

# Next Generation ADC Solution for Virtual and Cloud Environments

Radware's Alteon Virtual Appliance (VA) is a high performance, next generation ADC packaged as a virtual appliance that runs on virtual and cloud infrastructures, providing up to 17Gbps of ADC capacity. With the portability and advanced integrations of Alteon VA, enterprises can leverage virtual server and cloud infrastructures to optimize resource utilization, application availability and performance. Combined with Radware's automation solutions embedded in APSolute Vision management system, administrators can accelerate application rollout times and reduce Alteon VA administrative/maintenance tasks.

## Advanced Enterprise Functionality

Alteon VA supports the complex functional requirements of enterprise applications, which go beyond basic availability and quality of experience features. These include:



### Layer 7 Rewrite

When application changes are needed on the fly and reprogramming of the application is not possible, ADC's are the preferred choice to resolve the problem without interrupting the availability of the application servers.



### Application Level Traffic Steering

When traffic needs to be directed to a specific server based on its functionality, Alteon VA can inspect application level request data (L7), classify the traffic, and perform the forwarding decision accordingly.



### SSL Offloading

Alteon VA utilizes a unique software architecture which enables flexible allocation of CPU processing cores per function, such as SSL offloading. As a result, Alteon VA enables cost effective SSL offloading from the application servers it manages.



### Full Web Performance Visibility with Integrated APM

Radware's application performance monitoring (APM) module monitors the quality of experience of actual users, including real data or errors. It provides historical reports with granular analysis based on user-defined SLAs, while measuring the delay of transactions and breaking it down by data center time, network latency and browser rendering time. Radware's APM works out-of-the-box, and unlike other solutions, it doesn't require manual synthetic transaction scripting nor deploying monitoring probes on servers – thereby reducing deployment time and costs.



### **Full Toolset for Web Application Performance Acceleration**

Alteon VA offers a full set of tools for application performance acceleration, including caching, compression, SSL offloading and TCP optimization. In addition, Alteon VA features an embedded FastView engine for web performance optimization (WPO) to decrease web application response times by 40% across a variety of end user devices, browser types/versions, and specific mobile devices. Combined with embedded HTTP/2 gateway, Alteon VA resolves many inherent HTTP 1.1 protocol performance bottlenecks and enables additional acceleration of web applications.



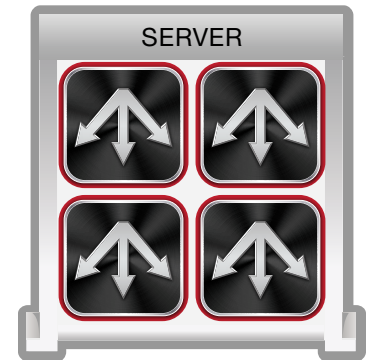
### **Easiest and Simplest Way to Secure Applications**

Alteon VA delivers best-in-class web application security coverage. The integration of advanced web application firewall capabilities, such as a unique out-of-path WAF deployment mode and auto-policy generation, enables risk-free implementation. In addition, full instance isolation and resource reservation ensures both the ADC and WAF function receive guaranteed resources. Even when WAF policies are updated, there's no impact on application availability and performance, resulting in secured web application with guaranteed SLA.

Alteon NG features a built-in authentication gateway with single sign on (SSO) capabilities by supporting Radius, Active Directory, LDAP and RSA SecurID, simplifying user experience without compromising application security.

### **Alteon VA for Server Virtualization Environments**

Alteon VA is available on all leading hypervisors, including VMware ESXi, Microsoft Hyper-V, KVM or Open-XEN. It simplifies the application life cycle management from start to finish by enabling instant provisioning of a new ADC instance in the development environment. That same ADC instance can be migrated to the staging and production environment and packaged as part of the application blueprint regardless of the form factor used. Because of the full compatibility across all Alteon form factors it doesn't matter if it's physical ADCs or vADCs on Radware's ADC-VX platforms.



### **Alteon VA in Cloud Environments**

Integrated with leading cloud management platforms including Cisco ACI, OpenStack, VMware NSX and VCD, and HP CloudMaps, Alteon cloud enables administrators to extend the automation value of cloud environments to the ADC function. It offers real-time provisioning of new ADC virtual appliances per application and consumes the exact amount of resources per virtual ADC instance.

Combined with Radware vDirect, administrators receive an ADC service automation engine that integrates with various cloud management systems, automating resource provisioning and lifecycle management of ADC cloud services. vDirect allows the cloud management platform to extend advanced ADC functionality to users via the standard cloud management user interface.

### **Alteon VA for Public Clouds**

Alteon VA is available as a virtual appliance on Microsoft Azure as well as on Amazon Web Services (AWS) via a bring-your-own-license (BYOL) model or as a pay-as-you-go (PAYG) model. Both use a simple activation process via the AWS/Microsoft Azure marketplace. Alteon VA for public clouds is best suited to supplement the enterprise application lifecycle as a PAYG infrastructure delivering the same functionality set as all other Alteon VA flavors and Alteon physical appliances. With an elastic footprint, Alteon VA only utilizes the required amount of resources it needs per deployment, making it a cost optimized ADC solution for cloud environments.

## Alteon VA Specifications

Functionality	Value
L4 Throughput licenses ranges (M=Mbps, G=Gbps):	
KVM	200M, 500M, 1G, 3G, 6G, 10G, 17G
VMware	200M, 500M, 1G, 3G, 6G, 10G
OpenXen	200M, 500M, 1G
Hyper-V	200M, 500M, 1G
Open Stack	200M, 500M, 1G, 1.5G, 4G <sup>1</sup>
Amazon EC2 Cloud/Microsoft Azure	200M, 500M, 1G
L4 CPS	270,000
L7 Throughput (Mbps)	17,000
L7 TPS	800,000
SSL CPS (2K keys)	5200 (with 8SPs) / 11,200 (with 16 SPs and 1 TD)
SSL Throughput (2K keys) (Mbps)	6,400
Compression Throughput (Mbps)	3,800
Maximum connections	16M+

The numbers above are provided for an Alteon VA instance running on HP DL 380 G9 server with 2 x Intel(R) Xeon(R) E5-2690 v3 @ 2.60GHz, on KVM over CentOS 7.1.

### Discover the Power of Alteon VA Today

Radware offers a free demo and/or lab/development versions of Alteon VA that offers all the features and capabilities of the full version. Click [here](#) to download a trial version.

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<sup>1</sup> 4Gbps over OpenStack when Alteon VA is running over an accelerated virtual switch

## About Radware

Radware® (NASDAQ: RDWR), is a global leader of **application delivery** and **cyber security** solutions for virtual, cloud and software defined data centers. Its award-winning solutions portfolio delivers service level assurance for business-critical applications, while maximizing IT efficiency. Radware's solutions empower more than 10,000 enterprise and carrier customers worldwide to adapt to market challenges quickly, maintain business continuity and achieve maximum productivity while keeping costs down. For more information, please visit [www.radware.com](http://www.radware.com).

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## Certainty Support

Radware offers technical support for all of its products through the Certainty Support Program. Each level of the Certainty Support Program consists of four elements: phone support, software updates, hardware maintenance, and on-site support. Radware also has dedicated engineering staff that can assist customers on a professional services basis for advanced project deployments.

## Learn More

To learn more about how Radware's integrated application delivery & security solutions can enable you to get the most of your business and IT investments, email us at [info@radware.com](mailto:info@radware.com) or go to [www.radware.com](http://www.radware.com).

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