A Deep Dive Into the WordPress.com REST API

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Part 1:
Some Stuff
About APIs

Like APIs?

Like APIs?

Good, because we have TWO.

“Why are there two APIs?”

NO, THERE IS TOO MUCH.
LET ME SUM UP.
memegenerator.net

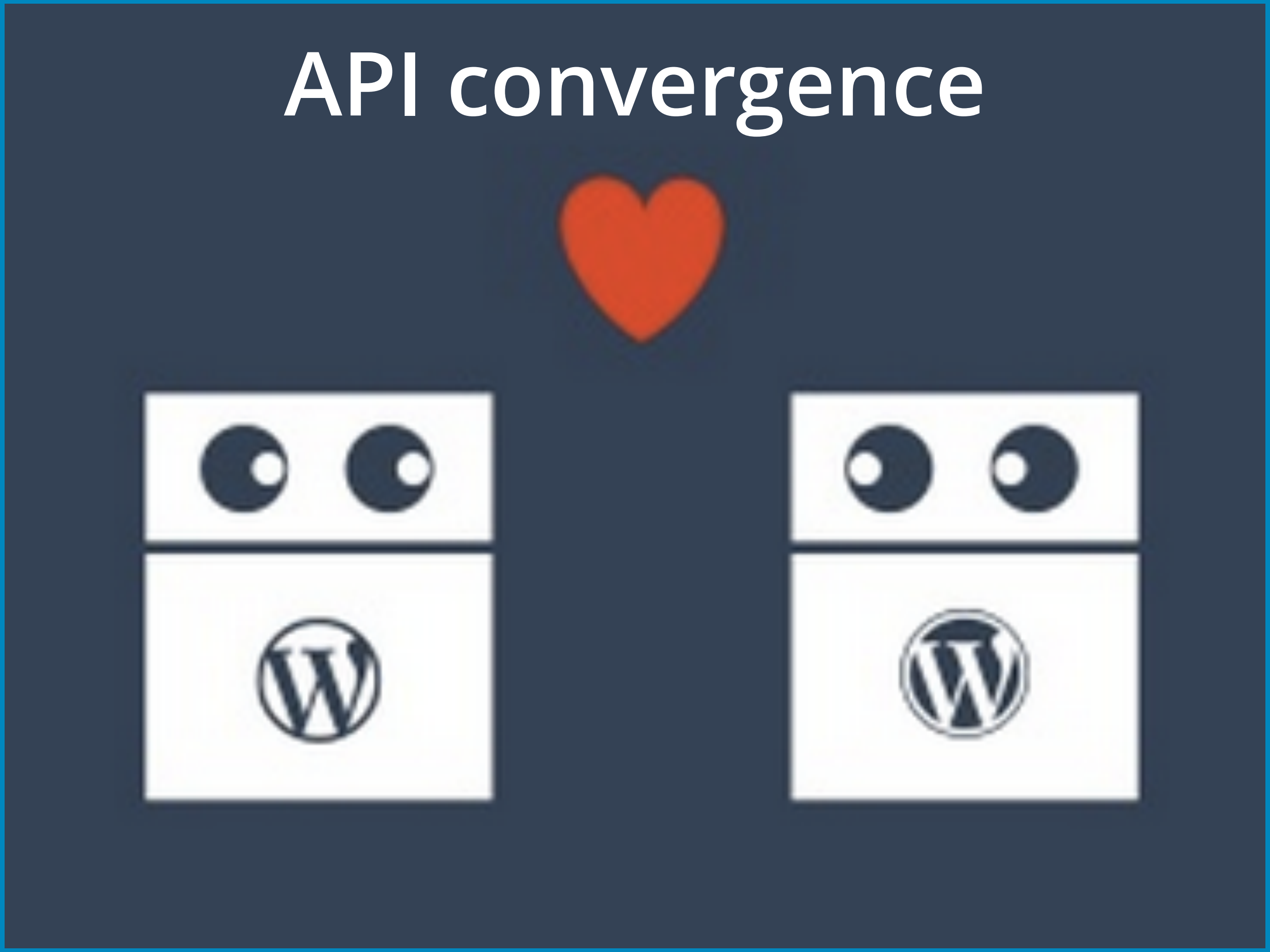
Some History

- WPCOM API has been around since 2012
  - We use it! WordPress.com + apps
- WP-API project began in 2013
  - Will soon become part of core

API Features

WP-API	WPCOM API
Self-hosted sites only	WPCOM + Jetpack sites
Runs on your own servers	We run the infrastructure
Open source, will ship w/core	Partially open-source
Extensible	Access WPCOM-only features
oAuth1 Authentication	oAuth2 Authentication
Actively developed	Actively developed

The Future



Part B:
Anatomy of an App

Meet Grasshopper

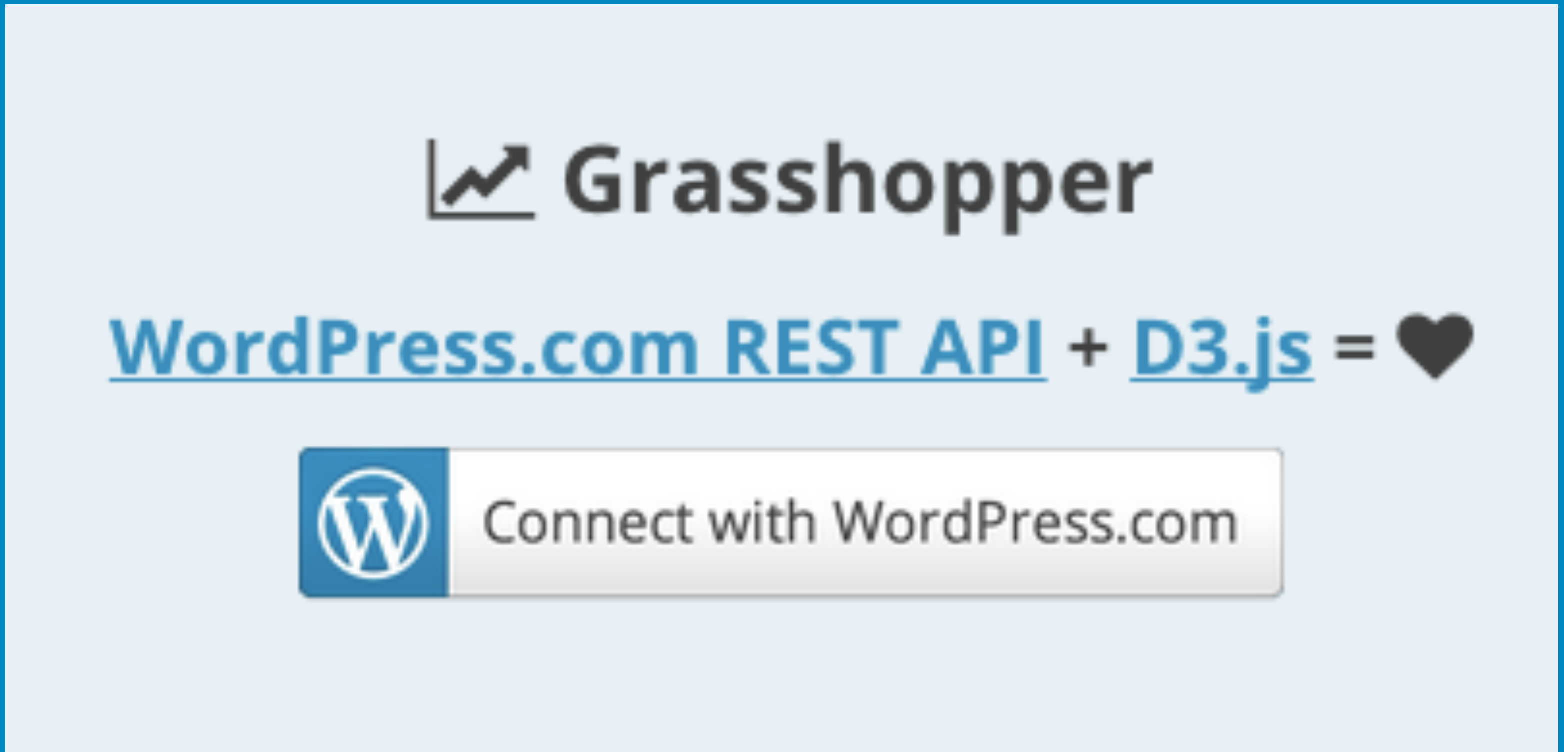
A single-page WPCOM API + D3.js example app

github.com/automattic/grasshopper

Basic Flow

1. Authenticate the user
2. Make a query
3. Graph the results

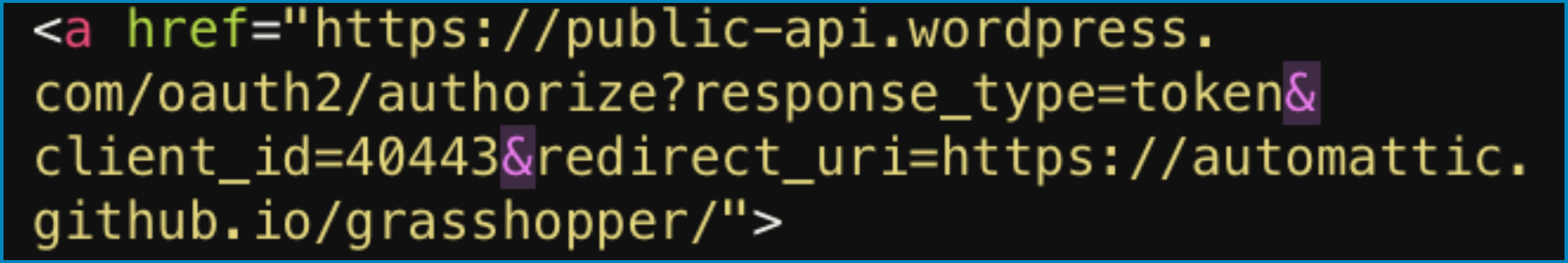
1. Authentication



Grasshopper

WordPress.com REST API + D3.js = ❤

/authorize



```
<a href="https://public-api.wordpress.
com/oauth2/authorize?response_type=token&
client_id=40443&redirect_uri=https://automattic.
github.io/grasshopper/">
```

Breaking that down…

public-api.wordpress.com/oauth2/authorize

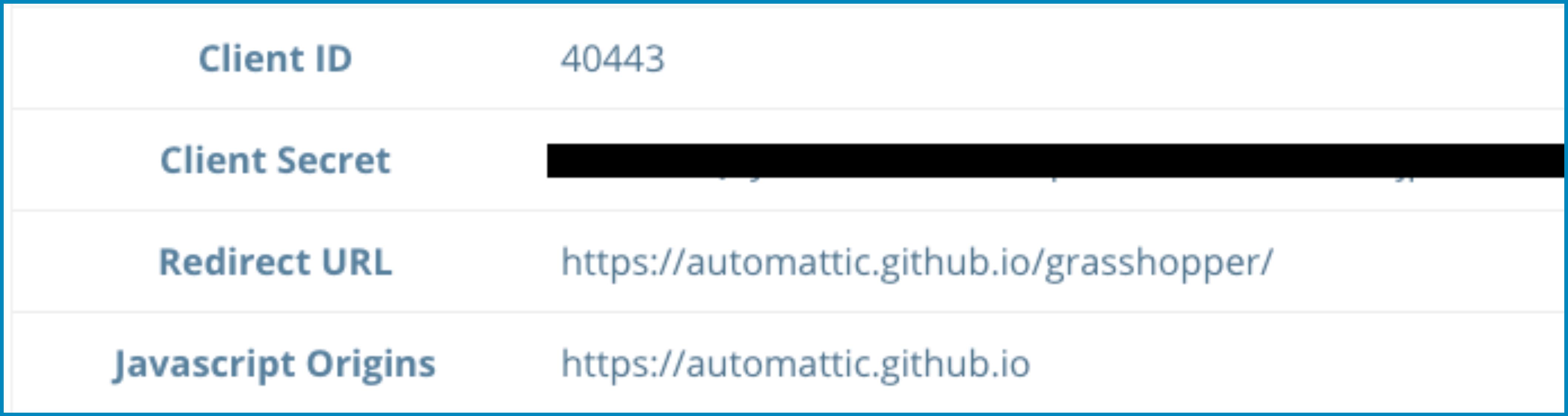
?response_type=token

&client_id=40443

&redirect_uri=https://automattic.github.io/grasshopper/

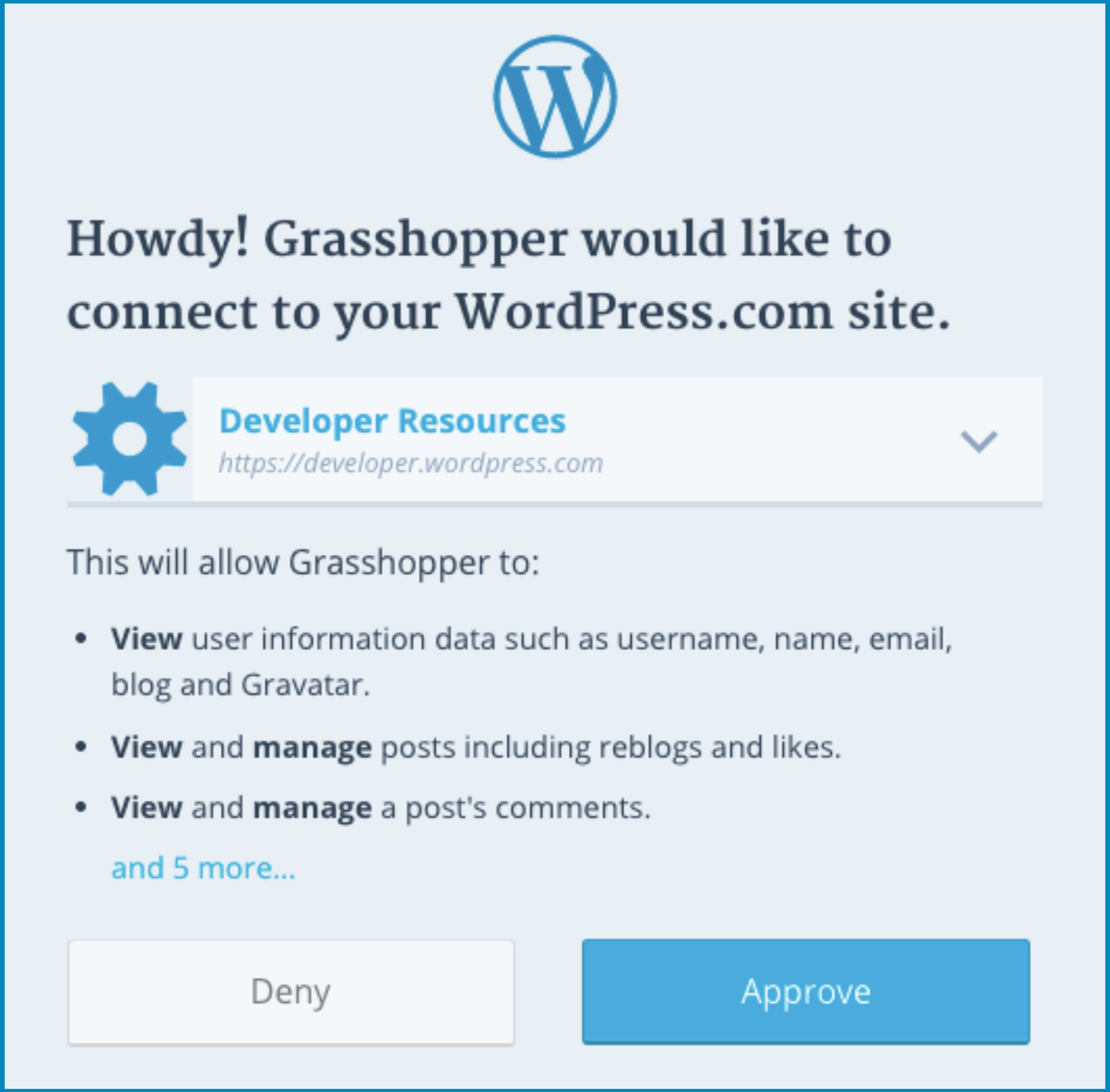
App Settings

developer.wordpress.com/apps/



Client ID	40443
Client Secret	[redacted]
Redirect URL	https://automattic.github.io/grasshopper/
Javascript Origins	https://automattic.github.io

oAuth Prompt



Howdy! Grasshopper would like to connect to your WordPress.com site.

Developer Resources
https://developer.wordpress.com

This will allow Grasshopper to:

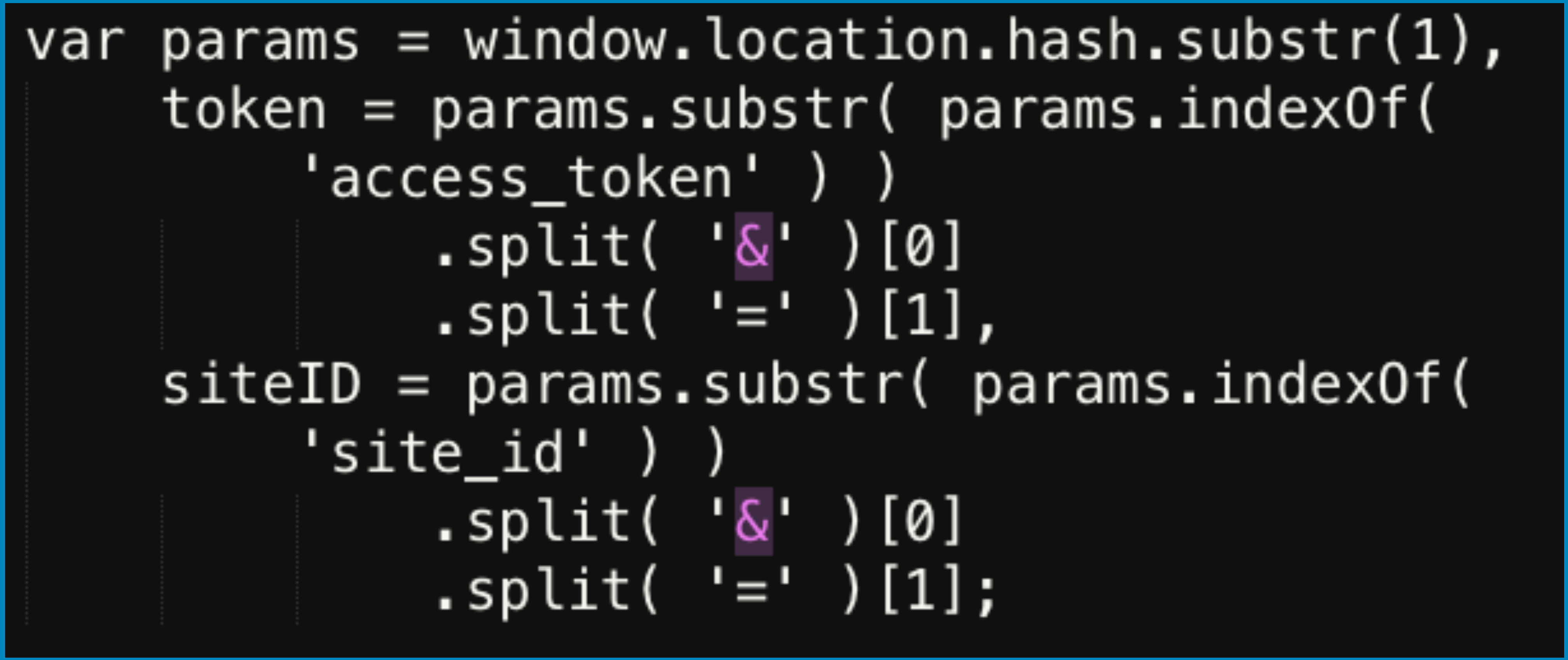
- **View** user information data such as username, name, email, blog and Gravatar.
- **View** and **manage** posts including reblogs and likes.
- **View** and **manage** a post's comments.

and 5 more...

Redirect

```
https://automattic.github.io/grasshopper

#access_token=yaZo%25kL%40%...

&expires_in=1209600

&token_type=bearer

&site_id=33534099
```

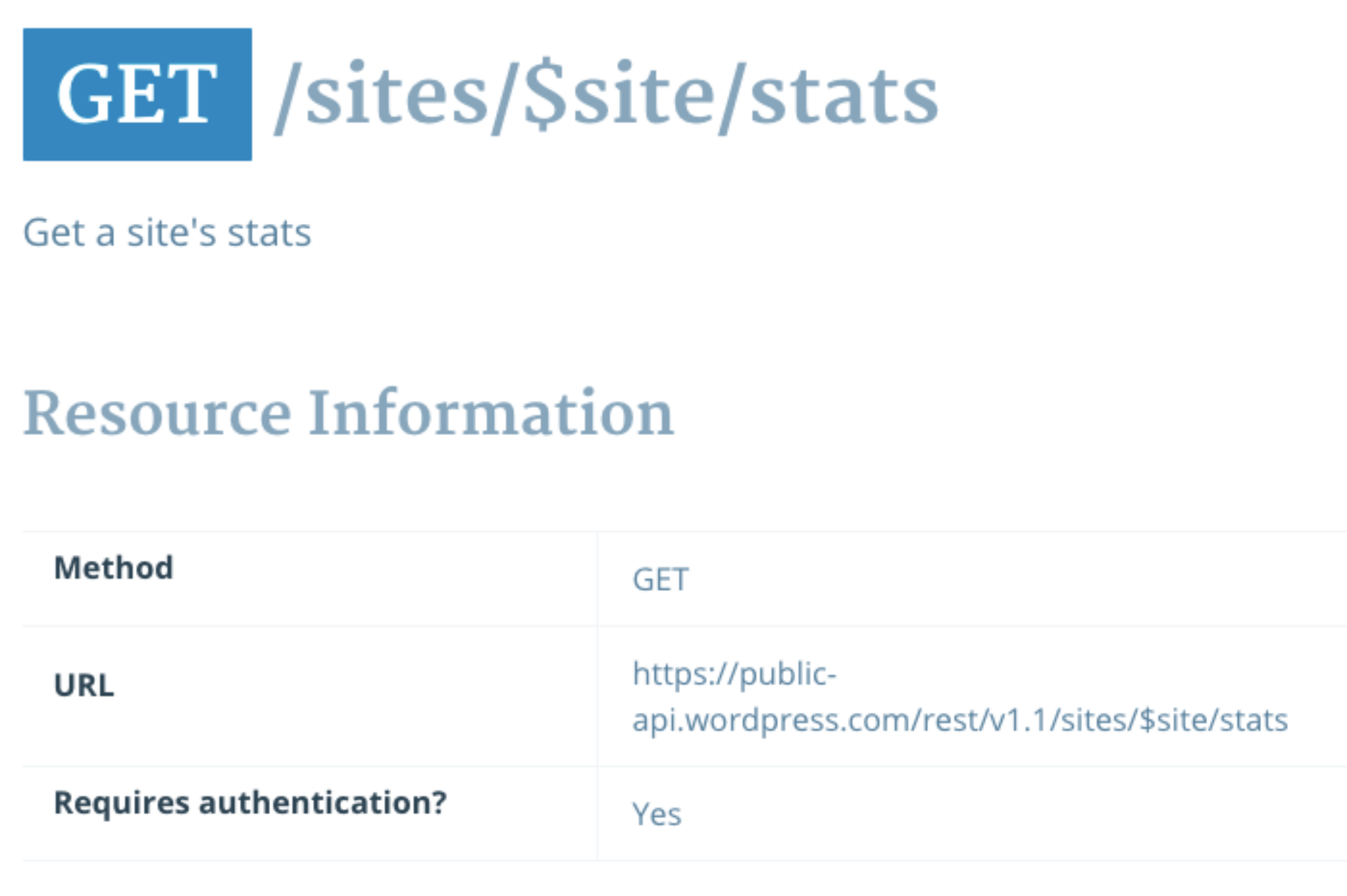
Save the token!



```
var params = window.location.hash.substr(1),
    token = params.substr( params.indexOf(
        'access_token' ) )
            .split( '&' )[0]
            .split( '=' )[1],
    siteID = params.substr( params.indexOf(
        'site_id' ) )
            .split( '&' )[0]
            .split( '=' )[1];
```

2. The Query

https://developer.wordpress.com/docs/api/



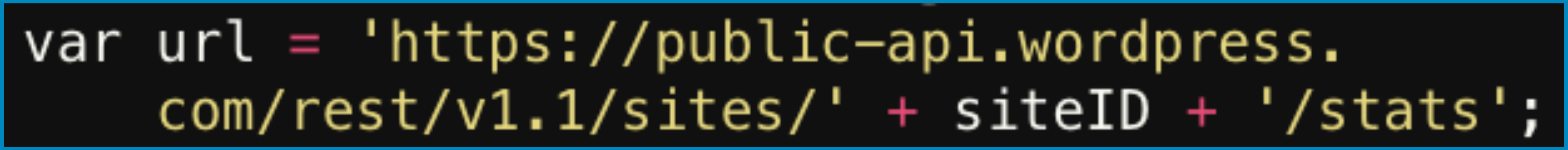
GET /sites/$site/stats

Get a site's stats

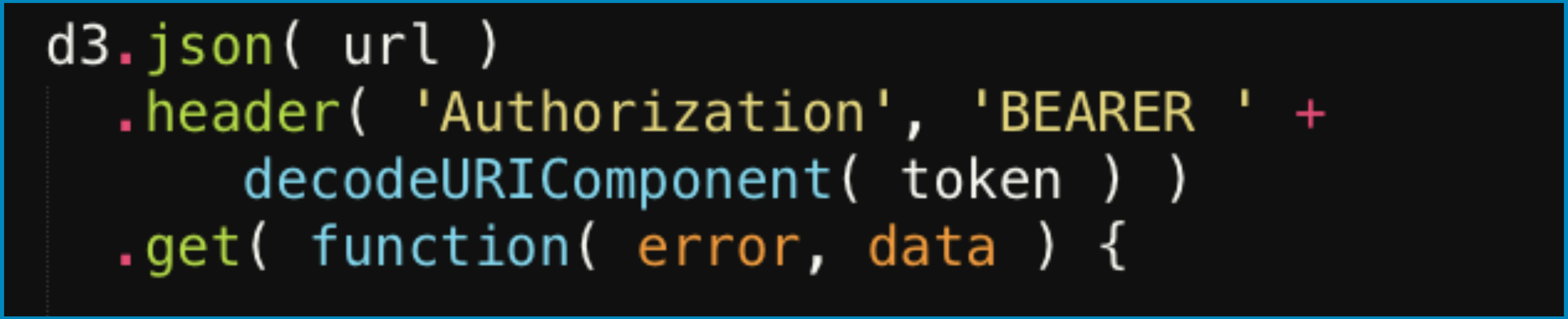
Resource Information

Method	GET
URL	https://public-api.wordpress.com/rest/v1.1/sites/$site/stats
Requires authentication?	Yes

2. The Query

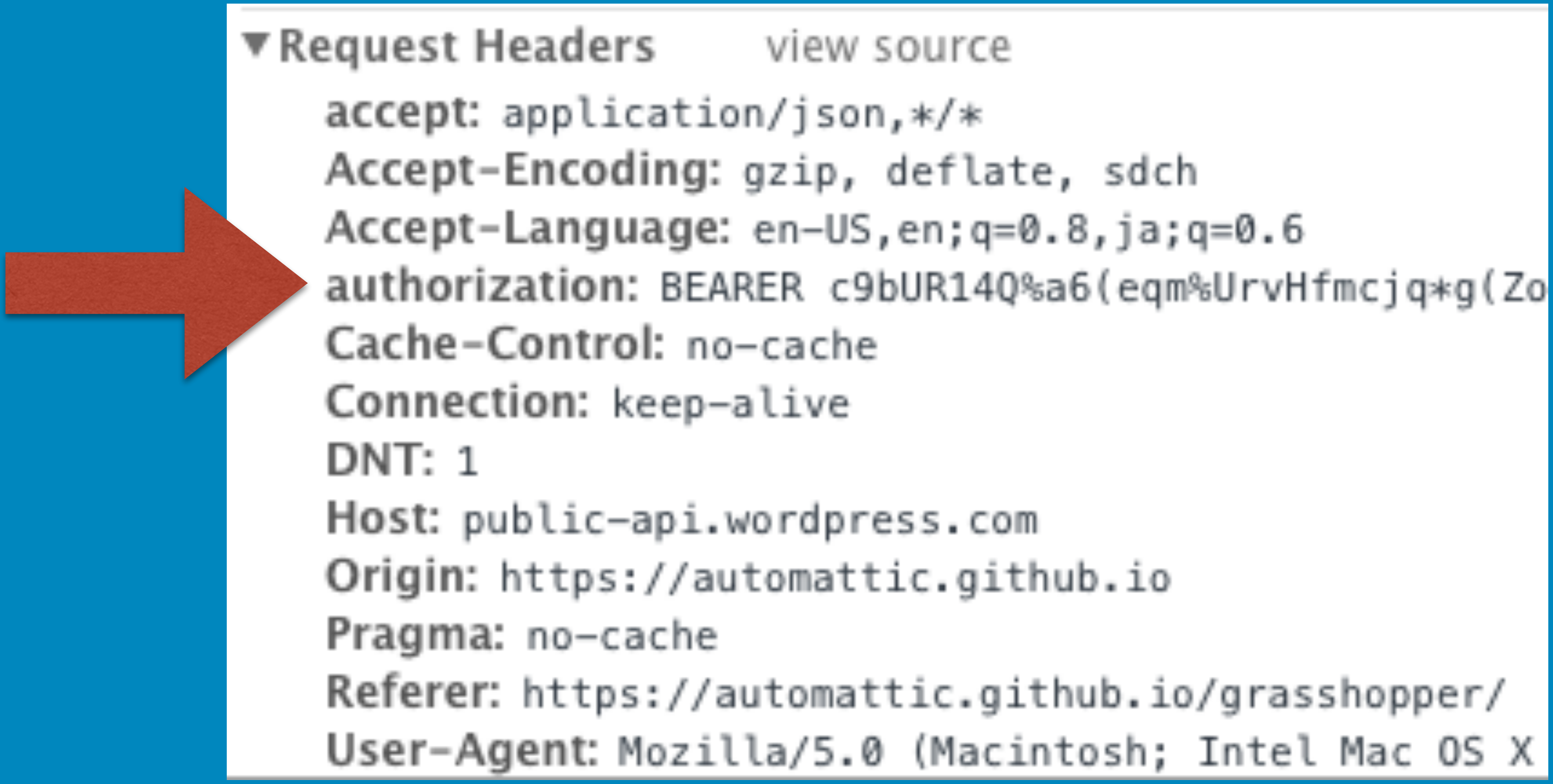


```
var url = 'https://public-api.wordpress.
    com/rest/v1.1/sites/' + siteID + '/stats';
```



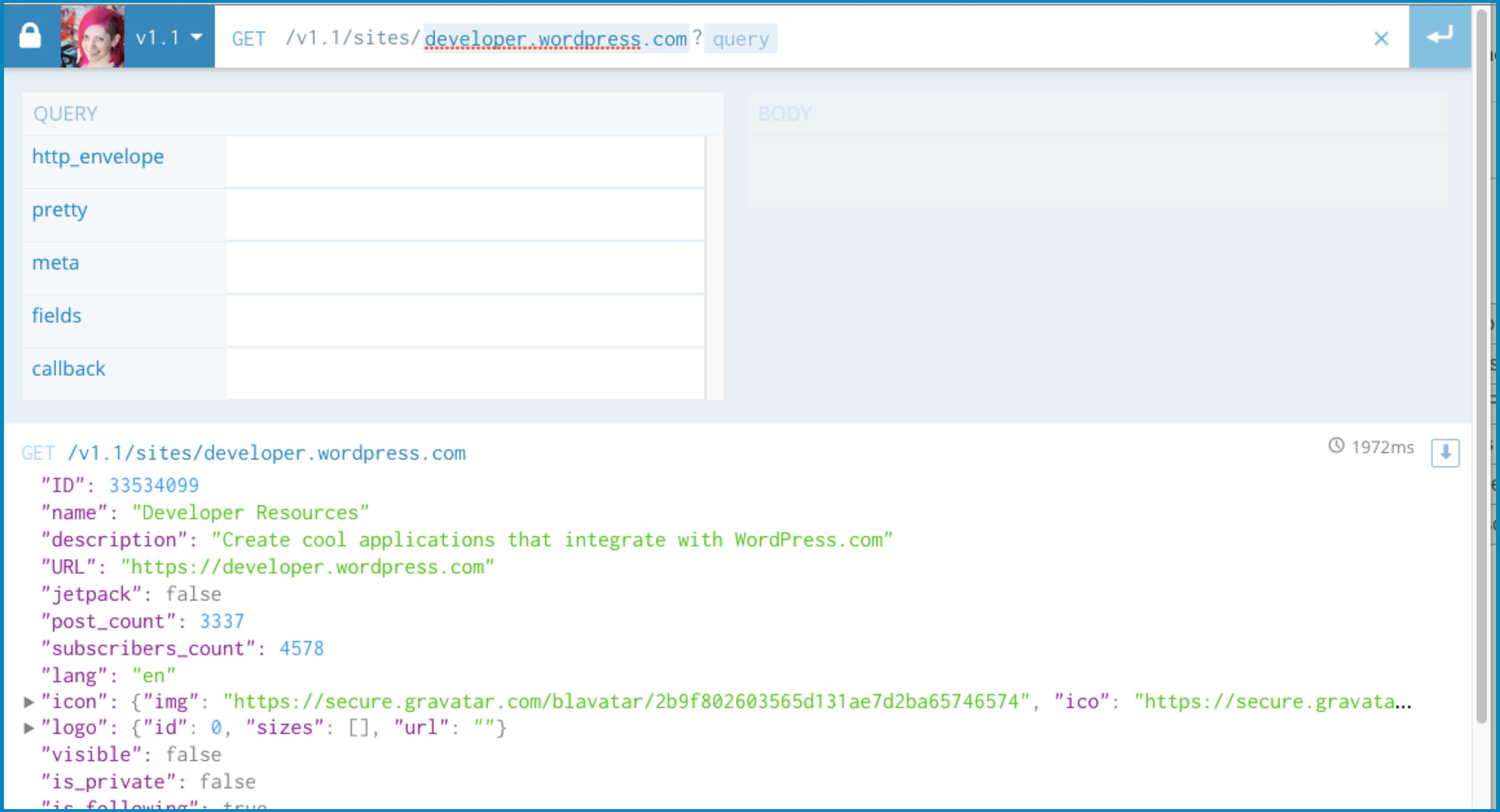
```
d3.json( url )
  .header( 'Authorization', 'BEARER ' +
      decodeURIComponent( token ) )
  .get( function( error, data ) {
```

Authorization Header



```
▼Request Headers      view source
    accept: application/json,*/*
    Accept-Encoding: gzip, deflate, sdch
    Accept-Language: en-US,en;q=0.8,ja;q=0.6
    authorization: BEARER c9bUR14Q%a6(eqm%UrvHfmcjq*g(Zo
    Cache-Control: no-cache
    Connection: keep-alive
    DNT: 1
    Host: public-api.wordpress.com
    Origin: https://automattic.github.io
    Pragma: no-cache
    Referer: https://automattic.github.io/grasshopper/
    User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X
```

Protip: Dev Console

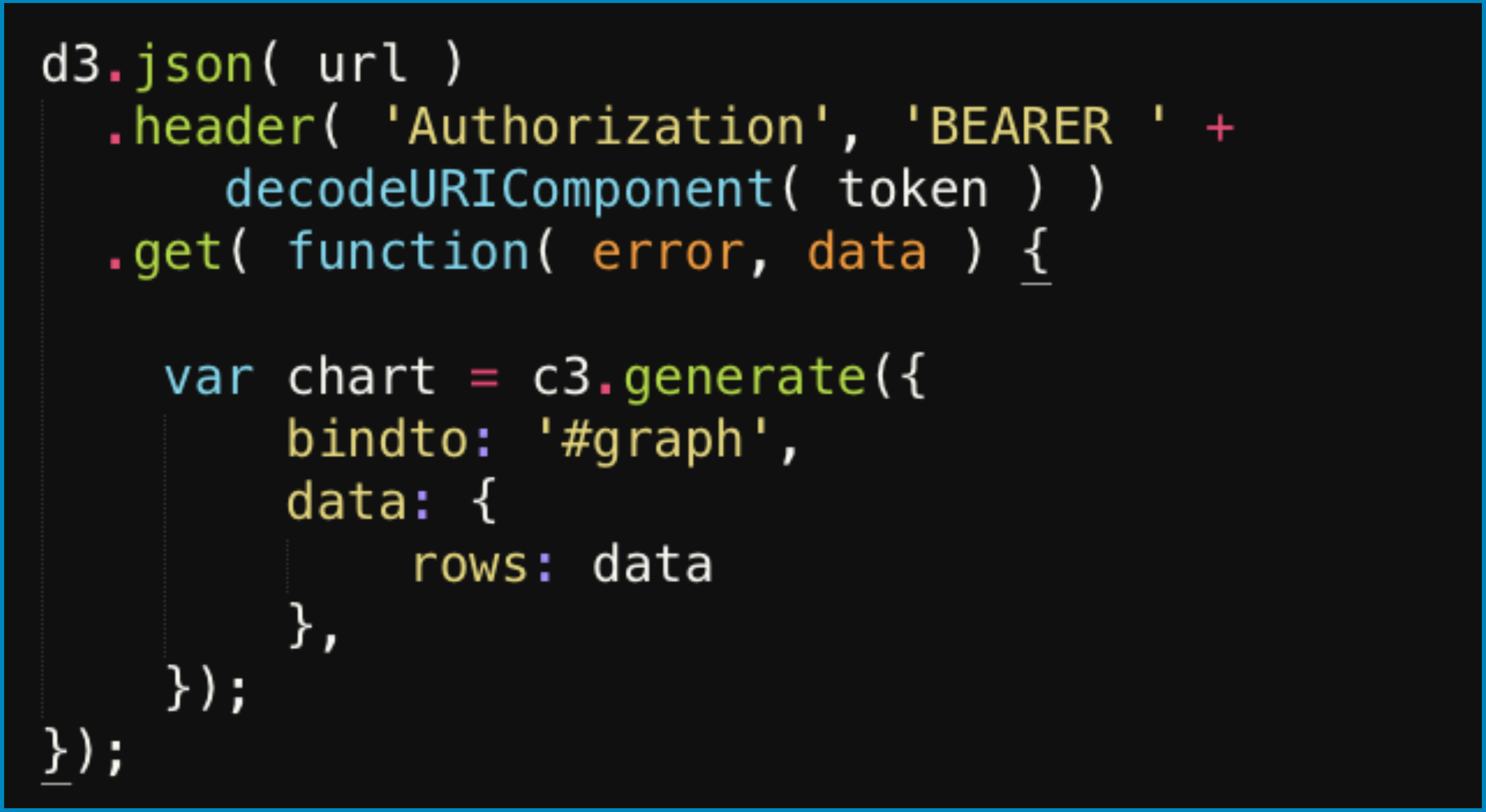


GET /v1.1/sites/developer.wordpress.com ? query

```
GET /v1.1/sites/developer.wordpress.com
  "ID": 33534099
  "name": "Developer Resources"
  "description": "Create cool applications that integrate with WordPress.com"
  "URL": "https://developer.wordpress.com"
  "jetpack": false
  "post_count": 3337
  "subscribers_count": 4578
  "lang": "en"
▶ "icon": {"img": "https://secure.gravatar.com/blavatar/2b9f802603565d131ae7d2ba65746574", "ico": "https://secure.gravata…
▶ "logo": {"id": 0, "sizes": [], "url": ""}
  "visible": false
  "is_private": false
  "is_following": true
```

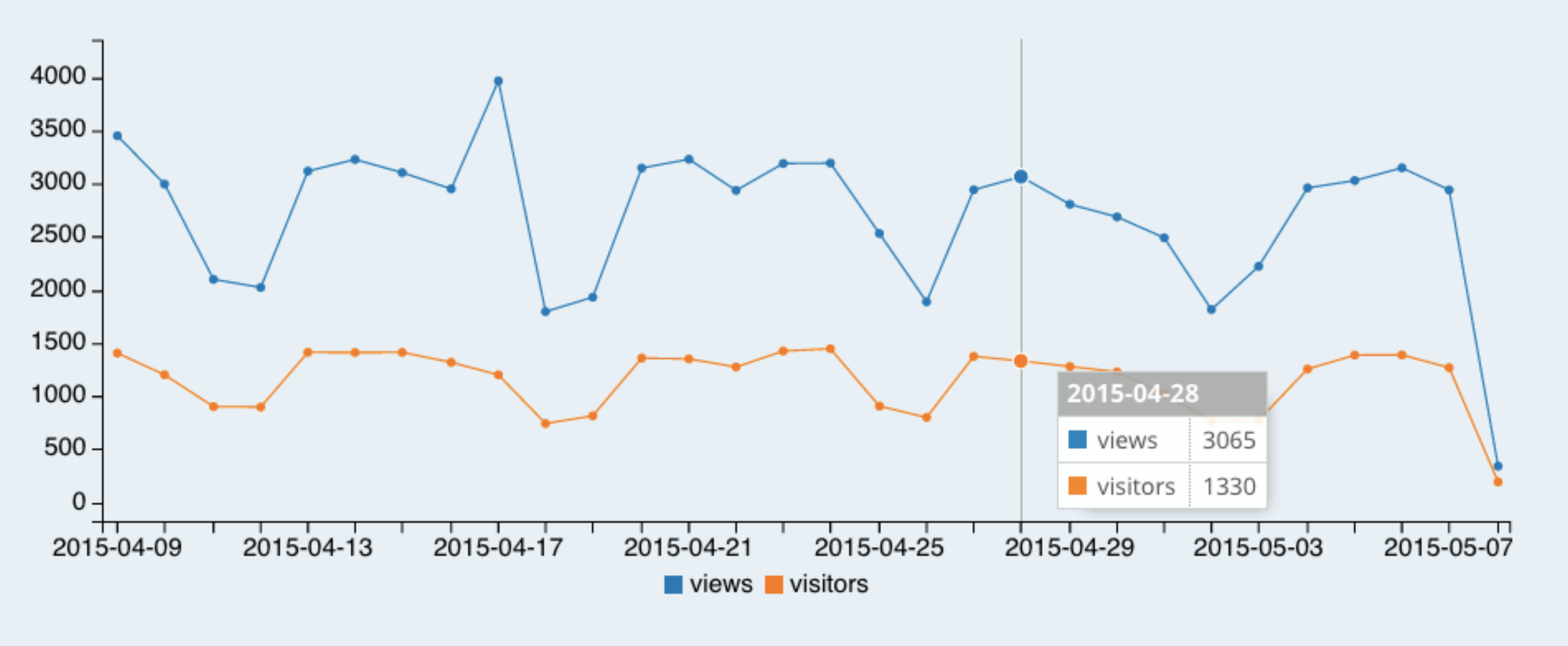
developer.wordpress.com/docs/api/console/

3. Graph it!



```
d3.json( url )
  .header( 'Authorization', 'BEARER ' +
      decodeURIComponent( token ) )
  .get( function( error, data ) {

    var chart = c3.generate({
        bindto: '#graph',
        data: {
            rows: data
        },
    });
});
```

The Result


4000
3500
3000
2500
2000
1500
1000
500
0
2015-04-09
2015-04-13
2015-04-17
2015-04-21
2015-04-25
2015-04-29
2015-05-03
2015-05-07
2015-04-28
views 3065
visitors 1330
views
visitors

Thanks!

codebykat.com/loopconf

developer.wordpress.com

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