NSX Advanced Load Balancing for Google Cloud VMware® Engine

KEY BENEFITS

Quick Provisioning
Accelerated application provisioning with zero-touch L4-L7 service lifecycle management.

Full-Featured Load Balancing
Enterprise-grade software load balancer combining the capabilities of a traditional load balancer appliance with the elasticity and automation

Self-Service
100% REST APIs enable policy-driven self-service for app developers and automation for IT administrators.

Application Analytics
Real-time insights into application performance, security, and end user interactions.

Distributed Architecture
Central control and policy management for distributed pool of load balancing resources.

Hybrid-Cloud Load Balancing
Consistent features across on-premises and Google Cloud VMware Engine SDDCs.

GSLB across application deployed on-premises and in Google Cloud VMware Engine.

Security
Security insights and health scores, mitigate DDoS attacks. Easy-to-configure iWAF to enable web application firewall, with both machine-learning based application security and pre-canned or customizable OWASP ruleset.

Multiple Application Environments Increase Complexity

Workloads now span on-premises and cloud environments, which significantly increases complexity for IT teams. For example, application networking functions that are effective in the data center may not work in the cloud, and cloud provider solutions may not work in the data center. Enterprises need to seamlessly integrate infrastructure environments to enable better workload portability and create consistent delivery of application and networking services across on-premises data centers and the cloud.

NSX Advanced Load Balancer + Google Cloud VMware Engine = Speed and Simplicity

VMware NSX® Advanced Load Balancer™, (Avi Networks) provides a next-generation application delivery fabric that spans on-premises and cloud environments. The centrally managed solution consists of a Software Load Balancer and Intelligent Web Application Firewall (WAF) that provides automation, analytics, and security for all applications across hybrid environments.

Google Cloud VMware Engine is one of the fastest and easiest ways to extend, migrate and run your VMware-based applications in Google Cloud without changes to your apps, tools, or processes.

Google Cloud VMware Engine is a fully managed service that lets you run the VMware vSphere, vSAN, NSX-T and vCenter in Google Cloud. The solution provides you with VMware operational continuity so you can benefit from a cloud consumption model and lower your total cost of ownership. The solution also offers on-demand provisioning, pay-as-you-grow, and capacity optimization.

The solution is fully compatible with your existing VMware tools, processes, and skills training. This compatibility enables your team to manage workloads without disrupting existing policies, such as those related to networking, security, data protection, and auditing.

Google Cloud VMware Engine Key Benefits:

Google Cloud VMware Engine Enables your VMware environment to run natively on Google Cloud bare metal, single-tenant infrastructure in Google Cloud locations and fully integrates with the rest of Google Cloud. Google manages the infrastructure and all the necessary networking and management services so you can consume the VMware platform efficiently and securely.

vmware®

Google Cloud VMware Engine is ideal for customers who want / need to:

- Continue running their workloads in fully compatible SDDC stack with reduced operational burden on IT.
- Protect on-premises VMware environments with frequent backups and disaster recovery in Google Cloud.
- Increase business agility by unlocking intelligent insights with Google services via BigQuery to analyze your data in real time
- Add agility to their on-premises VMware vSphere-based environments by extending them to Google Cloud.
- Take advantage of flexible capacity management as the service provides all the hardware and VMware licenses you need to run in a dedicated VMware SDDC in Google Cloud

Elastic, Automated, and Analytics-Driven Application Delivery Across VMware and Google Cloud VMware Engine

NSX Advanced Load Balancer (or NSX ALB), is a 100% software application delivery solution that runs across containers, virtual machines, and bare metal—on-premises and in the cloud. The platform provides elastic L4-L7 load balancing as well as detailed analytics for the application, infrastructure, and end-users. By separating the data and control plane, NSX ALB can provide centralized management and consistent operations across hybrid cloud environments and is ideal for enterprises with cloud migration and hybrid cloud initiatives.

NSX ALB for Google Cloud VMware Engine addresses two use cases:

App Migration - Enterprise-Class Elastic Load Balancing for Google Cloud VMware Engine

Enterprise-class Elastic L4-L7 Load Balancing for workloads in Google Cloud VMware Engine provides a cloud-native experience but with a powerful enterprise-class app delivery feature set across availability, security, and real-time application performance monitoring.

Hybrid-Cloud Load Balancing for Data Center Extension

Extend consistent operations across on-premises VMware based workloads and Google Cloud VMware Engine, with ability to scale workloads in either environment using Avi's GSLB and Elastic LB capabilities.
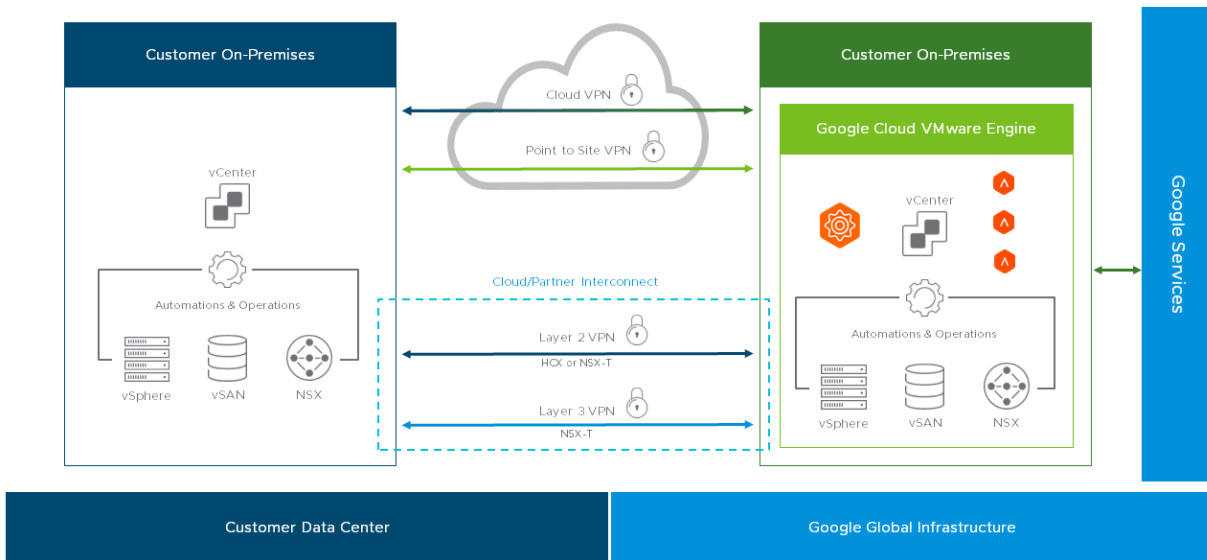

Figure 1: NSX Advanced Load Balancer in Google Cloud VMware Engine

Contact Us:

To learn more about NSX Advanced Load Balancer on Google Cloud VMware Engine, please visit:

Google Cloud VMware Engine