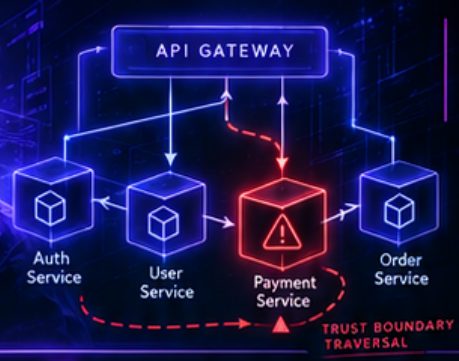
PENTESTERRA
SEE THE REAL RISK

API PENTEST MODULE

API Penetration Testing

REST, GraphQL, WebSocket, gRPC-adjacent stacks — tested like an attacker, not a linter.

API SECURITY REAL IMPACT



API TRUST
BROKEN AUTH
REAL IMPACT
MODERN SERVICES

BEYOND SPECIFICATIONS TOWARDS REAL SECURITY.

API security testing that understands modern service-to-service trust, not just OWASP API Top 10 checkboxes.

What it does

- **GraphQL:** introspection abuse, injection through nested queries
- **REST:** IDOR/BOLA, BFLA, mass assignment, versioning abuse, spec exposure (Swagger/OpenAPI auto-parsed for scope)
- **API gateway:** rate-limiting bypass, auth bypass, microservices & service-mesh trust boundaries
- **WebSocket:** CSWSH (cross-site WebSocket hijacking)
- **JWT:** alg:none bypass, JKU/X5U header injection, OAuth/SAML misuse
- **Auto-discovers** API surface from JS bundles, OpenAPI specs, and traffic — not just a manually-fed endpoint list

Why Pentesterra

- **API context** is not isolated from web — one findings model, one attack chain, one triage queue
- **Active exploitation**, not just static specification analysis

> *Modern APIs power modern business. We test them like real attackers do.*
> — PENTESTERRA

API SECURITY
REAL EXPLOITS
MODERN SERVICES
ATTACK CHAINS
REAL ADVANTAGE

THE API PENTEST WORKFLOW

1. **Discover** — Find API surface (JS, OpenAPI, traffic)
2. **Map** — Understand services & trust boundaries
3. **Test** — Run active exploitation tests
4. **Verify** — Confirm real impact with PoC
5. **Correlate** — Link findings into attack chains

OpenAPI & Swagger | GraphQL Introspection | JWT Analysis | API Gateway Testing | Microservices & Service Mesh | Active Exploitation | Attack Chain Correlation | AI / LLM Coverage

Test the APIs your business depends on.

Explore API Pentest →

PEOPLE
PROCESS
TECHNOLOGY
STRONGER
TOGETHER

PENTESTERRA

API PENETRATION TESTING

API Security Tested Like an Attacker, Not a Linter

REST, GraphQL, WebSocket, gRPC-adjacent stacks - tested for real exploitability, not just OWASP API Top 10 checkboxes. API security testing that understands modern service-to-service trust.

4

Protocol families covered: REST, GraphQL, WebSocket, gRPC-adjacent

Auto-Discovered

API surface from specs, JS bundles, and live traffic

Active

Real exploitation, not static specification analysis

WHY NOW

Your API surface grew again this quarter, and half of it isn't in the OpenAPI spec anyone actually maintains. An undocumented endpoint with broken authorization is invisible to a spec-based scanner - and it's exactly what an attacker finds first.

WHAT IT COVERS

GraphQL & REST

Introspection abuse, injection through nested queries, and the authorization failures that make an endpoint exploitable, not just documented.

- → GraphQL introspection abuse and injection through nested queries
- → IDOR/BOLA, BFLA, mass assignment, versioning abuse
- → OpenAPI/Swagger auto-parsed for scope, spec exposure checks

Authentication & Trust Boundaries

Modern APIs are built on service-to-service trust - Pentesterra tests where that trust actually breaks.

- → JWT tampering: alg:none bypass, JKU/X5U header injection
- → OAuth/SAML misuse
- → API gateway: rate-limiting bypass, auth bypass, microservices & service-mesh trust boundaries

WebSocket & Real-Time

Real-time channels get the same active-exploitation treatment as REST endpoints, not a pass.

- → CSWSH (cross-site WebSocket hijacking)
- → Auth and session validation over persistent connections
- → Discovered and tested alongside REST and GraphQL in the same run

Auto-Discovered Surface

The API surface is discovered the way an attacker finds it, not just from what you hand over.

- → OpenAPI/Swagger specs, JS bundle analysis, and live traffic - not a manually-fed endpoint list
- → REST, GraphQL, WebSocket, and gRPC-adjacent services enumerated automatically
- → Every discovered endpoint is in scope, not just the documented ones

WHY PENTESTERRA

API context is not isolated from web - one findings model, one attack chain, one triage queue. A broken-authorization finding on an internal API and a phishing-captured credential can chain into the same reported path.

FREQUENTLY ASKED QUESTIONS

Does this replace a linter or a spec-conformance check?

No, and it isn't meant to. A linter checks your OpenAPI spec against a style guide. This actively exploits the endpoints your spec describes (and the ones it doesn't) - broken authorization, injection, JWT tampering - the way an attacker would, with a working proof of concept attached.

How is the API surface discovered?

Automatically, from three sources: OpenAPI/Swagger specifications, JavaScript bundle analysis, and observed live traffic - so undocumented or forgotten endpoints are in scope, not just the ones in your spec file.

Does it test GraphQL and WebSocket, or just REST?

All of them in the same run: REST, GraphQL (introspection abuse and nested-query injection), WebSocket (including CSWSH), and gRPC-adjacent services.

Is API testing connected to the rest of the platform?

Yes. Findings share the same model as web and network pentest results, feed the cross-domain Attack Chain graph, and get the same non-destructive exploit verification as every other module.

Test the APIs your business depends on

Point Pentesterra at your API surface - REST, GraphQL, WebSocket, all in one run.

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