

## Predictable Application SLA, Guaranteed. Only with Alteon NG.

Alteon NG, Radware's next-generation application delivery controller (ADC), is the industry's only solution designed from the ground up to ensure predictable application SLA at all times. The only ADC packed with next-generation ADC services, Alteon NG cost-effectively addresses emerging IT challenges faced by enterprises and online businesses.

### **Application SLA Challenge**

In today's business landscape, IT is required to deliver consistent availability and performance-optimized user experiences for application end-users. On-going trends, such as virtualization, consolidation and cloud-shared platforms are complicating these delivery requirements - the same resources are now shared by different applications and exposing organizations to SLA breaches. Moreover, cyber-attacks that threaten application operation can potentially downgrade application SLA. Finally, application infrastructure issues, including increased Web application complexity and mobility, create additional challenges for delivering optimized application performance and meeting SLA requirements.

Whether it's an online Web application, or an internal mission-critical enterprise application such as CRM, ERP or an organization portal, end-users expect to receive consistent quality of experience. The conclusion is clear: today's organizations require predictable application SLA and need tools to proactively monitor and manage application SLA.

### **Standard ADC: Not Good Enough Anymore**

For years, companies have been using application delivery controllers (ADC) to optimally deliver applications. However, the standard/legacy ADC is not enough anymore as it is based on a best-effort approach. In a standard/legacy ADC, all resources are shared between server applications- there is no resource isolation per application and no resource reservation mechanism. This may lead to SLA degradation of neighboring applications. Likewise, adding features or services to one application can degrade the overall ADC performance and impact other applications' SLA.

In addition, the standard/legacy ADC doesn't offer tools for monitoring application SLA- it only provides acceleration features that are mainly on the TCP/SSL layers but not on the application, user or device levels.

In contrast to the standard/legacy ADC, a next-generation (NG) ADC provides real-user monitoring, best-in-class application level acceleration features, and innovative security offerings. With a full application SLA assurance, a next-generation (NG) ADC also provides application level resource reservation, which allows for the addition of new services without performance penalties.

### **Alteon NG: Complete Application SLA Assurance**

Alteon Next-Generation (NG) is the industry's only ADC to ensure application SLA at all times. Innovative, and built from the ground up, it leverages next-generation services unavailable in any other ADC on the market. Alteon NG combines FastView Web Performance Optimization (WPO), Application Performance Monitoring (APM), AppWall Web Application Firewall (WAF), Authentication Gateway, Advanced Denial of Service (ADoS), ITM/bandwidth management, as well as maximum SSL and compression capacities.

Alteon NG can guarantee application SLA like no other ADC in the market:

- Alteon NG is engineered to deliver full application level resource isolation and designed to prevent resources from maxing out.
- Alteon NG incorporates APM capabilities that provide full visibility into application SLA, broken down by application, transaction or location.
- Alteon NG integrates with FastView, the industry's most advanced WPO technology, which accelerates application responses for higher conversion rates, revenues and productivity.
- Alteon NG is part of a unique attack mitigation architecture, allowing accurate detection and mitigation of the most advanced cyber-attacks.



## Engineered to Ensure Application SLA

Alteon NG enables companies to flexibly allocate a separate virtual ADC (vADC) instance per application, service or department. Each vADC instance is fully isolated from neighboring instances and has independent CPU cores, memory, network stack, management control and operating system versions. As a result, the Alteon NG ADC ensures complete fault isolation and predictable application SLA for all delivered Web applications at all times. In addition, next-generation services can be quickly and safely enabled without impacting the performance of other service applications.

Alteon NG is designed to dynamically scale when necessary, without hardware modifications. It can scale up on-demand, adding more throughput, services and vADCs, or out-of-the-box on-demand, leveraging an external extensible resource pool (such as server infrastructure) for computational intensive NG services. By eliminating the need to purchase additional ADC units, Alteon NG allows for cost-effective hardware consolidation. It provides easy, fast provisioning of additional vADC instances, without service interruption, at a fraction of the cost of buying a physical ADC.



## Full Application SLA Visibility with Radware's Application Performance Monitoring

Radware's Application Performance Monitoring (APM) module provides real-time tracking of application SLA by measuring real-user transactions, including real errors. Embedded in Alteon NG, Radware's APM is an out-of-the-box solution which doesn't require synthetic transaction scripting or additional installation - reducing deployment time and costs. APM intuitively tracks SLA by location, user, application and transaction type to expedite root cause analysis. Additionally, it provides historical reports based on user defined SLA that feature granular analysis, allowing the measurement of the delay per transaction phase and including data center time, network latency and browser rendering time.

## Full Toolset for Web Application Performance Acceleration

Alteon NG offers a full set of tools for providing the highest application performance acceleration, including caching, compression, SSL offloading and TCP optimization. Alteon NG enables faster communication between the client and server, while offloading CPU intensive tasks from the application server.



Radware's FastView technology, embedded in Alteon NG, adds a second layer of acceleration by providing up to 40% faster web application response times for a variety of end-user devices and browser types/versions, and with specific optimization for mobile devices. FastView automatically adapts to new application versions and new modules, which eliminates manual code optimization work and allows organizations to focus on core business competence.



Alteon NG offers an embedded HTTP/2 gateway, a third layer of acceleration that resolves many inherent HTTP 1.1 protocol performance bottlenecks, and thus enables additional acceleration of web applications. By leveraging the Alteon NG acceleration functionality and pairing it with FastView's content analysis algorithms, the HTTP/2 gateway can automate server pushes, even before the client requests the content, and provide an even faster application response time.

Alteon NG offers a full set of acceleration tools that work in concert to deliver the fastest Web application optimization experience yet, for any type of browser, mobile or desktop device.

## Unique Attack Mitigation Architecture

As a key component of Radware's Attack Mitigation Network (AMN), Alteon NG delivers best-in-class web application security coverage. It leverages a unique Defense Messaging mechanism that efficiently mitigates attacks by signaling attack information to Radware's DefensePipe cloud service and DefensePro, a data center attack mitigator located at the network perimeter.



The integration of advanced web application firewall capabilities, such as a unique out-of-path WAF deployment mode and auto-policy generation features, enable risk free implementation. In addition, full instance isolation and resource reservation ensures ADC resources. Even when WAF policies are updated, there's no impact on application availability and performance. This results in secured web application with guaranteed SLA.



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



## Advanced Multi-Homing and Enterprise Gateway Capabilities

The integrated LinkProof NG module delivers an application-aware, cost-effective solution to guarantee enterprise Web application service levels and ensure Internet connectivity at all times. By detecting application downtime through full-path application health monitoring, LinkProof NG allows organizations to pinpoint issues in various networking nodes and enables instant recovery along the entire WAN path.

By simultaneously load balancing and optimizing both inbound and outbound traffic of multiple WAN links, the solution serves as an advanced enterprise gateway which optimizes access to cloud applications by applying advanced TCP congestion control and selecting the best ISP link per service. LinkProof NG increases employee productivity and reduces costs at the branch office by supporting hybrid WAN architecture, aligning allocated WAN links by priority and accelerating employee access to SaaS applications.

## Complete Layer 4-7 Feature Set

Alteon NG delivers a complete set of Layer 4-7 services to ensure the availability, performance and security of mission-critical applications in the local and cloud data centers. These extend to traffic redirection, content modification, persistency, redundancy, advanced health monitoring, global server load balancing (GSLB) and bandwidth management that optimizes the delivery of mission-critical applications.

## Programmable & Shaped to Deliver Applications

Alteon NG employs Radware's AppShape technology which simplifies and accelerates application deployment on the ADC. By offering configuration templates for leading business applications, AppShape helps customers set up and configure all the required ADC options in a fast, risk-free and user-friendly manner. The benefits are faster application rollouts and optimized performance of the ADC for each specific application.

Radware's AppShape++ technology delivers scripting capabilities, allowing customization of the ADC service for specific application flow and scenario. By leveraging the script examples library, customers can use AppShape++ to refine various Layer 4-7 policies including HTTP, HTTPS, TCP, UDP, SSL and more – without application modifications and reducing cost and risk.

## Best Performance in Its Class

Alteon NG offers the best performance in any Layer 4-7 metric versus the competition: 6.8x more Layer 4 connections per second, 3x more Layer 7 requests per second and 5.5x more SSL connections per second (using 2048 bit keys). Packed with built-in 10GE ports, Alteon NG enables enterprises to address traffic growth, ensure fast application response time and meet application SLA better than any other ADC in its class.

## About Radware

Radware (NASDAQ: RDWR), is a global leader of [application delivery](#) and [application 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).

Radware encourages you to join our community and follow us on: [Facebook](#), [Google+](#), [LinkedIn](#), [Radware Blog](#), [SlideShare](#), [Twitter](#), [YouTube](#), [Radware Connect app](#) for iPhone® and our security center [DDoSWarriors.com](http://DDoSWarriors.com) that provides a comprehensive analysis on DDoS attack tools, trends and threats.

## 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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