Adaptive Protection Against Web Application and DDOS Attacks





WAF Critical protection for every business

Two types of attacks

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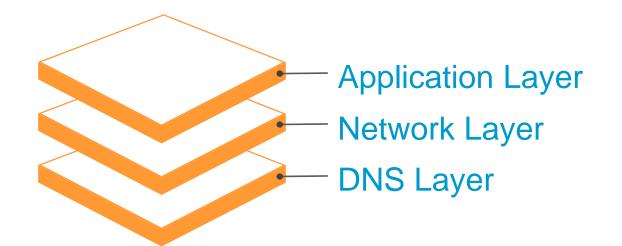
Want *quick* money

- Target many at once
- Low effort to hide
- Known methods

Want *big* money or damage

- Target a few organizations
- High effort to hide
- Unknown/new vectors

Broad attack surface





DDoS attacks on the rise **16%** layer 3&4 attacks

Web Application Threats

138% application layer attacks

Results of DDoS attacks:

- Flooded networks
- Overloaded infrastructure
- ✓ Distributed deployments

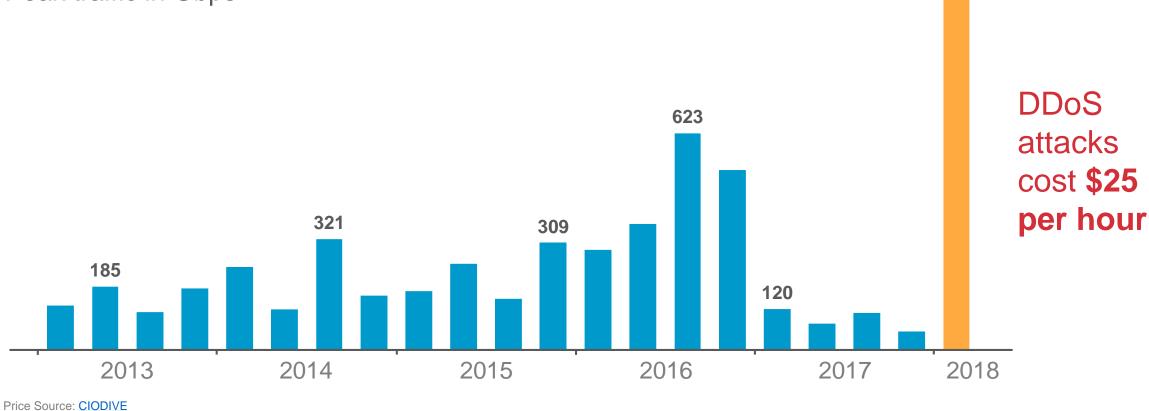
GitHub MIRAI

Source: SOTI DDoS Attack update Summer 2017 vs. Summer 2018



DDoS Attack Trends Attacks easily double in size

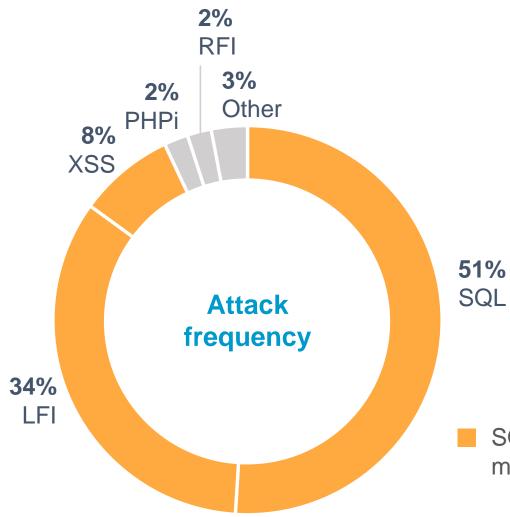
Peak traffic in Gbps





1,252

Web Application Threats



Well-known attack vectors:

Are frequently used

Create background noise to hide new attacks

SQL, LFI, and XSS accounted for **93%** of malicious attacks in the most recent period.

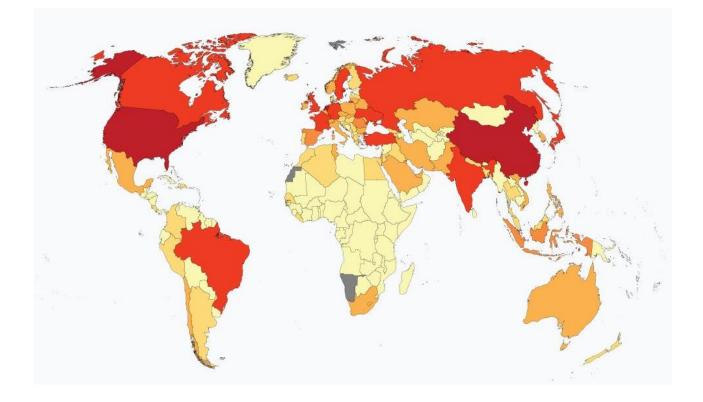


Web Application Threats

Attacks are on the rise:

- Growing in scale
- Growing in sophistication

Originating across countries



Count	Percentage
238m	30%
94m	12%
56m	7%
49m	6%
35m	4%
	238m 94m 56m 49m

Source countries for web application attacks summer 2018

What Does This Mean for Your Business?

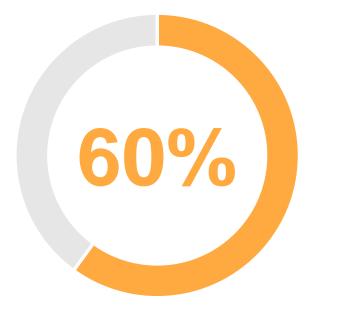


Web application attacks represent a large part of the **background noise** It's difficult to **detect attacks** specifically targeting your business in that noise \sim

Understand your website traffic and business for better **threat detection**



Threat from Operational Complexity 60% of security software remains unused



Top IT challenges are a lack of:

Business alignment

- Time/expertise to implement
- Staff to use product properly



Source: Osterman Research



Edge security

- Massive scale to mitigate and absorb attacks
- Insulates from collateral damage by attacks against other customers
- Removes malicious traffic from servers and networks, avoiding overprovisioning costs
- Prevents performance degradation from attacks consuming vital resources
- ✓ Delivers better end-user experience with content caching



Adaptive threat protection

- Maintains accuracy in fast changing threat landscape
- ✓ Data driven, best-in-industry research team
- Analysis of 15% to 30% of all internet traffic
- Continuous rule testing and tuning
- Automated rules designed for low false positives
- Special protection with custom rules







Simple operation

High degree of automation to increase operational agility and efficiency

- Automated rule updates offload your security teams
- Allows focus of resources and research on your high-value web assets
- Easy-to-read web analytics data in real time
- ✓ Dashboards support deep forensic analysis





Integration that fits your business needs

- Self-service integration for vital protection
- Guided by experts to build a defense-in-depth solution
- Managed services for a complete security solution
- ✓ Technical and threat research support when you need it most



The Better Web Application Firewall What does it mean?





Web Application Security Adaptive protection with more than just a firewall



Extend your security perimeter far beyond your site Scale your defense with a cloud edge WAF

Protect against all network layer DDoS attacks Reverse-proxy drops all traffic not on port 80 and 443

Refuse requests from countries outside your business Geo-based blocking of IP addresses

Protect from known attackers Positive or negative security model (black or white lists)

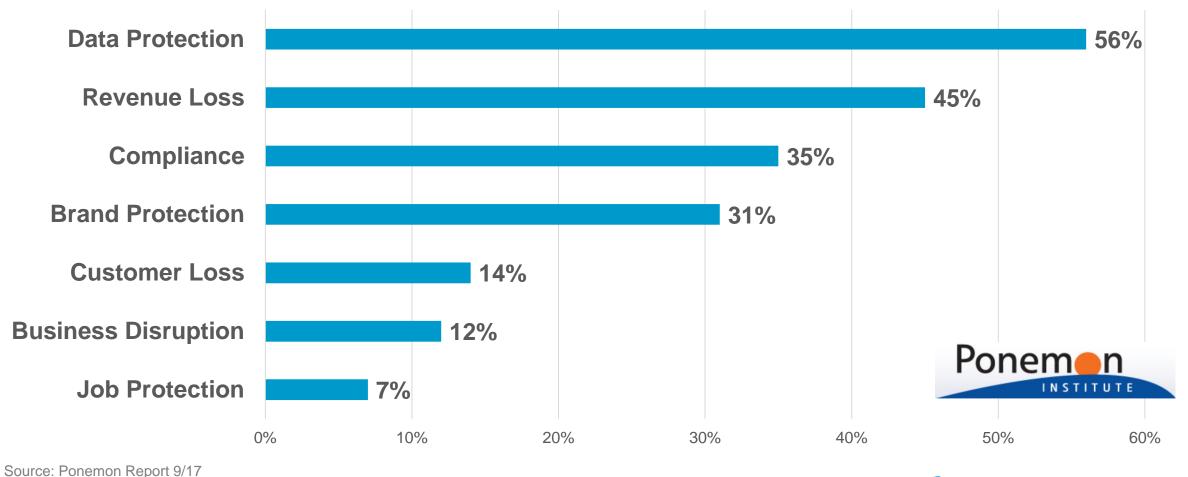
Protect against application layer DDoS attacks Rate controls block traffic that acts too fast or too slow

Use best WAF rules in the industry with confidence Data driven, continuously monitored and refined

Protect content servers, improving end-user experience Dynamic and static content caching



Web Application Protection Addressing organizations' top concerns



Akamai Experience the Edge

Market Leader in Security Named as a leader by Forrester and Gartner

Forrester Wave

Web Application Firewalls, Q2 2018

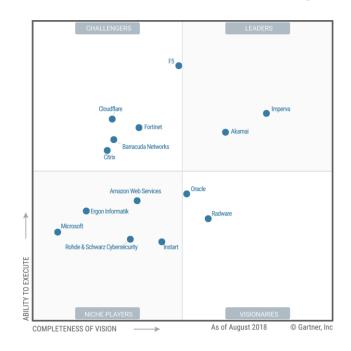


Forrester Wave

Strong Challengers Contenders Performers Leaders Strong Imperva Radware - (\cdot) Arbor Networks -Verisign (•) Neustar -Cloudflare Nexusquard - (\cdot) Akamai F5 Networks Technologies Current Huawei Technologies • offering Fortinet • Market presence $\cdot \odot \odot (\cdot) (\cdot)$ Weak Strong Weak Strategy

DDoS Mitigation Solutions, Q4 2017

Gartner Magic Quadrant Web Application Firewalls, Aug 2018



Forrester Wave

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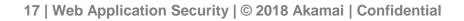
Gartner Magic Quadrant

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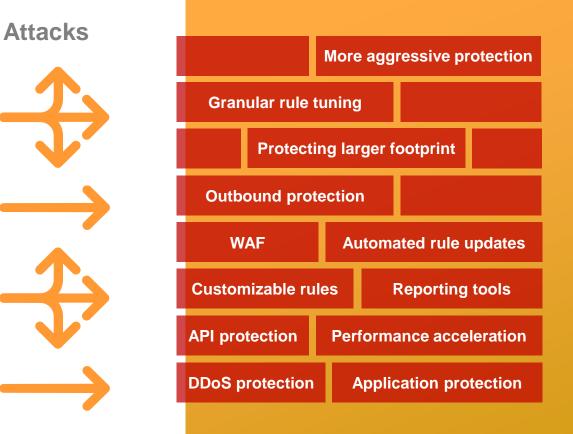
What to Expect More mature and advanced attacks

- Fast-changing threat landscape with new attack vectors, volume and variety
- Attacks tuned to exploit specific vulnerabilities
- Attacks tuned to avoid detection
- Attacking via the API layer
- Zero-day attacks
- Leveraging of bot networks





Kona Site Defender Protection against most sophisticated attacks



Kona Site Defender

- Robust and customizable protection
- Customized integration
- Self-managed or Akamai managed
- Additional custom rules, whitelists and strong rate controls
- Detailed threat reporting tools for indepth forensic analysis
- Optional add-ons for additional protection
- Powered by Akamai Intelligent Edge Platform



Your site



Protection against the most sophisticated attacks.

Kona Site Defender





