

VMware Cloud on Dell EMC

Get 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

KEY HIGHLIGHTS

- Cloud infrastructure delivered as a service on premises
- Co-engineered and delivered by Dell Technologies; ongoing service fully managed by VMware
- VMware software-defined data center (SDDC) includes compute, storage and networking
- Built on VxRail, Dell EMC's enterprise-grade cloud platform
- Hybrid control plane to provision and monitor resources
- Monthly subscription model

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

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 integrates with enterprise-class Dell hardware. This unique approach empowers you to drive any enterprise workload and focus on business innovation and differentiation, while VMware operates the entire infrastructure end to end.

The best of both clouds

Today's IT teams deal 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 because of an increasing emphasis on information, as well as the swelling number of applications deployed to make this information accessible and actionable.

These traditional data centers have been built using CapEx, where compute, storage and networking equipment are purchased and depreciated over a defined life span. This cyclical spending pattern creates 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 commonplace in private data centers.

Finance organizations view the public cloud as a vehicle for removing the financial responsibility associated with digesting 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 the infrastructure management and support responsibilities that come with running an on-premises 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.

KEY BENEFITS

- Customer-driven ordering process
- Fully managed and supported by VMware
- Freedom from asset ownership
- Choice of payment terms with subscription-based pricing
- Ongoing security updates and software patching
- Transparent hybrid cloud control plane

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.

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 VxRail™, Dell EMC's enterprise grade hyperconverged cloud platform.

This powerful hardware and software combination yields an innovative, fully managed infrastructure 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-premises data centers.

CLOUD ADVANTAGES	ON-PREMISES ADVANTAGES
Increased agility and time to value Self-service provisioning and elasticity of resources	Controlled costs Predictable cost model with resource transparency
Simplified operations Zero infrastructure management	Increased performance Low data latency and high-performance networking
Accelerated innovation Rapidly extend capacity for scaled-up services	Mitigated risks Compliance with data residency and regulatory requirements

FIGURE 1: VMware Cloud on Dell EMC benefits.

Integrated hardware and software delivered as a service

VMware Cloud on Dell EMC delivers the VMware SDDC platform—including VMware vSphere®, VMware vSAN™ and VMware NSX® virtualization technologies—and integrates with Dell EMC’s enterprise-class VxRail hyperconverged infrastructure.

Within the VMware Cloud Services portal, you can select the rack size and number of host instances, and configure network requirements to meet your exact specifications. The VxRail appliance architecture enables you to start small and grow, scaling capacity and performance easily and non-disruptively from 3 to 26 nodes¹.

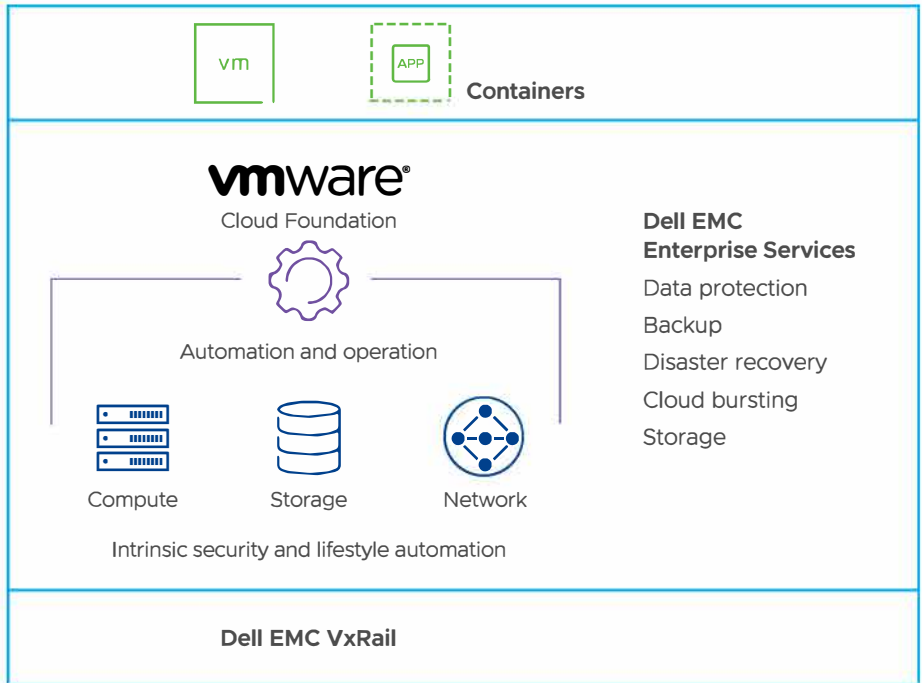


FIGURE 2: VMware Cloud on Dell EMC architecture.

Getting started

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 focus on value-add tasks.



Order – Sign in to 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 and 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.

FOR MORE INFORMATION

- Visit the [VMware Cloud on Dell EMC](#) product page.
- Read a [blog post](#) about VMware Cloud on Dell EMC.
- Follow [@VMWondellEMC](#) on Twitter.

Use cases

There are several use cases for VMware Cloud on Dell EMC. The following use cases best address contemporary challenges most data centers face today.

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.

Data center and edge location modernization

Refreshing hardware – Update your aging, non-virtualized on-premises data center to easily scale and build modern day applications.

Streamlining operations – Enable real IT innovation and eliminate maintenance downtime with a consistent infrastructure across all compute areas, including on-premises, edge and cloud locations.

Switching from a CapEx to an OpEx model – Move to a more predictable OpEx model with costs based on usage, eliminating the overestimating or underestimating of CapEx.

Accelerate modernization

Development agility – Simplify operations, do more than just keep the IT lights on, and focus on quickly providing your developers with the environment they need to deliver innovation, using modern automation tools such as VMware vRealize® Suite, VMware Tanzu Kubernetes Grid (TKG), and Ansible.

Elastic capacity – Rapidly stand up the 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.

Data-latency and sovereignty-sensitive workloads

Low-latency requirements – Make real-time decisions with data at edge locations. There's 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 percent of IT decision-makers in large enterprises said their on-premises security is stronger than cloud security. This may be 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.

¹Note: deployment of 26 active + 1 standby instances requires use of a R2 full-height rack powered by 3-phase power.