IMPERVA°

CASE STUDY



The Vietnamese
Government Builds a
Powerful Defense against
Automated Web Attacks



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Overview

The Vietnamese Government developed a Web portal in 2006 to communicate government policies and news to its citizens. The Vietnamese Government Web Portal disseminates information about local and federal government legislation and offers the latest news from Vietnam's ministries and people's committees. It also serves the international community, offering visa, customs, trade, and other data to individuals seeking to travel to or do business with Vietnam.

The Government Web Portal is managed by the Minister and Chairman of the Government Office. The Portal has been praised by many people, including previous Prime Minister Phan Van Khai. When the site was launched, the Prime Minister commended the Government Office on the success of the Web Portal, but he also advised the Government Office to ensure the "safety and security of the system and the network [to minimize the risk of any possible incidents."

From the outset, the security team at the Government Office sought to secure the Vietnam Government Web Portal. The manager of networking and security, Thien Pham Quang, was concerned about automated application attacks like application Distributed Denial of Service (DDoS). As a government-controlled Website, the Web Portal could be a tempting target for dissidents or hackers from other countries. Mr. Thien wanted to implement security measures that would prevent malicious users from stealing sensitive data or disrupting access to the Web Portal.

After a thorough analysis of the organization's infrastructure and security risks, Mr. Thien determined that the Government Office should deploy a Web Application Firewall. The Web Application Firewall would be able to stop application threats such as DDoS and automated attacks. Mr. Thien and his team outlined the following product requirements:

- Best-of-breed Web application security The Web Application Firewall had to accurately protect the Government Web Portal from attack and abuse. The solution had to be able to identify attacks based on multiple criteria, including the reputation of the attack source. For the Government Office, this would be a crucial way to prevent large-scale attacks from bots and malware-infected devices.
- Intuitive management The security team at the Government Office did not want to invest a lot of resources in managing and tuning the Web Application Firewall. The product needed to be secure and accurate without imposing operational overhead. If they needed to adjust policies, the product would have to be flexible and easy to configure.
- Fast, easy deployment The Government Office wanted a solution that would drop in transparently into their environment without requiring a lot of network or application changes.
- Custom reporting and detailed, actionable security alerts The Web Application Firewall should not only stop attacks, but also provide full visibility into security events for forensics. IT Security administrators would need to investigate incidents and assess trends. So comprehensive alerts and customizable reports were essential features.



Customer

The Government of Vietnam Hanoi, Vietnam

Requirements

- Protect data posted on the Government Web Portal
- Stop large-scale automated Web attacks
- Offer easy, intuitive management

Solution

The Imperva SecureSphere Web Application Firewall protects the Government Web portal from Web-based threats and bots.

Bottom Line

- SecureSphere has become thecornerstone of the Government's Web application security strategy
- ThreatRadar identifies requests from known malicious sources
- SecureSphere provides immediate and actionable security alerts and reports for security analysis and forensics

Mr. Thien and his team considered several Web Application Firewalls. Mr. Thien also spoke to colleagues and to trusted security advisor to learn their opinions. Based on his team's research and strong endorsements from his security advisor, Mr. Thien determined that Imperva SecureSphere was the ideal choice for the Vietnam Government Office.

Based on careful analysis, Mr. Thien concluded that only Imperva provided reputation-based security to defeat known malicious sources and bots. Imperva's patented Dynamic Profiling technology would automatically learn application elements and expected usage. The Government Office staff would also be able to easily manage security policies from SecureSphere's intuitive Web user interface. And with its transparent bridge configuration option, SecureSphere offered flexible, drop-in deployment.

Imperva SecureSphere Exceeds Vietnam Government Office's Expectations

After selecting Imperva SecureSphere, the security team wanted to get it up and running quickly. The Government Office was able to rapidly deploy the SecureSphere Web Application Firewall inline in front of the organization's Web servers. The SecureSphere Web Application Firewall automatically learned the URLs and elements in the Vietnam Government Web Portal in a short period of time. Then SecureSphere was able to apply sophisticated security measures to safeguard the Web Portal from application threats.

The Government Office also provisioned ThreatRadar Reputation Services. ThreatRadar tracks attack sources such as anonymous proxies, Tor networks, phishing URLs, and known malicious IP addresses—IP addresses that are often bots managed by remote command and control servers. ThreatRadar, in conjunction with custom policies that detected excessive numbers of requests, helped mitigate application DDoS attacks. According to Mr. Thien, Imperva SecureSphere helped the Government Office prevent Web application threats and ensure that the Web Portal is always accessible to Vietnamese citizens.

"Imperva SecureSphere is a powerful solution with many outstanding features. It automatically learned the structure of our Web applications to accurately stop attacks. We were able to quickly and easily deploy the SecureSphere Web Application Firewall; its intuitive Web user interface enables our security team efficiently manage and monitor Web application activity."

THIEN PHAM QUANG,
MANAGER OF THE SECURITY
AND NETWORK DEPARTMENT,
VIETNAM GOVERNMENT OFFICE

SecureSphere Enables Government Office to Monitor and Investigate Security Events

Imperva SecureSphere provides the Government Office detailed security alerts and a powerful reporting framework. With SecureSphere, security administrators have the detail necessary to investigate and act on security events. Security administrators can examine alerts to understand how hackers are attacking the site. Custom graphical reports identify application errors, Web attacks, suspicious activity, and more. With Imperva SecureSphere, the Government Office not only prevents malicious activity, but it also receives a full picture of how hackers and malicious users are interacting with the Vietnam Government Web Portal.

In addition to its powerful alerting and reporting capabilities, SecureSphere also offers streamlined management. Imperva's patented Dynamic Profiling technology recognizes when new pages are added to the Web Portal and automatically adjusts the application profile. An intuitive Web user interface helps the security team perform administration tasks quickly and efficiently. Overall, Imperva SecureSphere provided everything that Mr. Thien and his colleagues expected and more. SecureSphere has become an indispensible part of the security infrastructure. With SecureSphere, the Government Office is confident that the Vietnam Government Web Portal is safe and always accessible.

