

API Security

Visibility. Posture. Detection. Testing.



Luis Croker Akamai Technologies



We protect the applications you build everywhere, every time without compromising performance or customer experience.



Securing Applications Is Harder Than Ever



5.8B

Users on the Internet

75B

IoT Devices by 2025

8.9M

Mobile Applications

Downloaded Worldwide



\$57B

Open Banking Transactions \$3.2T

Spent Online (Consumer Goods)

1.5B

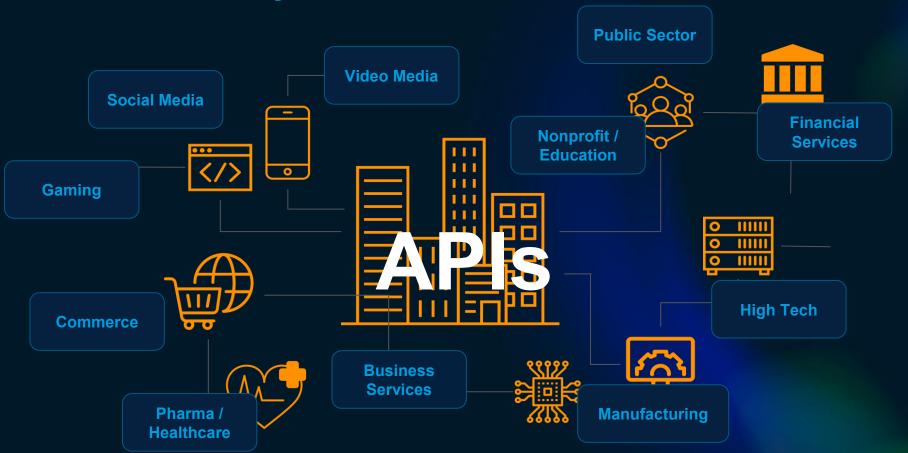
Viewers of 2023 FIFA World Cup 1061

Average Apps Per Enterprise With applications running your business, vulnerabilities multiply as the ecosystem becomes more complex.

Resulting in an ever-growing attack surface.



APIs Are Everywhere...





Akamai's Approach:

Defense in Depth



 $0\rightarrow \diamondsuit$ **Business Partners** □←Ŏ





Protect client unavailability Apps from compromise









Defend Apps from

Protect Apps from OWASP, Bot, and API attacks

Defend APIs from attacks within the perimeter

Defend Apps against abuse and sensitive data exposure



APIs Enable Apps Everywhere

Open Internet, Employees, Suppliers, Partners, IoT



Check in for a flight



Check the Weather



Order a Car



Order Coffee



Use Maps



Log in to Social Media



31% of all traffic protected by Akamai is API traffic



Challenges with Securing APIs

Visibility, posture, detecting abuse, testing

Diverse Environments and Integrations

Variety of Potential Threats

Immature Industry Standards

Complexity of Modern Applications Authentication and Authorization Complexity

Versioning and Deprecation of APIs



Rapid
Development and
Deployment
Cycles

Exchanging Sensitive Data

Third-Party
Dependencies

Akamai's data shows 109% year-over-year growth in API attacks



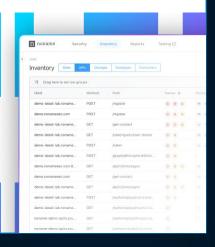


Pillars of API Security

Security beyond WAF and Bots

Discovery

Automatic and continuous cataloging of your APIs, sensitive data, and related risk, created from both internal and external perspectives



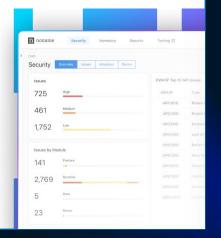
Posture

Uncover vulnerabilities and misconfigurations to speed remediation and ensure compliance



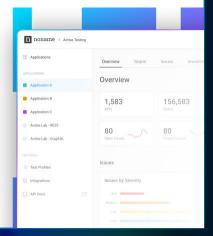
Runtime

Detect and block API attacks with real-time traffic analysis powered by machine learning



Testing

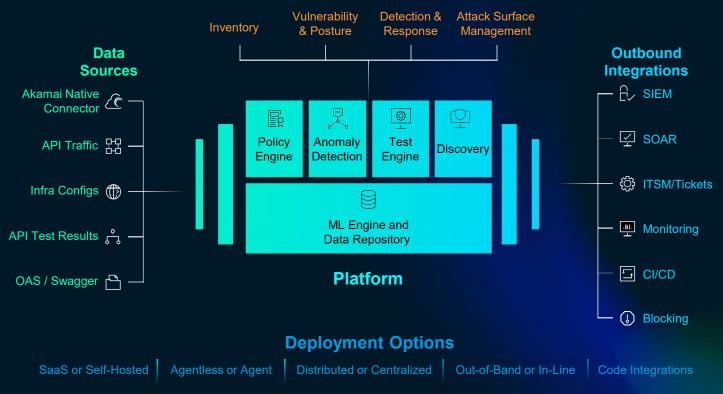
Find and remediate API vulnerabilities during the development lifecycle





API Security Architecture

Outcomes



API Coverage Requires Defense-in-Depth

Protection, discovery and governance

App & API Protector

- Request Constraints
- Basic API Discovery
- WAF Protections
- Basic PII Detection
- Rate Limiting
- Alerts
- Reporting

API Gateway

- Policy & Routing
- API Management
- User Authentication/ Authorization
- Global User Quotas

API Security

- API Discovery
- Attack Detections
- Advanced detection of sensitive information
- OWASP API Top 10 protection
- Shift Left with API testing
- API Risk Scoring
- API Exposure Monitoring



