APIs are the building blocks of modern apps and ecosystems, but as they grow in number and complexity, so do the threats.



# The API Explosion:

## Rapid Growth and Rising Threats

APIs are growing rapidly, but so are their attack surfaces. Security must evolve in tandem with adoption to stay ahead of potential threats.

By 2026, **30%+** of new API demand will come from Al and LLM tools (Source: Gartner, 2023)

CAGR for APIs is projected at 17% to 28% annually

(Source: Grand View Research, 2023)

API management market to reach \$16.9B

by 2029, and up to

\$49.95B

by 2032

(Source: Fortune Business Insights, 2024)



# The Hidden Risks of APIs

High-profile incidents expose sensitive data, damage reputations, and trigger regulatory action. Here are a few actual instances where weak API architecture made headlines.





insecure APIs to access accounts across 55 banks and transfer money without authorization during a simulated attack.' A large-scale misconfiguration in Google Firebase APIs exposed

sensitive data—including emails, passwords, and chat

messages—in more than 24,000 Android apps.<sup>2</sup>

Alissa Knight, a well-known API security researcher, exploited



A researcher gained backend access to over 100 Tesla vehicles worldwide by exploiting unprotected APIs, enabling remote control features through a VPN.<sup>3</sup>



An API logic flaw in Coinbase's retail trading platform allowed users to sell cryptocurrency they did not actually own, prompting a \$250,000 bug bounty reward for the discovery. 4

# How Can API Security Help

# strengthen your systems?

We go beyond basic API protection. Our lifecycle approach ensures security is built-in, from design to deployment.



**API Security Domain API Discovery** 

& Inventory **How We Protects** 

Identify shadow APIs, catalog endpoints, map data flows, and user roles



Secure API Design & Development

**API Security Domain** 

**How We Protects** Threat modelling

(STRIDE/DREAD), OWASP Top 10 protections, RBAC, OAuth/OIDC



Testing & Threat Simulation

**API Security Domain** 

**How We Protects** Automated & manual pen testing, business logic

vulnerability scans

misuse cases, continuous



**Access Control** & Protection

**How We Protects** Gateway policy

enforcement, session control, rate limiting, DDoS & bot mitigation



Compliance & Governance

**How We Protects** 

Align with GDPR, HIPAA, PSD2, ISO 27001; ensure audit readiness and regulatory reporting



DevSecOps & Monitoring

**How We Protects** CI/CD integration, continuous discovery, real-time monitoring,

adaptive threat detection





Connect

Access)

### API Security: A Strategic Approach To Compliance Readiness Compliance frameworks enforce controls that help prevent API security incidents. The table below maps these to global regulations, showing how





EU, China, SE Asia,

USA, Global, Brazil,

USA, EU, Singapore,





Secure authentication

and delegated access

Why It Matters

compliar	nce strengthens API security.	
Security	Regulatory	
Control	Frameworks	

**Frameworks** 

HIPAA, PCI-DSS, LGPD, PIPEDA, DPDPA, NYDFS GLBA, DPDPA, NERC CIP,

GDPR, PIPL, PDPA, SOC 2

SAMA Framework, DIFC DPL NIST CSF, PSD2, MAS

USA, India, Saudi Arabia, UAE

Canada, India

Regions

Global

Protect data in transit (HTTPS) Restrict sensitive

Rate Limiting/API Gateway

RBAC (Role-Based

OAuth 2.0/OpenID

TLS Encryption

TRM, APRA CPS 234 ISO 27001, SOC 2,

Australia Global, USA, Prevent DDoS and brute-force API attacks

**API** access

Security Logging/Monitoring Strong Authentication

(MFA, SCA)

NYDFS, APRA CPS 234 PSD2, NYDFS, HIPAA,

Australia EU, USA

and respond to threats Prevent unauthorized access and data theft

Enable auditability, detect

**Breach Notification** 

GDPR, HIPAA, DPDPA, HITECH **CLOUD Act, PIPL,** 

HITECH, GLBA

EU, USA, India USA, China,

Meet legal obligations for data breach disclosure

Data Localization and Cross-Border Control Consent and Data

Minimization

GDPR, Qatar DPL GDPR, LGPD, PDPA, PIPL

EU, Qatar EU, Brazil, SE Asia,

China

Regulate where data can be accessed and stored Protect user privacy

at the API level

API security is a strategic layer of defense. NuSummit Cybersecurity helps you secure APIs

Powering compliance and trust through API security

Let NuSummit Cybersecurity guide your journey





<sup>&</sup>lt;sup>1</sup> https://www.akamai.com/products/api-security

<sup>&</sup>lt;sup>2</sup> https://www.comparitech.com/blog/information-security/firebase-data-leak/

end-to-end, ensure compliance, and safeguard sensitive data.

<sup>&</sup>lt;sup>3</sup> https://techcrunch.com/2022/01/24/teslamate-bug-teslas-exposed-remote/ 4 https://www.coinbase.com/blog/retrospective-recent-coinbase-bug-bounty-award