aws

Streamline virtual desktop and application management on VMware Cloud™ on AWS

Increase cloud-scale agility in a modern environment

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Introduction

Realize the business value of deploying Virtual Desktop Infrastructure (VDI) on VMware Cloud™ on AWS. This solution delivers an integrated hybrid environment that enables you to extend the capabilities of your on-premises VMware Software-Defined Data Center (SDDC), including virtual desktops and applications, to the cloud without investing in additional data center resources.

Streamline management and costs by centralizing your desktops in a VDI on VMware Cloud on AWS. Deliver your end users mobility by giving them the ability to access their virtual desktops anytime, from anywhere, on any device.

Deploying VDI on VMware Cloud on AWS enables such use cases as on-demand capacity, business continuity, disaster recovery, and Amazon Web Services (AWS) cloud co-location for latency-sensitive applications. The cloud adoption process is simplified because you are able to use the same on-premises architecture (and the same desktop images), on VMware Cloud on AWS.

In this eBook, we will touch on common use cases, go into detail on some of the ways your organization can benefit from running VDI on VMware Cloud on AWS, and offer a brief description of available VDI solutions offered by Citrix and VMware.
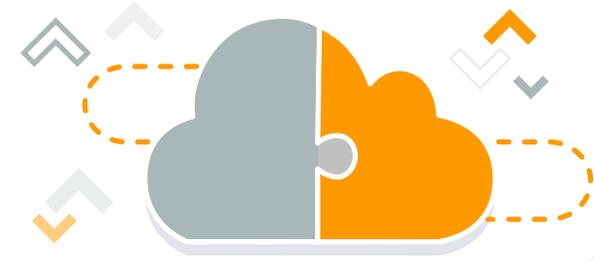
Common VDI use cases on VMware Cloud on AWS

Some of the common drivers that compel organizations to move their on-premises VDI to VMware Cloud on AWS include:

Data center extension
The hybrid model not only fosters footprint expansion, but also delivers on-demand capacity. The migration process is accelerated by the fact that you are able to use the same desktop images both on-premises and on the cloud. VMware Cloud on AWS also makes it easier to run VDI test and development workloads and stream backup to AWS.

Application locality
Enables you to move your VDI capabilities closer to your end-users. This is amplified by the fact that VMware Cloud on AWS is available in multiple AWS Regions and Availability Zones (AZs) around the world, making it easier for your organization to rapidly expand its global footprint.

Modernization of disaster recovery (DR) strategies
Workloads can be automatically scaled and running VDI on VMware Cloud on AWS simplifies the use of VMware Site Recovery for replication and orchestration.

Interoperability
Enables business continuity between your on-premises environment and VMware Cloud on AWS. With the simplified migration process, you are able to move to the cloud with little or no downtime and/or disruption of business.
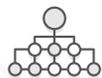
Quickly add and remove temporary desktop and application capacity
This can also serve as a determining factor when choosing to migrate VDI to VMware Cloud on AWS. The solution is ideal for organizations that need to add capacity in response to spikes in demand, like retail organizations during the holidays or accounting firms during tax season.

Rapidly migrate VDI to VMware Cloud on AWS

A common challenge faced when when moving to the cloud is often found in the significant architectural differences between key infrastructure components like storage, networking, and monitoring. Yet VMware Cloud on AWS is able to bring the same consistent management and VMware SDDC components to the cloud.

This enables your organization to take advantage of the flexibility of those platforms, while simultaneously delivering the same end-user experience as an on-premises environment. By running VMware cloud on AWS, you also gain low latency access to native AWS features like AWS Lambda for serverless computing, Amazon Redshift for big data, and Amazon Simple Storage Service (Amazon S3) for storage, backup, and archiving.

VMware Cloud on AWS is built using proven technologies like VMware vSphere for compute, VMware vSAN for storage, and VMware NSX for software-defined networking. It is a hybrid solution that is managed and monitored using the same set of tools you are already using to manage your on-premises VMware environments.

This helps to reduce some of the friction commonly associated with moving to the cloud by avoiding common infrastructure challenges associated with migrating to an entirely new platform. Migrating your VDI to VMware Cloud on AWS allows your administrators to continue using the same desktop images both on-premises and on the cloud. The cloud adoption process is simplified by using VMware HCX, which runs on AWS Direct Connect and can be used to directly migrate your workloads using the advanced connectivity provided by AWS.

Running VDI on VMware Cloud on AWS is straightforward, especially if your organization has experience running it on ESXi in an on-premises environment, because that will translate directly to the hybrid model. Since VMware Cloud on AWS runs directly on bare-metal hosts, things like desktop and application configuration follow normal VMware best practices.

More easily take advantage of native AWS services

Moving your on-premises VDI to VMware Cloud on AWS enables you to rapidly gain access to more than 160 native AWS services.

Simplify the migration process and increase interoperability between your data center and VMware Cloud on AWS by employing AWS Direct Connect. This service provides a dedicated, secure network connection between your environments and helps smooth the transition to a hybrid model.

Leverage Amazon Elastic File System (Amazon EFS) for more effective scalable, elastic VDI workload storage either or on-premises or AWS.

Integrate the Amazon Route 53 Domain Naming System (DNS) seamlessly with your virtual desktops and applications to simplify DNS management for your VDI.

Manage VDI workloads more efficiently by using AWS Directory Service to manage Microsoft Active Directory, which enables you to more easily set up user and group data and provide the necessary access to native AWS services.

Accelerate the storage and retrieval of data in your database virtual desktop and virtual application environment using the Amazon Relational Database Service (Amazon RDS).
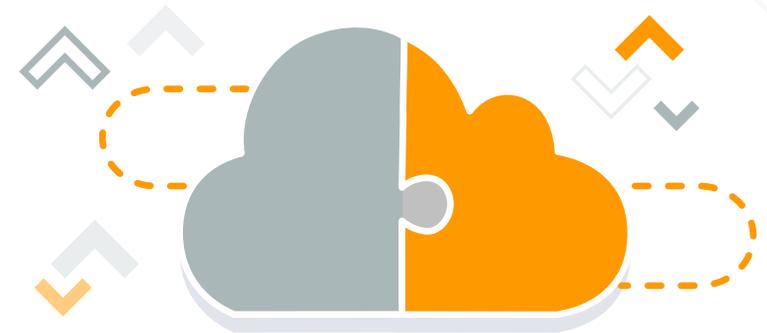
Benefits of running VDI on VMware Cloud on AWS

This hybrid solution enables your organization to dynamically add compute to accommodate peak business instead of paying for peak compute year-round. You can also have hardware failures automatically fixed in minutes instead of hours or days with no additional contracts, fees, or employee involvement, and reduce licensing costs across fewer, state-of-the-art bare-metal compute hosts. Other benefits include:

- Adaptive user experience that delivers constant connections across devices, locations, and media to help ensure uninterrupted productivity

- Streamline access with smart policies using simplified authentication across all desktop and application services to help improve security and performance while protecting user resources

- Securely extend your desktops and applications to VMware Cloud on AWS

- Unify your digital workspace to support real-time validation, consolidated control, and streamlined identity management across a wide range of sources—including Microsoft Active Directory

- Leverage your VDI investments and training with the added benefits of AWS scalability, performance, and security

- Extend your VDI to VMware Cloud on AWS to enable end-users to rapidly connect to the nearest virtual desktop or application hosts, regardless of whether the application is on-premises or VMware Cloud on AWS

- Increase flexibility and availability across your entire organization through centralized, simplified management

- No longer purchase hardware or be burdened by Capital Expenditures

- Pay only for what you use with the flexible consumption model to increase cost efficiency

Deploy Citrix Virtual Apps and Desktops on VMware Cloud on AWS

Deploy Citrix Virtual Apps and Desktops on VMware Cloud on AWS to seamlessly deliver the capabilities of this enterprise desktop and application service to your users—wherever they are located. This solution simplifies management by leveraging this proven Citrix offering along with VMware capabilities.

With a single tool, the Citrix Virtual Apps and Desktops service allows you to easily manage Citrix workloads to extend your virtual apps and desktops to VMware Cloud on AWS as needed.

Implementing this solution will enable you to combine the capabilities of the Citrix Virtual Apps and Desktop service as a flexible, secure, and scalable solution with VMware Cloud on AWS. Use it to more rapidly migrate your existing Windows, Linux, and line of business applications.

You will also reduce time-to-value and increase cloud-scale elasticity without having to refactor any applications, while benefitting from advanced application and desktop management, delivery, and performance at scale on a cloud-based infrastructure. As your business needs change, realize the value of being able to automatically scale your application and desktop workloads up or down using the pay-as-you go Infrastructure-as-a-Service.

Accelerate cloud adoption using Citrix Provisioning Services (PVS). The transition to VMware Cloud on AWS is seamless because VMware vSphere is commonly used in the on-premises environments of organizations that migrate to the hybrid offering. PVS works seamlessly with vSphere, employing the same disk image so no changes are required when you move from your data center to VMware Cloud on AWS—enabling you to replicate the images without the complexity.

Citrix Virtual Apps and Desktops service allows the following deployment options:

- Simply leverage Citrix Virtual Apps and Desktops service capabilities to easily manage and deliver workloads running within VMware Cloud on AWS

- Manually install the Citrix Virtual Apps and Desktop management components and the application and desktop workloads within VMware Cloud on AWS as part of your hybrid-rights entitlement

Either option gives you a simplified management solution to take advantage of cloud services at scale with more efficient workload migration while extending your data center to further support disaster recovery, colocation, rapid provisioning, as well as enhanced security and compliance.

Deploy VMware Horizon 7 on VMware Cloud on AWS

Run VMware Horizon 7 on VMware Cloud on AWS to simplify the management of your virtual desktops and applications using your on-premises infrastructure and VMware Cloud on AWS with Cloud Pod Architecture (CPA). This links cloud deployments in different AWS Regions and AZs and enables operational consistency as you use the same desktop images both on-premises and on the cloud.

This solution can help you increase agility and accelerate expansion by driving workloads to VMware Cloud on AWS to more quickly respond to changing business needs. You can use CPA to enable central management and interoperability among key hybrid use cases and automatically scale based on your needs. This can help accelerate time-to-value and cloud-scale elasticity and optimize costs as you shift to an Operational Expenditure model.

The desktop and application virtualization provided by Horizon 7 and VMware Cloud on AWS makes it easier for you to deliver business-critical applications to any device, anywhere. CPA enables scaling across multiple pods and sites,

allowing federated management on-premises, and the ability to stretch Horizon 7 across your data center and VMware Cloud on AWS using the same deployment methods and management best practices.

This solution also empowers you to expand Horizon 7's capacity for scaling existing workloads and simplifies the process of deploying new and variable workloads. It should also be noted that Horizon 7 is not a pure desktop-as-a-service solution, because you can deploy it as a software stack on VMware Cloud on AWS and have VMware manage the hardware and SDDC, while you still deploy and manage your own Horizon 7 infrastructure.

The hybrid use capabilities enable you to transform the desktop images used for delivering desktop applications between on-premises environments and AWS. Using the CPA configurations in Horizon 7 helps simplify the management on VMware Cloud on AWS. Using these, you can reduce the need to export or transform the image from its on-premises format when using it on the cloud, making the

hybrid deployment management process more efficient.

This solution can be easily delivered for either Windows or Linux and accelerate the delivery of resources at scale across multiple data centers, AWS Regions, and AZs.

Conclusion

Implementing VDI on VMware Cloud on AWS can help your organization lower capital and operating expenses while avoiding costly breaches or regulatory fines. By allowing greater flexibility in where people work and the devices they use, VDI with VMware Cloud on AWS improves the employee experience. You can use AWS cloud and its more than 160 native services for a variety of use cases from data center extension to application modernization to Disaster Recovery.

To get started, engage with VMware Sales or your AWS Sales Representative for a face to face workshop to map out a vision, assessment, strategy, and plan for moving your VDI to VMware Cloud on AWS.
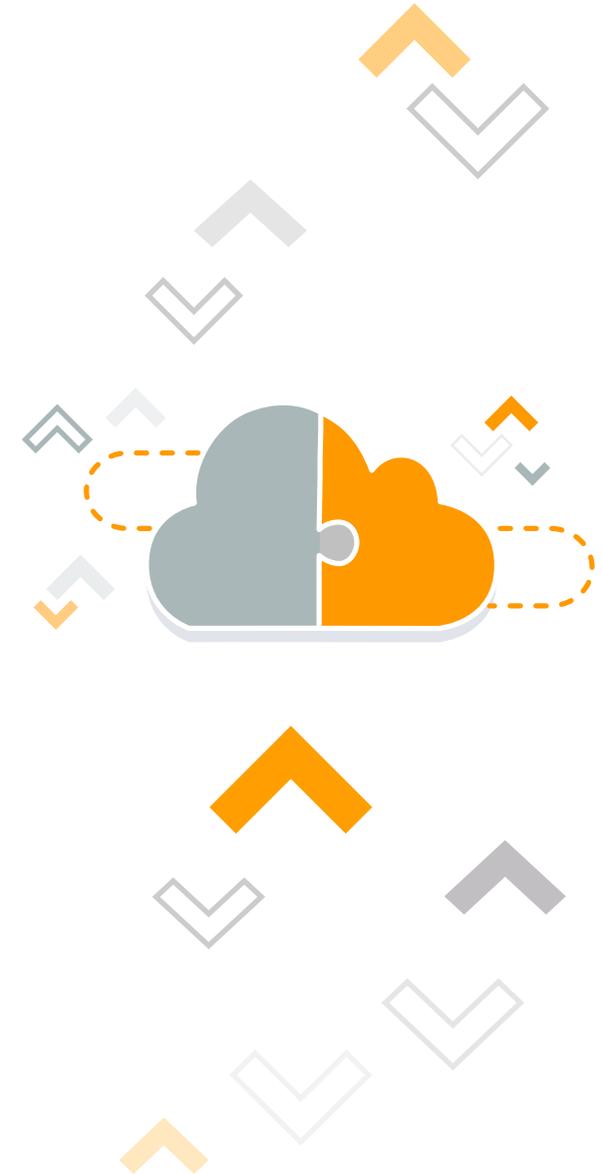
VDI on VMware Cloud on AWS Resources

VMware Cloud on AWS Home

VMware Cloud on AWS (on AWS site)

VMware Cloud on AWS (on VMware site)

Run Citrix Virtual Apps and Desktops Service and VMware Horizon 7 on VMware Cloud on AWS:

Take your on-premises Citrix Virtual Apps and Desktops to VMware Cloud on AWS

VMware Horizon 7 Desktops and Apps with a Seamlessly Integrated Hybrid Cloud

TCO tools

VMware Cloud on AWS Pricing Calculator

VMware Cloud on AWS Sizer and TCO

VMware roadmap

VMware Cloud on AWS Roadmap