Edgescan API Discovery – Case Study

Discovering Rogue and Hidden APIs Across your Enterprise.
Problem Statement:
Enterprises are deploying API services in order to support rapid expansion and diversification of their business channels. Open Banking and PSD2, for example, in the finance industry have accelerated this growth further. APIs have been proven to be very effective as a common ‘back-end’ for multiple types of systems be they B2B or B2C services. **Uncontrolled deployment of APIs can give rise to cyber security ‘blind spots’ and unmanaged endpoints.**

Visibility:
With this growth of API deployment many enterprises find themselves in a situation where they don’t know how many or where APIs are deployed across the enterprise. This can result in APIs, which act as a path to sensitive business data being insecure, unmaintained and not regularly assessed. **Do you know how many APIs are deployed across your public facing Internet and where?**

The Challenge:
It can be difficult to discover APIs as they are ‘headless’ and don’t have a website or other obvious indicator they exist. Many APIs are only discoverable if you interact with the endpoint in the correct manner. **If we can’t easily find and track deployed APIs how do we secure them?**

Edgescan API discovery:

API Discovery: Using multi-layer probing techniques
- Multi-layer probing across IP/CIDR ranges designed to detect rogue or unknown deployed API endpoints.
- API Discovery from edgescan™ is part of the edgescan™ continuous asset profiling service that allows you to understand the API topology deployed across your public internet facing estate.
- With cataloguing and categorising correlation technology, it is possible to find a true inventory of APIs and exposures facing the public internet.
- Our proprietary discovery process runs continuously across your entire estate non-stop, 24x7x365 and alerts you when a newly discovered API has been detected.
Case Study

Global bank.

Known API’s deployed: 900
APIS Discovered by Edgescan: 2063

Unknown ‘blind-spot’ APIs discovered 1163

The Challenge:
Edgescan were approached by a Global bank with a challenge;
• Could Edgescan discover and tabulate all APIs deployed by the bank across their global estate?
• Could Edgescan discover API blind-spots and rogue API’s?

The bank supplied Edgescan with the following data relating to their public internet facing estate. Edgescan’s objective was to see how many APIs could be discovered across the supplied enterprise endpoints and web domains supplied.

Domain names: 11,000 domains (and sub domains) were supplied
IP Addresses/CIDR ranges: 500,000 IP addresses were provided to edgescan

Outcome:
Within 2 weeks Edgescan discovered an additional 1163 APIs deployed across the bank’s public facing infrastructure. This was obviously a surprise to the bank. The following API types were discovered in addition to the APIs known to the bank. These APIs were ‘blind-spot’ APIs, unknown to the bank.

• 100 exposed development APIs
• 325 Exposed Mobile App APIs
• 92 Open Banking APIs
• 8 Transversal APIs
• 584 Unknown/Custom/Bespoke APIs
• 54 SOAP APIs

Edgescan’s API discovery service is performed using multilayer probing technology which produces a confidence interval to demonstrate the level of confidence Edgescan has that an API was discovered. Clients are alerted in real time (if required) once an new API is discovered.

Edgescan API vulnerability management can deliver automatic, intelligently validated API security for all discovered APIs. See more at edgescan.com