Challenges with Cloud Transformation

The COVID-19 pandemic has accelerated the need for cloud services. Enterprises are under pressure to migrate workloads to the cloud and modernize applications in public cloud to leverage benefits, including reduced costs, improved service quality and increased flexibility. As a result, moving to public cloud is driving a transformative new business model. In addition, by providing access to the newest technologies and innovations, such as artificial intelligence and machine learning, cloud technologies help companies stay ahead of the competition.

However, despite all the benefits and advancements, enterprises face challenges associated with quickly and effectively transforming existing workloads to the cloud:

• Operational inconsistency between on-premises and the cloud
• Lack of talents to manage cloud services
• Incompatible configurations and capabilities between on-premises and cloud environment
• High upfront costs for refactoring and revalidation
• Different machine formats reduce portability, increase risk and slow down migration

Introducing Alibaba Cloud VMware Service

Alibaba Cloud VMware Service integrates VMware on-premises tools, skillsets and processes, delivering a vSphere-based, multi-tenant cloud service to Alibaba native cloud. Alibaba Cloud VMware Service allows organizations to access the scale and agility of the Alibaba Cloud while extending VMware-based workloads and applications across the Alibaba Cloud in an operationally consistent manner. Alibaba Cloud operates SDDC build, supports the hybrid cloud environment, and manages lifecycle. It empowers enterprises to reduce operational costs and complexity, and mitigate operational risk, while customers can focus on delivering value-added services.

Alibaba Cloud VMware Service leverages VMware compute, storage and network virtualization products, and centralized management functions deployed to Alibaba bare-metal hosts. This consistent and unified cloud infrastructure enables organizations to migrate and seamlessly move workloads between on-premises and Alibaba Cloud at scale. Businesses can quickly migrate and access VM resources using familiar VMware tools without rearchitecting applications or retooling operations. IT Operations can also take advantage of Alibaba Cloud capabilities that include, based on Alibaba 2021 data:

• Infrastructure stability with close to 2 million containers running on Alibaba bare-metal servers
• Database performance supported by 100TB high-speed network and PolarDB with Remote Direct Memory Access (RDMA)
• Applications reliability featuring E2E stress testing, flow control and peak order creation at 544 thousand per second
• DevOps efficiency P2P based large scale image distribution over than 10 thousand nodes
• Security protection with anti-DDoS, risk management, data encryption and proven to have protected against 60 billion attacks worldwide
• Embedded Artificial Intelligence (AI) supporting 25 billion real-time computing transaction with 98% of customer support functions and 60% of identity authentication are completed with Alibaba AI applications
**WHY ALIBABA CLOUD VMWARE SERVICE?**

**Unified platform**
Transfer applications with fully automated provisioning and life-cycle management. Delivered by the same vSphere-based SDDC that you use on-premises without rearchitecting or refactoring applications.

**Seamless integration**
Fully integrated control plane with Alibaba Cloud native console and monitoring panel.

**Accelerated migration**
Migrate your workloads without retrofit or disruption, reducing migration effort from months to weeks.

**High Speed and Secure Cloud Network**
99.9% SLA for both SDDC instance availability and management components globally with VMware NSX, L2-L4 network security.

**Consistent operations**
Based on vSphere and vCenter APIs so your existing VMware and third-party tools continue to work without the need for re-training.

**Security and compliances**
Deploy existing or new applications with the only China-based cloud provider that meets regulatory export control and data privacy requirements across Asia Pacific, Europe and North America.

**GET STARTED TODAY**
Please visit the complementary Alibaba Cloud VMware Solution Hands-on-Lab, authored in Simplified Chinese language, to see how the solution works. For additional information, please contact ACVSsales@vmware.com.

With Alibaba Cloud VMware Service, you can migrate existing workload from on-premises to the cloud with agility using the same applications, tools and policies you are familiar with on-premises. On-premises workloads can be deployed without refactoring and retooling.

**FIGURE 1: Alibaba Cloud VMware Service**

**Cloud Migration**
For customers who want to start with a fast, low-cost migration to transform applications to the cloud or refresh infrastructure due to hardware end of life, Alibaba Cloud VMware Service offers a consistent and enterprise-class cloud service that brings the best VMware technologies to Alibaba Cloud.

**Data Center Extension**
Customers who want to scale data center capacity, handle unplanned temporary capacity needs for new projects, or have a need to perform test/development activities in a cloud environment can choose Alibaba Cloud VMware Service to extend the data center with consistency and agility.

**Disaster Recovery**
Ideal scenario for new DR implementation, secondary DR site cost reduction and additional workloads protection with a cloud-based DR solution. Disaster recovery, delivered as a service for Alibaba Cloud VMware Service, provides on-demand site protection with native automated orchestration, failover, and failback capabilities.

**Application Modernization**
For customers who want to modernize enterprise applications faster, you can choose to combine Kubernetes, popular developer tools and frameworks, and access to native Alibaba Cloud services to achieve a fast path to production for applications.