

Wikimedia Developer Platform

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Platform Team



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Wikimedia Developer Platform

- Vision
- Aligned Goals
- Targets
- Needs
- Product
- Next Steps

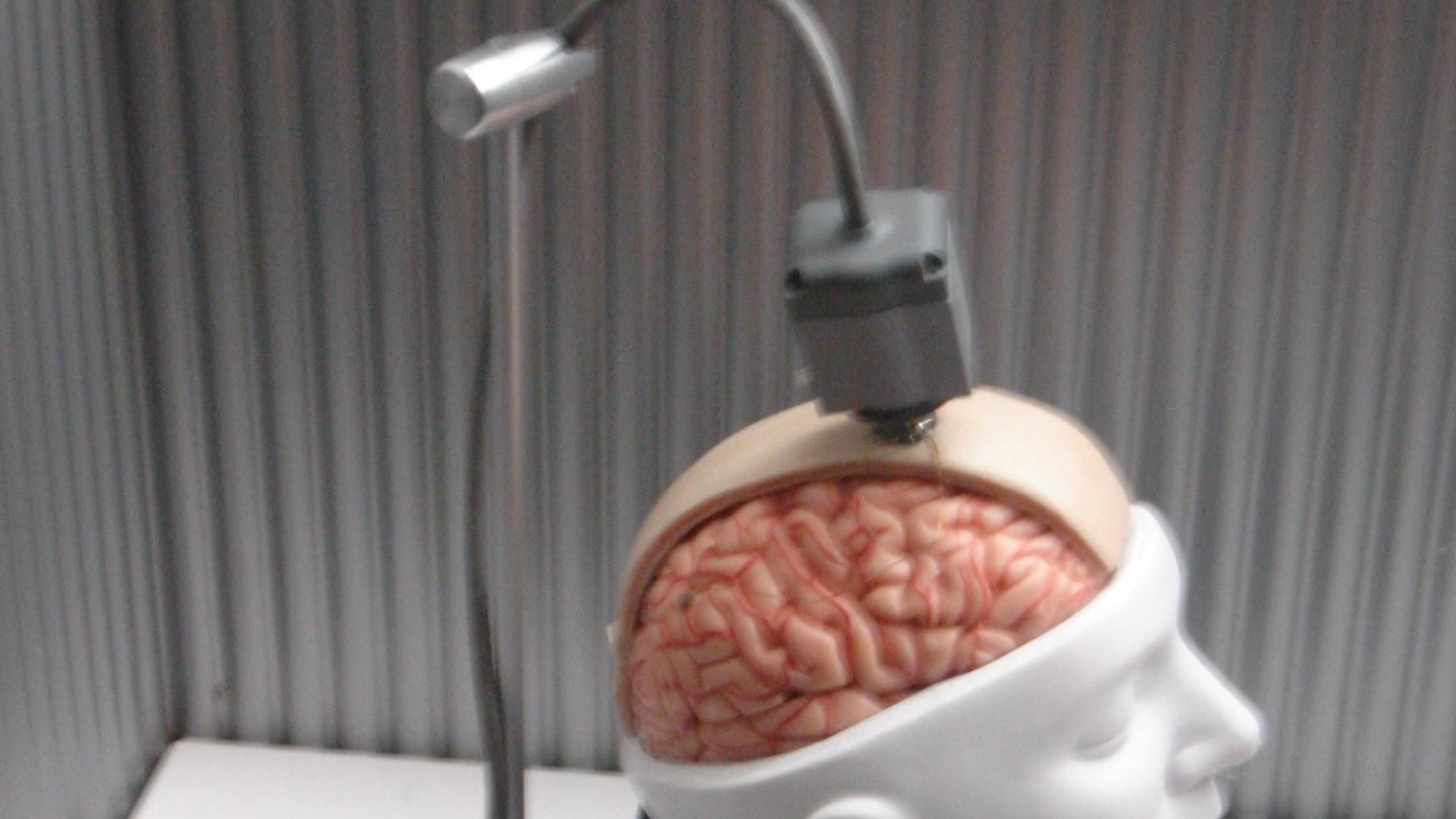






Attribution
Matthew Bowden





**We're not going to
build these apps.**



**But we can give tools
to the developers
who will.**

Aligned Goals

“Software platforms with integrated machine learning, rich media, and structured data components, and associated tooling for internal and external development and reuse of code and content.”

Wikimedia will become the essential infrastructure of the ecosystem of free knowledge

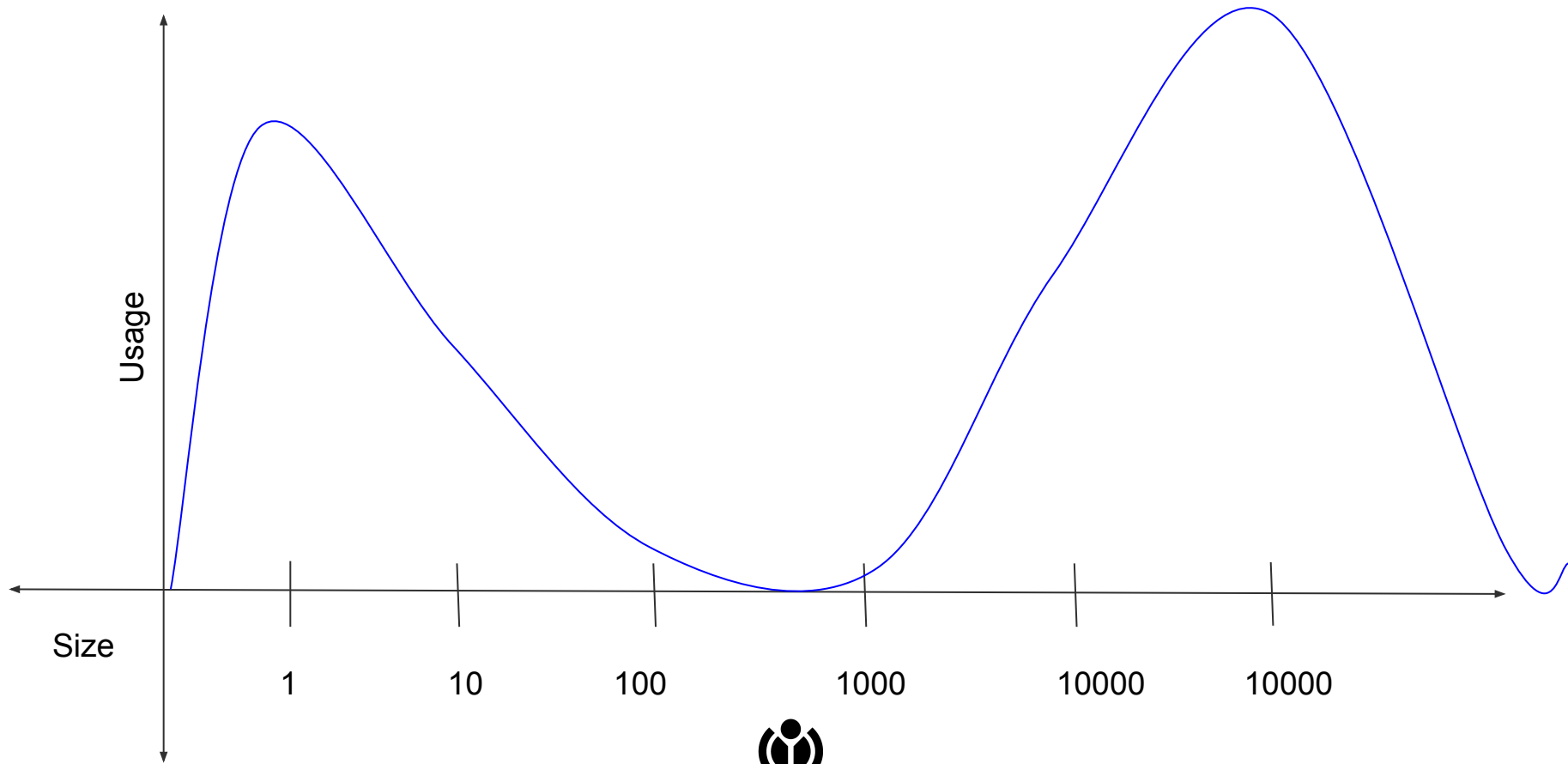


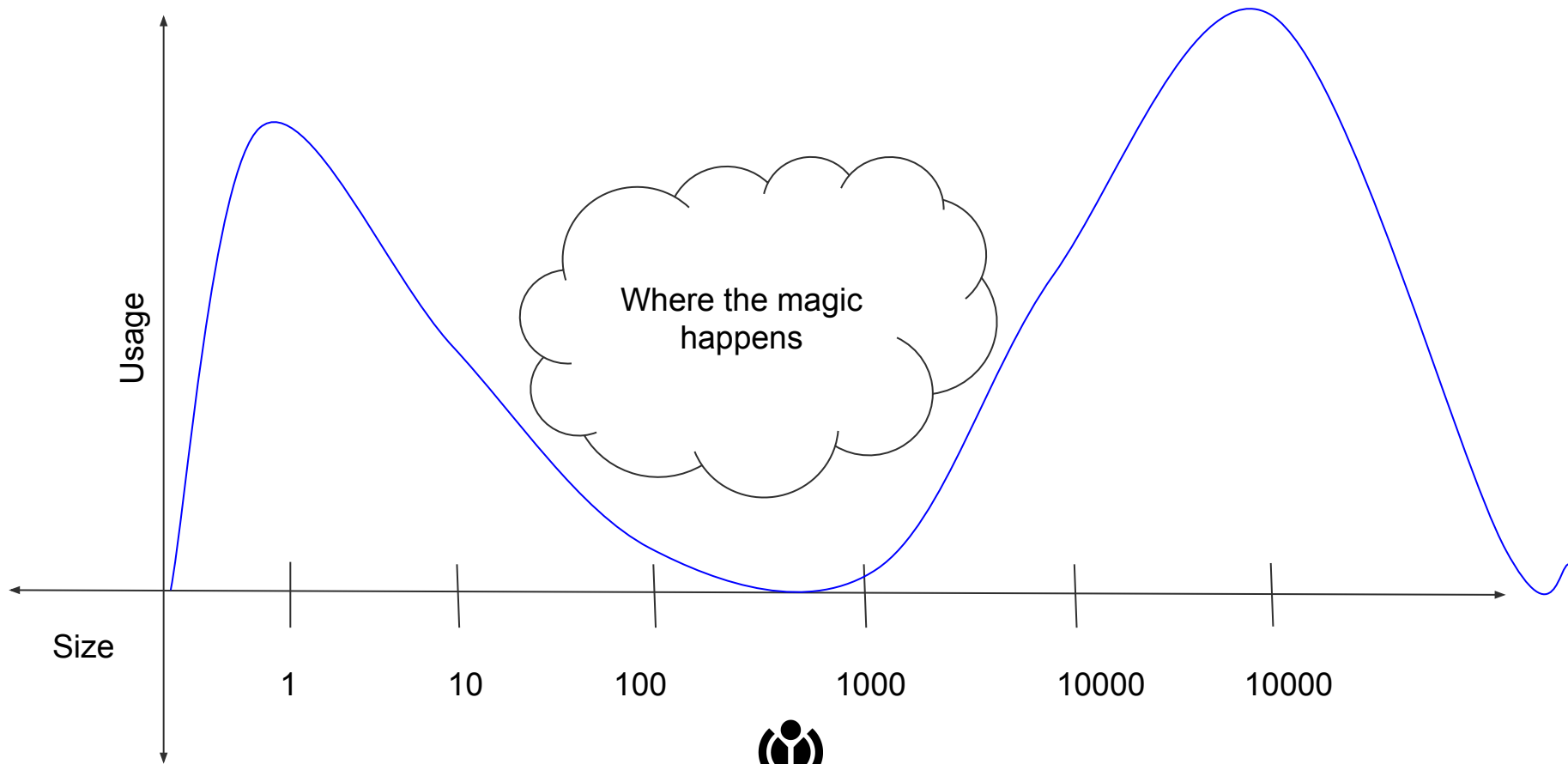
Targets

Who uses our APIs?

- Internal developers
- Contributors
- Search engines
- Voice assistants







Size

Usage

1

10

100

1000

10000

10000

Where the magic happens



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App Developers

- Easy onboarding
- Familiar paradigms
- Tools
- Documentation
- Clarity
- Clear licensing



What's “familiar”?

- Twitter
- Facebook
- Google
- Apple
- Amazon
- Twilio



Other audiences

Audience	Needs
Community developers	Low-maintenance, stability, code templates, code-by-example
Official clients	Performance, easy integration with front-end tools, dependability

Not audiences!

Audience	Needs
Major internet platforms	Bulk syndication of Wikimedia project content

How do they make do?

- Proprietary APIs
- Public domain data sets
- Commercial services
- Dump + filter



Wikimedia Developer Platform



Desktop
Web

Mobile
Web

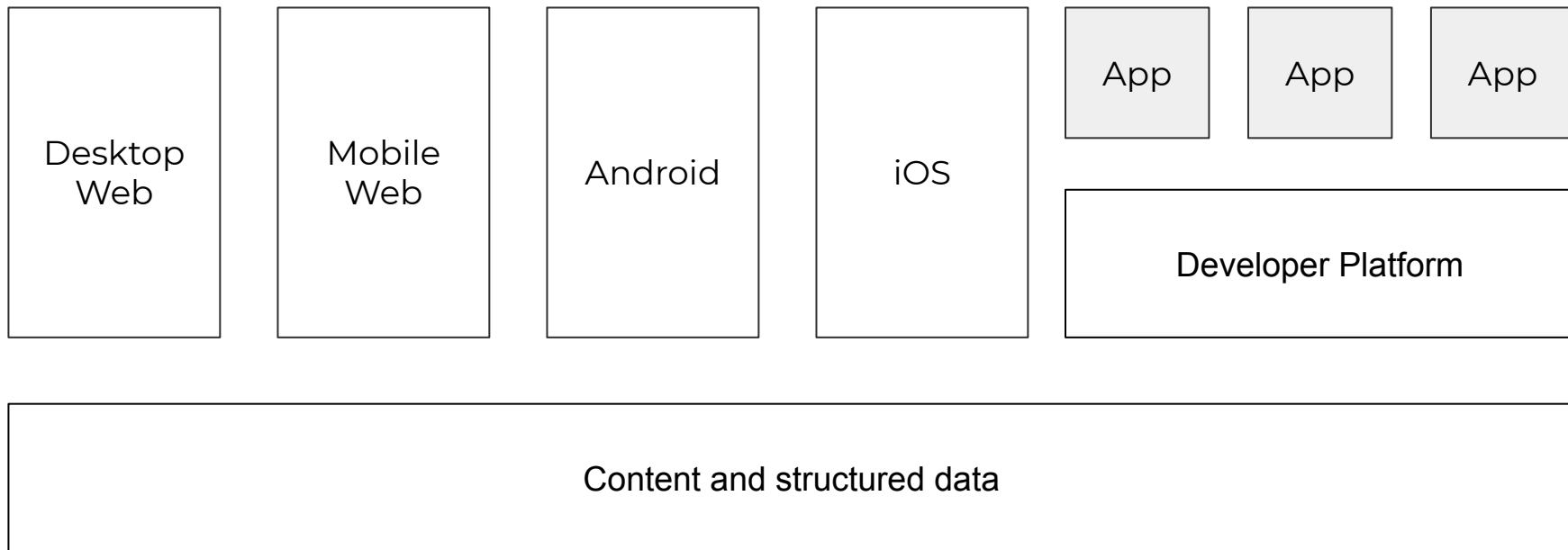
Android

iOS

Content and structured data



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Developer onboarding

API portal guides developers through signing up for a Wikimedia account, requesting client IDs, and creating their first apps.





Wikimedia API

Start building free knowledge apps with open access to multilingual information from Wikipedia, images and media files from Wikimedia Commons, dictionary entries from Wiktionary, travel guides from Wikivoyage, and more.

[Log in](#) with your Wikimedia account and [register an app](#) to get started.

[Get started](#)

Wikipedia articles

Get free, multilingual information from Wikipedia, including article metadata, history, and HTML.

Free images & media files

Build apps using free images, audio, and video from Wikimedia Commons.

Dictionary, travel & more

Define words in over 50 languages, browse phrasebooks, explore travel guides, and more with Wikipedia sister projects.

Documentation

API portal includes reference documentation focused on API. Tutorials, example code, and coding templates.



Overview

Search

Search pages

Autocomplete page title

Featured content

Get announcements

Get daily featured content

Get on-this-day content

Pages

Get page

Get page offline

Search pages

Discuss

History

Edit

GET `/search/page?q=search terms`

Searches page titles and content for the provided search terms, and returns up to 50 matching pages. This endpoint responds to the presence of a logged-in user and returns search results appropriate to that user's permissions.

Request examples

cURL

Python

JavaScript

PHP

```
# Search for pages about the Solar System on English Wikipedia
$ curl https://api.wikimedia.org/v1/wikipedia/en/search/page?q=solar system

# Search for images of Jupiter on Wikimedia Commons
$ curl https://api.wikimedia.org/v1/commons/search/page?q=jupiter
```

API routing

A single virtual server for serving API requests.

**fr.wikivoyage.org/api/rest_v1/
en.wikibooks.org/w/api.php
zh.wikisource.org/api/rest_v1/**

api.wikimedia.org



API curation

Selected APIs that are supported for external developers.

Semantic versioning

The semantic versioning (semver) strategy is used to make APIs backwards compatible for as long as possible.

REST

Focus on modern REST APIs. First APIs available will be Core REST API and Wikifeeds.

OAuth 2.0 and JWTs

The Internet standard for API authentication. Libraries and tools available for popular Web programming languages and toolkits. Developers can let Wikimedia users access their apps and enjoy read/write access under their own account.



Client IDs

API calls are identified according to the developer using an OAuth 2.0 client ID. Client IDs are owned by a Wikimedia account. Developer portal for creating and managing client IDs.



Dev center

Notifications

API usage

App management

Profile settings

App management

My apps

My Travel Finder

Created 11 Oct 2019

[VIEW DETAILS](#) Disable

My Wikibook Reader

Created 11 Oct 2019

[VIEW DETAILS](#) Disable

Enforced rate limits

Uniform rate limits across all APIs per client ID. If a client goes over its rate limit, API calls fail until the end of the time period. Easy-to-understand explicit limits like “50,000 API calls per hour”. Generous default API limit, and developers can request a higher limit if needed. Developers are notified on rate limit overage.

API usage

Notifications

API usage

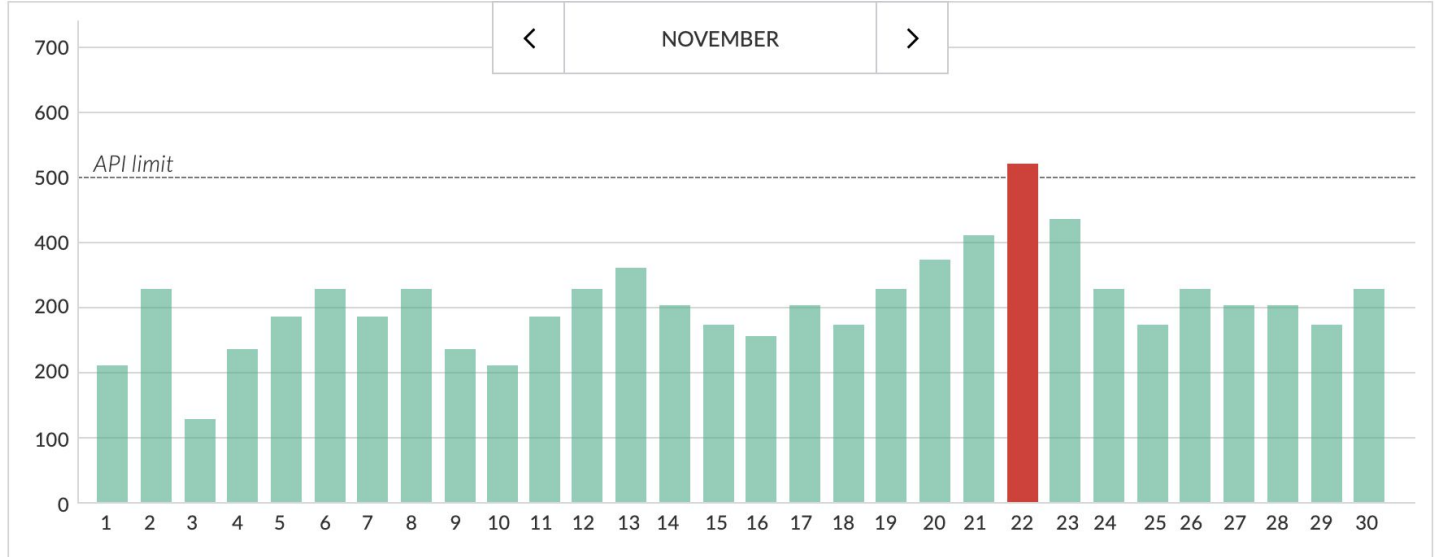
App management

Profile settings

API calls per day

Select app:

My Traveler Finder



Date	Number of API calls
11/01/2019	380

Date	Number of API calls
11/17/2019	380

Vertical APIs

Future APIs through this platform will expose abstractions on the problem domain of developers, rather than the solution domain of our software. APIs for movies, books, species, companies, biographies.

Pulling together data, media and content from multiple projects in a simple RESTful interface.

Solutions

Portal

- MediaWiki site
- Chameleon skin
- Extension for OAuth
- Extension for other features



Gateway

- [Envoy Proxy](#)
- Rate-limiting plugin
- Custom code for JWT and OAuth 2.0 handling



Challenges

A photograph showing two individuals in a field of green vegetation and water, surrounded by a large colony of white birds. The person on the left is wearing a tan cap and a light-colored shirt with an orange vest, and is holding a camera up to take a picture. The person on the right is wearing a wide-brimmed straw hat and a light-colored shirt, and is looking towards the birds. The sky is filled with many birds in flight. The word "Community" is overlaid in large white text across the center of the image.

Community



Public Domain
Greg Thompson, US Fish and Wildlife Service



Herman James Good

Canadian soldier of World War I recipient of the Victoria Cross ([Wikidata](#)). From Wikipedia, the free encyclopedia

Herman James Good, [VC](#) (29 November 1887 – 18 April 1969) was a soldier in the [Canadian Expeditionary Force](#) during the [First World War](#) and a recipient of the [Victoria Cross](#), the highest award for gallantry "in the face of the enemy" that can be awarded to British and [Commonwealth](#) forces. Good received the award for his actions during the [Battle of Amiens](#) in August 1918, while fighting around [Hangard Wood](#). Good survived the war and returned to Canada. After his discharge from the military in 1919, Good worked in the lumber industry and then later a fish and game warden. He died of a stroke in 1969, at the age of 81.

Early life

Good was born on 29 November 1887^[1] in South Bathurst, [New Brunswick](#), Canada. He was one of fourteen children of Walter and Rebecca Good. He was educated at the local [public school](#) and involved in lumber operations in the area.^[2]

First World War

On 29 June 1915, Good enlisted in the [Canadian Expeditionary Force](#) (CEF) on 29 June 1915 in Sussex, New Brunswick. He embarked for England in late October 1915. Arriving there the following month, he was posted to the 2nd Pioneer Battalion serving on the [Western Front](#).^[2]

In April 1916, he transferred to the [13th \(Royal Highlanders of Canada\) Battalion](#), 3rd Brigade, [1st Canadian Division](#). Two months later, he received gunshot wounds to his buttocks which required six weeks of treatment before he could return to his unit. He experienced a bout of shell shock in early October and was in and out of care for the next several weeks. He was back with the 13th Battalion by early 1917. He

Herman James Good



Herman Good during the First World War

Born

29 November 1887

Discovery



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Let op:
Deze envelop bevat uw stempas(sen).
Bewaar deze zorgvuldig!

Message



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Next steps

- API Gateway
- API Portal
- Beta period Q1
- Launch Q1?



Contact

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Shout-outs

- Bill Pirkle
- Will Doran
- Platform
- Traffic
- Eric Evans
- Clara Andrews-Wani
- Alex Paskulin
- Hallo Welt
- Cindy Cicalese



THANK YOU



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