

# WordCamp Ottawa 2014

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@jkudish

Let's talk about interacting with WordPress from outside of  
WordPress.

Oh by the way, these slides are at  
<http://slides.jkudish.com/>



# Howdy, Developers

Build something amazing that will reach over a billion people across more than 21% of the web.

[Get Started](#)

## REST API

Some of our available endpoints:



### Publishing

Push new content



### Likes

## Embed

Create embeddable timelines, follow, and share buttons.

### Timelines

New

Display a listing of your latest posts to your website with one line of code.

### Follow button

Let other WordPress.com users easily [follow your site](#).

Follow Developer Resources

2,208

+ Follow



# Howdy, Developers

Introducing the  
WordPress REST API

Get Started



## REST API

Some of our available endpoints:

### Publishing

Push new content



### Likes

# What is the API exactly?

- json RESTful API
- allows you to integrate data + features from WordPress into any application.
- works with any language/platform as long as it can make HTTP requests.
- works with WordPress.com and Jetpack-enabled WP.org blogs (since 1.9+! now at 2.9.3).

# What is the API exactly?

- uses oauth2 for authentication.
- some information queryable without authentication.
- insights/stats into your own app usage.

# What can you do with the API?

- user info
- site metadata
- create, edit, delete, find, reblog, and view posts (includes CPTs & post meta)
- create, edit, delete, find, and view comments
- search & related posts
- taxonomies (categories/tags & custom ones too)

# What can you do with the API?

- media
- likes & following/subscribing to a blog
- WordPress.com Freshly Pressed content
- notifications
- stats
- WordPress.com reader
- your own app's insights

Who's using it?

[View In iTunes](#)

+ This app is designed for both iPhone and iPad

Free

Category: [Social Networking](#)

Updated: Apr 15, 2014

Version: 4.0.2

Size: 14.4 MB

Languages: English, Bokmål, Norwegian, Croatian, Danish, Dutch, French, German, Hebrew, Hungarian, Indonesian, Italian, Japanese, Korean, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Thai, Traditional Chinese, Turkish

Seller: Automattic, Inc.

© Automattic Inc

[Rated 4+](#)

Compatibility: Requires iOS 7.0 or later. Compatible with iPhone, iPad, and iPod touch.

This app is optimized for iPhone 5.

## Description

It's easy to manage your WordPress blog or site from your iOS device. With WordPress for iOS, you can moderate comments, create or edit posts and pages, view stats, and add images or videos with ease. All you need is a WordPress.com blog or a self-hosted WordPress.org site running 3.6 or higher.

[Automatic Web Site](#) ▾ [WordPress Support](#) ▾

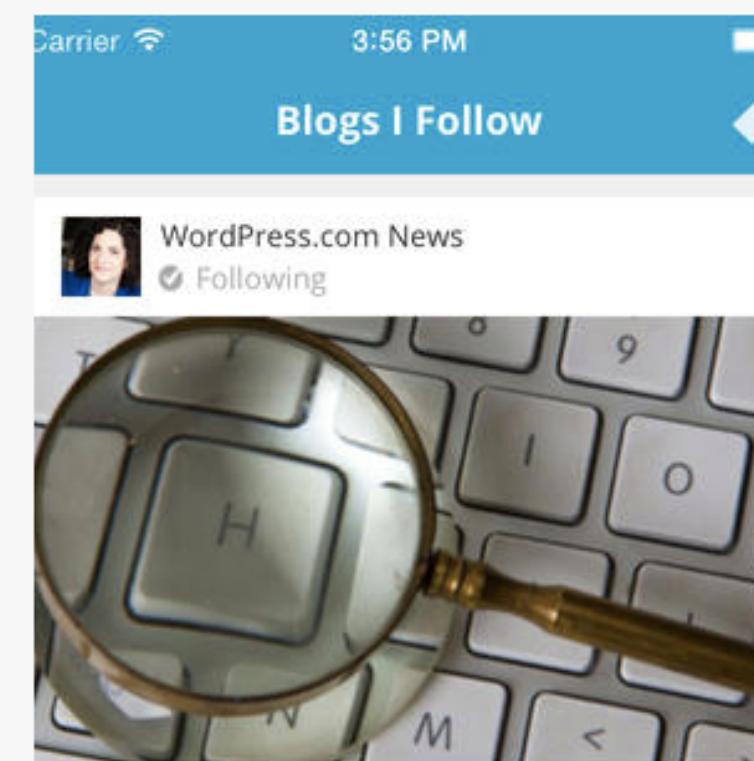
[...More](#)

## What's New in Version 4.0.2

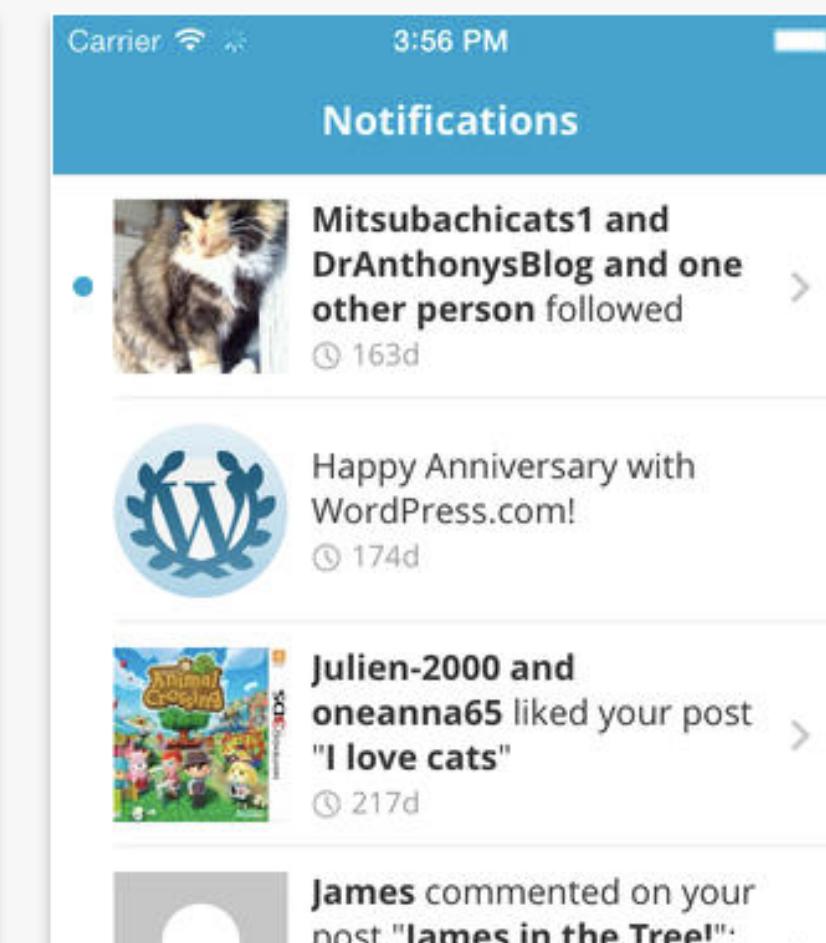
Fixed a bug where users were unable to schedule posts.

## Screenshots

[iPhone](#) | [iPad](#)



**How To Be a WordPress.com Detective**





Search



Sign in



Apps

My apps

Shop

Games

Editors' Choice



# WordPress

Automatic, Inc - May 1, 2014

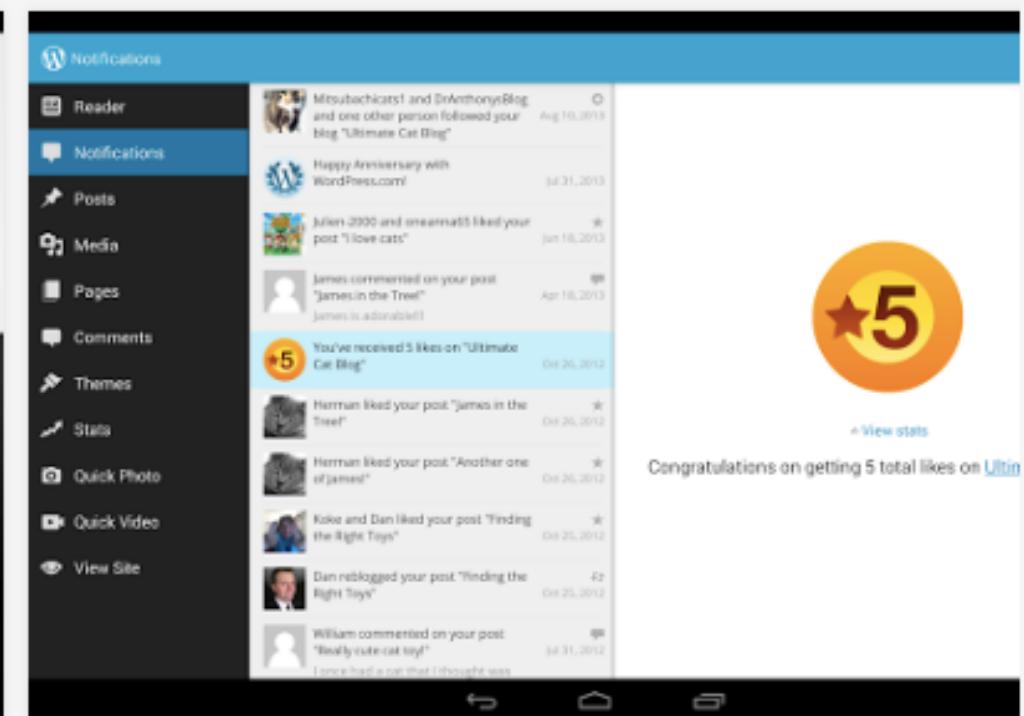
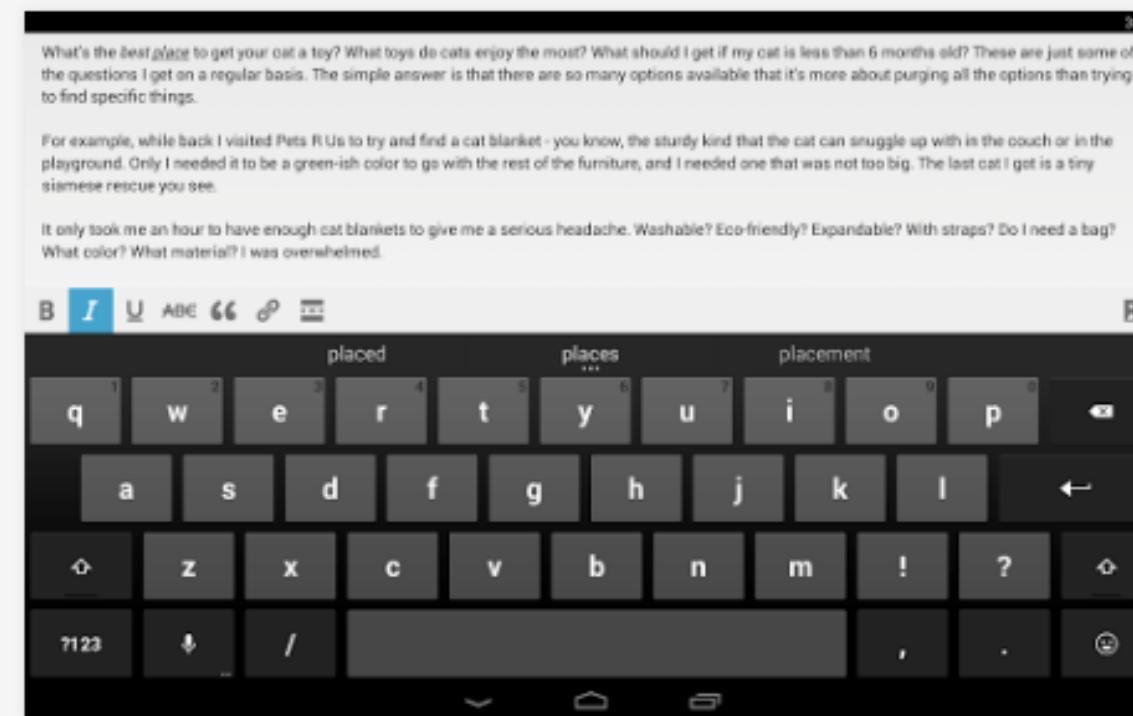
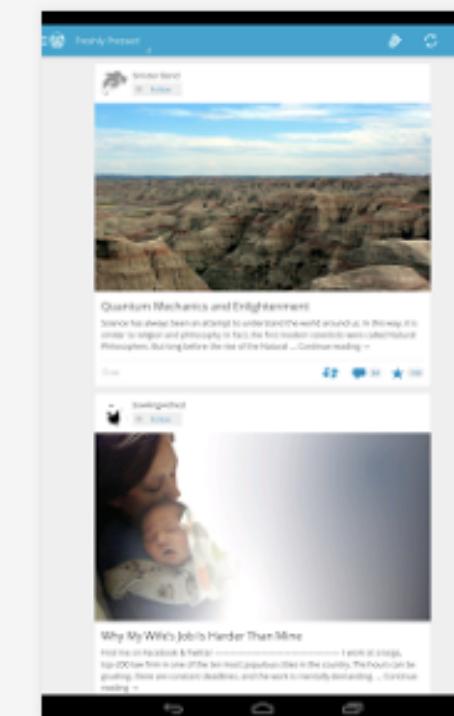
Social

Install

Add to Wishlist

★★★★★ (36,582)

Top Developer





## Freshly Pressed



Most Call it Mardi Gras, Some  
Call it Shrove Tuesday, I Call it  
Pancake Day!

Foodimentary



Images from Hanoi  
Not Really a Blog



Losing Yourself and Finding  
Some Chocolate: Beating the  
Writer's Block  
Lantern Hollow Press



The Vegetarian's Dilemma  
The Camel Life



Silent Colors  
plain steam rice



2012 Austin Marathon  
Behind the scene with Bean



The Roundtable: Oscars' in the  
Air  
Filmophilia



A Walk in the Minnesota Woods  
Sarah takes pictures.



The Doggie Dash – A Six Legged  
Race  
My Everyday Photos



CBMK Skatepark  
christophbphoto



Reader

Stats

My Blogs

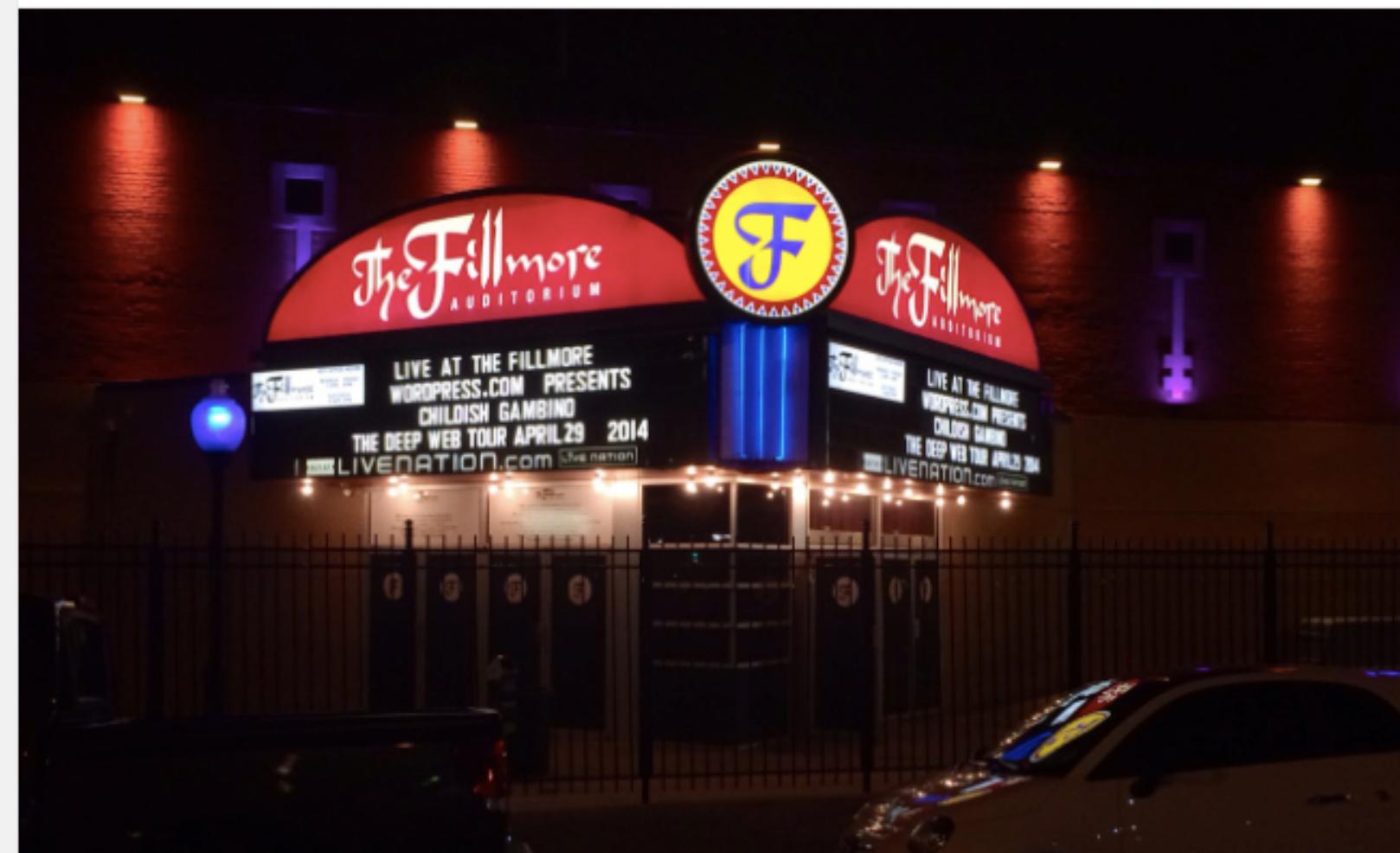
Freshly Pressed

New Post



Matt on Not-WordPress

Following



## Live at the Fillmore

Moblog

① 3d

Reblog

Comment 4

Like 149

YOU MAY LIKE

MORE



MacManX.com

Followed by people with similar interests



John James Jacoby

Followed by bloggers you follow



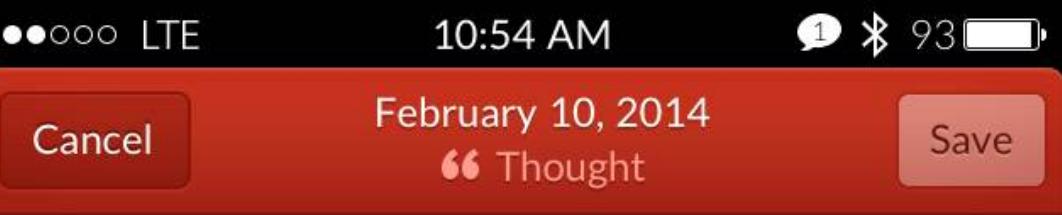
Matt Miklic

Followed by bloggers you follow



Photos

Followed by people with similar interests



What's on your mind?

I'm with...

I'm at...





Wordpress.com

Disconnect



Last.fm

Connect

Close

Share



Evernote



Facebook



Kippt



LinkedIn



Pinboard



Reddit



StumbleUpon



Tumblr



Twitter



WordPress



APPS

[Browse Recipes](#)[Sign in](#)[Join](#)

# WordPress Channel

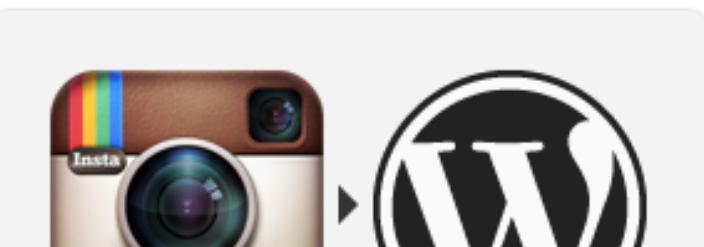
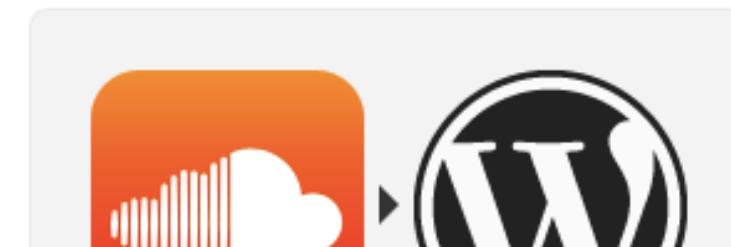
IFTTT enables you to connect the WordPress Channel to 100 different Channels. [View all Channels](#)



WordPress is an open source blog tool and publishing platform. [WordPress.com](#) is a hosted weblog provider brought to you by some of the same folks who work on the open source blogging software.

[Activate](#)

## Popular WordPress Recipes



Let's get started



Developers

Documentation

Blog

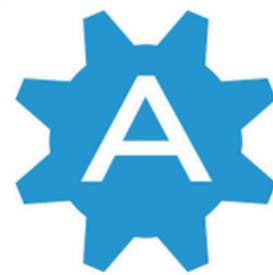
My Apps

Contact

DEVELOPER.WORDPRESS.COM/APPS/

[Create New Application](#)

# My Applications



## WordPress.com Test Application

The best app you will ever use.

[View Insights](#) |  [Manage Application](#)

**Name**

The name of your application. This is used in the authorization dialogs.

**Description**

The description of your application.

**Website URL**

The URL to an informational home page about your application.

**Redirect URL**

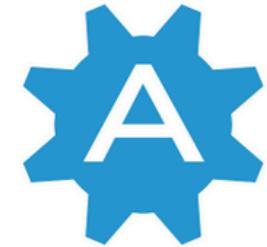
The URL we should redirect to during the authorization process.

**Type**

- Web** clients must be able to keep the generated secret private and should do all authenticated API calls server to server.
- Native** clients are those that cannot keep the generated secret private. They usually live in a user's browser or mobile device and make client-side authenticated API calls.

**Create**

## WordPress.com Test Application



App Description: The best app you will ever use.

App URL: <http://binarysmash.com/>

## Tools

- [Manage Settings](#)
- [Manage Users](#)
- [View Insights New](#)
- [Documentation](#)
- [Developer Console](#)
- [Create New App](#)
- [Contact](#)
- [Delete Application](#)

## OAuth Information

<b>Client ID</b>	### ID GOES HERE ###	
<b>Client Secret</b>	Random String of Characters	<a href="#">Reset Key</a>
<b>Redirect URL</b>	<a href="http://binarysmash.com/wpoauth/">http://binarysmash.com/wpoauth/</a>	
<b>Type</b>	Native	
<b>Request token URL</b>	<a href="https://public-api.wordpress.com/oauth2/token">https://public-api.wordpress.com/oauth2/token</a>	

## Save them for later

```
$client_id = '1';  
$client_secret = '#####';  
$redirect_url = 'http://wordcampottawaisthebest.com';
```

# AUTHENTICATION

- done via OAuth2
- authorization\_code grant type

DEVELOPER.WORDPRESS.COM/DOCS/OAUTH2/

## OAUTH2 ENDPOINTS

- <https://public-api.wordpress.com/oauth2/authorize>
- <https://public-api.wordpress.com/oauth2/token>

## FIRST STEP: REDIRECT

- [https://public-api.wordpress.com/oauth2/authorize?  
\*\*client\\_id=your\\_client\\_id&redirect\\_uri=your\\_url&response\\_type=\*\*  
code](https://public-api.wordpress.com/oauth2/authorize?client_id=your_client_id&redirect_uri=your_url&response_type=code)
- Exchange it for access



Howdy **justin**, Klout wants to connect to WordPress.com.

Select a blog to connect:

- Select -

A standard light-grey dropdown menu button with a small arrow pointing down on its right side.

or enter your site's URL here

Authorize

Cancel

What permissions are being granted?

To connect using an account other than **justin** please [sign out](#) first.

In return, you get a code!!

<http://wordcampottawa.com/myapp/?code=cw9hk1xG9k>

# Let's send that back to get access

```
$curl = curl_init( "https://public-api.wordpress.com/oauth2/token" );
curl_setopt( $curl, CURLOPT_POST, true );
curl_setopt( $curl, CURLOPT_POSTFIELDS, array(
    'client_id' => $client_id,
    'redirect_uri' => $redirect_uri,
    'client_secret' => sanitize_key( $_GET['code'] ), // the code we got from the authorization screen
    'grant_type' => 'authorization_code',
) );
curl_setopt( $curl, CURLOPT_RETURNTRANSFER, 1 );
$auth = curl_exec( $curl );
```

# You get some handy stuff back

```
$secret = json_decode( $auth );
print_r( $secret );

{
    'access_token' : **YOUR_API_TOKEN**
    'blog_id' : 1234
    'blog_url' : 'http://mysupercooljetpackblog.com'
    'token_type' : 'bearer',
}
```

Save the token and site ID for later.

```
$access_token = $secret->access_token;  
$site_id = $secret->blog_id;
```

*Huzzah! authentication is as simple as that...*

What good is any of this so far?

Let's make our first *real* API call.

WHO AM I??

[https://public-api.wordpress.com/  
rest/v1/me](https://public-api.wordpress.com/rest/v1/me)

```
$options = array(
    'http' =>
        array(
            'ignore_errors' => true,
            'header' => array(
                'authorization: Bearer ' . **$access_token**,
            ),
        ),
),
);

$context = stream_context_create( $options );
$response = file_get_contents( 'https://public-api.wordpress.com/rest/v1/me' , false , $context );

$response = json_decode( $response );
```

GET https://public-api.wordpress.com/rest/v1/me

```
{  
    "ID": 10916751,  
    "display_name": "Joey Kudish",  
    "username": "jkudish",  
    "email": "jkudish@automattic.com",  
    "primary_blog": 21221610,  
    "token_site_id": false,  
    "avatar_URL": "https://2.gravatar.com/avatar/e3b86944dc95b3f722798bc3a74fe11d?s=96&d=identicon",  
    "profile_URL": "http://en.gravatar.com/jkudish",  
    "verified": true,  
    "meta": {  
        "links": {  
            "self": "https://public-api.wordpress.com/rest/v1/me",  
            "help": "https://public-api.wordpress.com/rest/v1/me/help",  
            "site": "https://public-api.wordpress.com/rest/v1/sites/5836086"  
        }  
    }  
}
```

# What theme am I running on my primary blog?

GET `https://public-api.wordpress.com/rest/v1/sites/21221610/themes/mine`

(We got the site ID from the `primary_blog` key from the last response.)

```
{  
    "id": "writr",  
    "screenshot": "https://i2.wp.com/s0.wp.com/wp-content/themes/pub/writr/screenshot.png",  
    "cost": {  
        "currency": "USD",  
        "number": 0,  
        "display": ""  
    },  
    "version": "1.0.8",  
    "download_url": "https://public-api.wordpress.com/rest/v1/themes/download/writr.zip",  
    "trending_rank": 62,  
    "popularity_rank": 66,  
    "launch_date": "2013-10-31",  
    "name": "Writr",  
    "description": "Writr is a minimalist...",  
    "tags": [ ... ]  
}
```

# Let's change it!

```
POST https://public-api.wordpress.com/rest/v1/  
sites/21221610/themes/mine
```

```
curl 'https://public-api.wordpress.com/rest/v1/  
sites/36336212/themes/mine?http_envelope=1' --  
data 'theme=twentythirteen'
```

*(auth removed for brevity)*

```
{  
  "id": "twentythirteen",  
  "screenshot": "https://i1.wp.com/s0.wp.com/wp-content/themes/pub/twentythirteen/screenshot.png",  
  "cost": {  
    "currency": "USD",  
    "number": 0,  
    "display": ""  
  },  
  "version": "1.2",  
  "download_url": "",  
  "trending_rank": 54,  
  "popularity_rank": 7,  
  "launch_date": "2013-04-24",  
  "name": "Twenty Thirteen",  
  "description": "The 2013 theme ...",  
  "tags": [ ... ]  
}
```

## Jetpack just works

- you don't need to do anything special, just activate the JSON API module (auto-activated by default),
- Jetpack sites show up in the OAuth Dialog.
- Jetpack sites have a site ID just like WordPress.com.
- a few endpoints (e.g. reblogging) are WordPress.com only.
- the /me endpoint always returns the WordPress.com user.

Developer Resources

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

W Developers Documentation Blog My Apps Contact Search ...

# Documentation

Getting started with WordPress.com development is easy. Our data is exposed via a REST Application Programming Interface (API) and uses the OAuth2 protocol for authentication.

Ready to start developing your application? Great! [Create a new application](#); you'll need to provide some basic information about your application and then you'll receive an OAuth2 token for use in your application.

In addition to the REST API, we also support additional integrations & partnerships. Take a look at our documentation!

## Browse by Topic

### API

- [REST API](#)
- [OAuth Authentication](#)
- [Developer Console](#)
- [oEmbed Provider API](#)

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[A brand new Developer Site](#)

[Introducing WordPress.com Insights](#)

[An efficient alternative to paging with SQL OFFSETS](#)

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[Home](#)

[REST API Resources](#)

Follow

REST Explorer

https://developer.wordpress.com/docs/api/console/ 142 ms 200

REFERENCE

SITES

GET /sites/\$site Information about a site ID/domain

POSTS

GET /sites/\$site/posts/ Return matching Posts

GET /sites/\$site/posts/\$post\_ID Return a single Post (by ID)

POST /sites/\$site/posts/\$post\_ID Edit a Post

PATH Raw

\$site 3584907

QUERY Raw

http\_envelope

pretty

meta

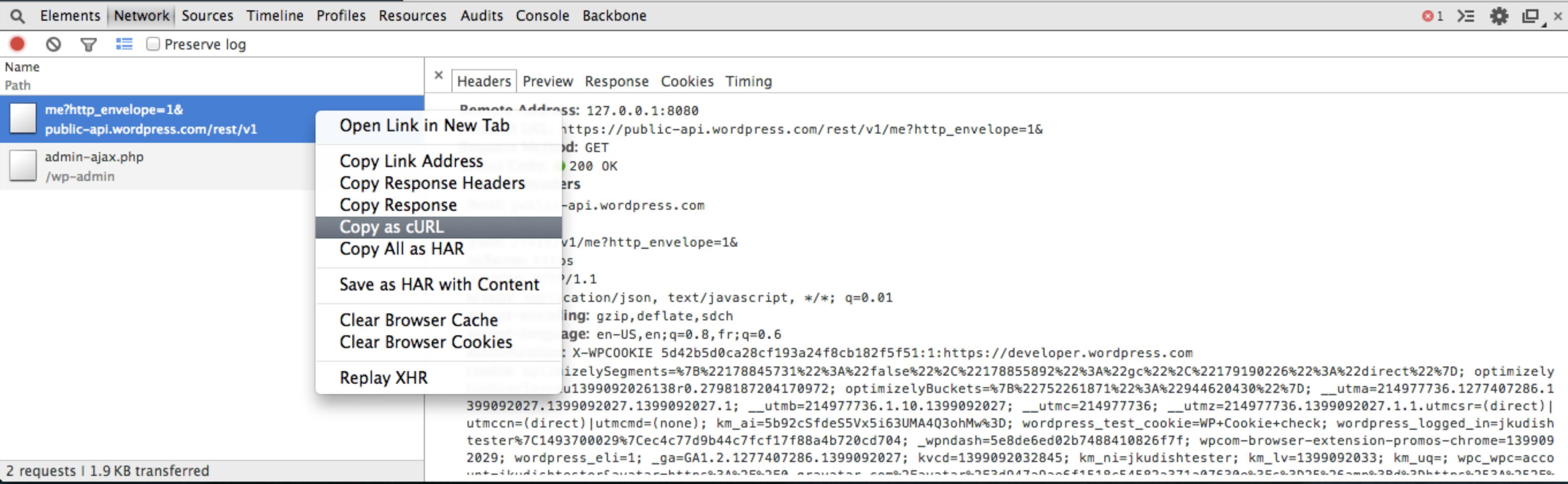
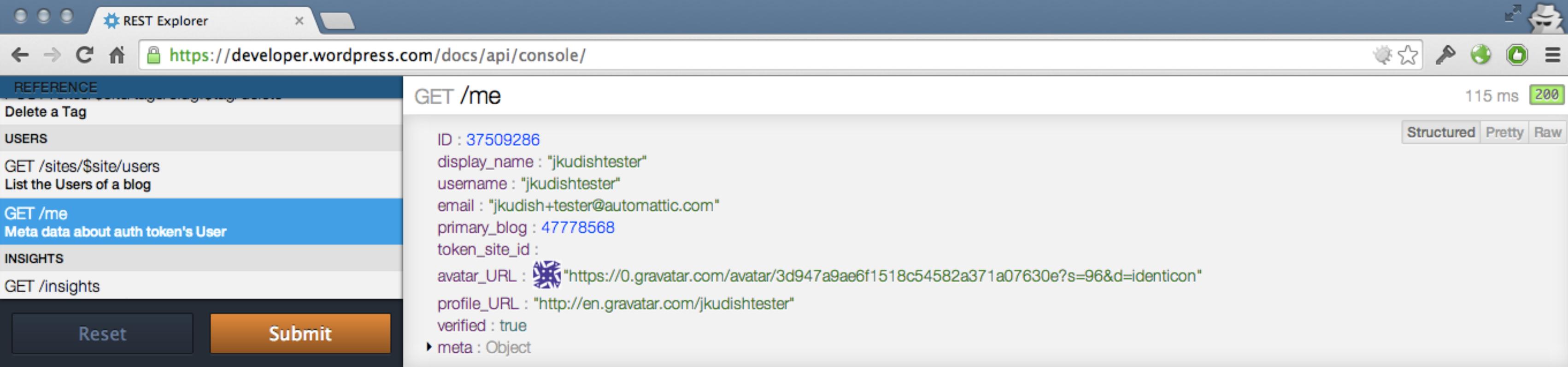
fields

callback

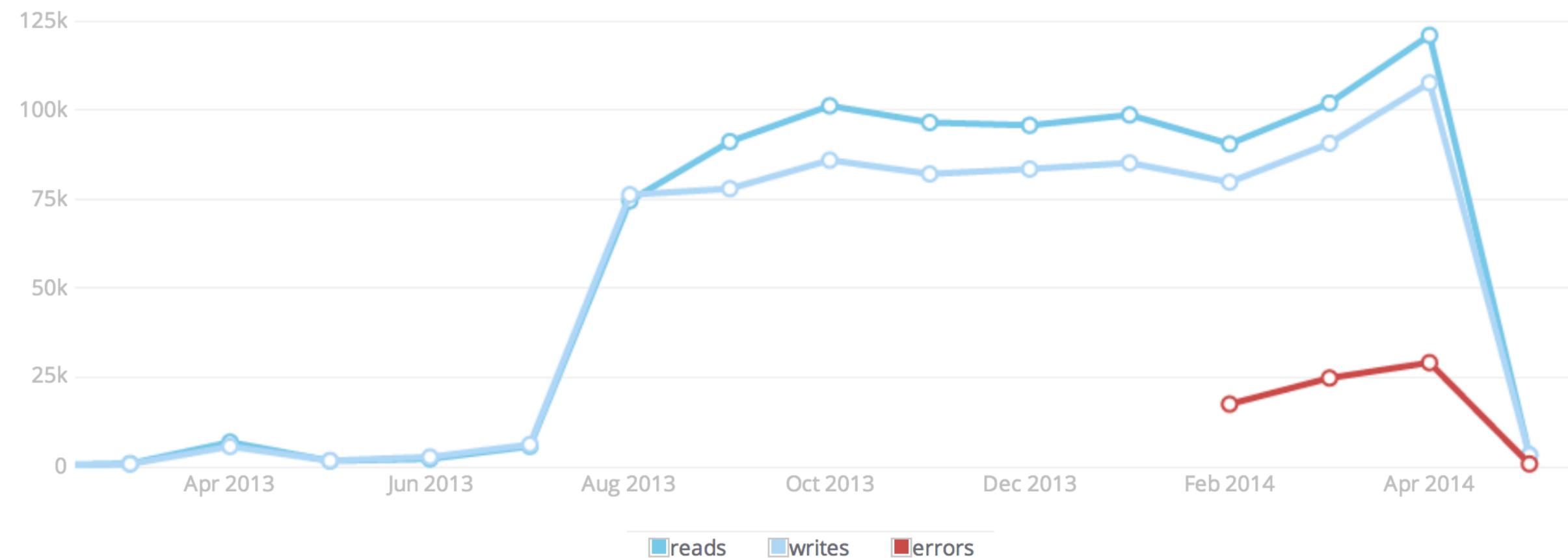
Reset Submit Structured Pretty Raw

GET /sites/3584907

ID : 3584907  
name : "WordPress.com News"  
description : "The latest news on WordPress.com and the WordPress community."  
URL : "http://en.blog.wordpress.com"  
jetpack :  
post\_count : 1088  
subscribers\_count : 11057944  
lang : "en"  
visible : true  
is\_private :  
is\_following :  
▶ meta : Object



## API Overview



## Today's API Numbers

API Calls

▲ 5%

10,323

Posts

▲ 14.5%

1,053

Likes On Published Posts

▲ 0%

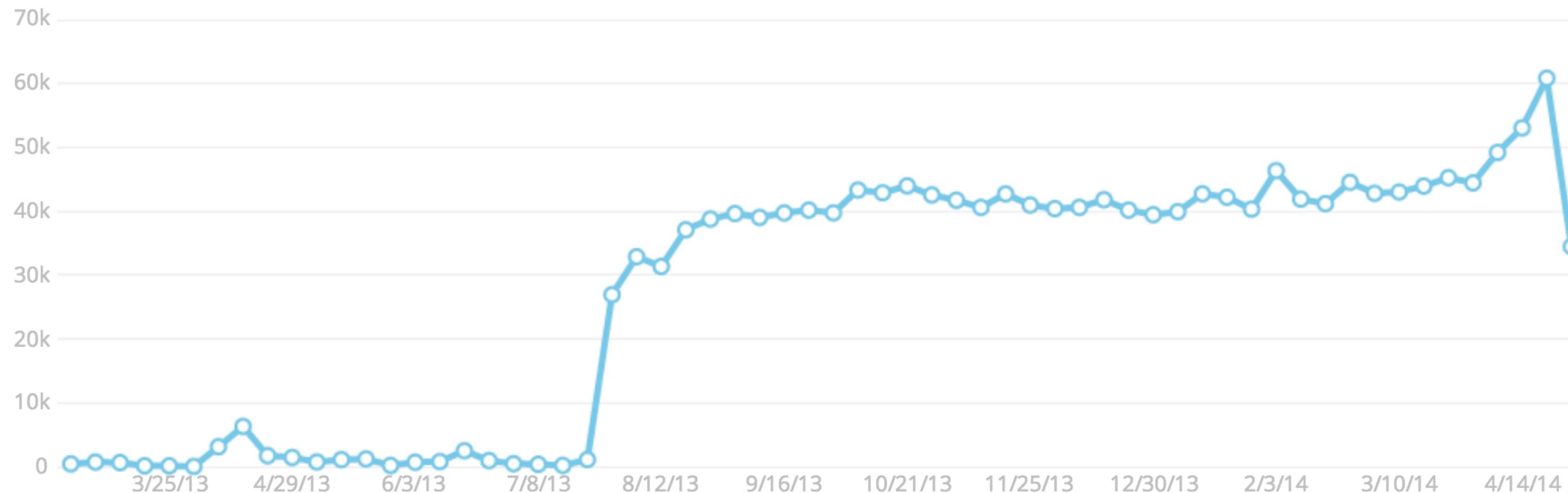
93

## Tools

- Developer Console
- Create New App
- Share
- Documentation
- Insights Help

[Daily](#)[Weekly](#)[Monthly](#)[Cumulative](#)Start End 

## Calls

[Export](#)**10,323** Daily

▲ 5% since yesterday

**64,760** Weekly

▲ 19.2% since last week

**235,581** Monthly

▲ 22.1% since last month

**1,666,541** Yearly

▲ 11338.2% since last year

# Custom Post Types & metadata

- If you're a WordPress.com VIP client or use Jetpack, you can easily support CPTs and custom metadata in the REST API
- <http://wp.me/p2gHKz-OY>
- There's 2 filters `rest_api_allowed_post_types` and `rest_api_allowed_public_metadata`

# Don't want to query blogs? Just need auth?

Try WPCC



# Want a follow button?

<http://developer.wordpress.com/docs/follow-button-creation/>

The follow button is a small button that you can add to any site, that will allow WordPress.com users to easily follow the specified WordPress.com or Jetpack enabled blog.

Following 2,209

Use the options below to generate the code for your WordPress.com Follow Button. You can use the generated code snippet to embed the Follow button anywhere you'd like to on the web.

Recent Posts: Developer Resources

For more information on how to use this generator, [click here](#).

[A brand new Developer Site](#)  
[Introducing WordPress.com Insights](#)  
[An efficient alternative to paging with SQL OFFSETS](#)

## Button Options

Blog to follow

Show follower count

Top Posts & Pages

Show blog name

Home

Language

REST API Resources

**Generate**

Documentation

## Preview and code

OAuth2 Authentication

Try out your button, then copy and paste the code below into the HTML for your site.

Follow Button Creation

Following WordPress.com News 11,067,478

WordPress.com Firehose

```
<a class="wordpress-follow-button" href="http://en.blog.wordpress.com" data-blog="http://en.blog.wordpress.com" data-lang="en" data-show-follower-count="true">Follow
```

Photon

Contact

Theme Guide

WordPress.com Connect

# Want an embeddable timeline

<http://developer.wordpress.com/docs/embedded-timelines/>

Developer Resources

developer.wordpress.com/docs/embedded-timelines/ Reader

Developer Resources Following Joey

1 | <a class="wordpress-timeline" href="http://en.blog.wordpress.com" data-theme="da:

**WordPress.com** Following

**News**

The latest news on WordPress.com and the WordPress community.

[Continue reading →](#)  
[wp.me/pf2B5-6WG](http://wp.me/pf2B5-6WG)

 **Around the World in Ten Photos** Apr 25

WordPress.com photographers across the globe know how to capture the perfect moment at any time of day. [Continue reading →](#)  
[wp.me/pf2B5-6UZ](http://wp.me/pf2B5-6UZ)

 **New Themes: Alto, Collective, and Worldview** Apr 24

Powered by WordPress.com

1 | <a class="wordpress-timeline" href="http://developer.wordpress.com" data-show-gr

**Developer Resources** Following

Create cool applications that integrate with WordPress.com

 **A brand new Developer Site** Mar 18

As you may have noticed, we've just relaunched the WordPress.com Developer site (the very one you're reading right now!) with a brand new look and feel! We've rebranded the site to match the overall WordPress.com aesthetic as well as to ...

# I'm lost, what are my resources?

- All the docs are at [developer.wordpress.com/docs](https://developer.wordpress.com/docs).
- Other resources at [developer.wordpress.com](https://developer.wordpress.com).
- Tweet us @AutomatticEng.
- Contact form (we reply within a day usually)  
[developer.wordpress.com/contact](https://developer.wordpress.com/contact).
- Email me directly: [jkudish@automattic.com](mailto:jkudish@automattic.com).

# What's next?

- support for publicize (automatic publishing to external services) in the API.
- bring all the endpoints up to par with wp-admin. Everything you can do in wp-admin should be do-able from the API.
- implicit oauth.
- more how-to's and sample apps on the developer site
- CORS support: so that you can build a full JS app without any server-side code or hacky iFrames.

# Ask me Anything + Discussion

- REST API/Developer resources
- WordPress.com/Jetpack
- WordPress development at large
- Working remotely (and travelling while doing it!)
- Automattic
- Beagles
- Bonus (time permitting): let's create your first app