Multi-Cloud Load Balancing 101 Hand's on Lab

VMware NSX Advanced Load Balancer (Formerly Avi Networks)

Cameron Jenkins Staff System Engineer

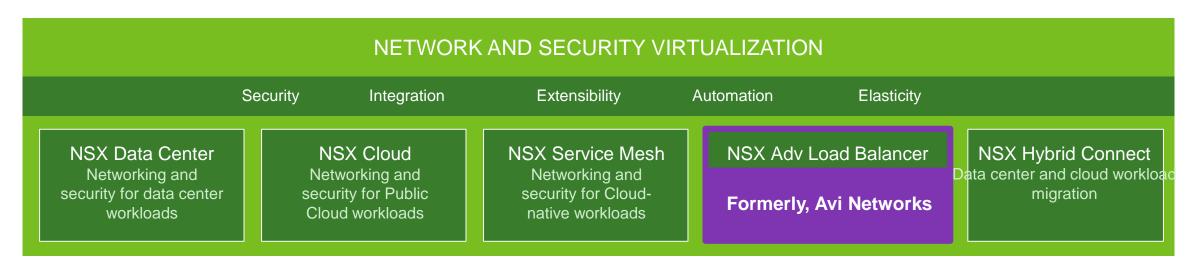
14th May 2020



VMware NSX Portfolio

The Foundation of the Virtual Cloud Network

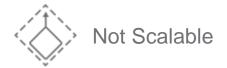
NETWORK AND SECURITY MANAGEMENT AND AUTOMATION Cloud-Based Management Workflow Automation Blueprints / Templates Insights / Discovery Visibility Network Insight VRealize Automation Tanzu Mission Control K8s Multi-Cluster Policy Management



Load Balancing Is a Key Blocker for Digital Transformation



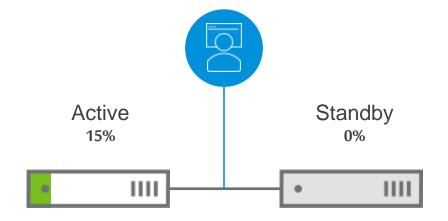








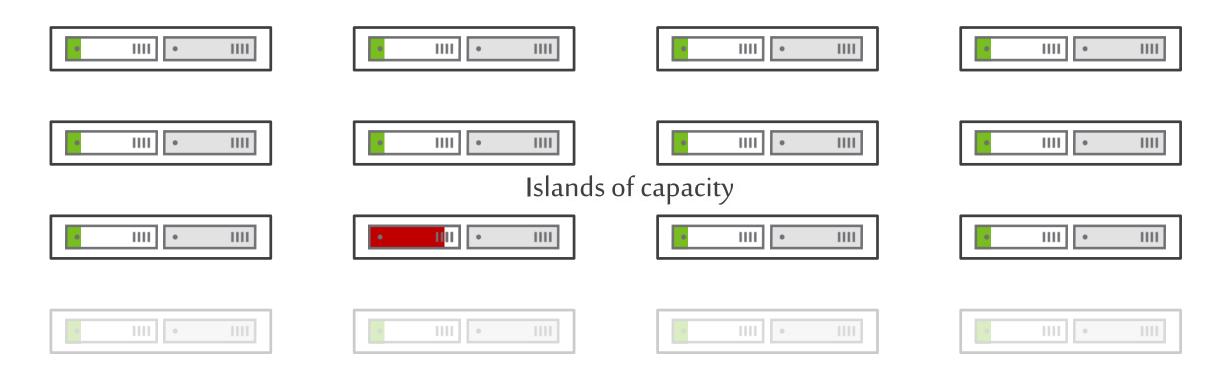


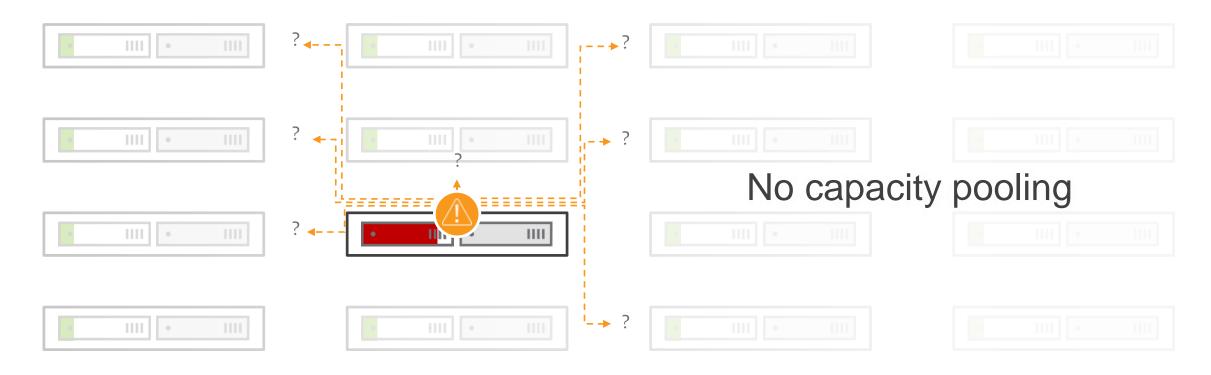








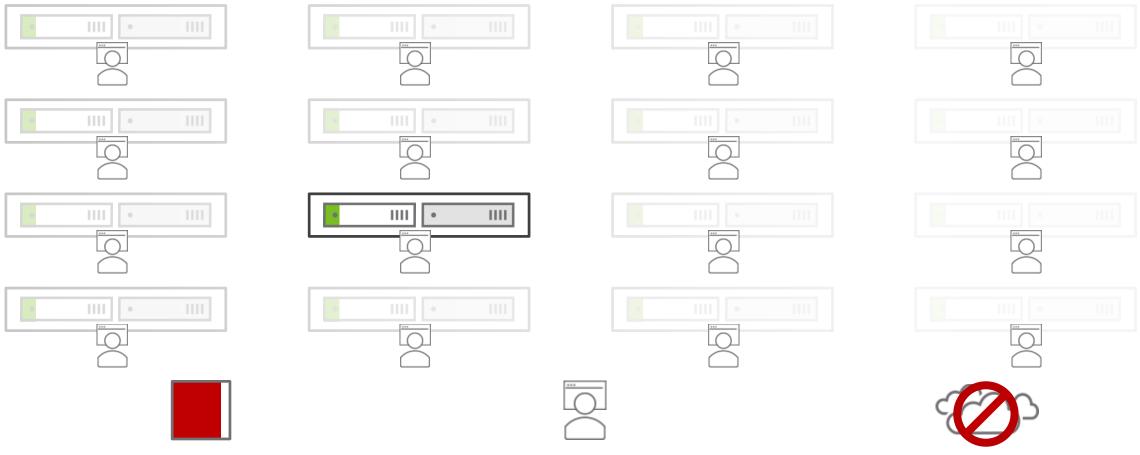






Capacity management – manual VIP placement, costly overprovisioning, no capacity pooling





Capacity management – manual VIP placement, costly overprovisioning, no capacity pooling

Separate control points – operational complexity, hard to automate, painful upgrades

Not designed for modern new environments like on-premises, cloud and container



Load Balancing Challenges/Tradeoffs in the Public Cloud

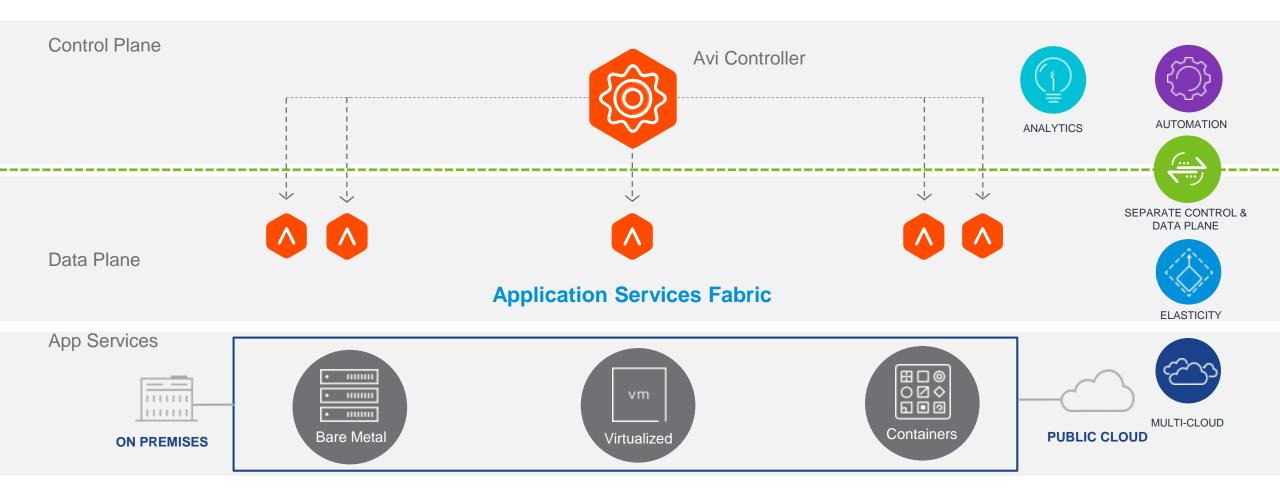
The legacy VEs and cloud provider solutions are an unacceptable compromise

Legacy Cloud **Virtual Provider** LB LB Tradeoff operational simplicity, automation, and cloud-native offers offers capabilities features automation & elasticity Tradeoff features, multi-cloud consistency, and portability VE Azure Can I have the **Best of Both Worlds**?



To Modern Distributed Architecture

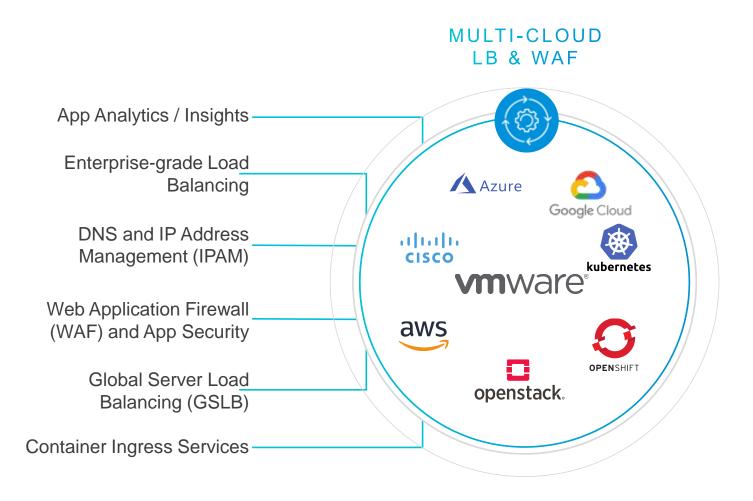
Centralized Policies and Full Lifecycle Management



vmware[®]

Avi Networks (now VMware NSX Advanced Load Balancer)

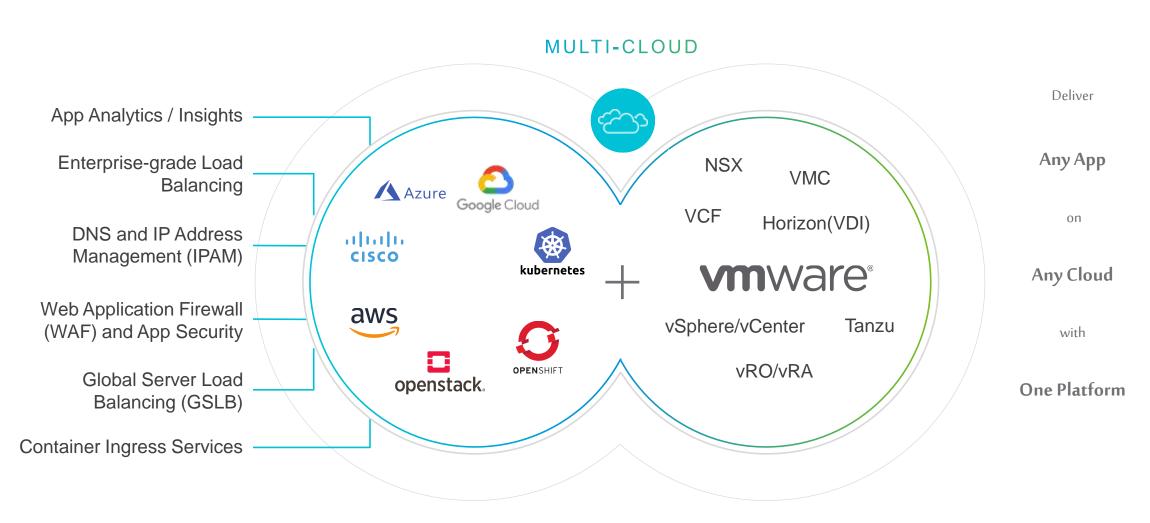
Consistent L4-L7 enterprise-grade app services across multi-cloud environments





Avi Networks (now VMware NSX Advanced Load Balancer)

Consistent L4-L7 enterprise-grade app services across multi-cloud environments





Comprehensive Application Services Platform

With automation across heterogeneous infrastructure





Enterprise Grade

L7 (HTTP) LB
L4 (TCP/UDP) LB
Global Load Balancing
Content Switching
Caching/Compression
Autoscaling

SSL Termination
DDoS Protection
L3-4 ACLs
L7 Rules/Policies
Rate Limiting
Client Auth / SSO





Cloud Native

Application Map
Service Health Score
Network Performance
App Performance
Request Logging
Security Insights

Sentral Management

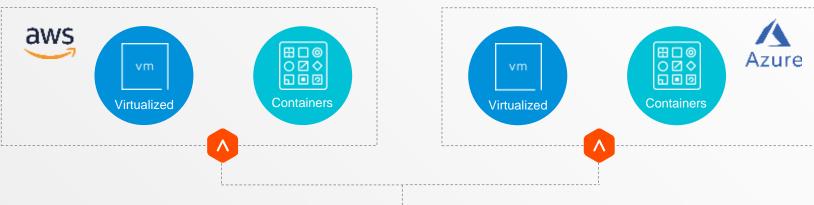
00% REST API / SDł

Self-Service

Multi-Tenancy

Service Discovery

IPAM/DNS



Demo

A single application services fabric across multiple clouds

