Fully Managed Infrastructure as a Service at Enterprise Scale

VMware Cloud on Dell EMC

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Modern Business will run on Modern Applications
Application Strategy Defines Infrastructure Strategy

Modern Apps
- Time to market
- Innovation
- Scale
- Differentiation
- Refactor
- Develop for Cloud
- Replace

Existing Apps
- Reduce Costs
- Security
- Reliability
- Control
- Maintain
- Replatform
- Hybrid Apps

SaaS
Point Cloud Tools and Silos Impact Agility and Economics

- Inconsistencies
- Heterogeneity
- Security Controls
- Skillsets and Tools
- SLAs

Public Cloud

Data Center

Edge
The Key Role of On-Premises Infrastructure

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

Data Sovereignty

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

Workload / Data Proximity

- Keep control over critical workloads
- Leverage existing IT investments
- Maximize value of existing talent and processes

Command and Control
VMware Cloud on Dell EMC

Delivering the Cloud Model to the Data Center

- Fully managed infrastructure solution for compute, storage, and networking.
- Managed for tight security requirements, through automated patching and system maintenance.
- Operated and controlled through the VMware Cloud Console.
- Operated in a cloud model, delivering subscription financials and on-demand services.
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
Introducing VMware Cloud on Dell EMC

Cloud infrastructure delivered as-a-service on-premises

Co-engineered and delivered by Dell Technologies; ongoing service fully managed by VMware

VMware SDDC including compute, storage and networking

Built on VxRail – Dell EMC’s enterprise-grade cloud platform

VMware Cloud Console allows provisioning and monitoring of resources

Monthly subscription model
How does VMware Cloud on Dell EMC work?

Cloud Consumption Model Delivered as-a-service

<table>
<thead>
<tr>
<th>HW + SW</th>
<th>Services</th>
<th>Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>VMware branded service</td>
<td>VMware takes first level support call from customer</td>
<td>VMware support</td>
</tr>
<tr>
<td>Dell EMC supply chain</td>
<td>Operated by VMware cloud SREs</td>
<td>Dell EMC support with 4-hour on-site break fix service</td>
</tr>
<tr>
<td>HW + SW rack &amp; Stack</td>
<td>Shipping and on-site activation</td>
<td></td>
</tr>
</tbody>
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All inclusive Service - HW, SW, Support, and Managed Services

- VMware branded service
- Freedom from asset ownership
- Jointly operated with the HW partner
- Subscription based pricing
- VMware is the “single point of contact”
- Choice of payment terms
VMware Cloud Console

• Provides single-pane of glass access to VMware Cloud on AWS and Dell EMC services

• Unified access to tools and workload services including Tanzu Kubernetes, HCX, and vRealize Suite

• Dashboard access to health, performance, and status information

• Allows scheduling of non-critical patches and updates as well as requests for additional capacity
Global and Vertical Regulatory Certification / Compliance

- VMware Cloud on Dell EMC continues to expand its broad compliance certification portfolio with new releases.

- Certifications ensure compliance for the implementation, management, and maintenance for information security within an organization.

- Compliance certifications and address information security needs specific to various regions and industries.
Key VMC on Dell EMC Use Cases

**Advanced VDI Workloads**
- Powerful Infrastructure for VDI
- Delivers Enterprise-class security
- Provides optimal workspace density

**Data center modernization**
- Streamlined operations
- Switch from CapEx to OpEx
- Hardware refresh

**Data latency and sovereignty**
- Low data latency requirements
- Data sovereignty requirements
- Data governance and security

**Application modernization**
- Development agility
- Kubernetes and modern applications
- Traditional application developments
What’s New In Our Latest Release

- Updated Instance portfolio featuring increased CPU core counts and ConnectX-5 Network adapters increases workload scale.

- New M1d.xSmall HW instance type ideal for cost-effective Microsoft VDI RDSH workload hosting applications
## VMware Cloud on Dell EMC Hardware Instance Types

<table>
<thead>
<tr>
<th>Instance type</th>
<th>M1d.xSmall</th>
<th>G1s.small</th>
<th>M1s.medium</th>
<th>M1d.medium</th>
<th>M1d.xLarge</th>
<th>X1d.xLarge</th>
</tr>
</thead>
<tbody>
<tr>
<td>VxRail Chassis</td>
<td>VxRail E560F 1U1N</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>2 x 28</td>
<td>1 x 28</td>
<td>1 x 28</td>
<td>2 x 28</td>
<td>2 x 28</td>
<td>2 x 28</td>
</tr>
<tr>
<td>vCPU</td>
<td>112 (56 Cores)</td>
<td>56 (28 Cores)</td>
<td>56 (28 Cores)</td>
<td>112 (56 Cores)</td>
<td>112 (56 Cores)</td>
<td>112 (56 Cores)</td>
</tr>
<tr>
<td>CPU Frequency</td>
<td>2.2 GHz All Core Turbo</td>
<td>2.2 GHz All Core Turbo</td>
<td>2.2 GHz All Core Turbo</td>
<td>2.2 GHz All Core Turbo</td>
<td>2.2 GHz All Core Turbo</td>
<td>2.2 GHz All Core Turbo</td>
</tr>
<tr>
<td>RAM</td>
<td>768 GB</td>
<td>256 GB</td>
<td>384 GB</td>
<td>768 GB</td>
<td>768 GB</td>
<td>1536 GB</td>
</tr>
<tr>
<td>Cache Storage</td>
<td>1.6 TB SSD SAS</td>
<td>1.6 TB SSD SAS</td>
<td>1.6 TB SSD SAS</td>
<td>3.2 TB NVMe</td>
<td>3.2 TB NVMe</td>
<td>3.2 TB NVMe</td>
</tr>
<tr>
<td>Primary Storage Capacity</td>
<td>3.8 TB SSD</td>
<td>11.5 TB SSD</td>
<td>23 TB SSD</td>
<td>23TB NVMe</td>
<td>61 TB SSD</td>
<td>61 TB SSD</td>
</tr>
<tr>
<td>Networking</td>
<td>2 x 25Gb</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>

* Significant capacity storage needs can be addressed through VMware Partnership with Faction storage services.
New M1d.xSmall Instance (Host) Type

New M1d.xSmall Workload and Storage Optimized Host Type:

• Ideal for Microsoft VDI RDSH workload environments
• Specs:
  • Dual Intel ‘Cascade Lake’ 28 core SP CPUs
  • 2.2 GHz All Core Turbo
  • 2 x 28 Core (112 vCPUs))
  • 768 GB RAM
  • 3.8 TB (Raw ) SSD Storage
  • 1.6 TB SSD SAS Cache Storage
  • 2x 25 Gbps NIC
  • E560F 1U VxRail Chassis Form Factor
The VMware Cloud on Dell EMC Experience Walkthrough

Order  Deploy  Support
Ordering starts with the IT Architect accessing the VMware Cloud Console showing the different services supported – including VMware Cloud on Dell EMC.
After selecting VMware Cloud on Dell EMC – the IT Architect is presented an informative overview of this service and the major parts of this offering.
Next, The VMware Cloud Console shows the IT Architect the steps along the journey to ordering VMware Cloud on Dell EMC, providing guidance and education along this path.
The IT Architect now specifies the location of where they wish to locate the VMware Cloud on Dell EMC infrastructure rack.
The IT Architect is then prompted to select the rack and power configuration for the infrastructure.
Next, the IT Architect selects the instance type, number of instances, and cluster configuration.
The Network Administrator can now configure the network requirements for the SDDC.
The IT Architect selects the subscription term (1 or 3 years) and confirms pre-requisite information entered.
Finally, the IT Architect reviews and confirms the order.
The IT Architect completes the order and receives an anticipated delivery date.
The IT Architect is informed that the order has been processed.
The IT Architect is informed that the equipment is shipped.
VMware Cloud on Dell Experience Walkthrough

Order  Deploy  Support
A Dell Technician will install the Infrastructure, connect power and networking, and test the deployment before activating the service. Once live, the IT Architect is free to move workloads to the new, fully managed infrastructure.
Using the same familiar vSphere interface, the IT Architect can setup the needed VMs and Containers.
The IT Architect can now activate HCX, allowing migration of VM’s to the new service infrastructure.
Using HCX migration, the IT Architect can easily migrate workloads to the new service infrastructure.
VMware Cloud on Dell EMC Experience Walkthrough

Order

Deploy

Support
When needed, the IT Architect can order additional instances.
The IT Architect select how many additional instances are needed and how they will be applied to the clusters.
The IT Architect confirm order of additional instances. These instances are typically installed by a Dell Technician in about a week.
Leveraging the VMware Cloud Console - the IT Architect can observe the health of the system at any point.
The IT Architect can also check the status of service tickets being worked on by VMware managed services.
The IT Architect can access the maintenance and update page - showing information on updates and patches requiring deployment and is able to schedule these actions as to not interfere with critical periods.
Additional Resources on VMware Cloud on Dell EMC

For more information on VMware Cloud on Dell EMC:

- VMware Cloud on Dell EMC Webpage
- VMware Cloud on Dell EMC Datasheet
- VMware Cloud on Dell EMC Customer FAQ
- VMware Cloud on Dell EMC Solution Guide
- Contact us: vmcondellemc@vmware.com
Thank You