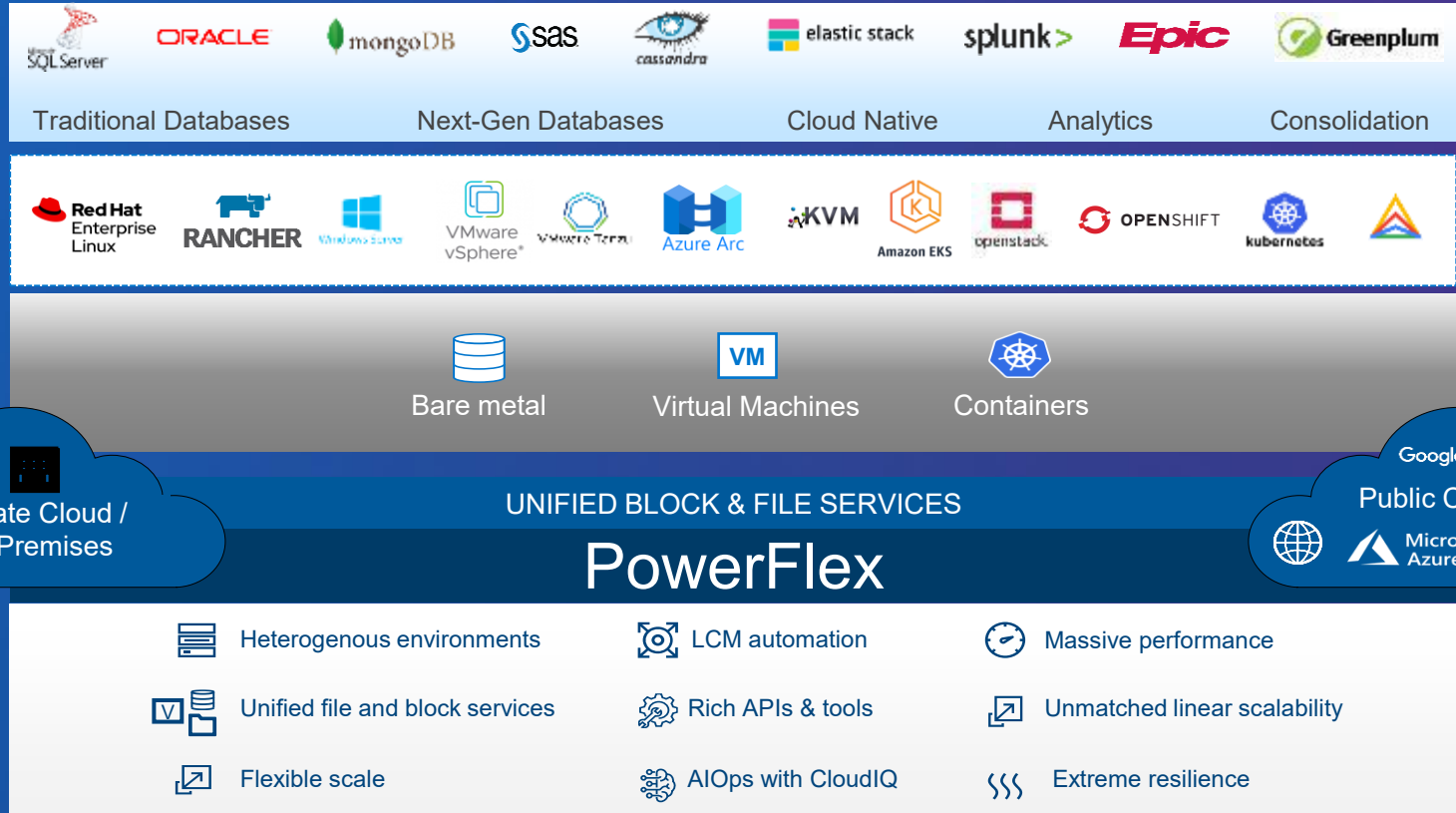


Automation



Workload
Execution

PowerFlex is the Universal Infrastructure Platform

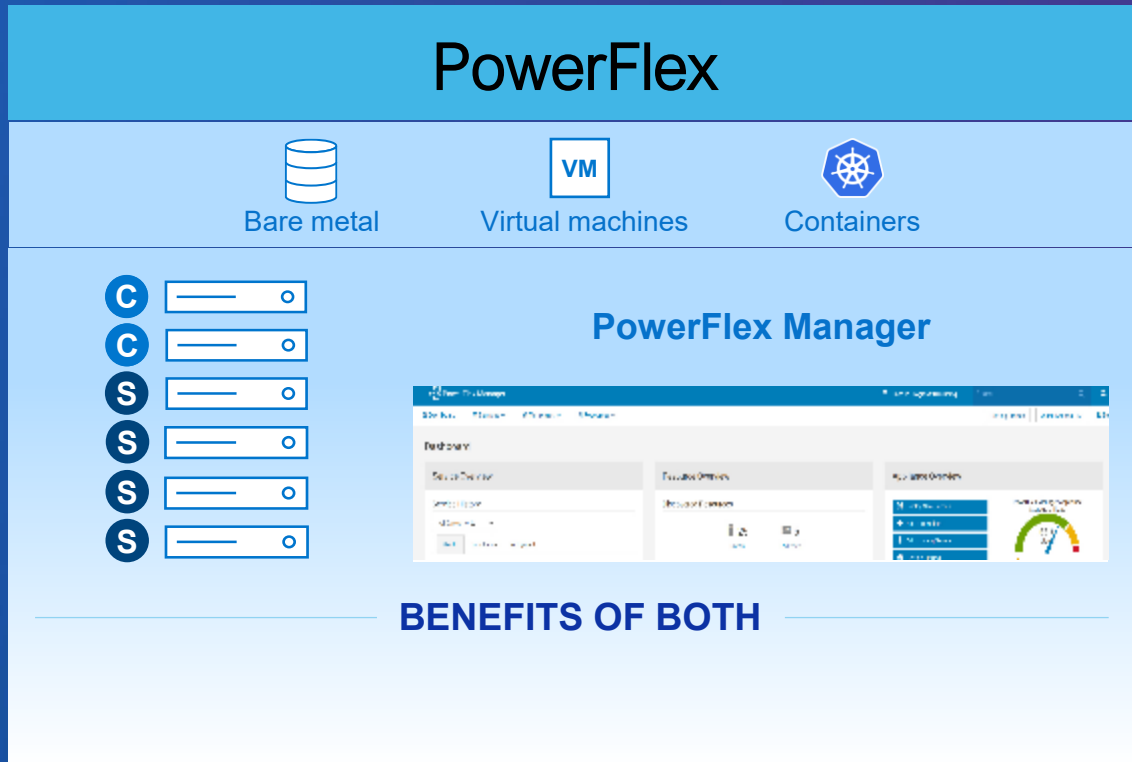


PowerFlex Unique Architecture

Three tier infrastructure

Independent scaling of compute and storage

Support for both virtual and physical



HCI

Scale out node based architecture

Lifecycle management

Dell EMC Integrated System for Microsoft Azure Stack HCI



**Full stack
lifecycle
management**

Reduce time to
complete complex tasks



**Flexible
configuration
options**

Meet requirements
of a broad set of
use cases



**Global solution
level support &
services**

Accelerate time to
value



**Pay as you use
consumption
options**

Pay for what you use,
when you use it



All-in-one, validated HCI system

Dell Technologies Dell XC with Nutanix



Automate

Remove complexity



Collapse **compute, storage and virtualization** into a single **Nutanix Cloud Platform** on Dell XC, with one stack to deploy

Simplify operations



Use **Nutanix Prism** as a single console for cluster management and troubleshooting across core, edge and cloud

Optimize infrastructure



Right-size environments with **small to large XC configurations** and independent scale of compute and storage

Innovate

Harness hybrid cloud



Deliver a **Nutanix private cloud on Dell XC** with the same operational model on-prem and in public cloud

Empower developers



Provide a **unified platform for VMs and containers** with Nutanix Cloud Platform and Kubernetes integration

Evolve workloads



Support a broad range of use cases — **VDI, databases, SAP HANA, AI/ML, ROBO/edge**

Accelerate

Streamline Ops



Reduce day-to-day admin effort with **policy-based automation, built-in AI/ML analytics, and guided lifecycle workflows**

Strengthen Resilience



Protect critical workloads with **integrated data protection, snapshots and replication**,

Avoid Lock-In



Implement a **dual-vendor strategy** (Dell + Nutanix) that reduces dependence on a single hypervisor vendor

Dell Technologies VxRail



Automate



Remove complexity

with automated operations via unique VxRail HCI System Software



Simplify operations

through native integration with vCenter and VMware Cloud Foundation



Optimize infrastructure

with consistent ease of use while lowering exposure with full stack lifecycle management

Innovate



Harness hybrid cloud

with simple and direct path due to unique integration with VMware Cloud Foundation



Empower developers

with lock-step support for VMware Kubernetes advancements – K8s your way



Evolve workloads

with thousands of configuration options and support for mixed generation nodes

Accelerate



Drive productivity

with 6x9s and 92% less unplanned downtime to focus on differentiated IT activities



Surge ahead

by rapidly integrating new VMware updates with 30-day synchronous releases

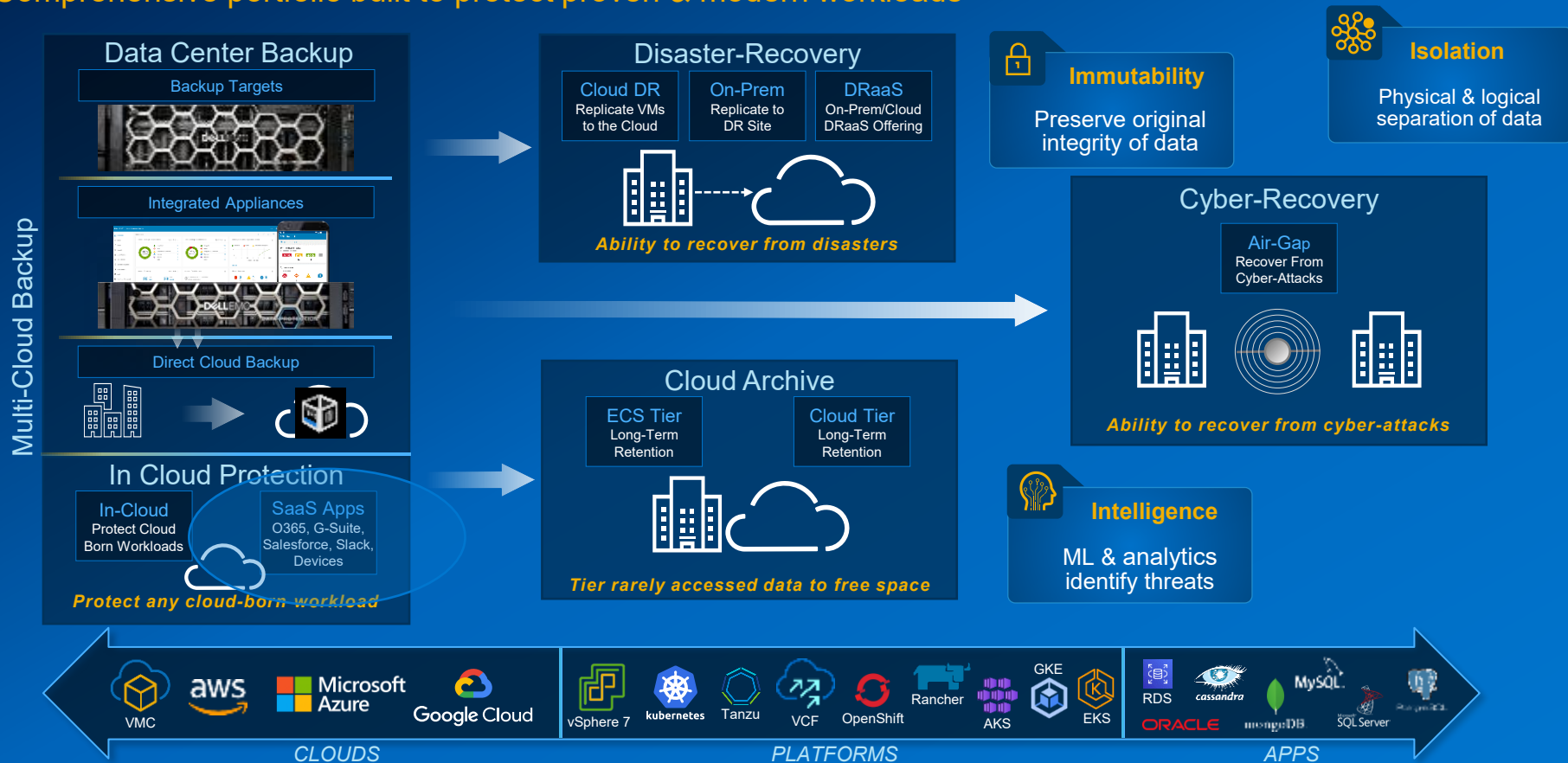


Accelerate Multi-Cloud

by rapidly enabling VMware on AWS

Dell Technologies Data Protection Solutions

Comprehensive portfolio built to protect proven & modern workloads



Dell's Extended Technology Partners



A Single Dell Quote

- Single Quote using Dell part numbers
- Custom Part Numbers or Bundled SKUs
- Apply Dell Financing to entire quote
- Dell support & pro services



Lower Cost

- Free Shipping*, Best OEM Price
- Out-year cost avoidance via multi-year contracts
- Higher Blended Margin



Reduce Need for Multiple RFQ/RFPs

- Purchase the entire solution through a Dell Partner
- Efficient MRR/RFI process



Vertiv

Solution Platform



Application

Capacity:
1-2 Racks
1-24kW

Segment:
Integrated Racks,
Network Closets,
Branches

Capacity:
3-10 Racks
20-36 kW

Segment:
SMB; Education;
Hospitals, Local
Government;
Remote Sites

Capacity:
Cost effective to
400kW

Segment:
Small/Medium Data
Centers; High
Density Zones in
Enterprise Data
Centers

Capacity:
Varies Upon
Application

Segment:
Enterprise
Expansion;
Co-location/Hosting
(Skids)
SMB Primary Data
Center

Capacity:
250kW+

Segment:
Enterprise Data
Centers;
Co-location/Hosting

Modernize the data center with Dell Infrastructure Solutions

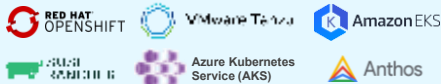
Accelerate innovation with
intelligent & efficient systems

Power any workload across the
edge, data center & public cloud

Deliver comprehensive data
protection everywhere

AIOps — Virtualization — NativeEdge — Dell APEX

Kubernetes distributions



Cloud platforms



Silicon partners



Extended Infrastructure partners



Colocation partners



Storage & Data Protection



Server



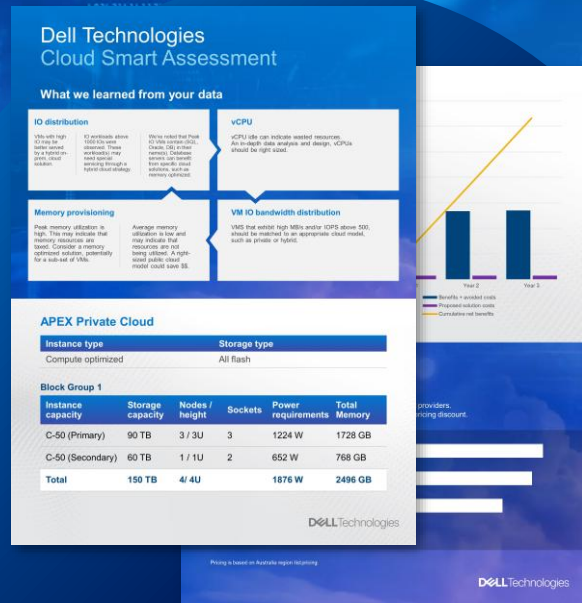
Networking

DELLTechnologies
FEDERAL PARTNER PROGRAM

Cloud Smart Discovery

Using data to make intelligent decisions about your cloud strategy

- IO distribution
- Memory provisioning
- xCPU provisioning
- VM IO bandwidth
- Compare cost – private cloud vs. public cloud



Move from multicloud by default to multicloud by design

A P E X

Dell Technologies
FEDERAL PARTNER PROGRAM

Accelerator workshops are the first step

What is an Accelerator Workshop?

Interactive, strategic session with business and IT leadership

Align cross-organizational priorities and gain consensus

Deliver actionable roadmap with recommendations to achieve desired results



Dell Technologies Differentiators

As-Is / To-Be methodology rapidly assess environment and implements plan

IT expertise to architect solutions and operationalize technology

Completed over 10,000 transformation projects and 1,000+ strategic workshops

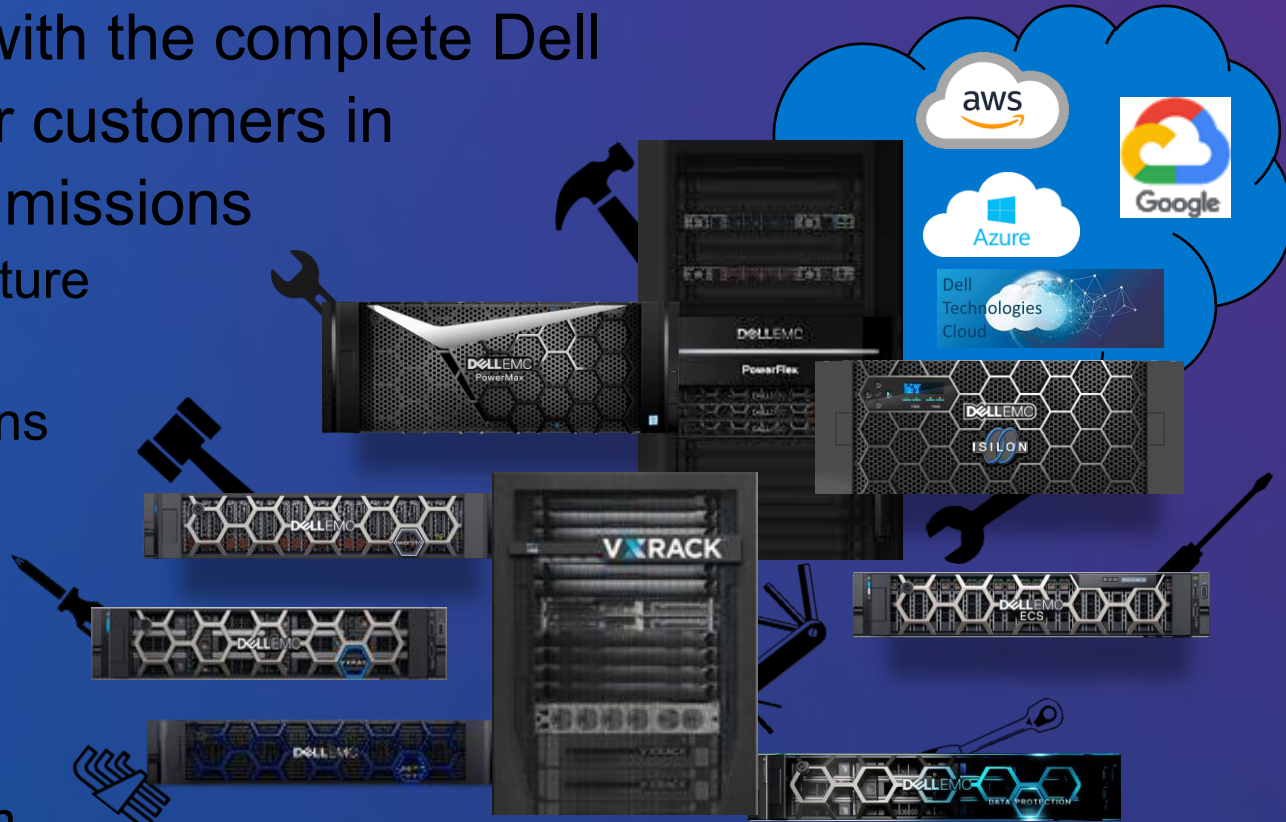
Next Steps and Q & A

Architect solutions with the complete Dell Portfolio, assist your customers in accomplishing their missions

- Data Center Infrastructure
- Client Devices
- Platforms & Applications
- Multi-Cloud

Next Steps

- Schedule a Test Drive
- Contact your Dell team



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To set up a meeting:
DellQuotes@carahsoft.com 888-662-2724