VMware Cloud on Dell EMC @CoreSite
Partner Solution Guide

Ken Smith – Sr Product Marketing Manager
VMware Cloud on Dell EMC

March 2021
VMware Cloud on Dell EMC

What is VMware Cloud on Dell EMC?
The VMware Hybrid Cloud is Everywhere
Consistent infrastructure and operations anywhere
Key Reasons Customers Still Invest In On-Premises

Data Sovereignty
- Regulatory and privacy requirements
- Sensitive data located on-premises
- Custom security standards
- Need to prove compliance to auditors

Workload / Data Proximity
- Low data latency requirements
- Workloads with local data processing
- Data Center workloads tightly integrated with backend systems

Command and Control
- Keep control over critical workloads
- Leverage existing IT investments
- Maximize value of existing talent and processes
A New Delivery Model for On-Premises

VMware Cloud on Dell EMC

Delivering the Cloud Model to the Data Center

Fully managed infrastructure solution for compute, storage, and networking.

Operated and controlled through a hybrid Cloud Control Plane

Managed for tight security requirements, through automated patching and system maintenance.

Operated in a cloud model, delivering subscription financials and on-demand services.
Overview of the VMware Cloud on Dell EMC Service
Cloud Consumption Model Delivered as-a-service

Hardware + Software
- VMware branded service
- VMware takes first level support call from customer
- Operated by VMware cloud SREs

Services
- Dell EMC supply chain
- HW + SW rack & Stack
- Shipping and on-site activation

Support
- VMware support
- Dell EMC support with 4-hour on-site break fix service

All inclusive Service - HW, SW, Support, and Managed Services
- VMware branded service
- Jointly operated with the HW partner
- VMware is the “single point of contact”
- Freedom from asset ownership
- Subscription based pricing
- Choice of subscription payment terms
Understanding the Hybrid Cloud Control Plane

Current State

Multiple Control Planes

Hybrid Cloud Control Plane
- VMware Managed
- Full Transparency of Operations
- Single Pane of Glass

Cloud Connectivity

Compute | Storage | Networking
Rack AVAILABLE and Ready to Consume
Pre-configured, racked, cabled and ready – Fully Managed Data Center as a Service

Hyperconverged infrastructure:
Compute and storage scale together

Flexible sizing –
Start with 3 or 4 nodes

More than a vSphere Cluster
• Redundant networking
  Top-of-rack switches
  VeloCloud SD-WAN
• Dedicated OOB switch
• Smart PDUs

Ready to power on at CoreSite
High Performance Connectivity to Clouds
Physical Data Center Five 9’s Availability / SLAs
Remote Smart Hands
# Hardware Tech Specs for VMware Cloud on Dell EMC

*Exact configurations are subject to ongoing refinements*

## Rack Specifications

<table>
<thead>
<tr>
<th>Rack</th>
<th>R1 (24U)</th>
<th>R2 (42U)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of VxRail E560F Nodes</td>
<td>3 → 5</td>
<td>3 → 12 or 26 (Req. 3 Phase power)</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>2 x 30 amp + UPS</td>
<td>4 x 30amp single-phase 2 x 60amp three-phase</td>
</tr>
<tr>
<td>Power Source Location</td>
<td>Floor</td>
<td>Floor or ceiling</td>
</tr>
<tr>
<td>Top of Rack Switches</td>
<td>2 x 10GbE</td>
<td>2 x 25GbE</td>
</tr>
<tr>
<td>Secure Management</td>
<td>SD-WAN by VeloCloud - Edge 620 (HA pair)</td>
<td></td>
</tr>
</tbody>
</table>

## Instance Type

<table>
<thead>
<tr>
<th>Instance Type</th>
<th>G1s.small</th>
<th>M1s.medium</th>
<th>M1d.medium</th>
<th>X1d.xLarge</th>
<th>M1d.xLarge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chassis Form Factor</td>
<td>VxRail E560F 1U1N</td>
<td>VxRail E560F 1U1N</td>
<td>VxRail E560N 1U1N</td>
<td>VxRail E560F 1U1N</td>
<td>VxRail E560F 1U1N</td>
</tr>
<tr>
<td>CPU sockets and cores</td>
<td>1 x 24</td>
<td>1 x 24</td>
<td>2 x 24</td>
<td>2 x 24</td>
<td>2 x 28</td>
</tr>
<tr>
<td>vCPU</td>
<td>48 (24 Cores)</td>
<td>48 (24 Cores)</td>
<td>96 (48 Cores)</td>
<td>96 (48 Cores)</td>
<td>112 (56 Cores)</td>
</tr>
<tr>
<td>CPU frequency</td>
<td>3.1 GHz All Core Turbo</td>
<td>3.1 GHz All Core Turbo</td>
<td>3.1 GHz All Core Turbo</td>
<td>2.9 GHz All Core Turbo</td>
<td>2.2 GHz All Core Turbo</td>
</tr>
<tr>
<td>RAM</td>
<td>256GB</td>
<td>384GB</td>
<td>768GB</td>
<td>1536GB</td>
<td>768GB</td>
</tr>
<tr>
<td>vSAN Disk Groups</td>
<td>1 (800GB SAS)</td>
<td>2 (800GB SAS)</td>
<td>2 (1.6TB NVMe)</td>
<td>2 (1.6TB NVMe)</td>
<td>2 (1.6TB NVMe)</td>
</tr>
<tr>
<td>All flash capacity storage*</td>
<td>11.5TB (SATA)</td>
<td>23TB (SATA)</td>
<td>23TB (NVMe)</td>
<td>61TB (SATA)</td>
<td>61TB (SATA)</td>
</tr>
<tr>
<td>Networking</td>
<td>2 x 10Gb</td>
<td>2 x 10Gb</td>
<td>2 x 25Gb</td>
<td>2 x 25Gb</td>
<td>2 x 25Gb</td>
</tr>
</tbody>
</table>
Advantages of VMware Cloud on Dell EMC

Cloud Advantages

Increased Agility
Self service provisioning and elasticity of resources

Simplified Operations
Offload management and automated version mgmt

Accelerated Innovation
Increased developer velocity and access cloud services

On Premises Advantages

Mitigate Risks
Comply with data residency and regulatory requirements

Controlled Costs
Predictable cost model and resource transparency

Increased Performance
Low data latency and high performance networking
VMware Cloud on Dell EMC – On Premises Data Centers
Refresh, Expand, Consolidate, Relocate

VMware Cloud on Dell EMC ideal for:

- **Infrastructure Refresh / Modernization**
  - Infrastructure built around Dell EMC VxRail
  - Delivered infrastructure is Hyper Converged
  - Latest Intel SP Processor technology
  - Shift from CapEx to Opex

- **Infrastructure Expansion**
  - Expand Data Center resources: No CapEx or additional management responsibility
  - Allows gradual expansion of nodes or slow refresh

- **Infrastructure Consolidation / Budget Reduction**
  - Migrate workloads to modern, OpEx expensed service

- **Infrastructure Relocation**
  - VMware is partnered with CoreSite – Deploy this service in a ‘CoLo’ facility that offers premium connectivity services
VMware Cloud on Dell EMC
Introduction to CoreSite Services
CoreSite: Home of Hybrid Cloud Solutions

What does CoreSite do?
CoreSite provides the optimal environment to integrate and optimize for Hybrid IT with the components for the most agile, dynamic infrastructure that can be adapted as business requirements change…

What makes CoreSite different than its competitors?
• Provide on-net, cloud-adjacent access to all of the leading public cloud providers
• Uniquely offer the flexibility to scale from a single cabinet to an entire data center in edge markets
• All with customer experience that is consistently ranked above industry average

Since 2001, CoreSite has focused on building secure, reliable, high-performance data center and interconnection solutions supported by industry-leading customer service.
Data Center Interconnect Fabric between CoreSite markets via the CoreSite OCX®

✓ Simplifies multi-cloud and multi-site configuration
✓ Improves performance in multi-region cloud architecture
✓ Enables data and VM replication
✓ Reduces network provisioning lead times
✓ No long-term commitments
Delivering a Fully Managed Cloud-adjacent SDDC within CoreSite Data Centers

Why VMware Partners With CoreSite

- Support for all VMC on Dell configurations without costly facility customization
- Industry leading portfolio uptime 99.999999%
- On-net access to public cloud availability zones
- Diverse VMware partner ecosystem
- Low latency connectivity to AWS, Azure, Google, Oracle, and IBM Availability Zones

- Eliminate or significantly reduce cloud egress fees
- Standard configurations support HPC avoiding expensive containment solutions
- Cost-effective networking services offered month-to-month
- Lower TCO and higher value relative to global co-lo peers
CoreSite: Cloud Expertise and Partnerships

✓ Interconnection gateways near Cloud Availability Zones
✓ Recognized by Gartner as leading cloud integration provider
✓ **1000+ cloud interconnections currently managed**
  • AWS Direct Connect Partner since 2012
  • Microsoft ExpressRoute Partner since 2015
  • Google Cloud Interconnect Partner since 2016
  • Oracle FastConnect Partner since 2018
VMware Cloud @ CoreSite: Public Cloud Access
VMware Cloud on Dell EMC

Compelling Events for Deployment
VMware Cloud On-Premises Drivers

Compelling events attracting customers to VMware Cloud on Dell EMC

- Public Cloud Mandate Driven Outside IT Org.
- Application & data center modernization
- Infrastructure Expansion / Consolidation
- Data Center Relocation / Consolidation
- VxRail as-a-Service for private cloud & edge infrastructure
- Focus valuable IT resources on higher priority business applications

Data Center  Colo Facility  Branch Office  Edge/IoT
VMware + CoreSite, Better Together

What Makes VMware Cloud on Dell EMC @CoreSite the Perfect Solution for Your Business?
Better Together
Unique benefits that are not found with other offerings

- Advanced Availability SLAs + VMware uptime
- Simplified, private, proximate, secure, high-performance direct connections to public clouds
- Access to Network Fabric - 10Gbps uplinks

- Enables digital and network transformation
- Reduced cloud egress and metered charges
- Scalable infrastructure: flexible for bandwidth, connections and providers
Why VMware Cloud on Dell EMC @ CoreSite

VMware Cloud on Dell EMC @ CoreSite Delivers:

High Performance and Reliability
• Provides a modern, Dell VxRail-based Infrastructure and VMware SDDC software stack.
• Fully managed Infrastructure and hosting service
• Focus on business growth and success instead of hardware and facility management

Flexibility and Optionality
• Cloud-like monthly billing with No CapEx expense
• Proof of Concept solution ‘try and buy’ available
• Access to CoreSite’s 775+ networks, clouds and IT services

Secure and Compliant
• CoreSite Colocation sites offer 24x7x365 hardened, multi-step security
• VMware Cloud on Dell EMC offers an extensive portfolio of industry and regional compliance certifications
Learn more about VMware Cloud on Dell EMC

Additional Resources are available

VMware Cloud on Dell EMC Resources

• VMware Cloud on Dell EMC Product Page
• VMware Cloud on Dell EMC Overview Deck
• VMware cloud on Dell EMC Service Data Sheet
• VMware Cloud on Dell EMC Solution Brief

For More Information on CoreSite

• Email: info@CoreSite.com