



VMware NSX[®] Advanced Load Balancer™: Elastic, Analytics-driven Load Balancing for AWS

CHALLENGES

Legacy hardware load balancers:

- Lack visibility into end-user experience or app performance
- Require each instance to be managed separately
- Lack turnkey deployment with native AWS API integrations

AWS Elastic Load Balancer (ELB):

- Cannot scale across multiple clouds
- Lack enterprise-grade features
- Lack guarantee for performance and security

SOLUTION

NSX Advanced Load Balancer:

Offers 100% software-defined load balancing solution with elastic scale and automation

- Runs in AWS for virtualized or container environments
- Enables multi-cloud load balancing across on-prem data centers and AWS
- Enables central policy and security control with separate data and control planes

BENEFITS

NSX Advanced Load Balancer offers:

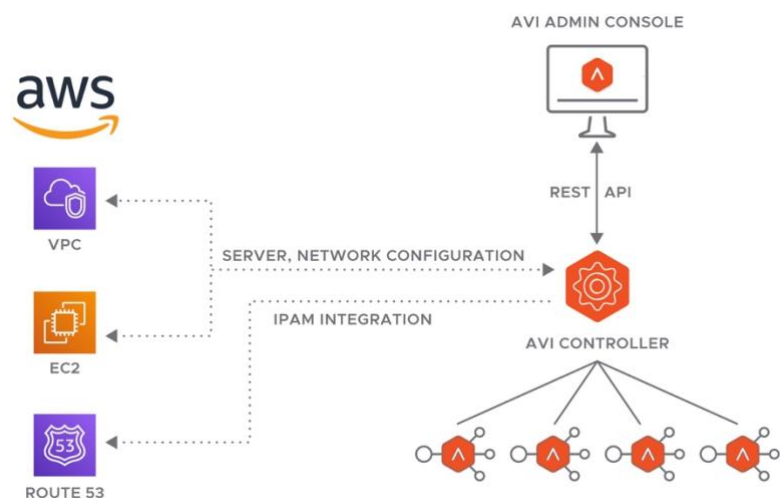
- Multi-cloud and per-app load balancing
- Pinpoint analytics
- Predictive auto-scaling
- Lower TCO

ELASTIC LOAD BALANCING FOR AWS DEPLOYMENTS

Enterprises are adopting Amazon Web Services (AWS) as a natural extension to their data centers and private clouds. These app-centric organizations have adopted continuous delivery practices across multiple environments (on-prem and cloud) and heterogeneous infrastructures (bare metal servers, VMs, and containers). Traditional hardware load balancers and their virtual appliances lack the ability to scale across multiple clouds and do not offer comprehensive visibility into end-user experience or app performance. These legacy solutions lack native integration with AWS APIs. Requiring manual configuration, each instance needs to be managed separately, and they are not developer-friendly. Moreover, native cloud load balancer solutions like AWS Elastic Load Balancer (ELB) or AWS Application Load Balancer (ALB) do not offer full-featured load balancing capabilities, multi-cloud traffic management, or real-time application analytics.

THE NSX ADVANCED LOAD BALANCER

The NSX Advanced Load Balancer is a full-featured, next-generation software load balancer with integrated application monitoring and analytics. Avi offers a premium elastic load balancing solution for workloads that run in AWS in a virtualized or a container environment. Built on software-defined principles, NSX Advanced Load Balancer separates the data plane (with distributed load balancers) from the control plane (single point of management and control) and enables central control and multi-cloud load balancing for workloads running in multiple AWS availability zones or on-prem data centers.



ENTERPRISE-GRADE LOAD BALANCING: Full-featured software load balancer that combines the capabilities of a traditional load balancer appliance with the elasticity and automation of AWS ELB. It provides a rich set of L4-L7 services, security, app analytics, application performance monitoring, and on-demand autoscaling.

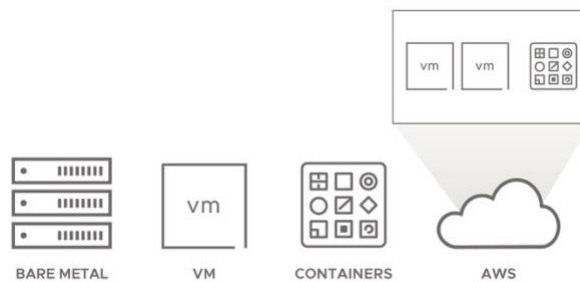
MULTI-CLOUD LOAD BALANCING: Load balance workloads both on-premises and in AWS simultaneously, while providing a centralized control, management, and policy repository.

LOWER COSTS: Dynamically scale-out (and scale-in) app instances as well as load balancing capacity based on real-time traffic patterns. Eliminate the need to overprovision and reduce your TCO.

Enterprises modernize and maximize infrastructure utilization with AWS. The next phase of this modernization is to extend the app-centricity to the networking stack. Application services need to go beyond load balancing to deliver real-time insights, simplify troubleshooting, autoscale predictively, and enable developer self-service and automation.

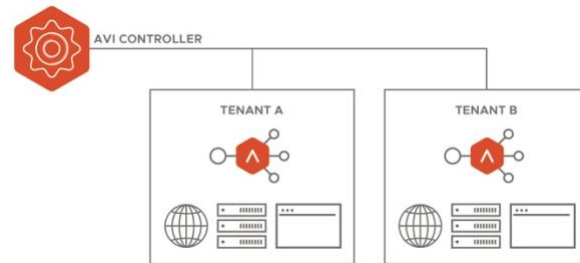
MULTI-CLOUD LOAD BALANCING

- Intelligent traffic routing across multiple clouds and multiple sites
- Autoscaling for apps and load balancers across public and private clouds
- On-demand scaling based on real-time traffic thresholds



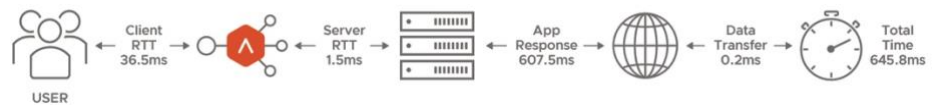
PER-APP LOAD BALANCING

- Prevention of service disruptions across multiple tenants
- High performance load balancers for each application
- Dedicated load balancers for production vs. test environments



PINPOINT ANALYTICS

- Visualization of round-trip times to understand end-user experience
- “Network DVR”-like capabilities to troubleshoot network incidents
- Google-search like capability for pinpoint analytics and rapid resolution



PREDICTIVE AUTOSCALING

- Zero-touch scaling via traffic thresholds without manual configurations
- Load balancer and app autoscaling across public and private clouds
- Management of AWS costs with automatic scale-out and scale-in

