Converged and Hyperconverged Infrastructure
Changing needs of workloads are driving cloud strategies

Cloud strategies must match the needs of each workload

<table>
<thead>
<tr>
<th>Existing Workloads</th>
<th>Cloud Native Workloads</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Modernize</strong></td>
<td><strong>Refactor</strong></td>
</tr>
<tr>
<td>Optimize workloads</td>
<td>Modify workload, new environment,</td>
</tr>
<tr>
<td>using modern infrastructure</td>
<td>on-prem or in the cloud</td>
</tr>
<tr>
<td><strong>Utilize Hybrid Infrastructure</strong></td>
<td>Shift portions of multi-tier workload to public cloud</td>
</tr>
<tr>
<td><strong>Develop for Cloud</strong></td>
<td>New cloud native workload deployed on-prem &amp; IaaS</td>
</tr>
<tr>
<td><strong>Replace</strong></td>
<td>Move to SaaS version of packaged application</td>
</tr>
</tbody>
</table>
Introducing the Dell Technologies Cloud

ONE cloud strategy…
Two leaders ….
Dell Technologies Cloud
The complete portfolio for the Hybrid Cloud Journey

Consistent Infrastructure
VM Infrastructure • Container Infrastructure • Systems Infrastructure
Hyperconverged Infrastructure
## VXRAIL
FASTEST GROWING HCI SYSTEM

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Revenue</td>
<td>&gt;$1B</td>
</tr>
<tr>
<td>Growth Rate</td>
<td>178%</td>
</tr>
<tr>
<td># of Customers</td>
<td>4,700+</td>
</tr>
</tbody>
</table>

1. For Q4 2019 year-over-year among TOP 10 product brands. IDC Converged Systems Tracker, Q4-2018, April 2019.
2. On an orders basis.

Powered by Intel® Xeon® Scalable Processors
VMware Cloud Foundation on Dell EMC VxRail

Flagship Dell Technologies Cloud Platform offering

Only

VMware Cloud Foundation infrastructure offering with full stack integration*

Jointly engineered integrated HCI system with VMware Cloud Foundation

Only

“The integration between VxRail Hyperconverged appliances and Dell EMC/VMware Cloud stack (like VMware Cloud Foundation) as a set of integrated software, provides a roadmap for GraceKennedy to optimally run our business-critical applications in private and public environments.”

- Nicole Case, Chief Information Officer, GraceKennedy Financial Group

Learn more DellEMC.com/VxRail

*Based on internal analysis in April 2019
Introducing VMware Cloud on Dell EMC

Dell Technologies Cloud Data Center-as-a-Service

- Cloud infrastructure delivered as-a-service on-premises
- Co-engineered and delivered by Dell Technologies; ongoing service fully managed by VMware
- Hybrid control plane to provision and monitor resources
- Built on VxRail – Dell EMC’s enterprise-grade cloud platform
- Monthly subscription model
Making it real – Dell EMC’s HCI portfolio
Powered by Intel® Xeon® Scalable Processors

<table>
<thead>
<tr>
<th>VxRail</th>
<th>vSAN Ready Nodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>vmware</td>
<td>Pre-validated &amp; optimized for vSAN</td>
</tr>
</tbody>
</table>

Jointly engineered, synchronous full stack integration from edge to core to cloud

<table>
<thead>
<tr>
<th>VxFlex</th>
<th>VxFlex Ready Nodes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-validated &amp; optimized for VxFlex OS</td>
</tr>
</tbody>
</table>

Most flexible and resilient appliances and engineered rack-scale systems

<table>
<thead>
<tr>
<th>Partner Aligned</th>
<th>Cloud for Microsoft Azure Stack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft &amp; Nutanix</td>
<td>Consistent Azure experience on-premises</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fully integrated racks and appliances</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Ready Node building blocks</th>
</tr>
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<table>
<thead>
<tr>
<th>Ecosystem alliances</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Partner Aligned</th>
</tr>
</thead>
</table>

Cloud for Microsoft Azure Stack

Consistent Azure experience on-premises

<table>
<thead>
<tr>
<th>XC Series &amp; XC Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on Nutanix</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Azure Stack HCI Ready Nodes*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-validated &amp; optimized for WSSD</td>
</tr>
</tbody>
</table>

* A component of Dell EMC Solutions for Microsoft Azure Stack HCI

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Introducing VxFlex family – flexibility unleashed
Powered by Intel® Xeon® Scalable Processors

VxFlex OS
Scale-out block storage service to create a scale-out Server SAN or HCI infrastructure

VxFlex Ready Node
Scalable, reliable and highly configurable HCI building block

VxFlex appliance
Simplified, economic form factor

VxFlex integrated rack
The most flexible HCI rack-scale system

VxFlex OS GUI, iDRAC, OME, AMS
Manage and monitor node clusters

VxFlex Manager
Comprehensive ITOM software

Summer 2019
Converged Infrastructure
VxBlock for Mission Critical Cloud

~ 4,500
systems installed worldwide

SAMPLE HIGH VALUE WORKLOADS

ORACLE  Microsoft  SQL Server  VMware  SAP  Epic

PROVEN LEADERSHIP

vmware  DELL EMC  CISCO
DELL EMC

VxBlock 1000

Turnkey system for high value workload consolidation built on powerful Dell EMC storage and data protection

HIGH VALUE WORKLOADS
Consolidate, optimize & protect

CLOUD OPERATIONS
Automate & proactively manage

LIFE CYCLE MANAGEMENT
Simplify & lower risk

Powered by Intel® Xeon® Scalable Processors
Consolidate, optimize & protect high value workloads

99%

Less unplanned downtime*


A fast and trusted way to modernize IT

**Flexibility**
- Choose the right mix of resources and data services based on application needs

**Efficiency**
- Maximize utilization and eliminate stranded capacity with flexible resource pools

**Choice**
- Select from industry-leading Dell EMC storage and data protection technology
Automate & proactively manage

66% more efficient IT operations*


Automate the entire stack with VxBlock Central and VMware vRealize

**Awareness**
- Monitors overall status of system
- Real-time alerts simplify troubleshooting & lifecycle management

**Automation**
- Engineered workflow for vRealize Orchestrator
- Workflow automation reduces daily tasks

**Analytics**
- Delivers system metrics to vRealize Operations (vROps)
- Proactive performance and capacity management
Simplify & lower risk with life-cycle management

6x Faster upgrades and patches*

Turnkey infrastructure created, managed, supported & sustained as one

- Engineered: Engineered according to your needs
- Manufactured: Built in ISO-certified factory
- Managed: Centralized management
- Supported: Single call support
- Sustained: Ongoing certified code upgrades

*Compared to traditional 3-tier system management. Source: ESG sponsored by Dell EMC. **Simplifying IT Infrastructure: Upgrades with Dell EMC Converged Infrastructure Systems and Vision Intelligent Operations Software, 2018. Results may vary.
CI and HCI: any workload, any industry

“Applications are faster with Dell EMC VxRail. That means we can help people make reservations, check in and pay for services quicker.”

- Chris Stanley, IT Manager
  Celtic Manor Resort

“By using the VxBlock System to transform our data center, we now have the ability to deploy solutions in hours as opposed to weeks.”

- Ryan Deppe, Network Operations Supervisor
  Cianbro Corporation

“The system manages storage and capacity itself, which allows my team to focus on more strategic activities. We’re delivering better value.”

- Paul Bunker, Business Systems & ICT
  Melbourne Airport

*Source: https://www.dell EMC.com/en-us/converged-infrastructure/customers/index.htm#scroll=off&customer=none