

SOLUTION BRIEF

Fortinet FortiWeb and ElevenPaths Vamps Security Solution

Vulnerability Assessment and Virtual Patching

Introduction

With the ongoing digital revolution, companies are more interconnected and online than ever before. However, as a result of this, they are also more exposed to a variety of attacks on their systems and assets. 53% of attackers take advantage of organizations' software vulnerabilities as a gateway to their systems, so early detection of existing vulnerabilities in the systems of an organization is vital.

Unprotected web applications are the easiest point of entry for hackers, and are vulnerable to a number of attack vectors. Externally facing web applications are vulnerable to attacks such as cross-site scripting, SQL injection, and Layer 7 denial-of-service (DoS). Internal web applications are even easier to compromise if an attacker is able to gain access to an internal network where many organizations think they're protected by their perimeter network defenses. Custom code is usually the weakest link as development teams have the impossible task of staying on top of every new attack vector. However, even commercial code is vulnerable as many organizations don't have the resources to apply patches and security fixes as soon as they're made available. Even if you apply every patch and have an army of developers to protect your systems, zero-day attacks can leave you defenseless and only able to respond after the attack has occurred.

Most organizations conduct point-in-time security reviews, most likely resulting in a report with evidence that a third party has been able to access their information systems, and with recommendations on how to mitigate the detected vulnerabilities. This report seems to be the end of the revision process, limiting itself to the detection of vulnerabilities, not to the correction of vulnerabilities, and in many cases, only those vulnerabilities that have a severity level are fixed.

ElevenPaths – Telefónica Cyber Security Unit and Fortinet recently established a technology partnership to help organizations simply and cost-effectively maximize the timely implementation of virtual patches, and to enforce security policies to prevent the exploitation of a known vulnerability.

Solution Description

The integration of ElevenPaths' Vamps with Fortinet's FortiWeb web application firewall (WAF) provides a solution to effectively address the needs described above.

Vamps provides a global view of organizations' weaknesses, helping to identify security threats and potential attack methods, discovering all the assets of an organization that are exposed on the internet, and allowing rapid management of their correction, in order to reduce the exposure time of detected weaknesses. Vamps implements and automates virtual patching and the latest pen testing techniques with its constant scanning, complemented by ElevenPaths' team of experts in hacking techniques who analyze and validate the vulnerabilities detected, providing corrective measures and recommendations to ensure an adequate level of security.

FortiWeb is a WAF that protects hosted web applications from attacks that target known and unknown exploits. Using multilayered and correlated detection methods, FortiWeb defends applications from known vulnerabilities and zero-day threats.

Joint Solution Components

- Fortinet FortiWeb Web Application Firewall (WAF)
- ElevenPaths Vamps

Joint Solution Benefits

- Reduces organizations' risk of exposure to threats, until the appropriate patch is released or while a patch is being tested and applied
- Provides protection for mission-critical systems that cannot be taken offline
- Provides early detection and proper management of security threats from the time they are discovered, enabling their fast mitigation and minimizing the exposure time
- 24/7 support of a technical team with extensive experience, qualified and certified, which verifies each detected weakness to determine its severity and define the remediation plan; allows organizations to focus their resources on quickly managing their correction
- Detects legacy or shadowed IT assets that could be used as a vector to break into organizations
- Get an instant comprehensive view and track features of all the vulnerabilities affecting the organization, detected as a result of manual penetration testing, feeds, or automated tools



By integrating ElevenPaths' Vamps with Fortinet's FortiWeb WAF solution, customers can easily deploy virtual patching of their web applications, web-based application programming interfaces (APIs), and web services. This is done by applying instant and highly reliable web app vulnerability data identified and validated by the ElevenPaths' technical expert team into FortiWeb, to instantly deploy virtual vulnerability patching and reliably protect their apps.

Vulnerabilities found by Vamps are quickly and automatically turned into security rules by FortiWeb to protect the application until developers can address them in the application code. The functionality of the joint solution is summarized in the illustration below.

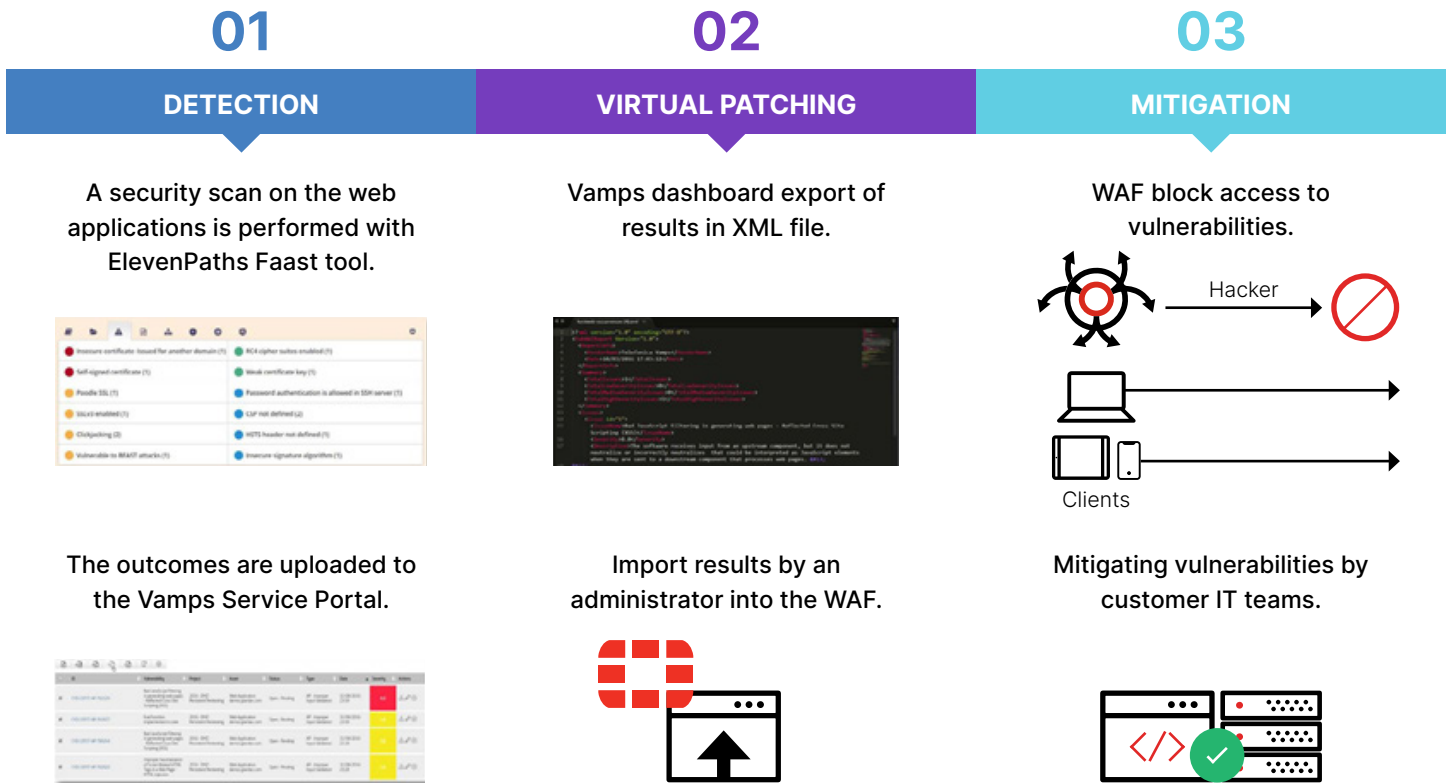


Figure 1: Summary of solution functionality.

About ElevenPaths

At ElevenPaths, Telefónica Cyber Security Unit, we believe in the idea of challenging the current state of security, an attribute that must always be present in technology. We're always redefining the relationship between security and people, with the aim of creating innovative security products which can transform the concept of security, thus keeping us one step ahead of attackers, who are increasingly present in our digital life. Learn more at <https://www.elevenpaths.com>.

