

DAWN OF THE DDoS OF THINGS

How the 'DDoS of Things' Is Powering Bigger, Smarter & More Devastating Multi-Vector Attacks

WHAT ARE MULTI-VECTOR DDoS ATTACKS?

Unlike single-vector DDoS attacks, multi-vector DDoS attacks are coordinated assaults that simultaneously target applications, networks and bandwidth.



A GLOBAL CRISIS

73%

Almost three quarters of all global brands, organizations and companies have been victims of a DDoS attack.ⁱ

67

Total countries targeted by DDoS attacks in Q3 2016 alone.ⁱⁱ

TOP 3 TARGETED COUNTRIES

72.6%

CHINA

12.8%

USA

6.3%

SOUTH KOREA

DAMAGE TO BUSINESS

3,700

More than 3,700 DDoS attacks occur each day.ⁱⁱⁱ

82%

Once attacked, there's an 82 percent chance of being hit again.^{iv}

6X

Of victim organizations, 45 percent were attacked six or more times.^v

\$2.35 Million

While cost varies, attacks can run businesses anywhere from \$14,000 to \$2.35 million per incident.^{vi}

ANYTHING BUT RANDOM

3 out of 4

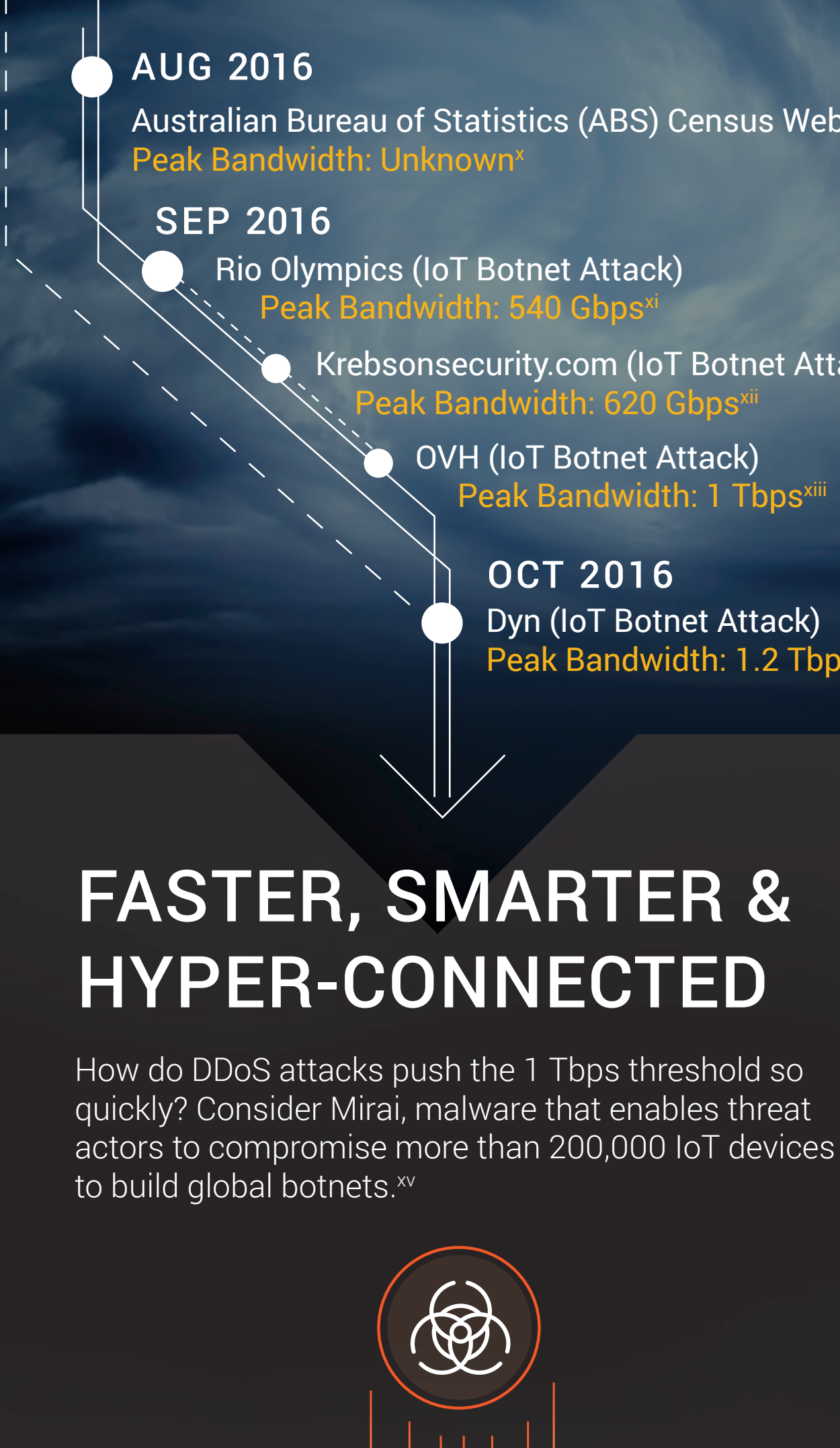
75 percent of today's DDoS attacks target multiple vectors.^{vii}

60/40

The percentage split of DDoS attacks that target your organization's application and network layers, respectively.^{viii}

30 Minutes or Less

DDoS-for-hire services are empowering low-level hackers with highly damaging network-layer bursts of 30 minutes or less. This relentless attack strategy systemically hurts corporations.^{ix}



1 TBPS & GROWING

Colossal DDoS attacks have become the norm. 300 Gbps used to be considered massive; today, attacks often push past 1 Tbps.

AUG 2016

Australian Bureau of Statistics (ABS) Census Website
Peak Bandwidth: Unknown^x

SEP 2016

Rio Olympics (IoT Botnet Attack)
Peak Bandwidth: 540 Gbps^{xi}

Krebsonsecurity.com (IoT Botnet Attack)
Peak Bandwidth: 620 Gbps^{xii}

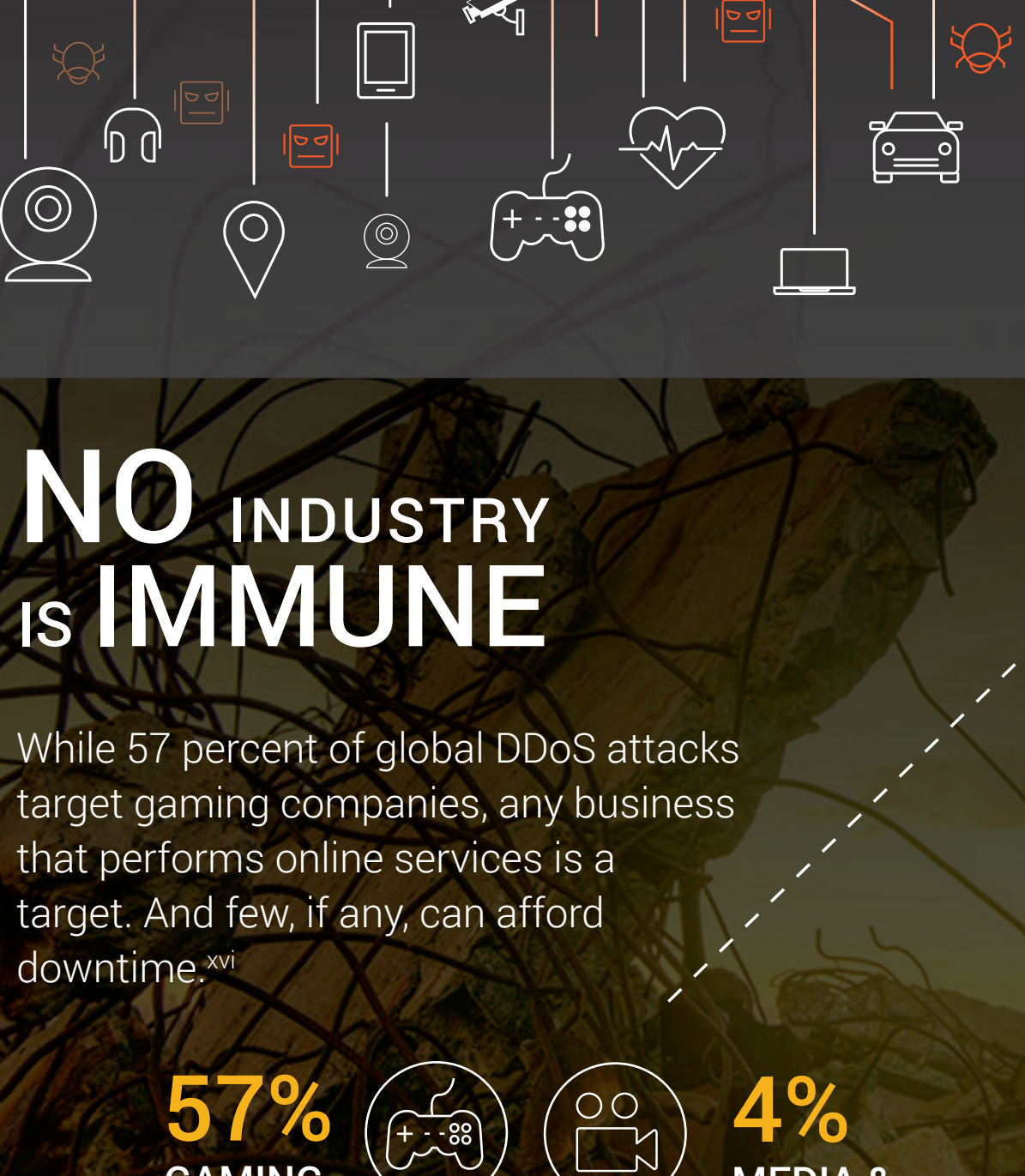
OVH (IoT Botnet Attack)
Peak Bandwidth: 1 Tbps^{xiii}

OCT 2016

Dyn (IoT Botnet Attack)
Peak Bandwidth: 1.2 Tbps^{xiv}

FASTER, SMARTER & HYPER-CONNECTED

How do DDoS attacks push the 1 Tbps threshold so quickly? Consider Mirai, malware that enables threat actors to compromise more than 200,000 IoT devices to build global botnets.^{xv}



NO INDUSTRY IS IMMUNE

While 57 percent of global DDoS attacks target gaming companies, any business that performs online services is a target. And few, if any, can afford downtime.^{xvi}

57%

GAMING SERVICES

4%

MEDIA & ENTERTAINMENT

26%

SOFTWARE & TECHNOLOGY

4%

INTERNET & TELECOM

5%

FINANCIAL SERVICES

3%

OTHER

1%

EDUCATION

FIGHT DDoS WITH THUNDER

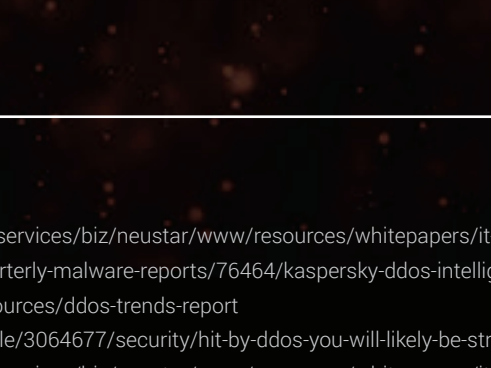
Even a moment of service downtime damages your revenue, brand and user experience.

A10 THUNDER TPS MITIGATION UP TO 300 Gbps or 2.4 Tbps

With the ability to mitigate DDoS attacks up to 300 Gbps in capacity (or 2.4 Tbps in a synchronized cluster), A10 Thunder TPS is your agile, efficient and battle-tested defense against the full spectrum of DDoS attacks.^{xvii}

STOP DDoS NOW

VISIT A10NETWORKS.COM/TPS



ⁱ https://ns-cdn.neustar.biz/creative_services/biz/neustar/www/resources/whitepapers/it-security/ddos/2016-apr-ddos-report.pdf
ⁱⁱ <https://seclist.com/analysis/quarterly-malware-reports/76464/kaspersky-ddos-intelligence-report-for-q3-2016/>
ⁱⁱⁱ <https://www.a10networks.com/resources/ddos-trends-report>
^{iv} <http://www.networkworld.com/article/3064677/security/hit-by-ddos-you-will-likely-be-struck-again.html>
^v https://ns-cdn.neustar.biz/creative_services/biz/neustar/www/resources/whitepapers/it-security/ddos/2016-apr-ddos-report.pdf
^{vi} <http://www.datacenterknowledge.com/archives/2016/05/13/number-of-costly-dos-related-data-center-outages-rising/>
^{vii} <https://www.a10networks.com/resources/ddos-trends-report>
^{viii} <https://p.incapsula.com/rs/804-TEY-921/images/2015-16%20DDoS%20Threat%20Landscape%20Report.pdf>
^{ix} <https://p.incapsula.com/rs/804-TEY-921/images/2015-16%20DDoS%20Threat%20Landscape%20Report.pdf>
^x <https://www.a10networks.com/blog/ddos-attacks-spark-australian-census-site-shutdown>
^{xi} <http://www.securityweek.com/iot-botnet-targets-olympics-540gbps-ddos-attacks>
^{xii} <http://krebsonsecurity.com/2016/09/krebsonsecurity-hit-with-record-ddos/>
^{xiii} <http://www.securityweek.com/hosting-provider-ovh-hit-1-tbps-ddos-attack>
^{xiv} <https://www.theguardian.com/technology/2016/oct/26/ddos-attack-dyn-mirai-botnet>
^{xv} <https://www.a10networks.com/blog/investigating-mirai-inside-malware-powers-iot-botnets>
^{xvi} <https://www.statista.com/statistics/440600/ddos-attack-traffic-by-industry/>
^{xvii} <https://www.a10networks.com/news/stop-multi-vector-ddos-disruption-expanded-thunder-tps-solution>