



EBOOK

Go Innovate: Modernize your VMware workloads with AWS

Make VMware Cloud on AWS the
next move in your cloud journey

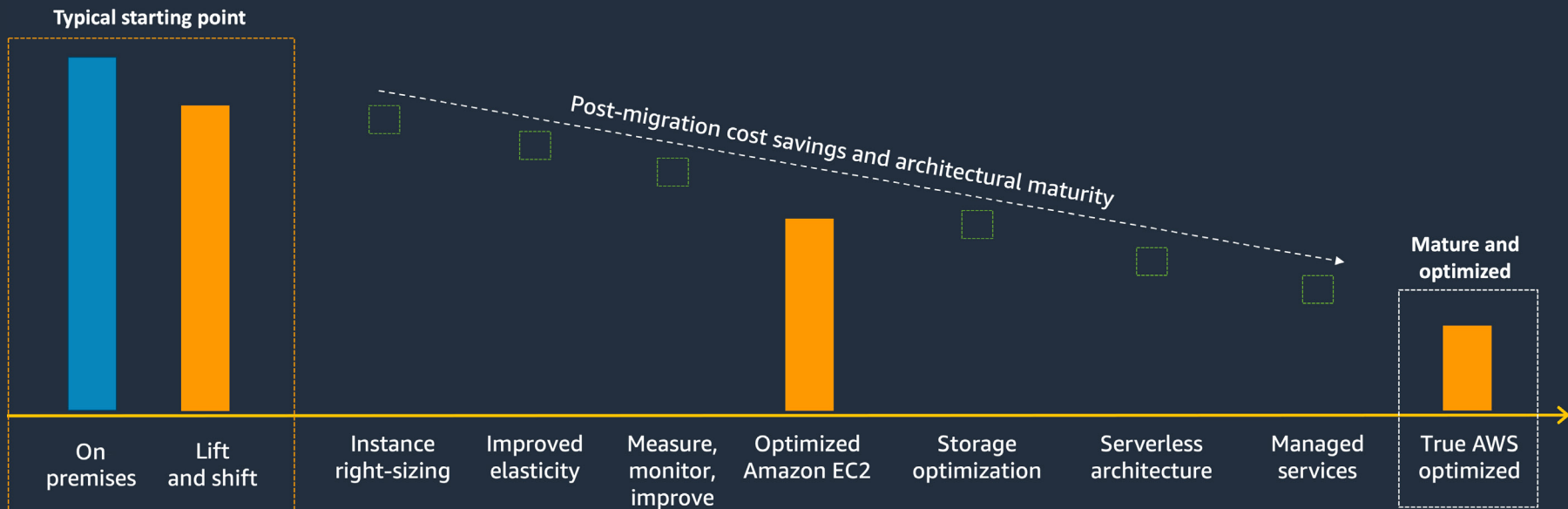
Modernization and cloud maturity is a journey— make the most of it

Cloud modernization and innovation begin with migration.

With VMware Cloud™ on AWS, your IT team can easily migrate your workloads by leveraging their existing VMware tools, skill sets, and governance across your on-premises and cloud environments. There's no need to purchase any new hardware, rewrite any applications, learn new skills, or change your operational models. Once you're on Amazon Web Services (AWS), you can easily modernize your infrastructure, data, and applications with minimal downtime and without expensive re-platforming.

With VMware Cloud on AWS, you get seamless access to the largest and most functionally rich selection of cloud-native services available in the public cloud today. For example, use Amazon SageMaker to support your ML/AI initiatives. Or try out serverless computing with AWS Lambda. Whatever you decide, with VMware Cloud on AWS, your team will be able to explore and build innovative solutions with AWS services to address your business' pressing challenges.

In this eBook, we'll take a closer look at some of the ways you can modernize with AWS services after you've migrated your **VMware workloads to the cloud**.



Modernize your infrastructure



Dr. Werner Vogels, CTO of Amazon Web Services, often talks about undifferentiated heavy lifting, which he defines as “tasks that must get done but don’t provide competitive advantage. For most businesses, these tasks include things like server management, load balancing, and applying security patches.”* If your team is largely focused on undifferentiated heavy lifting, it may be time to modernize your infrastructure. This is where **VMware Cloud on AWS can help**.

Many of our customers use VMware Cloud on AWS to extend their VMware workloads into the cloud to meet cyclical, dynamic performance, and capacity demands, or to protect their workloads with a fully automated disaster recovery solution. Other customers choose to use VMware Cloud on AWS to exit their on-premises infrastructure altogether and move to AWS, thus retiring their expensive legacy infrastructure. Not only are they reducing their costs, they’re also better able to support their businesses.

Modernizing your infrastructure frees up your IT team and developers to drive innovation and automate underlying operations, as opposed to focusing on undifferentiated work. In the table, see some of the more popular AWS services our customers are using to modernize their infrastructure and take advantage of cloud-enabled possibilities not previously achievable on premises.

If you would like to...	Check out some of these AWS services:
Store your data reliably and securely in the cloud	Amazon Simple Storage Service (S3) <i>Object storage built to store and retrieve any amount of data from anywhere</i> Amazon Elastic File System (EFS) <i>A scalable, elastic, cloud-native NFS file system</i> Amazon Elastic Block Store (EBS) <i>Easy-to-use, high-performance block storage at any scale</i>
Share files across a Windows desktop architecture	Amazon Elastic Compute Cloud (EC2) <i>Secure and resizable virtual servers to support virtually any workload</i> AWS Directory Service <i>Managed Microsoft Active Directory in AWS</i> Amazon FSx for Windows File Server <i>Fully managed file storage built on Windows Server</i>
Route end users to internet applications	Amazon Route 53 <i>A highly available and scalable cloud Domain Name System (DNS) web service</i>

* Source: Modern applications at AWS (allthingsdistributed.com)

Modernize your data



The “one-size-fits-all” monolithic databases offered in the past don’t fit today’s business models. Your developers are now building highly distributed applications that require multiple database types to perform reliably at scale. With 15 database engines and growing, AWS provides the broadest selection of commercial-grade, purpose-built databases that allow development teams to build and innovate faster on any application use case at any scale.

While building a strong database foundation is crucial for your business, the real value of your data is discovered through the services and tools you use to analyze, visualize, and learn from your data. By leveraging the wide range of AWS analytics services, from business intelligence to machine learning, you are putting yourself on the fast path of getting answers from all your data to all your users.

If you would like to...	Check out some of these AWS services:
Store your data in a relational database in the cloud	Amazon RDS <i>Managed relational database service for MySQL, PostgreSQL, Oracle, SQL Server, and MariaDB</i> Amazon Aurora <i>A high-performance, MySQL and PostgreSQL-compatible, managed relational database</i> Amazon Redshift <i>Analyze all your data with the fastest and most widely used cloud data warehouse</i>
Support your mission-critical workloads with single-digit millisecond performance	Amazon DynamoDB <i>A fully managed NoSQL database with built-in security, backup and restore, and in-memory caching for internet-scale applications</i>
Migrate your databases to AWS with minimal downtime	AWS Database Migration Service <i>Migrate your data to and from most widely used commercial and open source databases</i>
Create and publish interactive BI dashboards	Amazon QuickSight <i>A scalable, serverless, embeddable, machine learning-powered business intelligence service built for the cloud</i>
Analyze real-time streaming data	Amazon Kinesis <i>Collect, process, and analyze video and data streams in real time</i>
Build, train, and deploy machine learning (ML) models	Amazon SageMaker <i>A fully managed service that provides every data scientist and developer with a ML suite of tools</i>
Accelerate data preparation for ML	Amazon SageMaker Data Wrangler <i>The fastest and easiest way to prepare ML data – from weeks to minutes</i>
Create personalized recommendations for site visitors	Amazon Personalize <i>An AI service that personalizes customer experiences, perfected from years of use on Amazon.com</i>

Modernize your applications



Your business applications are the engines that help run your company, allowing you to process valuable data, gain deeper insights, and make better business decisions. Modernizing these applications is an inevitable part of doing business.

With VMware Cloud on AWS, you get to decide how to migrate your applications and at what pace, leveraging the industry's most reliable infrastructure with the deepest set of services. When you're ready to modernize these applications on AWS, you'll have several options, including enhancing them for the cloud and integrating them with other AWS services to improve their availability and performance.

You can also step up your application game by taking advantage of newer technologies like containers and serverless computing. Did you know that 80% of all containers in the cloud run on AWS* because of the security, reliability, and scalability AWS offers? And with serverless, today's applications are being built serverless-first, a strategy that prioritizes the adoption of serverless computing services, to help you increase agility throughout your application stack.

Fun fact: In 2014, AWS pioneered the serverless computing space with the launch of AWS Lambda

If you would like to...	Check out some of these AWS services:
Use containers to deploy applications and standardize operations across environments	<p>Amazon Elastic Kubernetes Service (EKS) <i>Start, run, and scale Kubernetes apps in the AWS Cloud or on-premises</i></p> <p>EKS Anywhere (coming in 2021) <i>Create and operate Kubernetes clusters on-premises, including on your own VMs and bare metal servers</i></p> <p>Amazon Elastic Container Service (ECS) <i>A fully managed container orchestration service that helps you easily deploy, manage, and scale containerized applications</i></p> <p>Amazon ECS Anywhere <i>Run and manage container workloads on your own infrastructure</i></p>
Go serverless: build and run your applications without thinking about servers	<p>AWS Lambda <i>Run code without provisioning or managing servers and pay only for the resources you consume</i></p> <p>AWS Fargate <i>Run serverless containers on Amazon EKS or Amazon ECS</i></p> <p>Amazon Aurora Serverless <i>Automatically scale capacity based on your application's need with this configuration for Amazon Aurora</i></p>

* Source: Guidebook: Containers and Kubernetes on AWS (nucleusresearch.com)

Migrate to modernize all your VMware workloads in the AWS Cloud



VMware Cloud on AWS is the only jointly engineered solution designed to simplify migrating and extending your VMware workloads into the AWS Cloud. Accelerate your business transformation goals by leveraging familiar VMware tools, skill sets, and governance across your on-premises and cloud environments. With seamless, optimized access to over 200 native AWS services, you can modernize your applications, unlock the value of your data, and innovate faster with cloud-native technologies like containers, serverless computing, machine learning, and artificial intelligence. Launched in 2017, VMware Cloud on AWS is the only jointly engineered and VMware-managed public cloud offering for VMware Cloud. It's sold by VMware, AWS, and their respective partner networks, and is delivered and fully managed by VMware and its partner community.

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