

Investigating Investigating

- Massive scale multi-vector attack (MVA) 600+ Gbps, 1+ Tbps attacks
- High-profile attacks changing the economics of protection
- IOT Powered



Investigating Milaina in the second of the

- Multi-vector attack
- 9+ vectors
- 300,000 to 500,000+ devices

UDP Random Flood	Floods random victim domain endpoints with spoofed UDP packets.
UDP Data Flood	Selects random victim domain endpoints and floods them with UDP packets and IP fragments.
TCP SYN Flood	Floods random victim domain endpoints with spoofed TCP SYN packets.
TCP ACK Flood	Floods random victim domain endpoints with spoofed TCP ACK packets.
TCP STOMP (Data) Flood	Intended to overcome DDoS mitigations; connects to random victim domain endpoints and floods them with TCP data.
HTTP Request Flood	Intended to overcome DDoS mitigations; connects to random HTTP endpoints in the victim's domain and floods them with HTTP requests.
DNS Water Torture Attack	Floods ISP recursive DNS servers with randomized queries to a victim base domain name, causing the ISP DNS servers to perform the attack on the victim's authoritative DNS servers. As victim DNS servers become overloaded, the ISP DNS servers retransmit attack queries to other authoritative DNS servers in the victim's enterprise.
Valve Gaming Server Attack	Floods random Valve streaming engine endpoints in the victim's domain with spoofed source-engine query packets.
GRE IP/ Ethernet Floods	Floods random victim domain endpoints with spoofed GRE IP or IP-over-Ethernet-tunneled UDP packets.



of respondents agree

"Multi-vector attacks, which include volumetric and application layer attacks, will be most dangerous in the *future*."

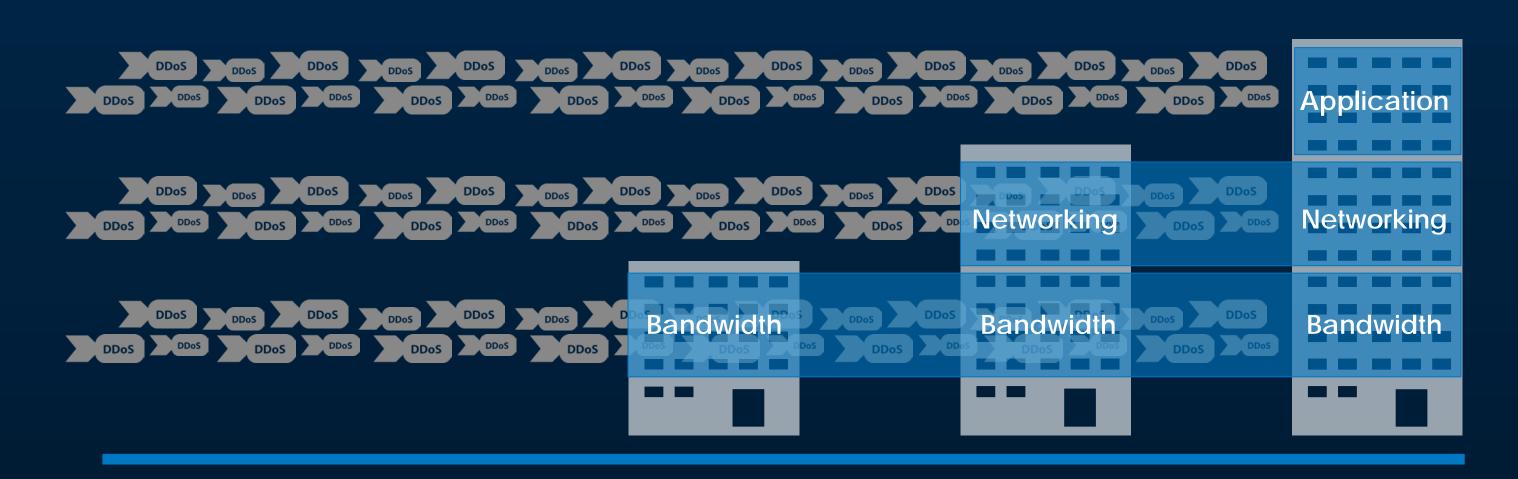


Are Your Defenses Ready?

Did you just say multi-Vector DOSS ?!



MVA: Find the Weakest Link



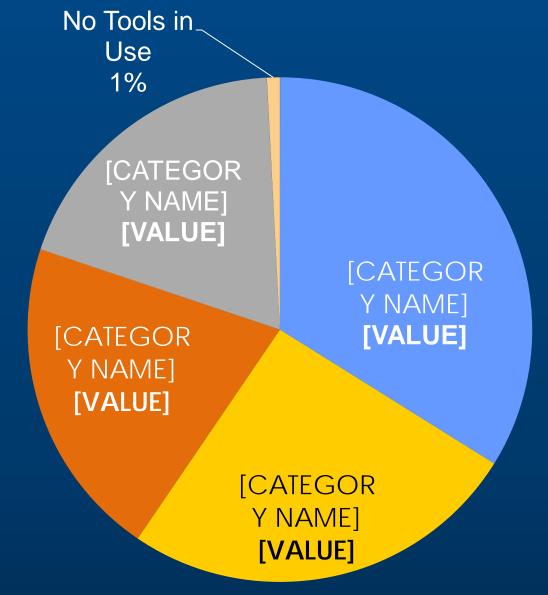
Internet Pipe Routers Firewall Server



What is the Most Effective Solution?

O: What current solutions do you use to address the multi-vector DDoS threat? (Select one or more)
Which is most effective? (Select one only)





Hybrid Solution:
On-premise with cloud bursting option



A10 Solution and Value Proposition

Brawn to Block Multi-Vector DDoS Threats

Thunder 14045

(300 Gbps, 440 Mpps)

Highest Mitigation for SP & Giants

Thunder 840 & vThunder

Turnkey Enterprise & NFV Solutions

Support w/DSIRT & Threat Intel

Enhanced Support



New A10 Thunder 14045: Highest Mitigation

- For high-performance networks
 - Service providers, websites, online gaming, and more
- Performance
 - 300 Gbps, 440 Mpps, 2.4 Tbps list synchronization cluster
- Specification highlights*
 - SPE with FPGA, 4x18 core Xeon, 3 RU, 4x100 GbE, 2+2 redundant 80 Plus Platinum rated power supplies

General availability with ACOS 3.2.2.P1 – Q4 2016



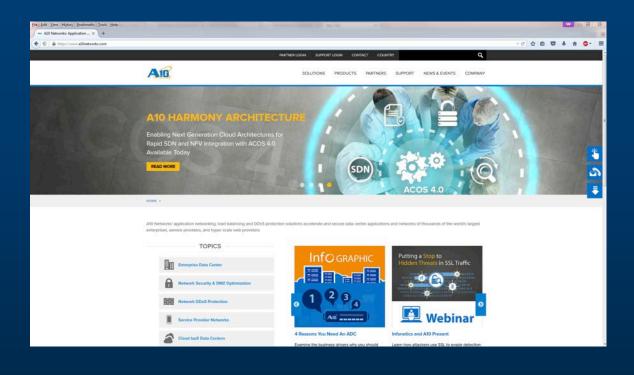
True Multi-vector Protection – True MVP



Multi-tiered, inc. Hardware offload

High bandwidth capacity

Max CPU resources for DPI





Thunder TPS

Full attack spectrum protection

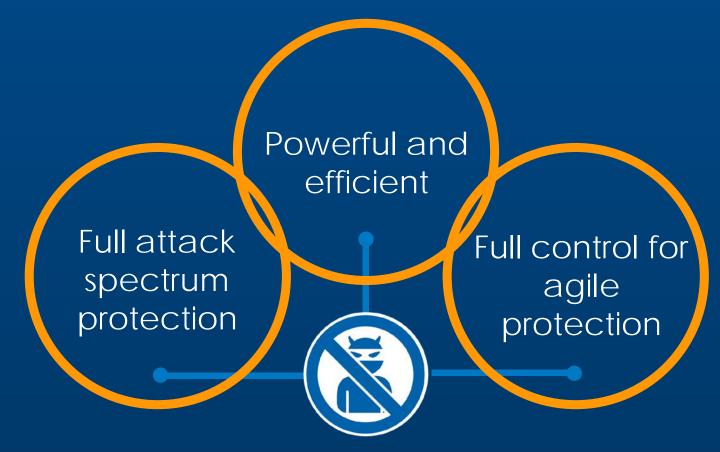
- Best protection against Multi-vector attacks
- 60 FTA hardware mitigations
- Verisign partnership for high bandwidth attacks

Powerful and efficient

- Mitigate up to 155 Gbps of attack throughput
- 223 M packets per second (pps) in 1 rack unit

Full control for agile protection

- Programmatic Policy Engine
- 3rd party integration
- Many deployment modes



Next Generation DDoS Protection For True MVP

Enhanced Support: Support w/DSIRT & Threat Intel

- Augmented 24x7x365 support offering
- DSIRT (DDoS Security Incident Response Team) support included (new)
- Augmented by dynamic A10 Threat Intelligence Service (now included)

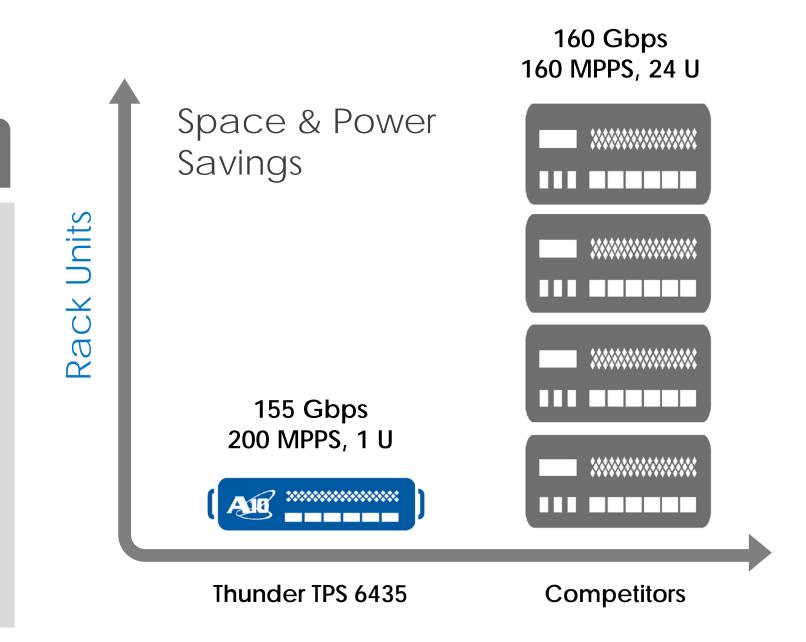


Success Story

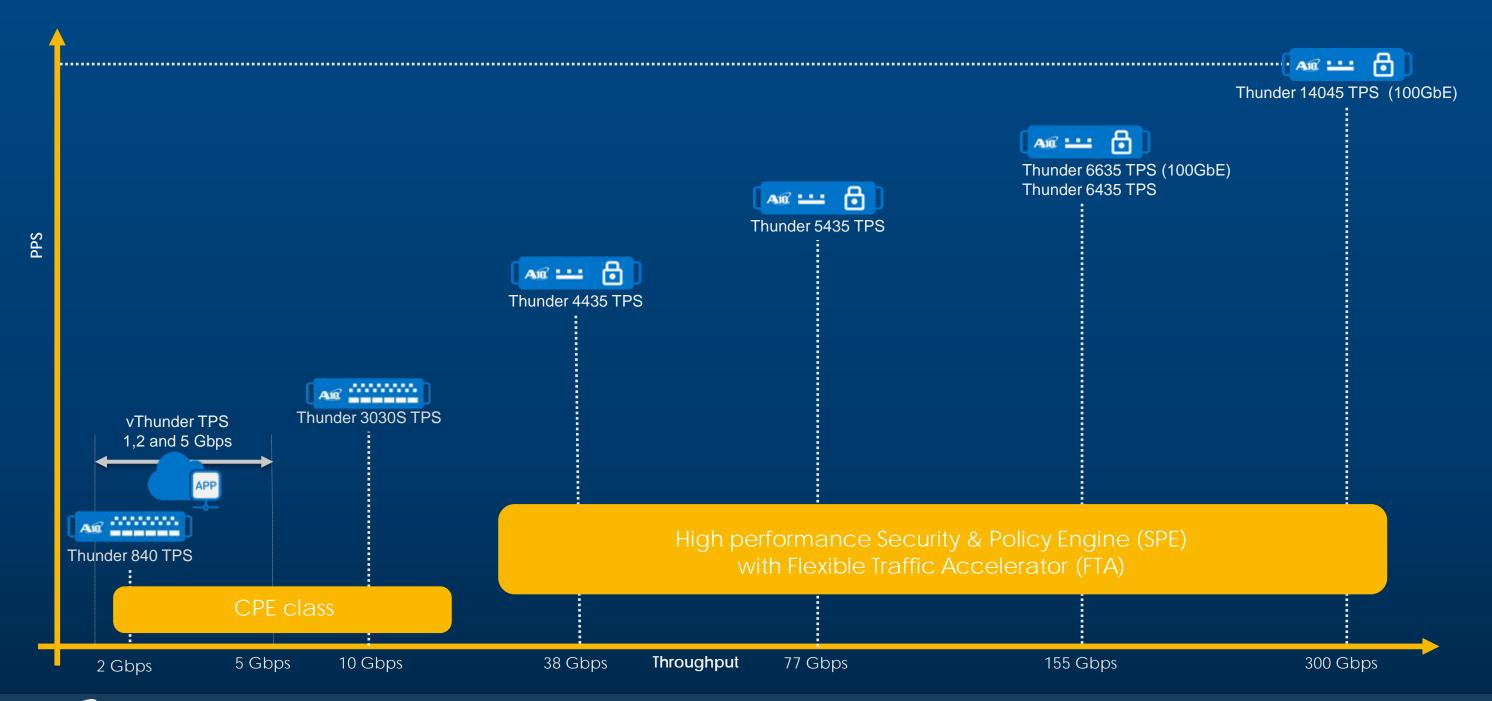
 Replaced the legacy Competitors with A10 Thunder TPS

Benefits

- Platform with rich mitigation features
- Platform with RESTful API to enable easier integration into their custom detection system
- Platform to enable agile development, ~40 new features implemented in 6 months
- \$2.5 M+ savings per site, 80%+ support savings (Reduced CAPEX and OPEX)



Thunder TPS Appliances





A10 DDoS Product Differentiation

ADC in Data Center: Application Protection TPS in BGP Perimeter: Full Network Protection







Changing Economics As Attacks Escalate

440 Mpps

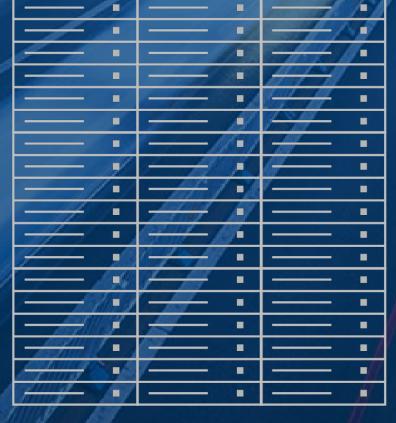
15X
MORE COST
EFFECTIVE

VS



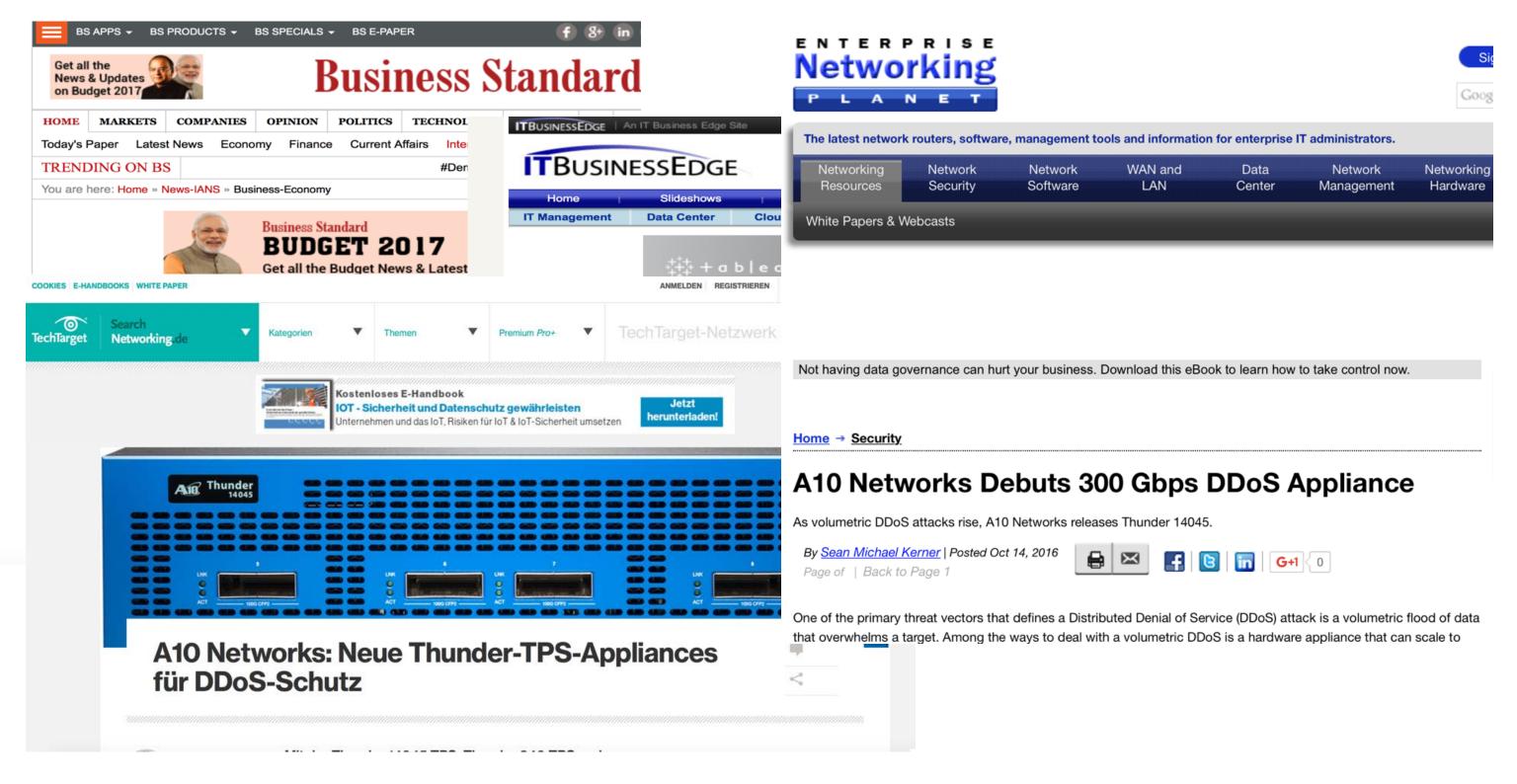
A10 THUNDER TPS

440 Mpps



THE COMPETITION







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MUST READ THIS PHISHING SCAM POSES AS A CHARITY EMAIL. DELIVERS RAMNIT BANKING TROJAN MALWARE

A10 Networks extends its Thunder TPS line of DDoS mitigation applia

DDoS attacks are frequent, increasing in scale and costly to target on-premises appliances aimed at everything from medium-sized













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A10 Networks Winning Recipe





A10 Networks Champions For Saudi Arabia



















A10 Middle East Open for Business...

