VMware’s goal was to architect a highly resilient solution for mission-critical applications, one that extends on-premises data centers to the cloud and guarantees superior availability.

VMware software powers the world’s most complex digital infrastructure. The company’s compute, cloud, mobility, networking, and security offerings provide a dynamic and efficient digital foundation to over 500,000 customers globally, aided by an ecosystem of 75,000 partners. Headquartered in Palo Alto, California, this year VMware celebrates 20 years of breakthrough innovation benefiting business and society.

The Challenge
VMware IT had to figure out how to seamlessly burst workloads into a public cloud, when and where needed. IT also wanted to gain economies of scale by using a single team to manage both the public and private clouds while having a robust infrastructure in place, without having to worry about maintaining that infrastructure. Lastly, VMware IT wanted to achieve comprehensive disaster recovery using public and private clouds.

The Solution
VMware IT explored VMware Cloud™ on AWS for workloads that are seasonal and require disaster recovery. An on-demand cloud service, VMware Cloud on AWS integrates VMware vSphere®, VMware vSAN™, and VMware NSX® along with VMware vCenter® management—running on a dedicated elastic, bare-metal Amazon Web Services (AWS) infrastructure. This solution offers IT the flexibility to dynamically scale VMware’s infrastructure capacity to meet increasing demands.

The solution proved its mettle with three use cases: VMworld® Hands-on Labs, the VMworld portal, and Dell Technologies World Hands-on Labs.

Hands-on Labs allow thousands of customers the opportunity to test drive new products. These labs represented 20 percent of the VMworld workload and 40 percent of the Dell Technologies World workload. With the hybrid infrastructure of VMware Cloud on AWS, the IT team was able to easily scale to support high usage, increasing from one to five clusters with a few clicks. The team could add capacity one day, test it the next, and run it as production on the third day. And there were no worries about any maintenance and software upgrade issues as those were handled by the VMware Cloud on AWS support team.
“By moving the VMworld portal to VMware Cloud on AWS, we solved two problems. The capacity for the application could be dynamically increased or decreased. The application could also be independently failed over from cloud to on-premises during a disaster scenario.”

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VICE PRESIDENT, CLOUD SERVICES  
DEVELOPMENT AND OPERATIONS  
VMWARE

VMware Cloud on AWS performed extremely well as part of our Hands-on Lab environment, with no surprises. In fact, it performed better than the other environments. There was a significant storage performance boost for VMware Cloud on AWS that we didn’t expect,” said Lyubomir Lyubenov, VMware Cloud Services architect.

With these successes, VMware looked next at the VMworld web portal. This application experiences a surge of activity centered around the VMworld conference, so it is beneficial to have infrastructure that can scale up and down quickly. For example, if additional compute or storage is needed, the team can simply add a VMware ESXi™ host to the cluster with a few clicks of the mouse. VMware IT also increased application resiliency and provided on-premises disaster recovery by leveraging the disaster-recovery-as-a-service (DRaaS) capabilities in VMware Cloud on AWS. After implementing DRaaS, the team successfully tested both failover and failback of the application. Traffic redirection was performed by using global server load balancing.

Looking Ahead
Regardless of the workload on hand, VMware can burst from private to public clouds and back again as needed with VMware Cloud on AWS. This offers tremendous flexibility for both planned and unplanned events.

The company foresees VMware Cloud on AWS continuing to play a major role in VMware events. The IT team has been testing migrations using VMware Hybrid Cloud Extension and has seen significant improvements in migration speeds and cutover times.

VMware also plans to migrate several critical applications with VMware Cloud on AWS, such as customer blogs, enterprise resource planning apps, and virtual desktop infrastructure.

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