



# Government Agency Fends Off DDoS Attacks and Future Proofs Operations

## The Situation

A high-profile government agency Web site recently came under attack from “hacktivists” attempting to disrupt political discourse. Their attack was sparked by outrage over the shutdown of file-sharing site MegaUpload as well as protests over The Stop Online Privacy Act (SOPA), a bill recently proposed in the US Congress. Such attacks against government agencies have drastically increased from just two-to-three per year in 2008 to at least two per month in 2011. Social media has enabled “hacktivists” to align efforts and assemble large forces quickly while maintaining anonymity. They also gain access to the botnet and “chaotic actor” resources that make launching attacks possible whenever they choose to exercise their freedom of speech or protest in such ways.

## The Challenge

The Twitter-organized Distributed Denial of Service (DDoS) attack reached levels of 1,262 requests per second and 257 Mbps of traffic – a significant increase over the site’s average volume. While the government agency Web site in question managed to remain operational during the attack, agency leaders learned from the event and sought to enhance site security before larger or more sophisticated attacks happen. They now wanted to put in place more proactive measures for recognizing and responding to the wide variety of online attacks, such as hacker attacks, DDoS, viruses, worms, and increasingly dangerous malware. With hacktivists feeling more empowered, all indications pointed to a continued increase in attacks on the agency, and by extension, the nation. According to agency leaders, maintaining Web site operations under such conditions would prove invaluable in terms of national credibility.

## The Goal

The agency needed to meet two requirements to support its objectives:

- **Prevent large-scale DDoS attacks:** As social media enables ever-larger groups to organize joint efforts against agency Web sites, agency leaders wanted the ability to detect and mitigate attacks on its Web site as early as possible.
- **Protect agency online operations beyond the Web site:** Agency personnel leverage numerous Web applications to interact with co-workers, external organizations, and other government agencies. Agency leaders wanted to protect their users and infrastructure without placing overly strict limits on their ability to interact with internal and external constituencies. They needed a solution that could protect agency data, applications, and infrastructure from the broad range of possible attacks.

### INDUSTRY

Public Sector

### SECURITY SOLUTIONS

- Akamai Web Application Firewall
- Akamai DDoS Defender

### KEY IMPACTS

- Absorbed over 24 million requests during a 24-hour period
- Offloaded 95% offload of requests from origin server
- Deflected attacks in HTTP and SSL traffic, preventing them from reaching the origin server
- Gained ability to remain operational at all times
- National credibility for the agency preserved

## Why Akamai

### Building on a History of Outstanding Service & Protection

As a long-time Akamai customer, agency leaders appreciated Akamai's commitment to customer success and willingness to take ownership of the problems surrounding the agency's online presence. The agency already realized tremendous value from the Akamai Dynamic Site Accelerator (DSA) solution, which accelerates delivery of rich, interactive content and applications.

During the DDoS attack, the Akamai platform absorbed over 24 million requests during a 24-hour period, representing a 95% offload from the agency's origin server.

### Fighting Off Scaled Attacks at the Edge

To address the distributed nature of attacks, Akamai recommended that the agency implement Akamai DDoS Defender. Operated as a managed multi-layered security solution that runs on the global Akamai Intelligent Platform, DDoS Defender's distributed architecture mitigates attacks close to their source. The agency implemented DDoS Defender in conjunction with Akamai's Web Application Firewall (WAF) service, which detects and mitigates potential attacks in HTTP and SSL traffic. WAF addresses such attacks within the Akamai Platform to ensure they never reach the agency's origin data centers. The proactive nature of WAF corresponded to the proactive security stance that agency leaders were seeking, especially as it related to securing internal users from threats.

### Improved Site Security Pays Off Fast

Akamai worked fast to help the agency deploy the new solutions, and the entire implementation took under one week. As a result, the agency realized rapid ROI from its newly distributed system of defense. According to one agency manager, "Two days after activating the Akamai WAF feature to deny malicious attacks, we've already prevented a Trojan on an infected end user's machine from accessing the agency portal!"

As a high-profile government agency, remaining operational at all times provides strong intangible benefits. Both internal and external constituencies gain faith in, and respect for, the agency. Moreover, the agency's operations reflect upon the credibility of the nation and its government as they seek to maintain normality in the face of organized chaos.

## The Akamai Difference

Akamai® is the leading cloud platform for helping enterprises provide secure, high-performing user experiences on any device, anywhere. At the core of the company's solutions is the Akamai Intelligent Platform™ providing extensive reach, coupled with unmatched reliability, security, visibility and expertise. Akamai removes the complexities of connecting the increasingly mobile world, supporting 24/7 consumer demand, and enabling enterprises to securely leverage the cloud. To learn more about how Akamai is accelerating the pace of innovation in a hyperconnected world, please visit [www.akamai.com](http://www.akamai.com) and follow @Akamai on Twitter.

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