

VMware Cloud on AWS

Accelerate enterprise cloud transformation with a deeply integrated hybrid cloud

At a glance

- VMware SDDC running on dedicated Amazon EC2 elastic, bare metal infrastructure
- Delivered, operated and supported by VMware and its partners
- On-demand capacity and flexible consumption
- Complete operational consistency with on-premises SDDC
- Fast and simple bi-directional workload migration
- Seamless large-scale workload portability and hybrid operations with VMware HCX
- Global AWS footprint, reach, availability
- Direct access and integration with native AWS services
- Spin up the entire SDDC in under 2 hours and scale host capacity in minutes
- Fully managed Kubernetes services with no additional cost

In today's digital-first world, business outcomes are tied to faster innovation and greater efficiency. To innovate faster and to improve operational efficiency, businesses need the latest technology that is more agile, flexible, scalable and resilient that can be optimized according to changing business needs. With continuously evolving business needs, businesses demand that IT operates at higher speed and with greater agility within the confines of existing budgets. And 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, public cloud transformation is challenging. IT teams face multiple challenges in 3 key areas:


- **While migrating and operating in public cloud:** Differences in every component of infrastructure stack and every aspect of IT operations between on-premises and public cloud environment.
- **While delivering enterprise applications in the cloud:** Highly costly and complicated assembly and integration of traditional public cloud services to cater to the requirements of enterprise applications due to high granularity of public cloud services, service independence and self-management of services.
- **While modernizing existing applications:** No satisfactory value or ROI delivered through one-size-fits-all refactoring due to differences in value delivered by applications, infrastructural needs, dev-ops processes and architectural designs.


These challenges decrease the sought-after agility and value of moving enterprise applications to public cloud, while increasing the time, risk and cost of initial migration, ongoing operation, and eventual application modernization.


VMware Cloud™ on AWS helps customers overcome these challenges and helps them accelerate their cloud transformation journey by providing a unified infrastructure framework that bridges the gap between private and public cloud.


VMware Cloud on AWS with VMware add-ons


A growing set of VMware services are supported on VMware Cloud on AWS and provide increased functional and operational parity between your on-premises data center and infrastructure in the AWS cloud.


 [VMware Cloud Disaster Recovery](#)
Protect your data, minimize downtime and reduce costs with optimized disaster recovery. Only pay for failover when needed.


 [VMware Site Recovery](#)
Automate orchestration of failover and failback to minimize downtime and improve availability.


 [VMware Cloud Flex Storage](#)
Scale storage capacity without adding hosts—a flexible, simple, cost-effective way to store and manage your data.


 [VMware NSX Advanced Firewall for VMware Cloud on AWS](#)
Take advantage of advanced distributed security and web application firewalls for VMware Cloud on AWS workloads.

 [VMware Aria Cloud Management](#)
Deploy, operate, and automate infrastructure and applications using Aria components running on-premises or in the cloud.

 [VMware Horizon](#)
Deliver seamlessly integrated virtual desktops and applications in the cloud.

 [VMware Tanzu](#)
Quickly deploy and operate enterprise-grade Kubernetes and cloud-native apps.

 [VMware SD-WAN](#)
Provide secure, reliable, and efficient connections to VMware Cloud on AWS workloads for users and application migrations.

 [VMware Cloud Director service](#)
Broaden business opportunities with multi-tenant cloud management.

Be cloud-smart with VMware Cloud on AWS

VMware Cloud™ on AWS is a jointly engineered service that brings VMware’s enterprise-class Software-Defined Data Center software to the AWS Cloud’s dedicated, elastic, bare-metal infrastructure, delivered as an on-demand service with optimized access to AWS services, enabling IT teams to rapidly migrate and modernize VMware vSphere® applications in AWS Cloud by leveraging the best of both worlds.

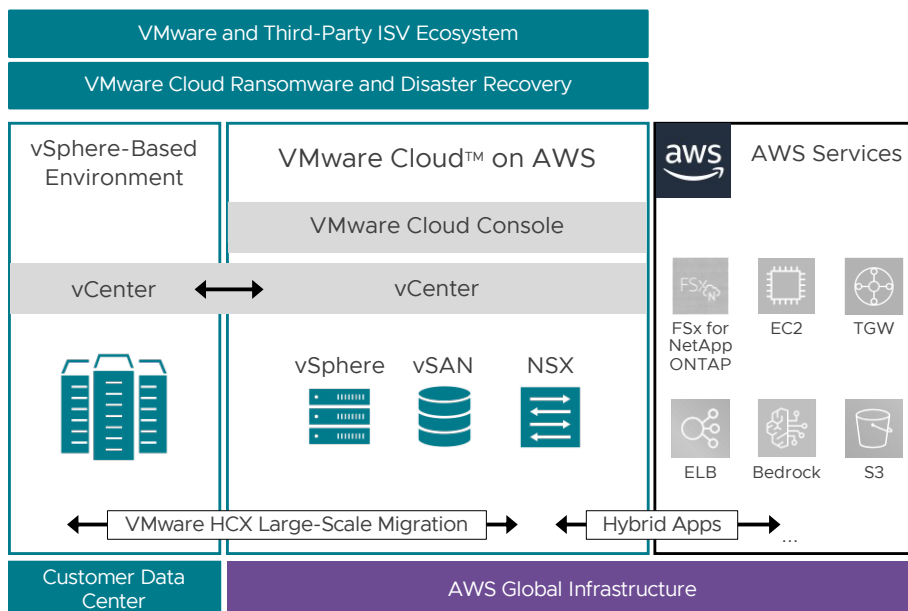


Figure 1: VMware Cloud on AWS.

The value of VMware Cloud on AWS

1

Best of both worlds

VMware’s enterprise software, combined with the flexibility and speed of AWS

2

Cloud economics

53% average reduction in infrastructure and operations costs¹

3

Zero refactoring

52% less staff time required to migrate and 63% faster to deploy new compute²

4

Existing skills

28% lower three-year cost of operations and 32% more efficient IT infrastructure teams²

1. Forrester TEI: The Total Economic Impact™ Of VMware Cloud On AWS, October 2022.

2. IDC, Business Value Snapshot, sponsored by VMware by Broadcom, Feb 2024.

“For mission-critical workloads, VMware Cloud on AWS allowed us to enhance the on-premise private cloud set-up, with the flexibility to scale up on demand across private clouds in AWS and on-premise, thereby ensuring that we leverage the proven capabilities of scale with consistency and availability for our businesses.”

Biswabrata Chakravorty
Chief Information Officer, [IndusInd Bank](#)

IndusInd Bank

“Our migration to the AWS public cloud was completed in a matter of months. We save 26% on our infrastructure costs...without penalizing our 900 users for a single moment.”

Jean-Yves Pottier
Head of IT Infrastructure, [Kem One](#)



“VMware Cloud on AWS requires significantly fewer resources to manage than our on-premises environment. We can spin down resources when everything slows down after graduation in the summer.”

Leonard Niebo
Associate VP & CIO
Office of Information Technology, [TCNJ](#)



“With VMware Cloud Disaster Recovery, we can carry out better testing, so we know that everything works.”

Adrian Hess
CEO, [Woche-Pass](#)



VMware Cloud on AWS use cases

App migration and modernization

Accelerate enterprise application migration without complex conversions or application refactoring. Run applications on VMware Cloud on AWS, leveraging the best of familiar VMware Cloud technologies. Once in the cloud, innovate rapidly and provide improved digital experiences by building next-generation applications and modernizing existing enterprise applications.

- Migrate or scale a line of business applications to meet your business goals
- Migrate applications with specific architecture requirements
- Modernize existing applications or build new modern applications

Data center migration

Reduce the data center footprint by migrating all workloads to the cloud quickly, safely and cost-effectively, leveraging the large-scale migration capabilities included in the service.

- Consolidate or retire data centers and migrate to the cloud
- Modernize infrastructure and accelerate by migrating to cloud
- Right-size data center post-divestiture

Data center extension

Extend an on-premises data center to VMware SDDC-consistent, on-demand, agile capacity in AWS Cloud. Manage on-premises and VMware Cloud on AWS environments through a single pane of glass in an operationally consistent way extending on-premises tools, processes and governance to the AWS Cloud.

- Scale infrastructure for new projects or expand across new regions
- Scale capacity on-demand for demand spikes, events or test/dev projects and pay as you grow and as much as you need
- Burst/protect/co-locate virtual desktops in the cloud

Disaster recovery as a service

Reduce disaster recovery costs with Disaster Recovery as a Service (DRaaS) for VMware Cloud on AWS. It delivers on-demand site protection with native automated orchestration, failover and failback capabilities. Use VMware Cloud Disaster Recovery, Ransomware Recovery as a Service, VMware Site Recovery add-ons or 'VMware Ready' partner solutions to set up DRaaS in the cloud.

- Protect and recover data from ransomware attacks
- Outsource/complement existing DR operations to cloud
- Improve DR operations and replace legacy DR solutions

Key benefits

Fast time to value

- Faster extension of on-premises infrastructure to compatible public cloud environment with consistent operating model
- Faster application migration without changes to a compatible cloud environment
- Faster application modernization with integrated IaaS and CaaS environments with access to 200+ PaaS services

Turnkey enterprise cloud infrastructure

- Deeply integrated enterprise compute, network, and storage capabilities packaged for business-critical applications and delivered as a fully managed cloud service
- Rich enterprise performance, availability, security, manageability and supportability capabilities built into the infrastructure
- Granular control over underlying compute, storage, and network resources with proven capabilities to optimize utilization

Deeply integrated hybrid cloud

- Consistent infrastructure management extending existing skills, tools, and processes from on-premises
- Integrated, single point of management control for virtual machines and Kubernetes orchestrated containers in the cloud and on-premises
- Flexible commercial options to convert on-premises subscriptions to cloud or port subscriptions between cloud environments

Key differentiations to accelerate your cloud journey

Enterprise-ready turnkey cloud service

Built-in enterprise infrastructure services for business-critical applications that don't have to be bolted-on, outsourced, or built into individual applications, delivered as a native, fully managed AWS service.

- Run, manage and protect production applications in a deeply integrated hybrid IT environment with out-of-the-box enterprise-grade capabilities delivering predictable, high-performance compute with vSphere running on bare-metal AWS EC2 infrastructure, zero-click enterprise-class storage with VMware vSAN™ built-in deduplication and compression delivered on local NVMe Flash storage and advanced networking and security services with VMware NSX-T™, including micro-segmentation security.
- Focus on strategic business priorities while VMware takes care of the infrastructure and scale infrastructure with rapid, on-demand capacity to support your business needs through Elastic DRS™ feature and optimize workload placement for efficient utilization with vSphere DRS.
- Deliver applications with confidence with intrinsic availability, performance and built-in resiliency with features such as Storage Policy-Based Management (SPBM), VMware HA, Auto Remediation and Partition Placement Groups, Multi-AZ stretched clusters and add-ons such as VMware Cloud™ Disaster Recovery or VMware Site Recovery™ and VMware Ransomware Recovery as a Service.

Fast, non-disruptive cloud migration


Fast, cost-effective, less risky way to migrate, re-platform, or refactor existing and build new business-critical applications in the cloud.

- Seamlessly move workloads bi-directionally between vSphere-based infrastructure and the AWS Cloud without any application refactoring or changes. Select from a large variety of migration methods including cold, warm with or without replication, or live with or without replication.
- Perform automated large-scale application migration with secure multisite interconnects between any vSphere version on-premises and VMware Cloud on AWS with VMware HCX.
- Use VMware vMotion® from vCenter® to migrate live VMs from on-premises to AWS Cloud without any downtime.


Resources


 [VMware Cloud on AWS website](#)


 [VMware Cloud on AWS Techzone](#)

 [VMware Cloud on AWS Hands on Labs](#)

 [VMware Cloud on AWS blogs](#)

 [VMware Cloud on AWS Unplugged Podcast](#)

 [VMware Cloud on AWS on YouTube](#)

 [VMware Cloud on AWS release notes](#)



Consistent, familiar cloud platform

Leverage existing skills, tools, and processes to migrate, operate and modernize enterprise applications in the public cloud.

- Eliminate re-training by using familiar skills, tools, and processes for managing cloud environments with consistent operations for improved productivity and reduced costs.
- Continue using established on-premises governance and operational policies and extend that with the cloud security, compliance and availability of AWS Cloud and take advantage of consistent operations delivered by the same on-premises technologies, such as VMware vCenter Server® for day-to-day operations and VMware Aria for advanced hybrid cloud management operations.
- Extend the capabilities of VMware Cloud on AWS through a robust set of 300+ VMware validated open-source and third-party solutions that you have been using on-premises.



Pragmatic, non-disruptive modernization

Rich set of deeply integrated options for modernizing enterprise applications anywhere along the cloud adoption journey that aligns with available resources, timelines, and skills.

- Increase the value of business-critical applications running in VMware Cloud on AWS with a simple and consistent way to access 200+ native AWS services over a high bandwidth, low-latency connection via AWS Elastic Network Interface.
- Deploy, run, scale and manage containerized workloads and transform applications on VMware Cloud on AWS with Tanzu services (Tanzu Kubernetes Grid runtime to run containerized workloads and Tanzu Mission Control to manage containerized workloads).
- Automate IT infrastructure operations with seamless developer experience across the entire platform with developer center, developer tools, automation tools and VMware Aria Automation.



Compelling TCO

Lower TCO compared to on-premises and public cloud alternatives because of unique resource optimization options, integrated enterprise capabilities and capitalizing existing investments in skills, tools and processes.

- Leverage flexible cloud consumption options with rapid time to value. Align costs to your business needs with flexible consumption options and investment protection.
- Reduce overall cost by eliminating overprovisioning or building new geo capacity.
- Reduce infrastructure costs with sustainable, energy-efficient infrastructure that leverages high performance, energy efficient server population and higher server utilization and thus reduces unused hardware capacity in on-premises data centers, and increases power usage effectiveness.