DATA SHEET

Avi Vantage Platform
Software-Defined Application Services

HIGHLIGHTS

100% SOFTWARE LOAD BALANCER
Full-featured, software load balancer deployed on any x86 server, VM, or container—on-premises or cloud.

SINGLE POINT OF CONTROL
Central control and policy management for distributed pool of load balancing resources.

APPLICATION ANALYTICS
Real time insights into application performance, security, and end user interactions. Troubleshoot application issues in minutes.

PREDICTIVE AUTOSCALING
Eliminates expensive overprovisioning of services—on-demand autoscaling is triggered by traffic thresholds.

AUTOMATION AND SELF-SERVICE
100% REST APIs enable policy-driven self-service for app developers and automation for IT administrators.

MULTITENANCY
Granular per-application and per-tenant load balancing—dedicated services close to each application.

ENHANCED SECURITY
Security insights and health scores to enforce L4-L7 policies, pinpoint and mitigate DDoS attacks, micro-segment container apps, and SSL issues.

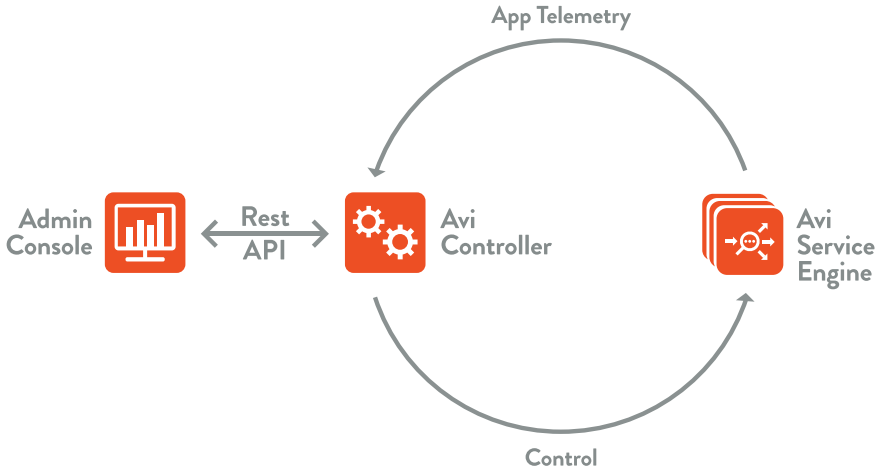
TURNKEY DEPLOYMENT
Integrations for OpenStack, SDN, container platforms, virtualized environments, and public clouds.

APPLICATION DELIVERY NEEDS TO CHANGE

Enterprises are adopting software-defined approaches for applications and networking in their data centers and clouds. They are becoming application-centric with a focus on delivering applications continuously across multiple environments (on-premises and cloud) and diverse infrastructures (bare metal servers, VMs, and containers). Legacy appliance based ADCs are unable to deliver application services that match the needs of these dynamic environments. Appliance-based load balancers are inflexible, do not work across environments, and often result in expensive overprovisioning of services.

AVI VANTAGE PLATFORM OVERVIEW

The Avi Vantage Platform is built on software-defined principles and mirrors next generation architectures to deliver the flexibility and simplicity expected by IT and lines of business. The Avi Vantage architecture separates the data and control planes to deliver application services beyond load balancing, such as application analytics, predictive autoscaling, micro-segmentation, and self-service for app owners in both on-premises or cloud environments. The platform provides a centrally managed, dynamic pool of load balancing resources on commodity x86 servers, VMs or containers, to deliver granular services close to individual applications.



The Avi Vantage Platform has three core components – Avi Controller, Avi Service Engines and Avi Admin Console.

The Avi Controller is a single point of management and control that is the “brain” of the entire system. The Avi Service Engines collect real-time application telemetry from application traffic flows. The Avi Controller uses big data analytics to analyze the data and present actionable insights to administrators on intuitive dashboards on the Avi Admin Console. The Avi Console is a modern web-based user interface that provides role based access to control, manage and monitor applications. All services provided by the platform are also available as REST APIs to enable IT automation, developer self-service, and a variety of third party integrations.

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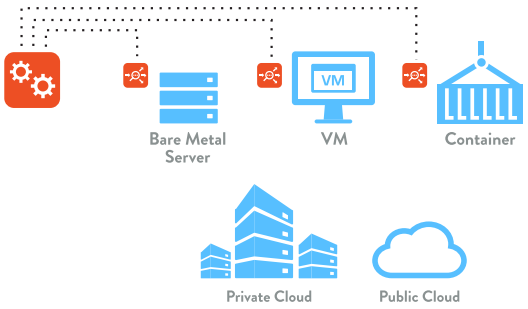
Avi Vantage Platform Deployment Scenarios

Avi Vantage provides out-of-the-box integrations for on-premises or cloud deployments. These integrations with private cloud frameworks, SDN controllers, container orchestration platforms, virtualized environments and public clouds enable turnkey application services and automation.

SOFTWARE LOAD BALANCER FOR ANY DATA CENTER OR CLOUD

Avi Vantage creates a centrally managed pool of distributed load balancers (Avi Service Engines) on any bare metal servers, VMs, or containers.

- Provisions VIPs in one click in private or public clouds
- Discovers application workloads and network topology
- Places services close to applications and eliminates traffic trombones
- Provides single point of control for all load balancers
- Autoscales load balancers predictively based on traffic



LOAD BALANCING AS A SERVICE FOR OPENSTACK

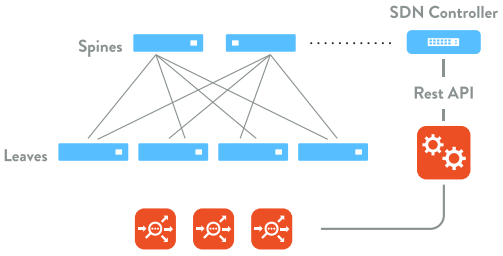
Avi Vantage enables enterprises to deliver a fully orchestrated OpenStack implementation.

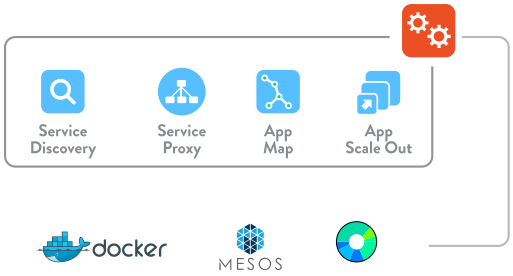
- Integrates natively with OpenStack Horizon, Nova, Keystone, and Neutron
- Overcomes the complexity of legacy ADCs
- Delivers enterprise-grade features not available with open source solutions
- Monitors applications and performance in real time
- Enables policy-driven, ticketless self-service

APPLICATION SERVICES FOR SDN

Avi Vantage mirrors the automation of SDN with fully automated L4-L7 services.

- Integrates with SDN environments - Cisco ACI, VMware NSX, and Nuage Networks
- Accelerates service insertion for Cisco APIC without the need for custom device packages
- Delivers distributed, programmable pool of load balancing resources
- Extends security policies configured in SDN to load balancing services





CONTAINER SERVICES FABRIC FOR MICROSERVICES APPLICATIONS

Avi Vantage integrates with container environments to deliver a comprehensive service fabric for microservices applications.

- Discovers services running in microservices apps
- Displays East-West interactions in graphical app maps
- Secures and isolates applications with micro-segmentation
- Simplifies troubleshooting with application analytics
- Autoscales applications predictively based on traffic

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Avi Vantage Platform
Software-Defined Application Services

SYSTEM PERFORMANCE AND SCALE	
Max System Throughput	10 Tbps
Max Connections	100,000,000/s
Max Concurrent Connections	10,000,000,000
Max HTTP Requests	200,000,000/s
Max SSL TPS (2k RSA)	10,000,000
Max SSL TPS (SEC256r1 ECC)	30,000,000
Max tenants with shared data plane	Unlimited
Max tenants with isolated data plane	200
Max Avi Service Engines	500

SUPPORTED PLATFORMS	
VMware	VMware vCenter 5.1, 5.5, 6.0 vCO and vCAC
OpenStack	Havana IceHouse Juno Kilo Liberty
Bare Metal	OEL 7.0, 7.2 RHEL 7.0, 7.2 CentoOS 7.2
Containers	Docker UCP Mesosphere DC/OS Apache Mesos / Marathon Rancher
Public Cloud	AWS
SDN	Cisco ACI/APIC Nuage Networks
Other	Nutanix Acropolis 4.6

SIZING RECOMMENDATIONS	
Avi Controller	
CPU	Intel x86 - 4 cores or higher
Memory	16 GB or higher
Disk Space	64 GB or higher (SSD recommended)
Avi Service Engines	
CPU	Intel x86 - 1 core or higher
Memory	2 GB or higher
DiskSpace	10 GB or higher

BENEFIT	DESCRIPTION
Lower TCO by >70%	Eliminate overprovisioning using commodity x86 servers. Replace capex with opex driven by on-demand elasticity.
5x faster app rollouts	Deploy applications faster by eliminating the need to procure, configure, and monitor disparate hardware appliances.
Self-service for app owners	Empower DevOps teams and app owners with REST APIs to build services into applications .
Simplified monitoring and troubleshooting	Monitor performance and record and replay network events for quick troubleshooting.
Match agility of private or public cloud initiatives	Integrate natively with VMware vCenter, SDN controllers, OpenStack, and Container Platforms.
Predictive autoscaling	Scale out or scale in load balancing resources and even application components based on real time traffic patterns.
Enhanced security	Micro-segment container applications, enforce L4-L7 policies, apply URL filters, mitigate DDoS attacks, and identify SSL issues.

For more details, please refer to Avi Networks' "Scale and Performance Datasheet for VMware" and "Scale and Performance Datasheet for OpenStack and KVM."

ABOUT AVI NETWORKS

Avi Networks delivers public-cloud-like agility for application services beyond load balancing including deep application analytics, predictive autoscaling, and security in the data center or public cloud. The Avi Vantage Platform delivers elastic, software-defined application services on commodity x86 servers, VMs, or containers. Avi Vantage provides application services as a dynamic pool of resources that matches the automation needs of private or public cloud initiatives. Fortune 500 technology, media, and financial services companies use Avi Networks to accelerate application delivery, enable self-service for application owners, and lower their TCO.