

API Discovery

Overview

API Discovery allows for the automatic detection of potential APIs, in addition to providing a simpler onboarding to API protection. API Discovery allows you to quickly recognize and manage your APIs (including legacy and shadow APIs). This feature is available to use on any site running WAF services, not limited to API-only sites.

API Discovery and protection are provided for APIs that are both public and private. Public APIs are published for public consumption and are available for anyone to use, while private APIs are only available to authorized users.

API Discovery protects REST APIs only. SOAP and other styles are not included.

Navigating the Portal

To get started, navigate to the **API Discovery** menu, which is located on the left-side navigation. Here you'll see four tabs listed at the top of the page:

- **API Baseline**
- **Potential APIs**
- **Scan History**
- **Settings**

More details about each section are explained below.

API Baseline

This is where your protected API endpoints are listed. You can group them as you see fit for organizational purposes. This is also where one of the methods for onboarding new API endpoints is located.

API Discovery

Identify, manage, and protect your API's

Site's Edge Address
r7k7b6c2.stackpathcdn.com

[API Baseline](#) [Potential APIs](#) [Scan History](#) [Settings](#)

+ Add an API

v2							
Search							
API ENDPOINT	SCHEME TYPE	METHOD	VERSION	SOURCE	LAST SEEN	REQ LAST 24 HRS	STATUS
/api/v1/test/1	HTTP	GET		User Defined	2023-04-12 06:28 AM	0	Confirmed
/api/v2/test/1	HTTP	GET		User Defined	2023-04-12 06:28 AM	0	Confirmed

api							
Search							
API ENDPOINT	SCHEME TYPE	METHOD	VERSION	SOURCE	LAST SEEN	REQ LAST 24 HRS	STATUS
/foo	HTTPS	GET		User Defined	2023-03-23 09:18 AM	0	Not an API
/ygy/(j d)/ddd	HTTPS	GET	2	User Defined	2023-04-04 08:58 AM	0	Confirmed

Adding an API

To add a new API endpoint from the API Baseline tab:

1. Click the **Add an API** button on the top right corner of the page. This will open up a pop-up menu on the right side of the page.
2. Enter the **Scheme, Method** and **Endpoint**.
3. (Optional) Select the **Version, API Group** and **Tags**.
4. If you are uploading an API Specifications file, it must be in YAML or JSON format.
5. Click **Add** when you are finished.

The screenshot shows the 'API Discovery' interface for 'wafsite.com'. The 'API Baseline' tab is active, displaying a table of API endpoints. A modal titled 'Add an API' is open on the right, allowing manual entry of API details.

API Discovery
Identify, manage, and protect your API's

API Baseline | Potential APIs | Scan History | Settings

API Baseline Table:

API ENDPOINT ▲	SCHEME TYPE	METHOD	VERSION	SOURCE	LAST SEEN
/api/v1/test/1	HTTP	GET		User Defined	2023-04-12 06:28 AM
/api/v2/test/1	HTTP	GET		User Defined	2023-04-12 06:28 AM

'Add an API' Modal Fields:

- Scheme: Scheme Type (dropdown)
- Method: Method Type (dropdown)
- Endpoint: (text input)
- Version (Optional): (text input)
- API Group (Optional): User Management (tag)
- Tags (Optional): Monitor (tag), Legitimate Activity (tag)

APIs that are onboarded to the platform through manual entry via the API Baseline tab will automatically be moved to a status of **confirmed** on the API Baseline tab.

Viewing Details

Click the three dots to the right-hand side of each API endpoint line item to view the endpoint details or edit the API path.

Selecting **View Details** will open a menu that displays additional information about your existing endpoint. From here you can edit the endpoints groups and tags or change its **Status**.

An endpoint can have one of the following statuses:

- **Potential** - These are endpoints that have been onboarded into the system through a network scan and are awaiting be marked as a confirmed API or not an API. It's up to the user to confirm whether this is a valid API.
- **Confirm** - Indicates that an endpoint is a valid API and should be protected. All endpoints that were manually onboarded into the tool will automatically be assigned this status. This can be changed.
- **Not an API** - Indicates that a potential endpoint is not a valid API and does not need additional protection. Users can manually assign this status to endpoints that were falsely scanned during a network scan.
- **Delisted** - API endpoint was originally found in an uploaded, scanned Swagger file, but subsequently missing after a later scan.

wafsite.com
Create

API Discovery

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v2

API ENDPOINT	SCHEME TYPE	METHOD	VERSION	SOURCE	LAST SEEN
/api/v1/test/1	HTTP	GET		User Defined	2023-04-12 06:28 AM
/api/v2/test/1	HTTP	GET		User Defined	2023-04-12 06:28 AM

Cancel
Save

API Details

HTTP SCHEME: HTTP

METHOD: GET

ENDPOINT: /api/v1/test/1

VERSION:

API GROUP: v2 x

REQUESTS LAST 24 HRS: 0

FIRST SEEN: 2023-04-12 06:28:16

LAST SEEN: 2023-04-12 06:28:16

TAGS:

Admin Access x
Cart Checkout x

SOURCE: User Defined

STATUS: Confirmed v

When manually entering or editing a path, you can use curly braces to signify query string parameters. e.g., /api/v1/stacks/{stack_id}/sites/{site_id}.

Potential APIs

When the API Discovery feature performs a network scan, the endpoints that are detected populate in this section. Here is where you can manage the status of these endpoints and determine whether they are a confirmed endpoint or not an API.

Once an API endpoint is moved to either confirmed or not an API, it will be removed from this tab and placed in the API Baseline tab.

API Baseline
Potential APIs
Scan History
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API ENDPOINT	SCHEME TYPE	METHOD	VERSION	SOURCE	LAST SEEN	REQ LAST 24 HRS	STATUS
/scan/api/accounts/4abc56/domains/4abc56/test	HTTP	GET		Traffic Scan	2023-04-18 08:28 AM	1	Potential v
/scan/api/accounts/{int_1}/domains/{int_2}	HTTP	GET		Traffic Scan	2023-04-18 08:28 AM	6	Potential v
/scan/api/accounts/{int_1}/domains/{int_2}/test	HTTP	GET		Traffic Scan	2023-03-30 02:00 PM	1	Potential v
/scan/api/partners/accounts/{int_1}/domains/{int_2}	HTTP	GET		Traffic Scan	2023-04-18 08:28 AM	1	Potential v
/scan/api/partners/{int_1}/accounts/{int_2}/one	HTTP	GET		Traffic Scan	2023-04-18 08:28 AM	1	Potential v
/scan/api/partners/{int_1}/accounts/{int_2}/something	HTTP	GET		Traffic Scan	2023-04-18 08:28 AM	7	Potential v
/scan/api/partners/{int_1}/accounts/{int_2}/support	HTTP	GET		Traffic Scan	2023-04-18 08:28 AM	6	Potential v
/scan/api/partners/{int_1}/accounts/{int_2}/template	HTTP	GET		Traffic Scan	2023-04-18 08:28 AM	13	Potential v
/scan/api/partners/{int_1}/accounts/{int_2}/template/custom/abc	HTTP	GET		Traffic Scan	2023-04-18 08:28 AM	1	Potential v
/scan/api/partners/{int_1}/accounts/{int_2}/template/custom/ddd	HTTP	GET		Traffic Scan	2023-04-18 08:28 AM	1	Potential v

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1
2
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Scan History

The **Scan History** section provides users with a list of all the endpoints that were scanned using API Discovery, either by way of a network scan or Swagger file scan, sorted by date/time. This section also provides you with information as to whether the scan was successful or resulted in errors. If an error did occur, a message with further details is provided in the **Message** column.

You can also refetch the results populated here should a new scan have occurred while you were on this page. Results will be automatically fetched at the designated time intervals selected on the **Settings** tab for each scan type.

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Site's Edge Address
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API Baseline Potential APIs **Scan History** Settings

Scan History / 353 [Refetch Results](#)

TIME	TYPE	STATUS	MESSAGE
2023-02-21 11:59 AM EST	Spec File	Error	'descriptionFileLocation' is not set for this domain
2023-02-21 10:59 AM EST	Traffic	Success	Traffic scan performed
2023-02-21 09:59 AM EST	Traffic	Success	Traffic scan performed
2023-02-21 09:59 AM EST	Spec File	Error	'descriptionFileLocation' is not set for this domain
2023-02-21 08:59 AM EST	Traffic	Success	Traffic scan performed
2023-02-21 08:59 AM EST	Spec File	Error	'descriptionFileLocation' is not set for this domain
2023-02-21 07:59 AM EST	Traffic	Success	Traffic scan performed
2023-02-21 07:59 AM EST	Spec File	Error	'descriptionFileLocation' is not set for this domain
2023-02-21 06:59 AM EST	Traffic	Success	Traffic scan performed
2023-02-21 06:59 AM EST	Spec File	Error	'descriptionFileLocation' is not set for this domain

Results Per Page 10

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Settings

The **Settings** section provides two additional manual onboarding mechanisms as well as provides users with the ability to change API Specification scan and Network scan

intervals.

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API Baseline Potential APIs Scan History **Settings**

API Base Path / 2

If your web application is using an API that is implemented on the same domain, e.g. [www.mysite.com/restfulapi](#), then you need to configure it here.

wafsite.com/ path/to/api Add

URL

/api/test	⋮
/api/v1/test	⋮

API Specifications File Start Swagger Scan

Path Upload

You can only have one API path at a time.

Path to API specification file Add

URL

There are no API specification files.

Scan Settings

Network Scans	<input checked="" type="checkbox"/>	Scan Every: 1 Hour
API Specification Scans	<input checked="" type="checkbox"/>	Scan Every: 2 Hours

API Base Path

If your site uses an API that's implemented on the same domain, you need to add it here. This defines the API communication path that the system will expect API requests from.

API Specifications File

Use API Discovery to parse an uploaded JSON or YAML Swagger file for API endpoints. You can either point to the URL of the Swagger file on the **Path** tab, or you can upload the Swagger file from the **Upload** tab. Once the scan is complete, potential endpoints will populate in the API Baseline list.

Selecting the **Start Swagger Scan** button will trigger a scan of the listed paths or files for APIs.

API endpoints onboarded to the tool from either of these two methods will automatically be moved to a status of **confirmed** on the API Baseline tab.

Uploading a Swagger file can significantly reduce the work needed for the classification of potential APIs, as this will automatically classify most of the endpoints that comprise the API Baseline.

Scan Settings

You can toggle the two settings in this section on/off at any time. More information about each setting is explained below.

Network Scans

Set an interval for when API Discovery will scan all your site's URLs and detect new potential API endpoints.

API Specification Scans

Set an interval for when API Discovery will scan your uploaded API Specification file or specified API paths to see if any new endpoints were added or if any preexisting endpoints were removed (Delisted).