

# Transforming Data Centers with Pulse Secure vADC

## HIGHLIGHTS

- Right-size ADC capacity by dialing up additional capacity on-demand
- Leverage virtualisation technology to transform application delivery
- Rapid ADC deployment through automation and orchestration
- Quickly scale to meet changes in demand while providing network and infrastructure continuity
- Leverage virtual/cloud solutions by adding capacity with simple license upgrade

## SOLUTION

- Pulse Secure Virtual Traffic Manager

## Evolving the Traditional Data Center Model

As enterprises move to a more flexible and cost-effective IT infrastructure to manage costs, traditional data centers pose challenges when scaling to support dynamic applications. But as enterprises begin to realize the performance and cost benefits a virtualized infrastructure offers, the application delivery layer becomes caught between networking and application virtualization pools. Traditional load balancer appliances become an anchor point in the network, creating a barrier to change, and a bottleneck in application performance.

The long lead times associated with the installation of static appliances not only reduces flexibility, it results in underutilized ADC systems surrounded by a virtualized architecture. Moving from individual ADC appliances to shared appliances hosting multiple applications does not provide a solution, so enterprises need to look towards an end-to-end virtualization strategy. A solution that virtualizes the application delivery layer can contribute significantly to performance improvements while creating CAPEX and OPEX savings for the enterprise.

### The Pulse Secure Solution

As enterprises make the journey to virtualization and cloud architectures, Pulse Secure provides solutions to complete the vision of software defined data centers with SDN integration and NFV deployments. Pulse Secure

extends virtualization to the application delivery layer, overlaid on the virtual network. Then, Pulse Secure Virtual Traffic Manager creates virtual appliances to host load balancing and application delivery technology, bringing the application delivery function closer to the application itself, using NFV technology to virtualize network functions. The resulting flexible architecture enables rapid response to changes in traffic patterns and the ability to scale up or down to meet changes in workloads.

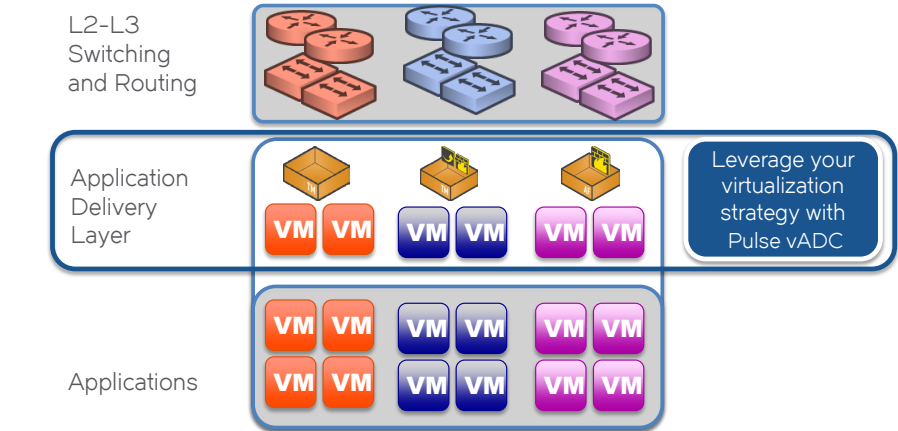
### Scale Up and Scale Out

Pulse Secure leverages commodity compute platforms within the virtualized fabric itself, enabling Pulse Secure Virtual Traffic Manager to immediately gain the agility and economics of the cloud. With more processor and memory resources

## THE NEW IP, INNOVATING AND ACCELERATING THE SPEED OF SERVICE DELIVERY

With Pulse Secure, the New IP is:

- **Open with a purpose:** Accelerates the rate of business innovation by reducing vendor lock-in to enable choice that increases flexibility while reducing cost and complexity.
- **Innovation-centric and software-enabled:** Gives you programmatic control over complex tasks, tight integration with business support systems and high-value end user applications, and the freedom to develop strategic techniques for accelerating business growth.
- **Ecosystem-driven:** Taps into the vast pool of resources that you need to keep pace with innovation, to let you build the network and add the services you want, and move faster and more efficiently than your competitors.
- **Your-pace-your-way migration:** Lets you evolve based on your business priorities, so you take evolutionary steps, and achieve revolutionary results as you modernize your infrastructure, your IT organization, and your business.



**Figure 1:** Transforming Data Centers with Pulse Secure vADC.

assigned to the virtual appliance, Traffic Manager can scale up to very large throughputs within a single instance. At the same time, Pulse Secure clustering technologies can scale out to reach the perfect balance of performance, resilience and geographic distribution to suit the largest of global applications.

In addition to the ability to scale resources up and down, Pulse Secure application delivery solutions are not limited by a fixed deployment platform or performance envelope. Because the Pulse Secure vADC software can leverage the latest high-performance compute platforms, it can deliver Layer 7 services at full speed. Services such as SSL encryption, compression, application scripting and web application firewall capabilities can all be delivered with no compromise on performance. Unlike other ADC solutions, which can require upgrading to a larger chassis and starting over, Pulse Secure Virtual Traffic Manager preserves enterprise investment, while always benefiting from the latest CPU enhancements.

### Full Programmability for NFV Deployment

Pulse Secure application delivery solutions excel in programmability. Business policies can be created in the data plane for real time inspection and

control of transactions, and RuleBuilder can create simple step-wise rules using drop down menus. Custom rules can be created using TrafficScript, a powerful application-aware scripting language for fine-grained control of transactions, users and services. Java or other developer tools can also help to reuse existing business logic and workflows.

In the control plane, open RESTful APIs and scripting tools give comprehensive command and control for complete lifecycle management. This also enables integration into self-service portals, or to link into orchestration frameworks for full service automation.

### Powerful Tools, Easy to Manage

Pulse Secure Virtual Traffic Manager leverages an easy-to-use graphical user interface to provide a simple and consistent means of managing applications, including activity maps, connection monitoring, security analytics and control panel. With detailed insights into requests and transactions these graphical tools can also be used as a diagnostic tool to understand application bottlenecks and connection problems. TrafficScript can also be used to build front end policies to improve the user experience.

The same feature set is available in each form factor, creating architectural freedom with value added capabilities to support cloud host platforms. These include a pure software download that maximizes flexibility for architects and OEM customers; virtual appliances for hypervisors (VMware, KVM, Microsoft HyperV and Oracle VM); close integration with cloud service providers (AMI for Amazon Web Services and VHD for Microsoft Azure); and bulk licensing options to support high density and multi-tenant architectures.

### **Best of Breed Performance with Flexibility**

Pulse Secure provides a best of breed platform that is purpose built-built for NFV, delivering unmatched scale and performance. The ability to scale up and scale out with N+M clustering delivers reliability, scalable throughput, and the flexibility to transform how applications are managed with rapid service deployment and cloud-ready commercial models. With Pulse Secure Virtual Application Delivery Controller solutions, enterprises can trade up from traditional ADC solutions to a more flexible and cost-effective application delivery architecture that supports cloud and virtual environments while scaling up and down to suit changes in workload.

### **Learn More**

Pulse Secure simplifies rapid service deployment and automated application delivery. To find out more about Pulse Secure Application Delivery solutions, or to arrange a demonstration or product evaluation, please visit [www.pulsesecure.net/vadc](http://www.pulsesecure.net/vadc).

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