



# VMWARE CLOUD™ ON AWS

**Top 5 Challenges of Migrating  
Applications to the Cloud**



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**As global workloads accelerate** (160 million today to 596 million by 2030), the need for greater agility and global deployment options have driven public cloud to be increasingly more attractive to customers. 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.

**But before reaping the benefits of public cloud,** businesses need to successfully move there. This is easier said than done. The first step is often the hardest, which is making the decision to move to the cloud at all. Once the decision is made, complexity abounds as companies struggle to adapt and migrate applications to run in a cloud environment. If you're considering migrating your applications, understand the challenges, and choose the right solution to fit your business's needs.

### **The Solution: VMware Cloud on AWS**

Helping customers seamlessly migrate and extend their VMware vSphere-based environments to VMware Cloud on AWS – without incurring unnecessary risks, costs or downtime – is our priority.

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Explore how VMware Cloud on AWS helps to address the common cloud migration challenges.



## CHALLENGE 1:

### Adapting people and processes

People and processes must change and adapt to develop new skillsets and tools for public cloud environments.

Acquiring cloud skills disrupts current operational effectiveness due to the increased burden of hiring, training and retraining the appropriate talent.

Resistance from existing employees threatened by the change can limit the effectiveness of cloud adoption.

#### THE SOLUTION: VMware Cloud on AWS

VMware Cloud on AWS offers the same VMware environment as you are using on-premises, enabling you to leverage familiar and proven VMware skills, tools and processes.

Your organization is not required to invest in new skills or additional people to immediately take advantage of public cloud capabilities.

CHALLENGE 1:  
Adapting people  
and processes

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## CHALLENGE 2:

# Re-architecting applications to run in public clouds

Existing applications running in on-premises data centers are not designed to run on public cloud infrastructure and require redesign before migrating.

Most applications must be rearchitected, machine formats must be converted, and everything must be thoroughly revalidated.

Networks must be integrated and reconfigured, and storage must be migrated and conform to capabilities available in public cloud.

### THE SOLUTION: VMware Cloud on AWS

VMware Cloud on AWS extends your on-premises infrastructure to the cloud, and therefore no redesign is required to migrate applications.

VMware Hybrid Cloud Extension is available with VMware Cloud on AWS at no additional cost, so that you can quickly and easily migrate one or thousands of applications.

CHALLENGE 2:  
Re-architecting applications  
to run in public clouds

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## CHALLENGE 3:

# Resiliency of mission-critical applications

Mission critical applications must meet the same or better performance and availability requirements after migration as before.

Applications that have relied on infrastructure to provide desired level of resiliency need to be re-implemented to provide built-in resiliency.

All mission critical workloads need to be thoroughly retested in the public cloud environment to ensure that desired availability targets are met.

### THE SOLUTION: VMware Cloud on AWS

VMware Cloud on AWS enables live application migration to the cloud with no downtime or disruption.

VMware Cloud on AWS provides virtual machine, host, and AWS Availability Zone failure protection at infrastructure level without having to redesigning applications for the cloud.

CHALLENGE 3:  
Resiliency of  
mission-critical applications



## CHALLENGE 4: **Cost, time, and risk**

Migrating applications to the cloud is complex, and the rework required to make the leap is costly and time-consuming.

The effort required to migrate applications to cloud is often underestimated, resulting in projects that run over time and budget, or underdeliver in achieving the goals.

Cloud migration projects drain resources and budgets from other critical IT activities, increasing the risk to support of ongoing business objectives.

### **THE SOLUTION: VMware Cloud on AWS**

Applications require no rework to migrate to VMware Cloud on AWS, saving on migration cost, time and increasing the likelihood that your cloud migration project will succeed.

According to a [Taneja Group report](#), VMware Cloud on AWS is up to 39% more cost effective than other hybrid solutions.

CHALLENGE 4:  
**Cost, time, and risk**

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## CHALLENGE 5: Security and governance

Organizations give up a certain degree of control over their infrastructure in public cloud. Security policies and practices must be updated to conform with this new model.

The differences between on-premises and public cloud infrastructure limit the reuse of established security and governance procedures and tools.

Public cloud infrastructure has different consumption patterns. New governance models need to be established to control how cloud resources are acquired.

### THE SOLUTION: VMware Cloud on AWS

VMware Cloud on AWS enables you to extend existing on-premises enterprise security, governance and operational policies to the cloud.

Customers can migrate their current on-premises security solution along with established configurations, rules and policies.

CHALLENGE 5:  
Security and governance



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Traditional migration practices involve a significant number of person hours, an assortment of tools and substantial risk, not to mention the actual time required to move from point A to point B. Data gravity further complicates cloud adoption and migration of production workloads – especially stateful apps with lots of data.

**VMware Cloud on AWS offers the best of both worlds**, allowing organizations to seamlessly integrate their on-premises data center environments on elastic, bare-metal AWS infrastructure.

### VMware Cloud on AWS Resources

Learn more by reading the [VMware Cloud on AWS Solution Brief](#)

See a [Demo](#)

Experience it first hand by doing a [VMware Cloud on AWS Hands on Lab](#)

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