## ProtectOnce

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# **API Security Radically Simplified**

LOGIN

\*\*\*\*\* PASSWORD \*\*\*\*\* \*

ProtectOnce's mission is to empower organizations to safely build, test, operate, and protect all of their APIs with radical simplicity.

## **API security that just works**

#### **1. API Security Complexities**

Modern API-driven applications are extremely complex and ever-changing. While APIs fuel growth and development speed, they expose the business logic of the application and make it a prime asset for attackers to target. Legacy WAFs are not enough, while modern solutions are too complex and expensive to run.

#### 2. What makes ProtectOnce different



**Full lifecycle API security** Testing, inventory, posture management, threat detection and response.



#### **Built for taking action**

easy to customize response playbooks allows you to create security workflows in minutes and take remediation action.

ProtectOnce



Agentless, automated deployment ProtectOnce handles the complexities of deployment, so you don't have to.



#### **API Testing done right**

ProtectOnce is the first solution to use runtime discovery data to automatically craft test cases that are specific to your environment.

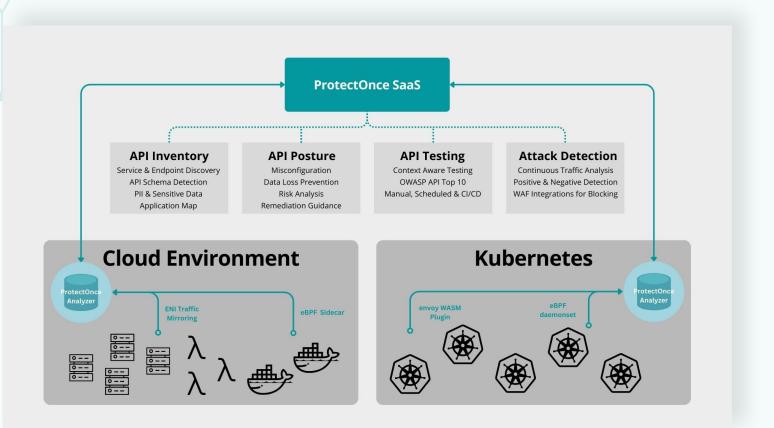
ashboard scovery > Dashboard		٩	Q Search III DEMO			
Total API Endpoints     API's At Risk       46 ↑ 5 last month     46 ↑ 5 last month	Shadow API's 46 ↑ 5 last month	Unauthenticated API's 46 个 5 last month	API Issues 46 1 5 last mont	API's With PII th 46 15 last month		
ENVIRONMENTS		ASSETS   These are cloud based resources that you have scanned		INCIDENT SEVERITY		
3 🧭 add manage		Monitoring Protected 3 O	Critical 9	Medium Low 3 0		
TOP 10 POSTURE ISSUES CLASSIFICATION	<b>C</b> ()	TOP 10 HIGHEST API INVO	CATIONS	<b>C</b> ()		
API Endpoints	Posture Issues	API Endpoints	Method	Count		
/socket.lo	22 1 22 22	22 1 22 22 /socket.io		1		
/rest/admin/application -configuration	22 1 22 22	22 (1) (22) (22) /rest/admin/application -configu		1		
/rest/languages	22 1 22 22	/rest/languages	GET	1		
/rest/socket.io	22 1 22 22	/rest/languages	PUT	1		
/socket.io	22 1 22 22	/rest/languages	PUT	1		
/rest/admin/application -configuration	22 1 22 22	/rest/socket.io	GET	1		
/rest/languages	(22) (1) (22) (22)	/socket.io	PUT	1		





## **The ProtectOnce Platform**

Our platform is specifically designed to provide the four essential functions that enhance your current API security, monitoring, and management systems. No matter the location or method of hosting your applications, ProtectOnce offers comprehensive protection that extends from your code to cloud.



#### 0 API Endpoints = Ô a Auth: O Unide 323.1KB 0 53 43 144 9.4 une 27th, 2023 At 7:01 Pm 0 cheme: https (1 Person d) : String String (1 Press 2) accept-language: EN-US priority: u=1. -api-key: SSA-358DUY27129-382H2 r-agent: MOZILLA/5.0 (+SYSTEM HIRLATEORN.OFTALS) 1

ProtectOnce

## 1. API Discovery & Inventory

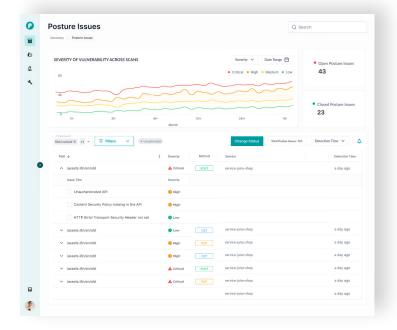
API endpoints change rapidly at certain parts of the application lifecycle, and security teams need a way to know what the up to date inventory is.

- Discover and catalog all your APIs, regardless of their setup or kind, such as RESTful, GraphQL, SOAP, XML-RPC, JSON-RPC, and gRPC.
- Identify which APIs are able to access sensitive data.
- Identify inactive, outdated, and so-called zombie APIs.
- Pinpoint shadow domains and drift from your official API schema.

### 2. API Security Posture Management

Basic API misconfigurations can render you vulnerable to cyberattacks. Once hackers breach your defenses, they can easily obtain and steal your confidential information. Utilize our platform to:

- Run automatic scans of your infrastructure to detect misconfigurations and concealed risks.
- Develop tailored workflows to alert relevant stakeholders about vulnerabilities.
- Allocate severity levels to identified problems to streamline the prioritization of fixes.
- Leverage playbooks to automate actions



curity Eve	ents				Q. McClure PLC		>
tection <sup>3</sup> Securit	y Events						
Ŧ						Tot	al Events
Status Code	Path	Method	Activity Type	OWASP Category	Environment	IP Address	Date
200	/cart	GET	Sel Injection	API10.2023 - Unsafe Consumption of APIs +1	DEFAULT_WORKLOAD	106.210.152.196	10 day
200	/cart	POST	Mass Assignment	API3:2023 Broken Object Property Level Autho +	1 DEFAULT_WORKLOAD	106.210.152.196	10 day
200	/api/v3/user/id	DELETE	Verb Tampering	API5:2023 Broken Function Level Authorization + 1	DEFAULT_WORKLOAD	106.210.152.196	10 day
200	/ftp	GET	Unauthenticated Apl	API5:2023 Broken Function Level Authorization + 1	DEFAULT_WORKLOAD	106.210.152.196	10 day
200	/cart	GET	Sel Injection	API 10:2023 - Unsafe Consumption of APIs + 1	DEFAULT_WORKLOAD	106.210.152.196	10 day
200	/api/v3/me/	GET	Cors Misonfiguration	API8:2023 Security Misconfiguration +1	DEFAULT_WORKLOAD	106.210.152.196	10 day
200	/api/v3/me/	GET	Shell Injection	API10.2023 - Unsafe Consumption of APIs + 1	DEFAULT_WORKLOAD	106.210.152.196	10 day
304	/api/v3/store/order/sid	GET	Verb Tampering	AP15:2023 Broken Function Level Authorization + 1	DEFAULT_WORKLOAD	157.33.79.38	10 day
304	/api/v3/store/order//id	GET	Verb Tampering	API5:2023 Broken Function Level Authorization + 1	DEFAULT_WORKLOAD	157.33.79.38	10 day
304	/api/v3/store/order/sid	GET	Verb Tampering	AP15:2023 Broken Function Level Authorization + 1	DEFAULT_WORKLOAD	157.33.79.38	10 day
500	/api/v3/user	POST	Sol Injection +1	API 10:2023 - Unsafe Consumption of APIs + 1	DEFAULT_WORKLOAD	62.225.226.179	10 day
500	/api/v3/user	POST	Sol Injection +1	API10.2023 - Unsafe Consumption of APIs +1	DEFAULT_WORKLOAD	62.225.226.179	9 days
200	/api/admin/console/ping/sid	GET	Shell Injection	API10.2023 - Unsafe Consumption of APIs	7cad0b0a-ea39-4c4a-9106-c68d8daa8105	154.118.44.973	7 days

ProtectOnce

0	onfiguration > Detect & Respond	+ Create Playbook			
	NAME	CATEGORY	STATUS	MANAGE	Category
	spec-analysis playbook	Specification Analysis		0	All
	change-API-playbook	API Drift		0	API Drift 1
	posture-issues-playbook	Posture Issues		0	Posture Issues 1
	Incident-playbook	Security incident		0	Security Incident

#### **3. API Attack Detection & Response**

The question isn't if your organization will face an attack, but when. This necessitates the ability to identify and halt attacks as they happen. Employ our Al/ML-driven anomaly detection system to:

- Detect complex API attacks such as Broken-Object-Level-Authentication with ProtectOnce's advanced threat detection.
- Go beyond OWASP top 10 to identify and block threat actors leveraging AI
- Agentless and out of band ProtectOnce's applies real time detection will never interfere with your app's performance..
- Respond to security events using the platform's easy to customize security playbooks.
- Integrate with existing workflows (ticketing, SIEMs, etc) to alert security/operations team

#### **4. AI Powered API** Security Testing

Shifting left is an integral part of API security. Some risks can't accurately be detected by posture analysis in runtime and sometimes, its just too late

- Unique 'purple team' approach uses runtime detected inventory and schema to dynamically craft test cases
- Automatically run tests that simulate malicious traffic, including the OWASP API Top 10
- Discover vulnerabilities before APIs enter production and reduce the risk of a successful attack
- Use mitigation information that helps patch vulnerabilities.
- Seamlessly integrate API scans and retests within CI/CD and progress towards shift left security.

STATUS RESULTS VULNERABILITY REPORT Owasp Category : API10:2023 Unsafe Consumption of APIs urity Misconfigu Broken User Authenticatio Mass Assignment Vulnerable Endpoints JWT - None Algorit Path Method Status Code Response Tin Integer Checks POST 34 ms /ani/Users • 201 Broken Object Level Authorization /api/Users POST • 201 57 ms Rate Limiting Attack /rest/user/login • 200 34 ms POST HTTP Verb Temparing Missing Authorization Shell Injection RE-RUN STATISTICS SQL Injection Path Traversal TimeBased SQL inject Server-Side Request Forgery Description A SQL injection the application. ack consists of insertion or "injection" of a SQL query via the input data from the client to Mitigations

```
    Ensure that all user inputs are being sanitized and malicious characters are stripped with the help of a well known and maintained library.
    Adde use prepared statements with parameterized queries and stored procedures wherever
```

3. Ensure that the user account connected to the database is provisioned with the least privileger required.

#### Impact

An SQL injection allows an attacker to manipulate SQL queries being run by the server potentially leading to exfitration of sensitive information or information being tampered in the database depending on the context of the neuro.

## **About ProtectOnce**

As a group of SaaS developers and cyber security entrepreneurs, application & API security has always been a pain point.

In today's cloud-native world, developing and deploying web applications is easier than ever, however properly securing them has never been more complex.

This is why we built ProtectOnce. We believe that quality API security should be accessible to all companies, big and small, without having to invest endless resources and manpower. With ProtectOnce, growing SaaS companies can get API visibility, discoverability and protection for free, with an automatic, out-of-the-box approach.

# **Start for free:** app.protectonce.com/signup

# ProtectOnce