VMware Cloud on Dell EMC

The simplicity and agility of the public cloud with the security and control of on-premises infrastructure, delivered as-a-service to data center and edge locations

Agility, accelerated innovation, and simplified operations—it’s no surprise that enterprise use of the public cloud has skyrocketed. Yet today, many organizations continue to make significant investments in their on-premises environments to support critical workloads with complex regulatory, security, and low-latency needs. Historically, the adoption of a multi-cloud strategy was the only way to capture the advantages of the public cloud, until now.

VMware Cloud on Dell EMC combines the simplicity and agility of the public cloud with the security and control of an on-premises infrastructure, delivered as-a-service to data center and edge locations. VMware’s industry standard compute, storage, and networking software is integrated with enterprise-class Dell Technologies, empowering you to drive any enterprise workload. This unique approach empowers customers to focus on business innovation and differentiation, while VMware operates the entire infrastructure end-to-end.

The best of both clouds

Today’s IT teams are dealing with an interesting conundrum. One of their highest priorities, ensuring end users have timely access to applications and data, is in peril due to spiraling IT capital expenditures and the allure of the public cloud. Traditional data center infrastructures have grown significantly over the past few years due to an increasing emphasis on ‘information’ and the swelling number of applications deployed to make this information accessible and actionable.

These traditional data centers have been built using capital funding (CapEx), where compute, storage and networking equipment are purchased and depreciated over a defined life span. This cyclical spending pattern creates a financial risk and often impairs an organization’s ability to take advantage of public cloud services. The public cloud promises secure and scalable data center infrastructure hosting services on a monthly billing cycle, void of any capital spend that has been commonplace in private data centers.

Finance organizations view the public cloud as a vehicle for removing the financial responsibility associated with reconciling the growing periodic capital spend of replacing data center infrastructure. As a result, their support of migrating the company’s workloads and data to the public cloud is seen as a boon where the cloud infrastructure cost is paid as a monthly operational cost.

While most IT organizations would love to shed infrastructure management and support responsibilities that come with running an on-premise data center, moving their data center infrastructure to the public cloud creates a unique set of challenges. It distances end users from the data they need to access, moves critically important corporate data offsite, and can make real-time management of workloads and data difficult.
Additionally, moving to the public cloud typically requires enterprise applications to be refactored, creating additional risk and complexity on top of the significant cost associated with retesting and recertifying each application.

What if there was a solution that captured the operational cost model of the cloud, while keeping critical corporate data and applications close to the end users, and it eliminated the burden of supporting and managing data center infrastructure?

VMware Cloud on Dell EMC brings the public cloud operating model to any data center, edge location, or leased co-location space. Powered by VMware Cloud Foundation™, VMware Cloud on Dell EMC delivers a proven, unified VMware SDDC platform built on Dell EMC VxRail, Dell Technologies enterprise grade hyperconverged cloud platform.

The synergy that emerges from this powerful hardware and software combination yields an innovative, fully managed infrastructure service, which is delivered, sold and supported by VMware and Dell EMC as-a-service to data center and edge locations. VMware Cloud on Dell EMC delivers the most sought-after benefits of the cloud and on-premise data centers.

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<tr>
<th>Cloud advantages</th>
<th>+ On premises advantages</th>
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<tr>
<td>Increased agility and time-to-value</td>
<td>Controlled costs</td>
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<td>Self service provisioning and elasticity of resources</td>
<td>Predictable cost model with resource transparency</td>
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<td>Simplified operations</td>
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<td>Zero infrastructure management</td>
<td>Low data latency and high-performance networking</td>
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<td>Accelerated innovation</td>
<td>Mitigated risks</td>
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<tr>
<td>Rapidly extend capacity for scaled-up services</td>
<td>Compliance with data residency and regulatory requirements</td>
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**Integrated hardware and software, delivered as-a-service to your data center.**

VMware Cloud on Dell EMC delivers VMware’s SDDC platform, including VMware vSphere®, VMware Virtual SAN™ and VMware NSX™ virtualization technologies and integrates with Dell EMC’s VxRail.

Within the VMware Cloud Services portal, customers can select the rack sizing, number of host instances, and configure network requirements to meet their exact specifications. The VxRail appliance architecture enables customers to start small and grow, scaling capacity and performance easily and non-disruptively from 3 to 24 nodes.
Getting started with VMware Cloud on Dell EMC is simple.

VMware Cloud on Dell EMC is as easy to order and manage as any public cloud resource. After an online order is placed, Dell EMC delivers and installs the infrastructure. VMware then provides ongoing maintenance and support. This makes it easy for IT operations to offload the burden of dealing with infrastructure and instead focus on value-add tasks.

**Order:** Sign into the VMware Cloud on Dell EMC service portal, select a configuration that fits your capacity needs and receive a delivery date.

**Deploy:** Dell EMC delivers the new service infrastructure to your site. An onsite technician installs, tests the equipment and activates the service. Once completed, you can begin to migrate workloads to the new infrastructure.

**Support:** VMware continually monitors the service infrastructure, patching/updating software while proactively addressing any issues that may surface.

**VMware Cloud on Dell EMC use cases.**

Explore four VMware Cloud on Dell EMC use cases, which address typical challenges data centers face today.

1. **Data center and edge location modernization.**
   - Hardware refresh: Update your aging, non-virtualized, on-premises data center to easily scale, build and run modern day applications.
   - Streamline operations: Enable real IT innovation and eliminate maintenance downtime with a consistent infrastructure across all compute areas including on-premises, edge locations and cloud.
   - Switch from a CapEx to OpEx model: Move to a more predictable OpEx model that is cost-based upon usage, eliminating over or under estimating CapEx expenditures.

2. **Accelerate modernization.**
   - Development agility: Simplify operations, do more than just keep the IT lights on, and focus on quickly providing your developers the environment they need to deliver innovation, using modern automation tools such as vRealize Suite, Kubernetes and Ansible.
   - Provide elastic capacity: Rapidly stand up needed capacity or extend capacity for scaled-up services.
   - Traditional application support: Support traditional and modern applications as your organization moves to new development platforms without extensive re-platforming.

3. **Data latency and sovereignty sensitive workloads.**
   - Low-latency requirements: Make decisions with data in real-time at edge locations. No need to wait for data to make a round-trip to your central data center.
   - Data security: According to Dimensional Research, in 2018 62% of IT decision makers in large enterprises said that their on-premises security is stronger than cloud security. This fact is because they want to retain control of the IT environment to protect their intellectual property.
   - Regulatory compliance: Some industries are under governmental compliance to host data on-premises.

4. **Advanced and Distributed VDI Workloads**
   - Deliver remote workspaces: VMware Cloud on Dell EMC delivers powerful infrastructure for virtual desktops and applications to power today’s evolving remote workspace needs.
   - Enterprise-class security: Certified support for VMware Horizon enables delivery of enterprise-class security and compliance in step with organizational requirements.
   - Superior Workspace Density: High performance for strong workspace density and end-user experience when running the most demanding applications.

IDC work cited: Source: IDC WW Hyper/converged services study, N=515