

VMware Cloud on AWS

Total cost of ownership of extending data center to the cloud

AT A GLANCE

VMware Cloud on AWS brings VMware's enterprise-class SDDC software to the AWS Cloud with optimized access to AWS services. Powered by VMware Cloud Foundation™, VMware Cloud on AWS integrates compute, storage, network and management products, which are optimized to run on dedicated, elastic, baremetal AWS infrastructure.

ADDITIONAL BENEFITS

- The option to pay for the capacity by the hour, eliminating the need to pay for on-premises capacity that can potentially sit idle.
- IT teams can respond faster to new business requirements and optimize costs with faster to deploy and more elastic infrastructure.
- Reduction in cloud migration risk by moving applications without any changes to a familiar and proven VMware infrastructure running on AWS – the world's most popular public cloud

Extending an existing data center to the public cloud can create significant integration challenges, whether you are scaling seasonal workloads, quickly building or deploying new applications, bursting virtual desktops, expanding into new geographies, accommodating M&A or divestiture activities, or simply providing a more flexible IT environment for developers. Because Infrastructure stacks are incompatible, you must re-test applications that move to the public cloud and then back on-premises. Operational procedures are also inconsistent and require different skills, tools and processes for the on-premises environment and public cloud. VMware Cloud™ on AWS has been jointly engineered by VMware and AWS to create a deeply integrated hybrid cloud that addresses these challenges.

Compared to non-VMware public cloud options, VMware Cloud on AWS provides several unique advantages for data center (DC) extension that incurs no additional cost beyond the core service:

1. Bi-directional migration of workloads without any application changes, including live application migration using VMware vMotion®
2. Single pane-of-glass management for on-premises and public cloud environments without to the need to learn new skills, deploy new tools or create new processes using VMware vCenter®
3. Enterprise-grade infrastructure with the same performance, availability and manageability capabilities expected of VMware vSphere, NSX® and vSAN™ in on-premises environments

These capabilities set VMware Cloud on AWS apart from other non-VMware public cloud options. The only other seamlessly integrated alternative to a true hybrid cloud that can scale up and down, albeit much more slowly, is to purchase or rent extra infrastructure capacity for the on-premises data center. Not only is the ability to scale slower than a true hybrid cloud, but, as this note demonstrates, it can also be more costly.

There are three elements of infrastructure and operations costs that organizations should consider when extending the data center to the public cloud:

1. On-premises or co-location data center facilities costs
2. Cost of purchasing perpetual software licenses, hardware infrastructure and support
3. Operating costs

The Total Economic Impact™ Of VMware Cloud On AWS, an August 2019 commissioned study of VMware Cloud on AWS customers conducted by Forrester Consulting on behalf of VMware, found that a typical customer experienced **39% savings** across these three different areas. The following chart shows savings in each of the three different cost categories:

RESOURCES

Try the [VMware Cloud on AWS Sizer](#) to get an estimate on your savings and request a Total Cost of Ownership Report

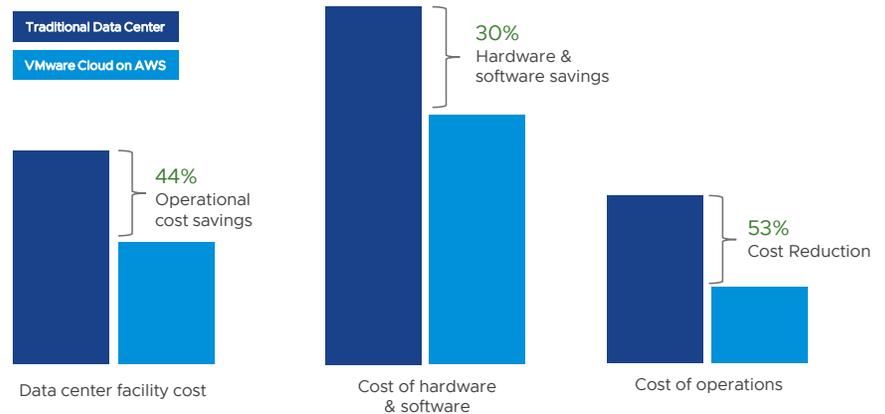


Figure 1. Real customer cost comparison of VMware Cloud on AWS vs. traditional data center

Data center facilities costs

Extending data centers to the public cloud enables organizations to prevent data center sprawl while capping technical debt. Not having to deploy additional physical hardware, including servers, storage arrays, networking gear, and security equipment, eliminates the need to pay for power, cooling, and maintenance staff. In the above-cited Forrester study, a typical organization can create a savings of 44% for the footprint that moves into VMware Cloud on AWS.

Cost of hardware and software

Leveraging public cloud infrastructure with the latest hardware enables organizations to consolidate licenses for various infrastructure and business applications. In doing so, they can pare down the number of socket-based software licenses. In addition to savings on unnecessary software licenses, organizations avoid future hardware refreshes for end-of-life infrastructure. In the Forrester study, a typical organization can create a savings of 30% by reducing unnecessary software licenses and avoiding future hardware refresh.

Cost of operations

With VMware Cloud on AWS, organizations get new, modern data center operations and a highly automated environment that requires fewer labor hours to administer. Organizations can either deploy IT staff to focus on more strategic priorities or reduce hiring needs for the staff that will manage the additional cloud infrastructure. In the Forrester study, a typical organization can create a savings of 53% by requiring less staff to manage the VMware Cloud on AWS environment.

The bottom line

VMware Cloud on AWS requires no additional costs beyond the core service to migrate applications from an on-premises VMware environment. Equally, it provides a cost-free option to move workloads back to on-premises. Also, for VMware customers, VMware Cloud on AWS requires no additional training, new tools or different processes to operate, eliminating a cost barrier to adopting public cloud. Finally, the infrastructure footprint provided by VMware Cloud on AWS creates savings in comparison to deploying an equivalent footprint on-premises with the added benefit of cloud speed and flexibility.