



VMware Cloud on Dell EMC

for
dummies[®]
A Wiley Brand

VMware Edition

The public cloud is key to many enterprise digital transformation initiatives today, promising greater agility, rapid innovation, faster time to market, and simplified operations. The public cloud is a great option for many cloud-native next-generation apps and workloads, but it isn't necessarily the right choice for all workloads. On-premises infrastructure is still needed to address critical enterprise use cases, including workloads that:

- Require low latency to ensure application performance
- Are tightly integrated with back-end systems
- Process local data

Many organizations must also comply with various regulatory mandates that require data sovereignty to ensure security and privacy, as well as internal

governance requirements for strict control of critical workloads. At the same time, enterprise IT teams must ensure timely access to applications and data — whether in the cloud or on-premises — while managing ever shrinking capital expenditures (CapEx) budgets and constant pressure to migrate workloads to the public cloud and shift spending to operational expenditures (OpEx).

In this guide, you'll discover how VMware Cloud on Dell EMC helps enterprise IT drive better business outcomes and a superior app experience with on-premises infrastructure delivered on-premises and fully operated and managed as a cloud service by VMware.

What Is Infrastructure as a Service?

Cloud-based infrastructure as a service (IaaS) provides customers the ability

to provision and manage virtualized compute, storage, and networking resources in a public cloud environment. The customer manages the operating systems, storage, applications, and other components of the infrastructure while the cloud service provider manages the underlying hardware and physical data center. Compared to platform as a service (PaaS) and software as a service (SaaS) cloud offerings, IaaS provides the enterprise customer with the most flexibility and control (see Figure 1).

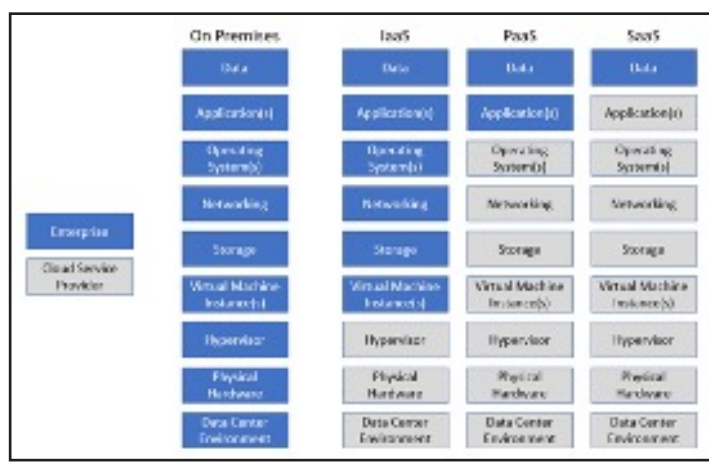


Figure 1: The shared responsibility model.



TIP

Deployment options for IaaS include public and private cloud, as well as traditional managed services. Many private cloud deployments originally may have been conceived as a solution to the latency and control challenges of IaaS in the public cloud, but the execution hasn't always delivered the expected outcomes. In many cases,

enterprises don't have the necessary foundation — a software-defined data center (SDDC) — upon which to build an environmentally consistent private cloud, and/or they lack the right people, processes, and technology needed to implement an effective cloud operating model. A managed service provider may alleviate some of these latter issues but may not be a viable (or desirable) option for many enterprises. Clearly, a different approach is needed.

What Is Local Cloud as a Service?

As enterprises move forward with their digitalization plans, many are running into significant challenges that stand in the way of their progress. In many cases, their existing private cloud deployments lack the flexibility, environment, and architectural consistency to be updated to support the growing number of modern workloads. Furthermore, enterprise IT organizations face increasing budgetary scrutiny over the multi-million-dollar capital spend every three to four years that brings a refreshed infrastructure. Often, this scrutiny evolves into pressure to shift IT infrastructure spend to an operationally costed expense model typically associated with the public cloud. Local Cloud as a Service (LCaaS) is a new concept that delivers a modern, private cloud

infrastructure solution on-premises or to the edge. The pre-built infrastructure is built on the latest hardware, leverages hyperconverged (HCI) technology, and is supplied through a termed service or subscription agreement that provides a cloud-like operationally costed monthly bill. Once subscribed to, the service provider will build, deliver, and deploy the infrastructure. Customers then only focus on their applications and workloads, while the service provider handles the management of the infrastructure, including ongoing remote infrastructure health monitoring, management, and support, as well as lift-cycle management of the hardware and software. Unburdening enterprise IT from the hardware/software management task frees up IT members to focus on more strategic business projects and activities.

What Is VMware Cloud on Dell EMC?

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 operates the entire infrastructure end to end, so you can focus on business innovation and differentiation. Powered by VMware's Hybrid Cloud SDDC software, VMware Cloud on Dell EMC delivers a proven, unified VMware SDDC platform built on VxRail, Dell EMC's enterprise-grade hyperconverged cloud platform (see Figure 2).

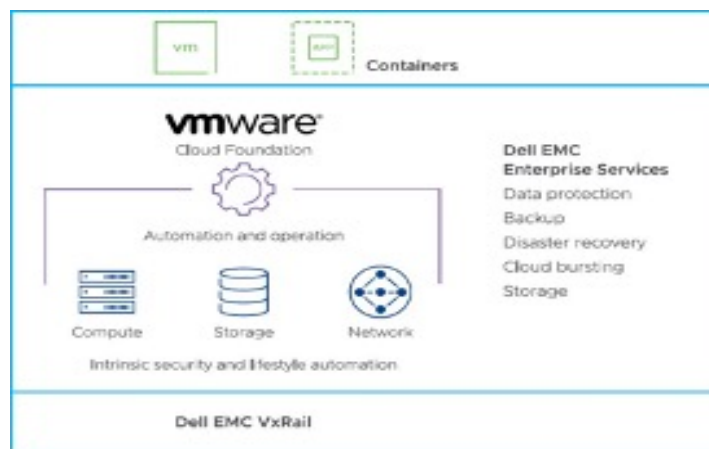


Figure 2: VMware Cloud on Dell EMC architecture.



TIP

Ordering VMware Cloud on Dell EMC is simple. Log into the VMware Cloud customer portal, select the infrastructure rack type, the type and number of instances, and configuration information to connect the infrastructure in your data center. Your custom infrastructure will then be built to your specifications, pre-installed with the included VMware SDDC software, and configured with the network information provided. This process ensures that your VMware Cloud on Dell EMC infrastructure can be deployed into production in a few hours and will be ready for your workloads. Expansion of the service infrastructure is as simple as ordering additional resources in the customer portal. Customers need only to focus on the management of their workloads while VMware continuously monitors and manages the infrastructure.

Use cases

VMware Cloud on Dell EMC supports many of the most common enterprise use cases today including:

Data center modernization

- **Modernize infrastructure:** Update costly, legacy on-premises data center infrastructure to easily scale and run modern apps and virtualized workloads.
- **Streamlining operations:** Enable real innovation and eliminate maintenance downtime with a consistent infrastructure across on-premises, edge, and cloud locations.
- **Shifting from CapEx to OpEx:** Move to a predictable operationally costed model with on-demand scalability, eliminating costly CapEx investments and downtime due to overestimating or underestimating infrastructure capacity requirements.

Data sovereignty and workload proximity

- **Addressing low latency requirements:** Host latency-sensitive workloads and workloads that are tightly integrated with on-premises back-end systems.

- **Ensuring command and control:** Keep control of your critical workloads and data, as needed, for governance and security.
- **Maintaining regulatory compliance:** Meet any applicable regulatory requirements for hosting certain workloads and data on-premises.

Application modernization

- **Enabling development agility:** Provide the environment and automation tools your developers need, such as VMware vRealize Suite and VMware Tanzu Kubernetes.
- **Providing on-demand capacity:** Flexibly add more resource capacity when needed to keep pace with organizational growth.
- **Supporting your entire application portfolio:** Choose the best environment — whether on-premises or at the edge — to run your traditional and modern applications without extensive re-platforming or refactoring.



TIP

Download your free copy of [*Data Center Modernization For Dummies, VMware Special Edition*](#), and [*Modern Infrastructure For Dummies, VMware Special Edition*](#), to learn more about these use cases.

Business benefits

VMware Cloud on Dell EMC delivers numerous business benefits for customers including:

- **Mitigated risks:** Comply with data residency and regulatory requirements with a hybrid cloud strategy leveraging on-premises LCaaS.
- **Controlled costs:** Choice of payment terms with subscription-based pricing provides a predictable operational cost model, resource transparency, and freedom from asset ownership.
- **Improved agility and performance:** Customer-driven, self-service provisioning and elasticity of resources provides low data latency and high-performance networking.
- **Simplified operations:** Fully managed and supported by VMware including ongoing security updates and software patching.
- **Accelerated innovation:** Increase developer velocity and cloud access with a transparent hybrid cloud control plane.

Getting started

VMware Cloud on Dell EMC is as easy to order and manage as any public cloud resource. After you place an order

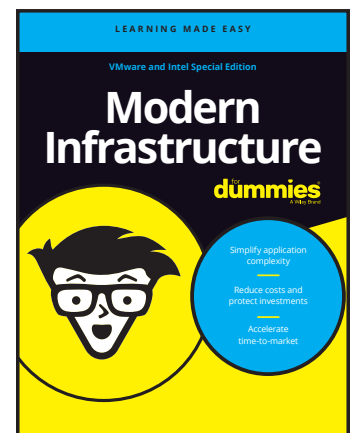
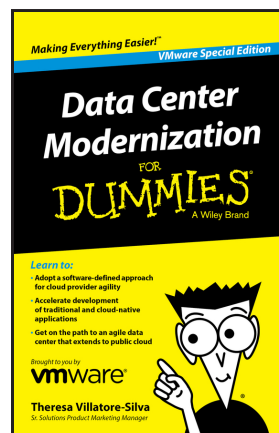
through VMware's Cloud Console, Dell EMC delivers and installs the infrastructure. VMware then provides ongoing maintenance and support, thereby offloading the burden of dealing with infrastructure and freeing you to focus on more strategic tasks and projects to deliver greater value to your business.



TIP

Check out the following resources from VMware to learn more about VMware Cloud on Dell EMC and get started today:

- [VMware Cloud on Dell EMC home page](#)
- [Technical overview of VMware Cloud on Dell EMC whitepaper](#)
- [IDC Technology Spotlight: Gaining an Edge in Enterprise Cloud Transformation, Doc #US45404619, Aug 2019](#)



vmware®