aws

VMware Cloud on AWS: From migration to modernization

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Strategic modernization: The VMware Cloud on AWS advantage

Migration to the cloud is not merely a technological shift; it's a strategy for transformation that unlocks modernization and innovation. Launching a migration to modernization strategy comes with its challenges. It involves navigating the complexities of integrating new technologies without disrupting existing operations and investments.

VMware Cloud on Amazon Web Services (AWS) helps customers migrate at their own pace while unlocking innovation faster. Offering seamless, scalable, and secure pathways to modernization, it combines the familiarity and flexibility of VMware technologies with the extensive capabilities and global infrastructure of AWS. It also provides a fast, safe option for migrating workloads, with the freedom to choose your path to modernization and move at your own pace.

VMware Cloud on AWS is the reliable migration path for your workloads

VMware Cloud on AWS integrates compute, network, and storage features, enabling quick and efficient connection, scaling, and migration of on-premises data centers to AWS's extensive global infrastructure. With VMware Cloud on AWS, organizations gain the economic benefits of cloud technology while retaining the ability to use existing skills—and avoiding the need to rebuild current applications.

Migration to VMware Cloud on AWS facilitates future modernization, positioning organizations to capitalize fully on cloud capabilities.

Benefits of VMware Cloud on AWS in comparison to on-premises environment[1]

- Organizations see up to **361%** three-year return on investment

- Infrastructure costs are lowered by **22%**

- Downtime is reduced by **95%**

1 "The Business Value of VMware Cloud on AWS for Creating VMware Hybrid Cloud Environments," IDC, February 2024

Real-world transformations with VMware Cloud on AWS

Migration is the start to innovation, and a faster and simpler migration allows a faster path to modernization. Organizations across various sectors have successfully driven significant transformation by migrating to VMware Cloud on AWS:

- **Rapid cloud migration:** Quality Bicycle Products successfully modernized its IT infrastructure, resulting in streamlined operations, significantly reduced operational costs, and efficient and secure IT environments.
  Learn more

- **Data center extension and cost reduction:** Alperia achieved a 30 percent reduction in compute costs by seamlessly running applications between on-premises and cloud infrastructures.
  Learn more

- **Enhanced disaster recovery:** S&P Global Ratings improved its disaster recovery time by 50 percent, avoiding substantial data center charges.
  Learn more

- **Application modernization:** William Hill accelerated its infrastructure, data, and application modernization, reducing migration time significantly.
  Learn more

4 focus areas for modernization with VMware Cloud on AWS

VMware Cloud on AWS offers four distinct focus areas on the path to modernization. Each focus area offers a unique advantage. Together, these four focus areas lay a comprehensive road map for businesses to navigate their modernization journey:

Security and protection

Data modernization

Storage and scalability

Management and governance

Security and protection

In 2022, 82 percent of data breaches involved data stored in the cloud.[2] Incorporating data protection and disaster recovery (DR) into your migration and modernization strategy helps ensure business continuity, minimizes downtime, and safeguards critical data against unforeseen events, helping maintain operational resilience in the digital transformation journey.
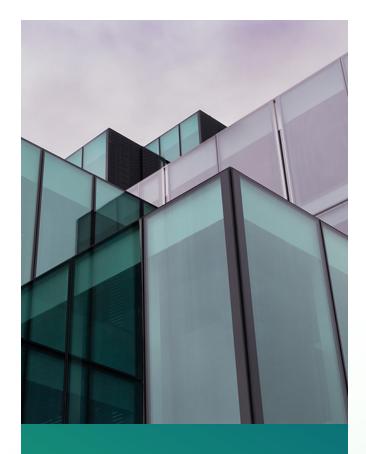
With VMware Cloud on AWS, customers can simplify their data protection and DR management strategy to mitigate risk while delivering accelerated time-to-protection and lower operational costs.

Safeguard your data

AWS Backup is a fully managed service designed to centralize and automate data protection across AWS services. Using this service, you can configure backup policies and monitor activity for your AWS resources in one place. It allows you to automate and consolidate backup tasks previously performed service by service and removes the need to create custom scripts and manual processes.

Ensure business continuity and recovery

VMware Cloud Disaster Recovery and **VMware Site Recovery** help simplify disaster protection, offering on-demand disaster recovery as a service that's optimized for VMware Cloud on AWS. Accelerate time-to-protection, simplify DR operations, and reduce secondary site costs with cloud economics—while providing a secondary site that is operationally consistent with your VMware data center.

Compliance with AWS

Protecting your workloads mitigates risks and ensures compliance with industry regulations. AWS supports 143 security standards and compliance certifications, including ISO 27001/17/18, FedRAMP, HIPAA, GDPR, OSPAR, G-Cloud, and Cloud Security Alliance.

🚀 Data modernization

Traditional data architecture is not built for the volume, velocity, and variety of data generated by today's applications. In many cases, organizations have learned hard lessons: Legacy systems weren't designed to handle today's modern data streams—and attempting to scale legacy systems is increasingly difficult.

VMware Cloud on AWS takes the guesswork out of getting value from your growing data. Modernize your data infrastructure with our three-step solution that's designed to support even the largest workloads today and tomorrow by migrating workloads to AWS.

Modernize data infrastructure in 3 steps after your migration:

Step 1:
Set up data lake

AWS Lake Formation centralizes governance, security, and data sharing, supporting powerful analytics and machine learning processes. It streamlines and secures your data lake, making data access efficient and compliant.

Step 2:
Streamline data processing

Amazon QuickSight is a cost-effective, cloud-powered service that delivers advanced analytics capabilities with ease. It's designed for scalability and speed, offering insights at a fraction of the cost of traditional business intelligence solutions, ideal for data-driven decision-making.

Step 3:
Build and scale with AI

Amazon Bedrock is a fully managed, serverless service that seamlessly integrates generative artificial intelligence (AI) into your applications. It boosts efficiency and drives innovation, offering a secure platform for developing cutting-edge, AI-powered solutions with minimal overhead.

Watch this webinar for more insights into this process >

Storage and scalability

No matter your data storage needs, VMware Cloud on AWS provides choice and flexibility to support agility and allows better control over storage demands with three solutions to support your business. By being in the cloud, customers can enjoy the ability to handle increased demand and scale down when needed. In terms of storage, organizations are set up for success with flexible storage options to meet their current requirements and anticipated growth.

Varied storage options for modern infrastructure

vSAN is software-defined storage and is the core storage platform for VMware Cloud on AWS. This integration offers high performance and availability for your workloads, simplifying storage management and scaling within the AWS environment. For workloads running on i4i.metal and i3en.metal, vSAN is the core storage platform.

Amazon FSx for NetApp ONTAP, a fully managed service on AWS, offers scalable and flexible NetApp file system storage. It supports various storage protocols, optimizing integration with VMware vSphere workloads on VMware Cloud on AWS, and provides tailored solutions for diverse storage needs.

VMware Cloud Flex Storage is a scalable, cloud-attached, VMware-delivered storage solution that integrates with VMware Cloud on AWS. It offers enhanced flexibility, efficiency, and performance.

For workloads running on i4i.metal and i3en.metal instances, Amazon FSx for NetApp ONTAP and VMware Cloud Flex Storage offer supplementary enterprise-grade storage solutions with high performance, durability, and scalability. On the other hand, on m7i.metal instances, Amazon FSx for NetApp ONTAP and VMware Cloud Flex Storage serve as primary storage options, providing a strong and reliable storage infrastructure.

Benefits of Amazon FSx for NetApp ONTAP

- **Performance and scalability:** suitable for demanding applications and varied workload requirements

- **Seamless integration:** works with AWS services, such as AWS Backup, providing a streamlined experience across cloud and on-premises environments

- **Multi-protocol support:** enables file access across Network File System, Server Message Block, and Internet Small Computer System Interface for versatile application compatibility

- **Enhanced data protection:** strong data protection features, including snapshots and clones, for high data integrity and recovery capabilities

- **NetApp data services:** offers advanced data services such as deduplication, compression, and thin provisioning for efficient storage usage

Looking for more flexibility with your primary storage?

The newest m7i.metal-24xl instance type for VMware Cloud on AWS allows you to disaggregate your storage from compute. **Learn more >**

Management and governance

Historically, organizations have had to choose between business agility and governance control when modernizing. VMware Cloud on AWS solves this problem by connecting you to solutions that enhance oversight and control to support improved insights and elevated security.

Monitor and gain control of your environment

AWS Systems Manager is a comprehensive management solution that ensures secure end-to-end management for environments hosted on AWS or hybrid setups. Systems Manager offers management functionalities that can be used to remotely gain oversight and control of your VMware Cloud on AWS environment.
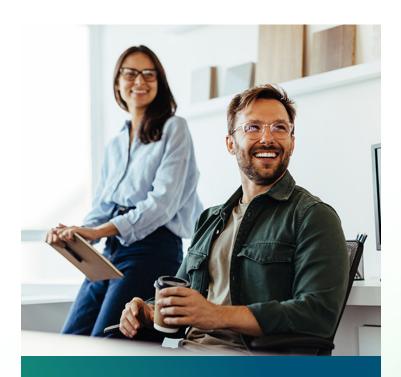
Key features of AWS Systems Manager

- **Fleet Manager** – This enables in-depth exploration of individual nodes, encompassing services, devices, or resources. It facilitates common system management tasks directly from a console, such as disk and file management, log oversight, and user administration.

- **Patch Manager** – This streamlines and automates the updating of managed nodes. This includes deploying both security-related updates and other essential patches.

- **Session Manager** – This offers a secure, auditable approach to node management, negating the need for inbound ports, bastion hosts, or SSH key management.

- **Inventory** – This gathers and organizes metadata from your managed nodes within AWS, including those on premises or across other cloud platforms.

VMware Cloud on AWS, your partner in migration to modernization

Modernization is an ongoing process—and the cloud is built with continuous evolution in mind. Modernize your systems and migrate on-premises workloads to VMware Cloud on AWS to extract more value from your data, increase productivity, and enhance your security. A simpler and faster migration leads to faster modernization strategy implementation.

With VMware Cloud on AWS, you gain the advantage of VMware's trusted enterprise technology along with AWS's comprehensive and scalable infrastructure. This unique combination creates a smooth migration and modernization process, reducing downtime and simplifying operations. With VMware Cloud on AWS, you also benefit from a consistent environment across on-premises and cloud platforms, facilitating easier management and streamlined workflows, so you can adapt to market changes and stay ahead in today's dynamic business landscape.
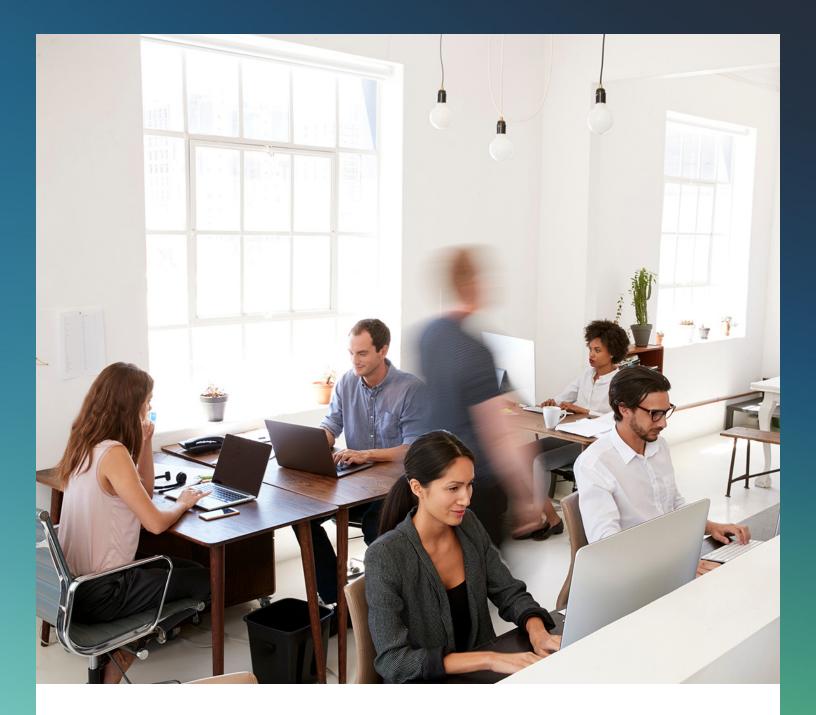
Start your journey today

Have a conversation: Talk to AWS or our partners about VMware Cloud on AWS.

Try VMware Cloud on AWS: Talk to your AWS representative to get started on a pilot.

Let's get started.

Learn more about **VMware Cloud on AWS**.