

VMware Cloud on AWS

Modern enterprise applications benefit from an integrated and hybrid approach

Solution overview

- VMware SDDC running on dedicated Amazon EC2 elastic, bare-metal infrastructure
- Sold, operated and supported by VMware and its partners
- On-demand capacity and flexible consumption
- Full operational consistency with on-premises SDDC
- Fast and simple Bi-Directional workload migration
- Seamless large-scale workload portability and hybrid operations
- Global AWS footprint, reach, availability over time
- Direct access and integration with native AWS services
- Spin up entire SDDC in under 2 hours and scale host capacity in minutes

For latest available features visit [VMware Cloud on AWS roadmap](#)

As global workloads accelerate (160 million today to 596 million by 2030), the need for greater agility and global deployment options have driven public clouds to be increasingly more attractive.¹ Customers view public clouds as a way to gain the flexibility and speed to respond to changing business needs, accelerate innovation and align costs to business requirements by managing upfront expenses, operational support and TCO.

However, in doing so, customers are recognizing the benefit of having their public clouds integrate and work seamlessly with their on-premises infrastructure while taking advantage of their existing teams, skillsets, tools and processes.

Challenges of adopting public cloud environments that are disparate from your on-premises investments:



Inability to leverage existing IT skillsets and tools when adopting public clouds



Differences in operational model and inability to leverage established on-premises governance, security and operational policies while taking advantage of cloud-scale and agility



Lack of flexibility when strategically determining where to run your applications due to lack of application portability and compatibility, reducing agility in serving business needs while increasing costs



Inflexibility to develop or modernize diverse types of enterprise applications due to incongruencies between developer needs and IT's ability to consistently deliver and manage heterogeneous cloud environments



Different infrastructures between private cloud and public cloud, forcing customers to re-architect / refactor existing applications while moving to cloud, thus increasing risks, costs and complexity

1. Balancing Freedom and Control: Evolution of the Cloud – 2006-2030, VMware White Paper, (October 2016)

Key value proposition of VMware Cloud on AWS

- Run, manage, and secure production applications in a seamlessly integrated hybrid IT environment
- Familiar skills, tools, and processes for managing private and public cloud environments
- Innovate and respond to changing business demands with the enterprise capabilities of VMware SDDC, coupled with the elastic infrastructure, and the breadth and depth of the AWS services
- Seamlessly move workloads bi-directionally between vSphere-based private and public clouds
- Rapid time to value with the ability to spin up an entire VMware SDDC in under two hours and scale host capacity in a few minutes
- Leverage established on-premises enterprise security, governance and operational policies, and extend that with the cloud scale and security that AWS Cloud brings
- Reduce your carbon footprint with renewable energy-powered and energy-efficient global AWS infrastructure

Value of running applications on VMware Cloud on AWS in VMware hybrid cloud environment:

351% three-year ROI² **83%** less unplanned downtime²

Customers across industries are accelerating adoption of both AWS Cloud and VMware infrastructure. Many of them want the ability to integrate their on-premises data center environments with AWS using their existing tools and skillsets within a common operating environment based on familiar VMware software. VMware Cloud™ on AWS delivers on this promise by providing a unified infrastructure framework that bridges the gap between private and public clouds. VMware Cloud on AWS delivers a seamlessly integrated hybrid cloud that extends on-premises vSphere environments to a VMware SDDC running on Amazon EC2 elastic, bare-metal infrastructure and is fully integrated as part of the AWS Cloud.

VMware Cloud on AWS enables Enterprise IT and Operations teams to continue to add value to their business in the AWS cloud, while maximizing their VMware investments, without the need to buy new hardware. This offering enables for customers to quickly and confidently scale up or down capacity, without change or friction, for any workload with access to native cloud services.

VMware Cloud on AWS is powered by VMware Cloud Foundation™, the unified VMware SDDC platform that integrates VMware vSphere®, VMware Virtual SAN™ and VMware NSX™ virtualization technologies. This service is optimized to run on dedicated, elastic, bare-metal AWS infrastructure and is delivered, sold and supported by VMware and its partners. The service provides access to the broad range of AWS services, together with the functionality, elasticity, and security customers have come to expect from the AWS Cloud.

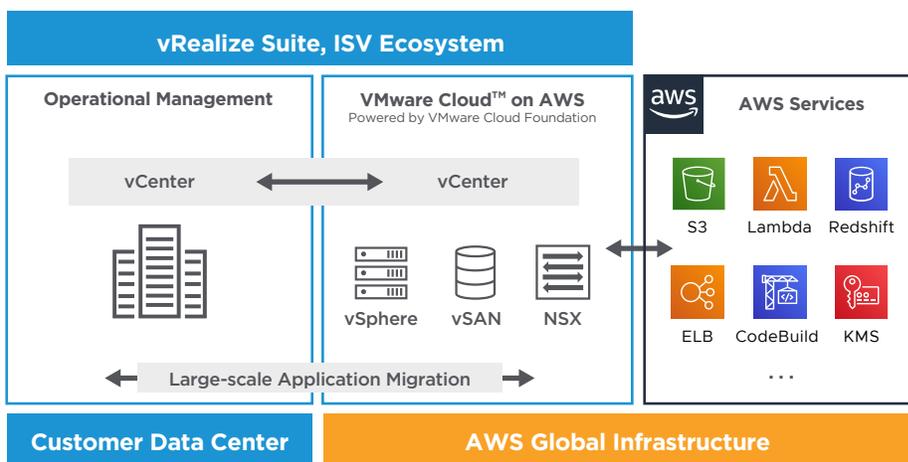


Figure 1: VMware Cloud on AWS

2. The Business Value of Running Applications on VMware Cloud on AWS in VMware Hybrid Cloud Environments - IDC WhitePaper 2020



Use case #1:
Cloud migrations

- Minimizes complexity and risk of transition
- Simplifies and accelerates speed of migrations
- Reduces cost of migrations
- Extends value of existing enterprise app investments

Learn more:

[Cloud migration solution brief](#)



Use case #2:
Data center extension

- Reduces upfront investment costs and delivers compelling TCO
- Accelerates speed of provisioning
- Reduces the complexity by having the same consistent architecture and operations on-premises and in the cloud
- Improved scalability: Pay as you grow and as much you need

Learn more:

[Data center extension solution brief](#)



Use case #3:
Disaster recovery

- Reduces secondary DR site costs
- Accelerates time-to-protection
- Increases business resiliency
- Simplifies DR operations
- Recovers data from ransomware attacks

Learn more:

[Disaster recovery solution brief](#)

Use cases

VMware Cloud on AWS provides a seamlessly integrated hybrid cloud offering to address use cases that align to a customer's cloud strategy.

Use case 1: Cloud migrations

Accelerate cloud migration without complex conversions and run your applications on VMware Cloud on AWS, a consistent and enterprise-class cloud service that brings the best of VMware technologies to AWS, the world's largest and most experienced public cloud. Once in the cloud, you can utilize other VMware cloud services and native AWS services to modernize applications as needed. This is ideal for customers who want to move to the cloud without having to re-architect applications:

Application specific

Move specific applications to the cloud due to specific business needs or want to move enterprise applications such as Oracle, Microsoft, SAP, etc. to the cloud.

Data center wide evacuations

Consolidate data centers and move completely to the public cloud.

Infrastructure refreshes

Are doing infrastructure refreshes (e.g., due to hardware end of life, infrastructure software upgrade etc.) and want to leverage the opportunity to move to the public cloud.

Use case 2: Data center extension

Extend your data center with VMware SDDC-consistent on-demand, agile capacity in AWS, the world's largest and most experienced public cloud, to meet the needs of your business. This is ideal for customers who want to expand their on-premises footprint with cloud capacity for specific needs:

Footprint expansion / on-demand capacity

- Have geographic capacity needs (such as data sovereignty rules or the need to be closer to their end users) and do not want to invest in building out a new data center.
- Have capacity constraints on-premises to handle seasonal spikes in demand.
- Want to handle unplanned temporary capacity needs or need capacity for new projects and do not want to invest in over provisioning or in building new capacity on-premises.

Virtual desktops and published apps

- Easily add and extend on-premises desktop services without buying additional hardware.
- Co-locate virtual desktops or published application hosts near latency-sensitive apps in the cloud.
- Leverage elastic capacity as a cost-effective way to protect on-premises Horizon deployments or for temporary needs.



Use case #4:

Next-generation apps

- Fast and seamless path to new modernized applications
- Extends value of existing on-premises enterprise app investments

Learn more:

- [Application modernization solution brief](#)
- [Click here to get started now with VMware Cloud on AWS](#)

Resources:

[VMware Cloud on AWS website](#)

[VMware Cloud Tech Zone](#)

[VMware Cloud on AWS Overview Video](#)

[VMware Cloud on AWS TCO 1-pager](#)

[VMware Cloud on AWS: Cloud Economics](#)

[Try VMware Cloud on AWS Hands-on-Lab](#) for a first-hand immersive experience

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Use case 3: Disaster recovery

Disaster recovery, delivered as a service for VMware Cloud on AWS, delivers on-demand site protection with native automated orchestration, failover and failback capabilities. This is ideal for customers who want:

Modernize

Modernize existing DR solutions by replacing existing DR to reduce secondary DR site costs and moving their DR operations to the cloud

Optimize

Complement existing DR to protect additional workloads and complement their existing DR strategy with a cloud-based DR

Accelerate

Rapidly restore data and applications from ransomware attacks and other data breach threats

Ransomware Recovery

Confidently recover from ransomware with integrated identification, validation, and restore of recovery points in an on-demand Isolated Recovery Environment (IRE)

Use case 4: Next-generation apps

Modernize existing enterprise apps with AWS cloud capabilities and services and integrate modern application tools and frameworks to develop next-generation apps

Application modernization

Utilize cloud-scale infrastructure and services to extend the value of existing enterprise applications or want infrastructure to be consistent with their on-premises environments for compatibility.

Next-generation application build-out

Build new applications using native AWS services while leveraging infrastructure that is consistent with their on-premises vSphere environments.

Hybrid applications

Build hybrid applications to span data center, cloud and edge—or a combination of these.

Test/Dev

Have a need to perform test and development activities in a cloud environment that is operationally similar to on-premises environments.