Expandable Next-Gen Firewall Security

MEETING THE CHALLENGE
For growing businesses, network scaling can be a challenge. You may have the best security but it is only valuable when your network is up and operating. You want to make sure the foundation your security tools connect to is as secure and scalable as the tools themselves. Ixia plus Palo Alto Networks create a solution that scales as you need to—quickly, securely, and reliably.

WHAT IS THE SOLUTION?
Palo Alto Networks PA-5000 Series of Next-Generation Firewalls (NGFWs)—This series protects data centers, large enterprise Internet gateways, and service provider environments where traffic demands greater firewall protections and threat prevention. Powered by more than 40 processors, it covers four functional areas: networking, security, content inspection, and management.

- Highly reliable and resilient with active/active or active/passive high-availability
- Physical separation of data and control plane; and
- Redundant, hot swappable components

Ixia Vision ONE™—Ixia Vision ONE is the first visibility appliance in the industry built specifically to prevent traffic overload by distributing traffic to multiple monitoring tools. The result: You can scale deployments as your needs grow and insulate your network from unwanted downtime.

According to Zeus Kerravala, principal analyst at ZK Research, 85% of mean time to repair (MTTR) is the time taken to identify that there is in fact, an issue.
• Load-balancing capability splits traffic into multiple streams so data can be processed by multiple tools working in parallel
• Takes traffic from any network port or aggregated set of network ports and distributes it to up to 16 monitor ports for balancing, based on IP address, port, protocol, VLAN, MAC address, or other parameters

Ixia Bypass™ (IBPO-HBSR- XFP)—The Ixia Bypass Switch enables fail-safe inline security monitoring to maximize reliability of the network. If Vision ONE goes offline, the Bypass switch immediately detects changes, either by link-state or by loss of heartbeats, and reroutes traffic. Once Vision ONE is brought back online, traffic automatically resumes.

INTEGRATION BENEFITS
When you combine the innovations of Ixia and Palo Alto Networks, you get next-generation load-balancing capability without compromising on reliability. The Ixia Bypass Switch and Vision ONE, together with the Palo Alto NGFW, provide superior performance, scalability, and resiliency for demanding network environments. Using a heartbeat to monitor both the Vision ONE and Palo Alto devices delivers a security solution that maintains network uptime while offering protection from evolving network threats.

Benefits:
• Aggregates asynchronous traffic from multiple segments into a single stream
• Load balances traffic across multiple tools with hash-based session awareness
• Establishes a visibility architecture with ‘on-the-fly’ scalability for your tools
• Actively monitors tool efficiency with heartbeat health check
• Supports state-sharing between xBalancers with high-availability

INTEGRATED FOR SPEED AND ACCURACY
The “heartbeat” health check packet is a vital part to ensuring a successful Bypass deployment. It is important that the “heartbeat” packet is seen by the PA NGFW

Scalable, load-balancing solution: Connect output traffic from Ixia Bypass Switches to Vision ONE, which aggregates asymmetric flows into one logical stream. Then, load-balance the traffic across multiple NGFW appliances, without having to schedule network downtime.

Protect your network with resilient security that easily expands as your traffic grows.

• Scale without need to ‘rip and replace.’
• Increase traffic volumes without investing in new 10GE capital equipment.
• Safeguard against network and application downtime.
• Eliminate impacts from device failure with high-availability features.
as normal traffic flow in Layer 2. It cannot be accidentally blocked by a policy or a
filter, otherwise it would report a false outage and inadvertently Bypass the NGFW
from the network link. For this reason, Ixia has integrated a Palo Alto Networks
“heartbeat” packet into all of our Bypass products eliminating the guess work.
Easy access through our user interface allows you to select a Palo Alto Networks
PA appliance, which in turn, automatically configures the Bypass with that specific
“heartbeat” packet.

This unique Ixia integration allows customers to:

• Easily deploy the Bypass in minutes versus hours
• Eliminate misconfiguration
• Provide faster time to value on improved security

ABOUT IXIA
Ixia (Nasdaq: XXIA) provides testing, visibility, and security solutions, strengthening physical
and virtual network elements for enterprises, service providers, and network equipment
manufacturers. Ixia offers companies trusted environments in which to develop, deploy,
and operate. Customers worldwide rely on Ixia to verify their designs, optimize their

ABOUT OUR PARTNER
Palo Alto Networks™ next-generation firewalls (NGFW) enable unprecedented insight
and granular policy control of applications and content—by user, not just IP address—at
20Gbps network throughput levels. Based on patent-pending App-ID™ technology, Palo
Alto Networks firewalls accurately identify and control applications—regardless of port,
protocol, evasive tactic or SSL encryption—and scan content to stop threats and prevent
data leakage. Enterprises can, for the first time, embrace Web 2.0 and maintain complete
visibility and control, while significantly reducing total cost of ownership through device
consolidation.