



# AX Series & Extreme Networks Solution Brief



## Scaling for Continuous Network Evolution

The Internet continuously increases demands on the network, requiring faster and more innovative approaches to solve complex network traffic management problems. Compounding this problem is the requirement for data centers to provide ever increasing performance coupled with comprehensive security and bullet-proof reliability for business applications.

Now web servers and application servers require server load balancers coupled with high performance switching and routing to provide:

- ▶ Consistent performance, carrier-class availability, end-to-end security and simplified management
- ▶ Performance throughput to multi gigabit levels and innovative advanced traffic management techniques, such as TCP connection re-use, and bulk secure socket layer (SSL) off-load for encryption/decryption capabilities
- ▶ Security through network level protections, such as SYN cookies to prevent SYN attacks, and application layer deep packet inspection (DPI) techniques, which can allow specific relevant patterns to be acted upon
- ▶ Reliability by the intrinsic ability to balance traffic between multiple servers for reliability in the event of a failure, or even simply routine maintenance

## The Joint Solution

Extreme Networks and A10 Networks products work in conjunction to meet these requirements. A recent example in a third party lab test\* using a high performance BlackDiamond® 8806 switch along with the AX 3200 server load balancer showed superior performance without bottlenecks and demonstrated an industry leading figure in excess of 34 Gbps of aggregate traffic for a single load balanced virtual IP address. Both the AX 3200 and the Extreme BlackDiamond line have been designed with high-performance in mind by:

- ▶ Delivering cost-effective connectivity to address today's evolving networking needs through:
  - Multiple 10Gb ports
  - Acceleration of business-critical applications with non-blocking wire-speed performance and continuous connectivity
- ▶ Scalable range of appliances, from entry level through enterprise
- ▶ High availability and redundancy through component and product failover options

The combined solution allows for an unprecedented amount of throughput in a resilient fault-tolerant environment, balancing today's networking needs with tomorrow's demands.

## A10 Networks AX Series

The A10 Networks AX Series is a next-generation server load balancer with the industry's best price/performance. The AX Series is revolutionary due to its native multi-systems support, which is exponentially faster and more scalable than other systems. A10's AX Series features include:

- ▶ Revolutionary Advanced Core Operating System (ACOS) offers true symmetrical multi-processing for maximum performance
- ▶ Industry's best SSL, RAM Cache and Layer 4-7 price/performance – never sacrificing features for performance
- ▶ Advanced aFlex scripting allows deep packet inspection capabilities for traffic management and security
- ▶ Unparalleled energy efficiency increases transactions per watt thus reducing power requirements for the lowest cost of ownership
- ▶ Dual stack IPv4 and IPv6 support
- ▶ Carrier-grade hardware components

## Extreme Networks Switching Solutions

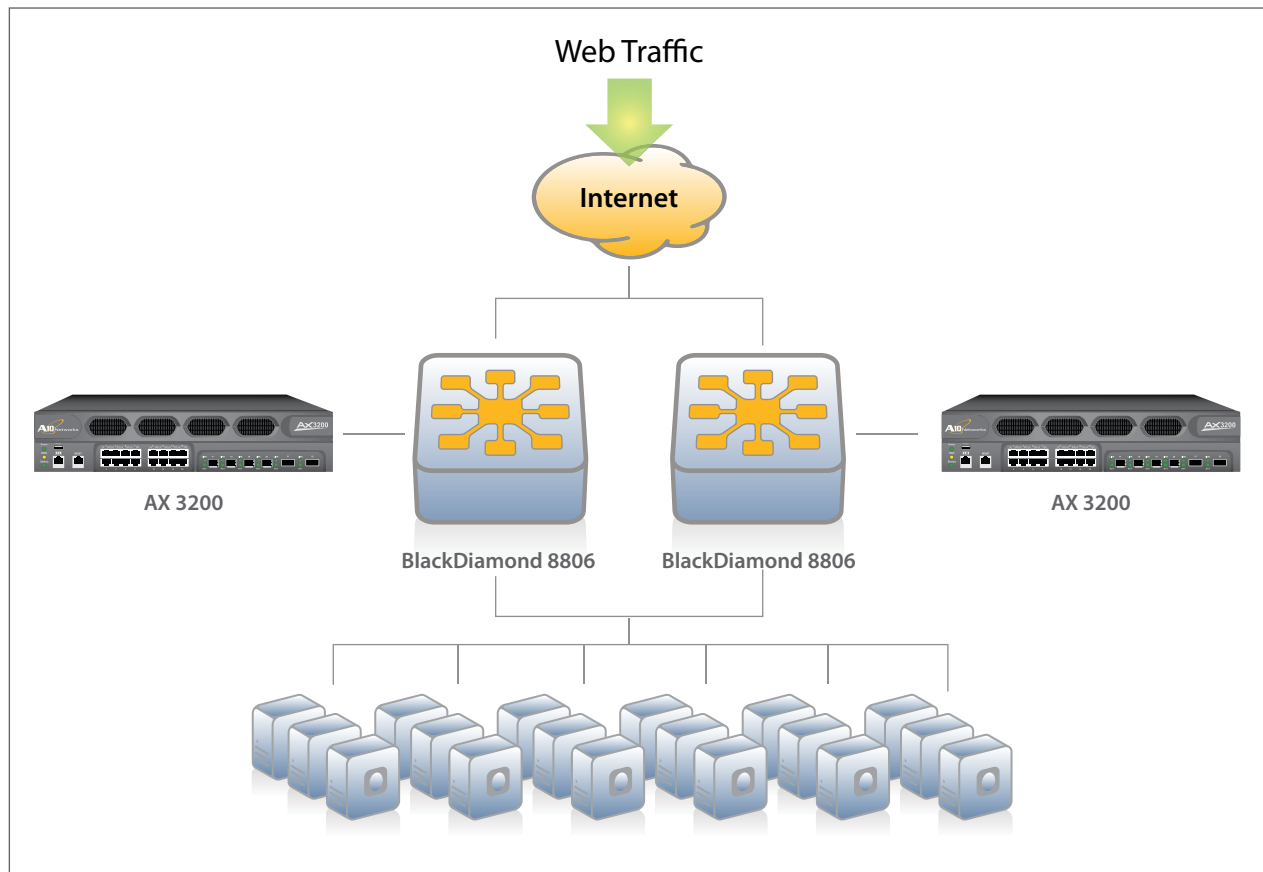
Extreme Networks offers premier infrastructure solutions to deliver extraordinary performance under duress supporting the most demanding and bandwidth-intensive data applications. Extreme Networks switches can economically scale to support growing businesses and are simple to deploy and use. Some of Extreme Networks' value to customers are:

- ▶ Performance delivery without surprises by utilizing multi-layer traffic grooming in the switch to avoid congestion in the core under all traffic loads
- ▶ Gigabit performance to the desktop through Summit® X350 and Summit X450 switches
- ▶ BlackDiamond 8800 and BlackDiamond 12000 series modular switches provide outstanding capabilities, including a fully non-blocking architecture, allowing a congestion free network core under high traffic loads

Resiliency features are implemented at both the hardware and software levels and the modular ExtremeXOS® operating system that eliminates network downtime.

\* "VirtualN Running on AX 3200," The Tolly Group,  
<http://www.a10networks.com/files/AX-TollyReport-0804.pdf>

## Sample Extreme and A10 High Performance / Availability Solution



### About A10 Networks

A10 Networks was founded in Q4 2004 with a mission to provide innovative networking and security solutions. A10 Networks makes high-performance products that help organizations accelerate, optimize and secure their applications. A10 Networks is headquartered in Silicon Valley with offices in the United States, Japan, China, Korea and Taiwan. For more information, visit: [www.a10networks.com](http://www.a10networks.com).

### About Extreme Networks

Extreme Networks designs, builds, and installs Ethernet infrastructure solutions that solve the toughest business communications challenges. The company's commitment to open networking sets it apart from the alternatives by delivering meaningful insight and unprecedented control to applications and services. Extreme Networks believes openness is the best foundation for growth, freedom, flexibility, and choice. Extreme Networks focuses on enterprises and service providers who demand high performance, converged networks that support voice, video and data, over a wired and wireless infrastructure. For more information, visit: [www.extremenetworks.com](http://www.extremenetworks.com).

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