



# Extending Your Data Center to VMware Cloud™ on AWS

## SOLUTION OVERVIEW

Consistent infrastructure between the vSphere environment in your data center and the vSphere Software-Defined Data Center (SDDC) managed by VMware in AWS Cloud

Unified view and resource management of your on-premises data center and VMware SDDC in AWS Cloud with vCenter

On-demand expansion of your data center capacity to the cloud with no impact to application uptime or disruption to end users

Seamless and efficient network integration between your on-premises and public cloud environment

Enterprise-grade capabilities designed for the needs of mission-critical applications from vendors like Oracle, Microsoft, and SAP

Organizations will continue to benefit from their data center investments, yet many of these organizations are also looking to benefit from the unique advantages offered by public cloud that cannot be cost-effectively delivered with today's traditional data center environment. They need to have a seamless way to integrate their existing data center infrastructure with the public cloud.

Digital transformation is driving businesses to the cloud to stay competitive. These businesses have several reasons to adopt cloud beyond their data center perimeter:



### Expand to new locations

Obtaining capacity for new projects to support the business, or expanding into new geographies, without building new data centers or investing in over-provisioning of existing resources



### Access capacity on-demand

Handling unplanned, temporary or seasonal capacity needs without having to incur the capital expense of maintaining spare capacity



### Extend application modernization to your premises

Developing new cloud applications that need to integrate with on-premises applications or extending on-premises applications to access native cloud services



### Provide flexible test, dev, lab, and training environments

Deploying as-needed environments for ephemeral workloads such as test, development, lab, and training environments

But integrating the public cloud with your existing data center infrastructure can be challenging due to the many technical, process, and skills differences required to leverage both of these environments simultaneously:

- Mismatched architectures between on-premises and cloud environments
- Different tools, skill sets, operating and security models
- The need to rearchitect and refactor applications for public cloud infrastructure
- Incompatible hypervisor, networking, storage, and management stacks



**Trend Micro, a global leader in cybersecurity solutions,** leverages VMware Cloud on AWS to easily and quickly migrate workloads to the public cloud, scale on-demand with no impact to application uptime, achieve consistent management and visibility across their data center and cloud environments, resulting in faster, more flexible business innovation cycles and the ability to dynamically scale up and back down as needed.

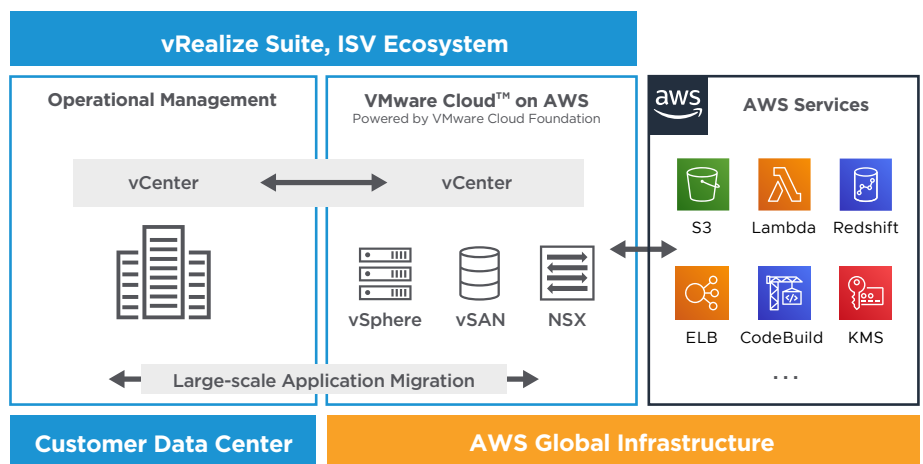
“With VMware Cloud on AWS, Trend Micro’s IT expanded services to AWS cloud providing agile, reliable service that when combined with Trend Micro’s Deep Security offers consistent management, visibility, and protection across our data center and cloud environments saving precious IT resources.”

**ALEX KUO**  
SENIOR DIRECTOR OF IT,  
TREND MICRO INC.

## Why VMware Cloud on AWS

VMware Cloud on AWS solves these challenges by delivering a hybrid cloud service that integrates familiar VMware flagship Software-Defined Data Center (SDDC) technologies for compute, storage and network virtualization (VMware vSphere®, VMware vSAN™ and VMware NSX®) along with VMware vCenter® management and robust disaster protection, all optimized to run on dedicated, elastic Amazon EC2 bare-metal infrastructure.

	<b>Cost-effective</b> Reduce upfront investment costs with no application re-factoring or re-architecting needed
	<b>Scalable</b> Rapidly increase or decrease capacity on-demand to adapt to changing business needs across global regions with automatic scaling and load balancing
	<b>Fast</b> Spin up an entire VMware SDDC in under two hours and scale host capacity in a few minutes, and leverage bi-directional, live application mobility between on-premises and the public cloud
	<b>Simple &amp; Consistent</b> Reduce operational complexity with familiar and proven VMware environment and a single console to manage both on-premises and in the public cloud
	<b>Secure</b> Leverage established on-premises enterprise security, governance and operational policies, and extend that with AWS cloud scale and security



EXPERIENCE IT TODAY

[Get a feature walkthrough](#)

[Try a Hands On Lab: VMware Cloud on AWS Getting Started](#)

RESOURCES

Learn more about our VMware Cloud on AWS service at the [VMware Cloud on AWS website](#)

Review the [VMware Cloud on AWS Solution Brief](#) and [VMware Cloud on AWS Total Cost of Ownership](#)

Watch informative demos, overview videos, webinars and hear from our customers: [VMware Cloud on AWS on YouTube](#)

Read our latest [VMware Cloud on AWS blogs](#)

Follow us on Twitter [@vmwarecloudaws](#) and give us a shout with #VMWonAWS

Get started now with VMware Cloud on AWS: <https://cloud.vmware.com/vmc-aws/get-started>

[Read VMware Cloud on AWS technical documentation](#)

Key Capabilities

- Consistent infrastructure** between the vSphere environment in your data center and vSphere SDDC managed by VMware in AWS Cloud

  - No need for re-architecting applications to move them to the cloud or back
  - Using the latest version of the vSphere hypervisor, VMware Cloud on AWS gives you the freedom to configure any vCPU, memory, and storage combination for virtual machines (VMs)
  - The widest range of on-premises VMware deployments available to seamlessly build a hybrid cloud, whether you have just vSphere, or are deploying a fully integrated SDDC via VMware Cloud Foundation
  - VMware vMotion and HCX provide seamless bi-directional mobility of applications between environments so resources can be moved to and from the cloud without retrofitting the infrastructure, eliminating complex migration assessments and mitigating associated risk
- Unified view of your hybrid cloud environment** including your on-premises data center and VMware SDDC in AWS Cloud. Connect all your vCenters, whether in the cloud or on-premises, using Hybrid Linked Mode and vCenter Cloud Gateway. Manage VMware Cloud on AWS resources as an extension of your data center using VMware vRealize® cloud management platform and VMware cloud services
- On-demand expansion of your data center capacity** to the cloud with no impact to application uptime or disruption to end users

  - Automatic scaling of capacity based on utilization policy with Elastic DRS
  - Consumption-based pricing for flexibility and to eliminate idle capacity
  - Ability to expand your global footprint in 16+ AWS regions and more coming
- Seamless and efficient network integration** between your on-premises and public cloud environment

  - Extending your on-premises Layer 2 network using NSX Gateway
  - Accelerating and securing the data crossing the WAN link using VMware HCX which includes traffic engineering, load balancing, WAN optimization techniques, and VPN
- Enterprise-grade infrastructure delivered as a service** with platform capabilities for the the needs of mission-critical applications

  - Entire SDDC provisioned in under 2 hours and hosts added in minutes
  - Predictable, high-performance compute with vSphere, the industry’s leading virtualization platform, running on elastic AWS bare-metal infrastructure
  - Flexible policy-driven resource management with compute policies, reservations/ limits/shares, memory ballooning, and VMware vSphere® Distributed Resource Scheduler™ (DRS)
  - Built-in resiliency with failure protection at VM, host and AWS Availability Zone level with vSphere High Availability, and automated host remediation
  - Zero Recovery Point Objective (RPO) high availability across Availability Zones with Stretched Clusters
  - Zero-click, enterprise-class storage with vSAN, with encryption, deduplication and compression
  - Advanced networking & security services with NSX-T, including security domains integration, micro-segmentation, and distributed firewalls

