

WAFs and API Security

Overview

Web Application Firewalls (WAFs) are proxy-based tools that inspect HTTP traffic to monitor, filter, and block malicious HTTP activity. These tools depend on signatures and are best used to prevent attacks exploiting known vulnerabilities.

WAF — attributes

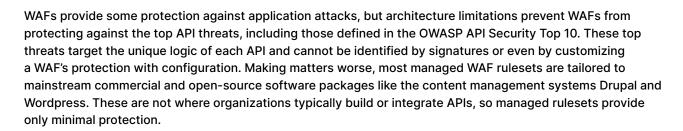
- Inline proxy
- Dependent on signatures to identify attacks
- Require configuration for customization
- Must be kept up to date to detect new attack types and when application changes are made

WAF — attack types prevented

- SQL Injection (SQLi)
- Cross Site Scripting (XXS)
- Local File Inclusion (LFI)
- Remote File Inclusion (RFI)
- Remote Code Execution (RCE)



What's needed to protect APIs



Protecting APIs from threats requires analysis of all API traffic to gain the context needed to identify and stop attackers. A WAF's proxy architecture limits the ability to see the big picture - instead, WAFs provide protection one transaction at a time. Without broader context, and the ability to stitch together disparate activities from a single user, a platform cannot stop attacks in progress, for example.

To fully protect APIs, organizations need:

- Simple deployment no agents, no proxy, no app changes or performance impact
- Automation establish baselines and adjust to changes with no tuning or configuration
- Broad reach see all your APIs, even those deprecated or not in gateways or documentation
- Deep analysis correlate activity, find what's new, distinguish "bad" vs. "safe" different
- Enforcement tap the "low and slow" attack pattern to stop attackers before they succeed
- Full lifecycle coverage protect and improve APIs across build, deploy, and runtime

Salt | WAFs and API Security



Salt Security — a unique architecture for securing APIs

At its core, the Salt Security solution is architected to leverage big data and patented artificial intelligence (Al) to enable the collection, analysis, and correlation of millions of users and their activity in parallel. By virtue of this architecture, the Salt Security solution can holistically see the subtle probing by attackers during the reconnaissance phase. Equipped with this capability, you can identify and stop them early in their attack methodology, avoiding a security incident or breach.

The Salt Security API Protection Platform works with any WAF, API gateway, development platform, and cloud environment to provide complete protection of APIs, including defending against the threats defined in the OWASP API Security Top 10 list.



Discover all your APIs

- Dynamically inventory all APIs, including shadow, zombie, new, and changed APIs
- Catalog exposed PII and other sensitive data to meet PSD2, PCI-DSS, GDPR, and CCPA requirements



Stop Attacks

- Correlate anomalous activity to identify attackers
- Pinpoint attacks early, during the reconnaissance phase, and shut down the attacker
- Cut incident response from hours to minutes with a comprehensive attack timeline view



Remediate vulnerabilities

- Share remediation details with DevOps to eliminate vulnerabilities in APIs
- Continuously harden APIs during development to ensure security doesn't slow application rollout

[The Salt Security Solution] contrasts with many other API management solutions that require manual configuration, such as API throttling limits, thus providing protection of APIs only after an attack has already been mounted — which is too late. 99



Mark O'Neill, VP Anaylst, Gartner Salt Security customers include:









TripActions



Salt Security protects the APIs that form the core of every modern application. Its patented API Protection Platform is the only API security solution that combines the power of cloud-scale big data and time-tested ML/AI to detect and prevent API attacks. By correlating activities across millions of APIs and users over time, Salt delivers deep context with real-time analysis and continuous insights for API discovery, attack prevention, and shift-left practices. Deployed in minutes and seamlessly integrated within existing systems, the Salt platform gives customers immediate value and protection, so they can innovate with confidence and accelerate their digital transformation initiatives.



Request a demo today! info@salt.security www.salt.security