Solution Brief

VMware Cloud on AWS Outposts

Context

Today’s businesses are built on modern applications, in order to provide differentiated value to customers. All these modern applications require flexibility in terms of deployment across private cloud, public cloud and edge infrastructure. And, hybrid cloud is the way to gain flexibility, respond faster to changing business needs, and align costs based on business requirements.

Within this context, the public cloud Infrastructure-as-a-Service (IaaS) model delivers several benefits. These include the ability to:

• Shift capital outlays to operational expenses
• Reduce infrastructure lifecycle management overhead
• Offer flexible capacity consumption models
• Deliver innovative services for modern apps

VMware Cloud™ on AWS is a prime example of an offering that provides these benefits. While a broad range of modern applications are increasingly finding value in VMware Cloud on AWS, many applications fundamentally need to reside on-premises. On-premises infrastructure plays a critical role for needs such as:

• Low latency between users and data
• Processing of huge amount of data generated locally
• Access to data that must be kept local for regulatory or compliance reasons
• Running critical applications without WAN

In order to leverage the benefits of on-premises environments and public cloud environments, we are bringing the best of both worlds with VMware Cloud on AWS Outposts.

With VMware Cloud on AWS Outposts, customers get speed, agility and a consumption model of cloud on-premises in their own data center where they have control over the data and applications running in their own data center. This is a fully managed offering that provides simple, secure and scalable infrastructure for on-premises data centers and thick edge locations.

Please note that VMware Cloud SDDC stack on AWS Outposts infrastructure is not a commercially released software yet. This is a strategy and vision document.
VMware Cloud on AWS Outposts is a jointly engineered on-premises as-a-service offering, powered by VMware Cloud Foundation. It integrates VMware’s enterprise-class Software-Defined Data Center software, including vSphere®, vSAN™, and NSX®, along with vCenter® Management that runs on next-generation, dedicated, elastic Amazon EC2 bare-metal infrastructure, delivered on-premises with optimized access to local and remote AWS services.

Use Case #1: Local Cloud

Leverage cloud “as-a-service” model for applications and data that need to remain on-premises.

**Low latency and local data processing:** Remain on-premises or close to customer end points for latency-sensitive applications, real time applications, or for applications that ingest large amounts of data that need to be processed locally in order to avoid data transfer costs. Some example of such workloads or applications are:

- Data and compute intensive workloads such as relational databases that will remain on-premises
- Highly scalable, distributed workloads, which require storage optimized hosts along with VMware’s VSAN storage capabilities
- Workloads with stringent security requirements where you prefer to control where your data resides and where it is managed
- High performance workloads such as enterprise data warehouse where both scale and access of data affect the overall system performance

**Hybrid and composite application deployment:** Deploy hybrid applications with VMware Cloud on AWS and regional AWS cloud services. Deploy composite applications that leverage existing integrations with enterprise back-end systems and traditional workload infrastructure.

**Application modernization platform***: Modernize on-premises applications by integrating with local AWS services or regional AWS services or by leveraging Kubernetes enabled next-generation local infrastructure.

* Based on future vision and capabilities
VMware Cloud on AWS Outposts

Use Case #2: Data Center Modernization

Leverage cloud “as-a-service” model/subscription model to reduce overall infrastructure and operating costs and bring hardware and software innovations from the cloud to on-premises; while enabling IT staff to focus on higher value tasks vs. low value infrastructure lifecycle management.

Outsourced infrastructure management: Leverage first-party managed infrastructure service and automated infrastructure upgrades, updates and patches, to reduce the need for local IT staff in resource constrained environment.

CapEx to OpEx financing transition: Adopt a subscription model to reduce overall operating and infrastructure costs, in lieu of making an upfront investment

Virtual desktop infrastructure*: Co-locate virtual desktop infrastructure near end user and backend systems.

Use Case #3: Flexible Capacity

Rapidly scale infrastructure to meet business needs in order to optimize infrastructure investment.

Accelerated infrastructure scaling: Instead of long hardware procurement cycles, scale on-premises infrastructure as per business needs in days/weeks and alleviate the unused/underutilized capacity issue.

Geographical expansion and M&A: Expand business to new regions by shipping racks to co-location facilities in those regions, and then leveraging infrastructure management by VMware in order to reduce infrastructure management overhead. Accelerate infrastructure consolidation by rationalizing on a consistent platform after M&A activities.

On-demand hybrid cloud capacity: Seamlessly extend on-premises infrastructure to VMware Cloud on AWS for non-constrained workloads for burst capacity needs or Disaster Recovery needs, and leverage a single fully managed service for private and public cloud infrastructure.

VMware Cloud on AWS Outposts: Key Benefits

Streamlined operations
Automated infrastructure lifecycle management improves operational efficiency, refocusing efforts on strategic priorities.

Accelerated innovation
Gain competitive edge by modernizing applications with the latest technologies and services. Agility of cloud on-premises increases developer velocity and flexibility.

Cost optimization
Reduce costs by switching from cap-ex to op-ex financing model, and by eliminating the rework tax with consistent infrastructure and operations.

Resources
VMware Cloud on AWS Outposts Website: http://vmwa.re/vmc-outposts
VMware Cloud on AWS Outposts Beta Program Blog: https://cloud.vmware.com/community/2019/12/03/vmc-aws-outposts/
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Call to action

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http://vmwa.re/vmc-outposts-interest

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*VMware does not support virtual desktop infrastructure (VDI) in VMware Cloud on AWS Outposts.