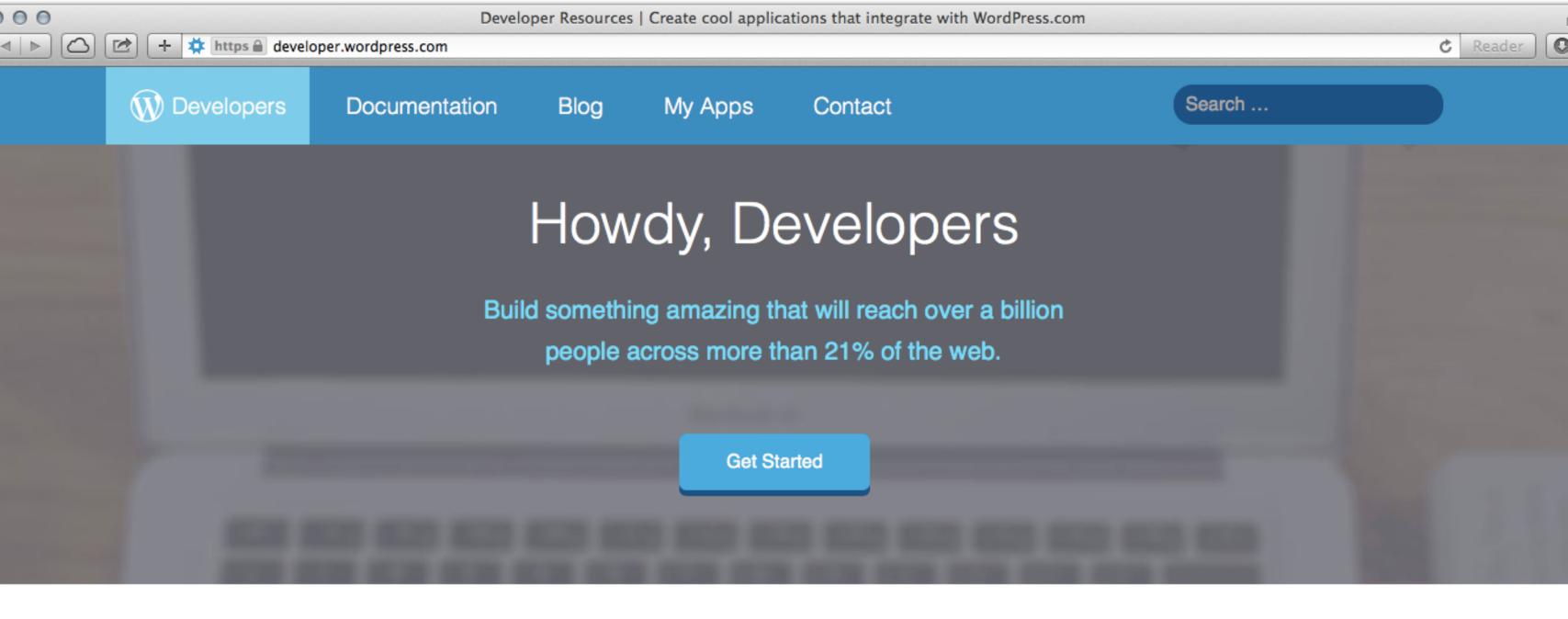
WordCamp Ottawa 2014

Joey Kudish Partnership Engineer at Automattic jkudish.com @jkudish

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



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.

W Follow Developer Resources

2,208



What is the API exactly?

- ison 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?

+ itunes.apple.com/ca/app/wordpress/id335703880?mt=8



View In iTunes

🗄 This app is designed for both iPhone and iPad

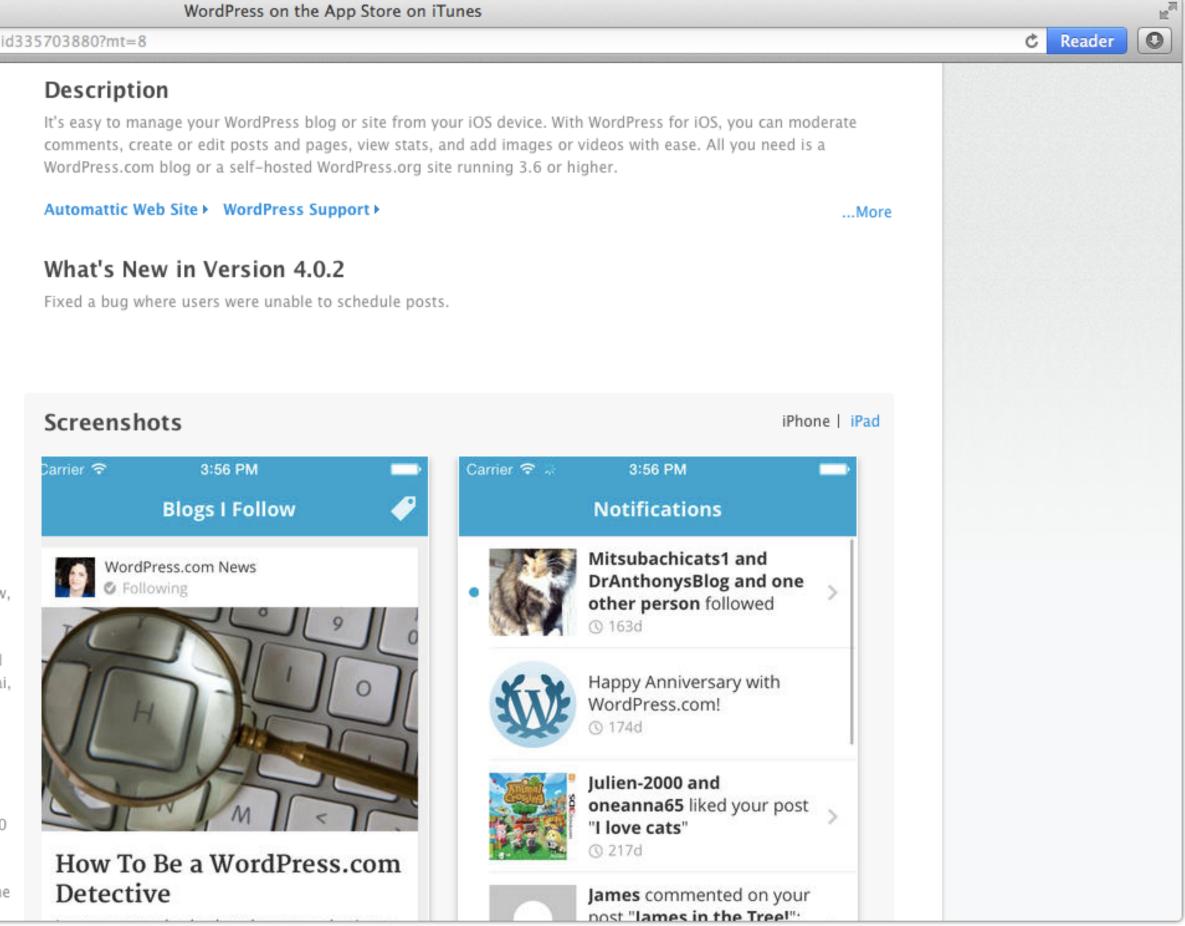
Free

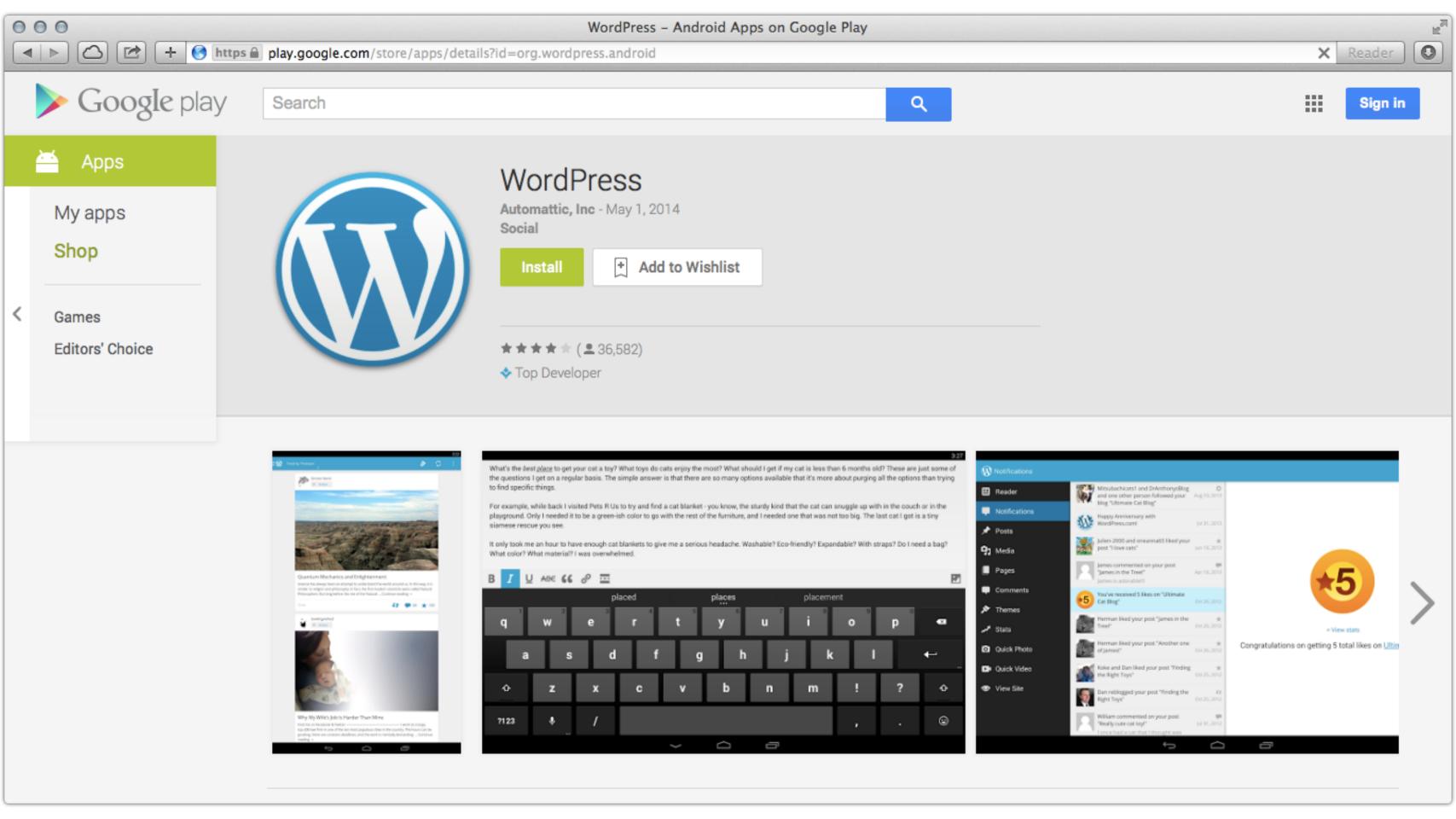
000

 \bigcirc

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





WORDPRESS.COM

Freshly Pressed



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



Images from Hanoi Not Really a Blog



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



The Camel Life



2012 Austin Marathon Behind the scene with Bean



The Roundtable: Oscars' in the Air



A Walk in the Minnesota Woods Sarah takes pictures.



Race

The Vegetarian's Dilemma

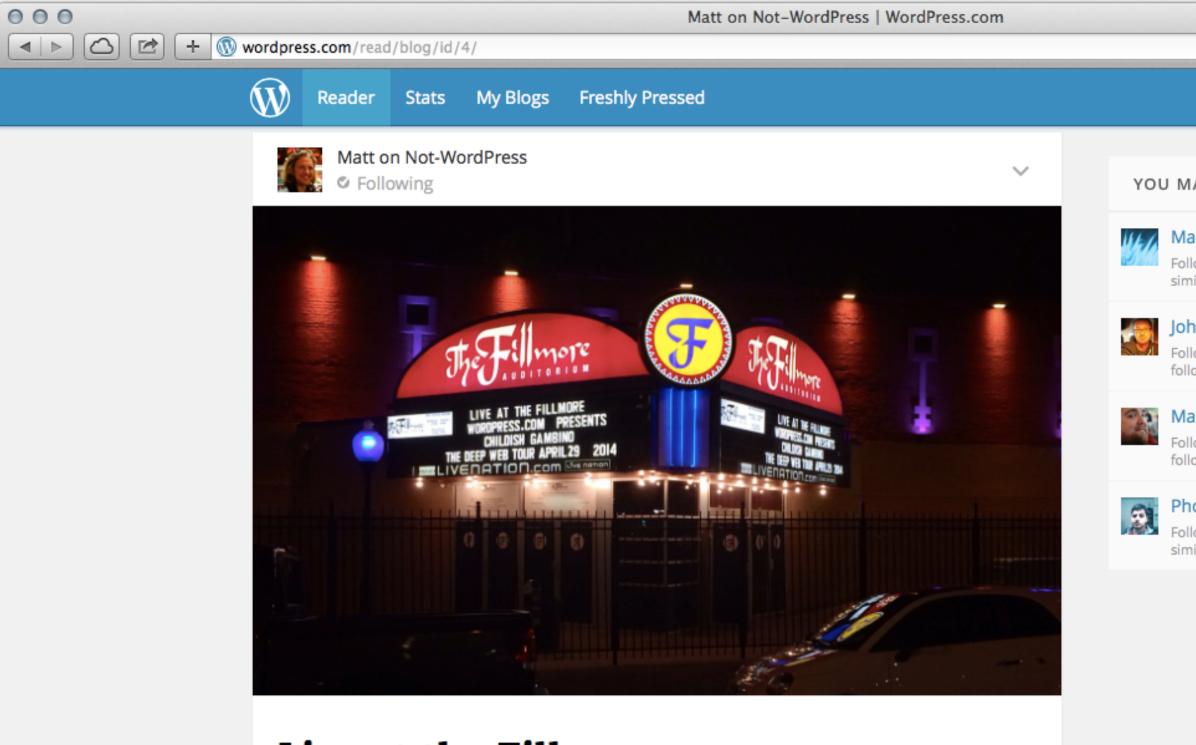


Silent Colors plain steam rice

The Doggie Dash – A Six Legged



CBMK Skatepark



Live at the Fillmore

Moblog

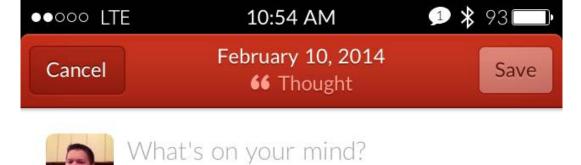
() **3d**

Freblog

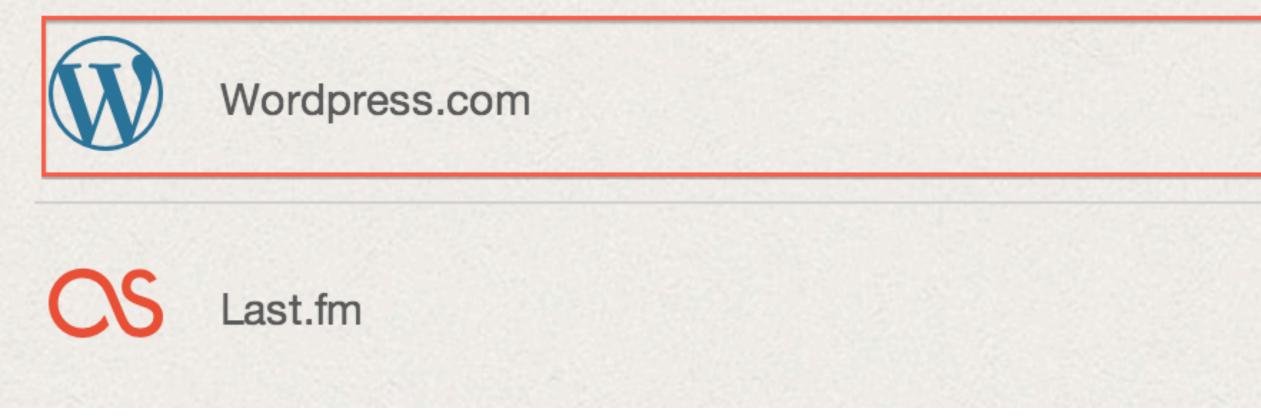
Comment 4



							M
				Ç	Read	er	0
	2						
ζΣN	10RE						
×	0						
×	0						
×	0						
×	0						
	××	× O	× O				







Disconnect

Connect

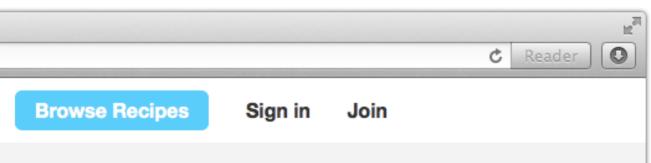
III_ Ver	izon LTE	1:43 PM	▶ 70% 🖃
Clos	e	Share	
	Evernote		>
f	Facebook		>
kippt	Kippt		>
in	LinkedIn		>
*	Pinboard		>
÷	Reddit		>
£	StumbleU	pon	>
t	Tumblr		>
y	Twitter		>
Ŵ	WordPress	S	>
APP	S		

🔁 🕂 🦰 https 🔒 ifttt.com/wordpress



000

< ▶



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.



Popular WordPress Recipes



Let's get started



Documentation

Blog





DEVELOPER.WORDPRESS.COM/APPS/



My Applications



WordPress.com Test Application

The best app you will ever use.

View Insights | ⁴ Manage Application

Create New 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.
Туре	• Web clients must be able to keep the generated secret private and should do all auth to server.
	Native clients are those that cannot keep the generated secret private. They usually l mobile device and make client-side authenticated API calls.



henticated API calls server

/ live in a user's browser or



WordPress.com Test Application



App Description: The best app you will ever use.

App URL: http://binarysmash.com/

OAuth	Information
O/ tatil	

Client ID	### ID GOES HERE ###
Client Secret	Random String of Characters
Redirect URL	http://binarysmash.com/wpoauth/
Туре	Native
Request token URL	https://public-api.wordpress.com/oauth2/token

Tools

- Manage Settings
- ✤ Manage Users
- View Insights New
- Documentation
- Developer Console
- Create New App
- Contact
- Delete Application

Reset Key

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
- Exchange it for access



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

Select a blog to connect:

– Select –	
bereet	

or enter your site's URL here



What permissions are being granted?

To connect using an account other than **justin** please **sign out** first.

Privacy Policy Terms of Service Find out more about WordPress.com Connect





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_POSTFIELDSS, 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

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

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

```
$reponse = 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)

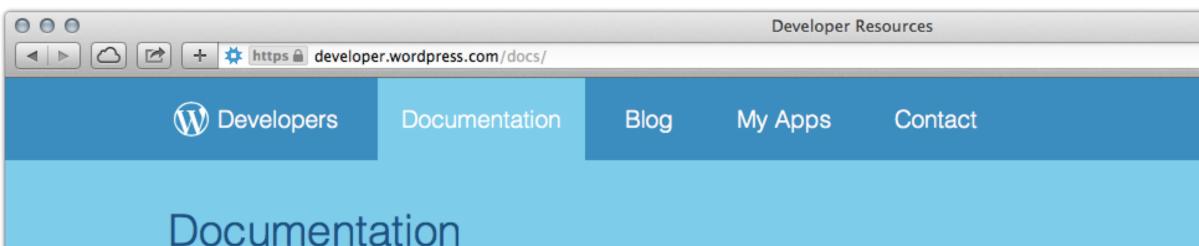
{

```
"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.



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.

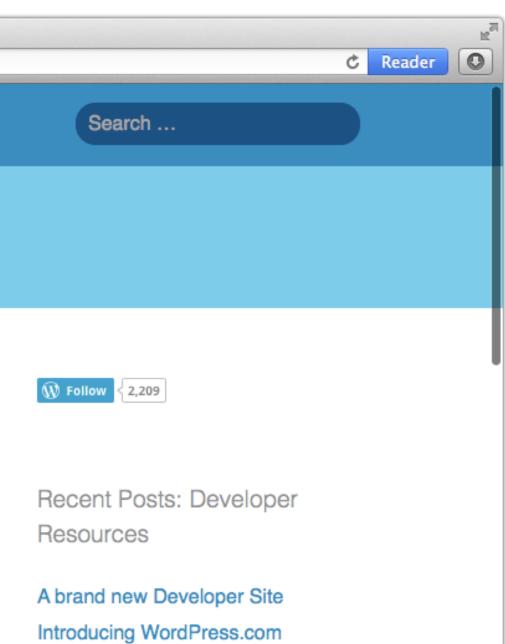
Ready to start developing your application? Great! Create a new application; you'll need to provide some basic information about your application and then you'll receive an OAuth2 token for use in your application.

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



Insights

An efficient alternative to paging with SQL OFFSETs

Top Posts & Pages

Home

REST API Resources

		REST Explorer		
	developer.wordpi	ress.com/docs/api/console/		
SITES		GET /sites/3584907		
GET /sites/\$site Information about a site ID/do	main	ID : 3584907 name : "WordPress.com News"		
POSTS		description : "The latest news on WordPress.com and the WordPress communi		
GET /sites/\$site/posts/ Return matching Posts		URL : "http://en.blog.wordpress.com" jetpack :		
GET /sites/\$site/posts/\$post_ID Return a single Post (by ID)		post_count : 1088 subscribers_count : 11057944 lang : "en" visible : true		
POST /sites/\$site/posts/\$post_ID Edit a Post				
PATH	Raw 🔵	is_private :		
\$site	3584907	is_following : Meta : Object		
QUERY	Raw 🕥			
http_envelope				
pretty				
meta				
fields				

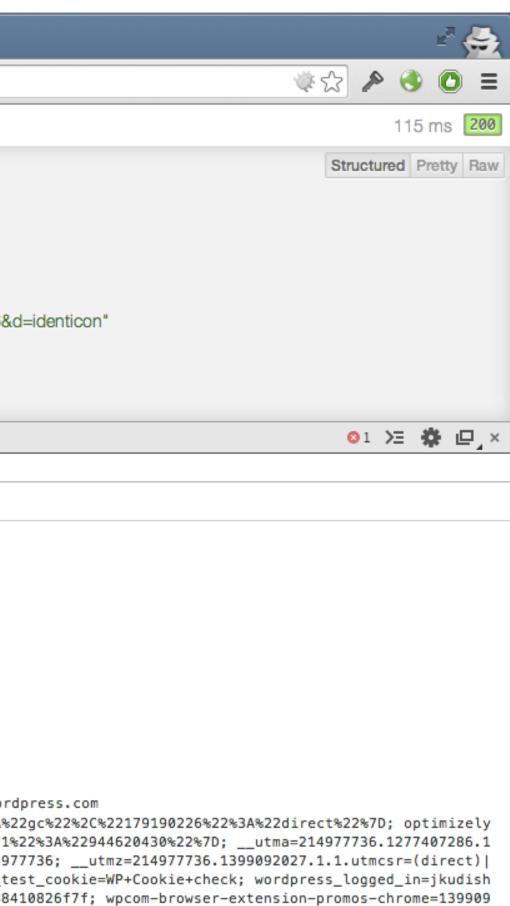
callback

Reset

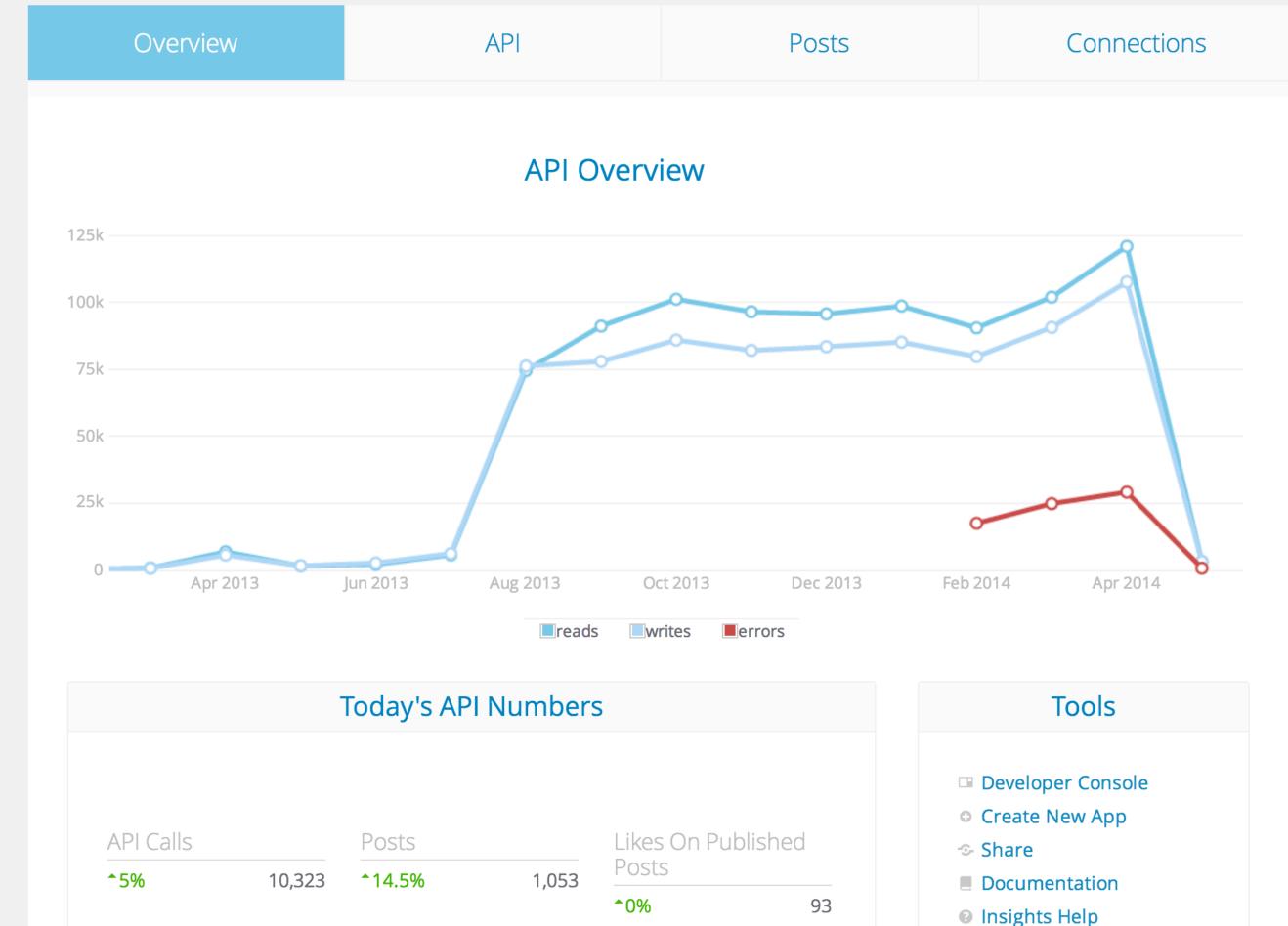
Submit

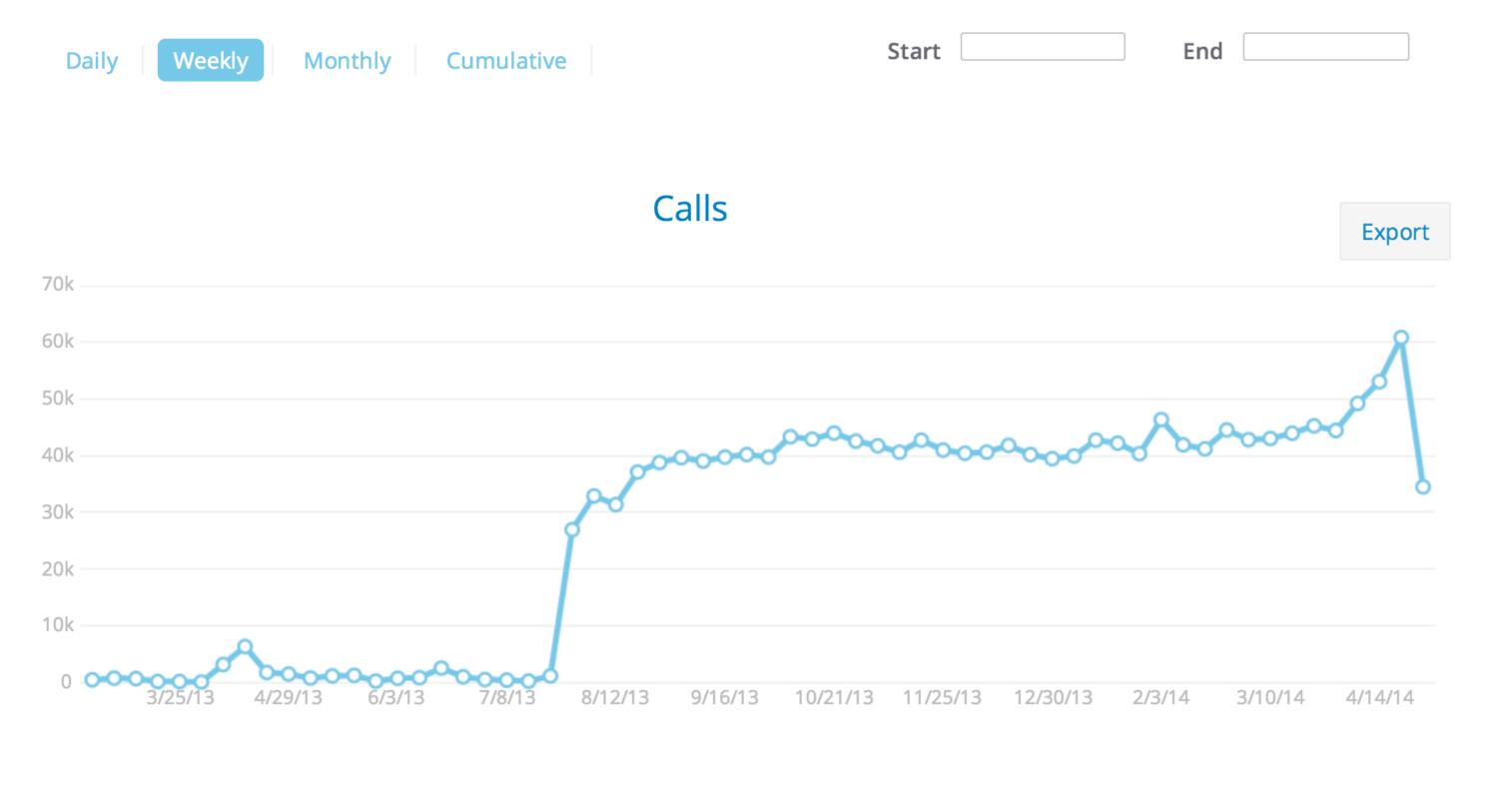
			M _{SI}
Ċ	Rea	ader	
<u> </u>	1100		
	14	2 ms	200
Structu	ired	Pretty	Raw

● ● ● 🗱 REST Explorer 🛛 🗙						
← → C A A https://developer.	wordpress.com/docs/api/cons	sole/				
REFERENCE	GET /me	GET /me				
Delete a Tag						
USERS		ID : 37509286				
GET /sites/\$site/users List the Users of a blog	username : "jkud	display_name : "jkudishtester" username : "jkudishtester" email : "jkudish+tester@automattic.com" primary_blog : 47778568				
GET /me Meta data about auth token's User	primary_blog : 4					
INSIGHTS	token_site_id :	token_site_id :				
GET /insights	avatar_URL : 🔰	avatar_URL : 💥 "https://0.gravatar.com/avatar/3d947a9ae6f1518c54582a371a07630e?s=96&c				
	profile_URL : "ht	ttp://en.gravatar.com/jkudishtester"				
Reset Subm	verified : true	verified : true				
	• meta : Object	• meta : Object				
Q Elements Network Sources Timeline	Profiles Resources Audits Cons	ole Backbone				
● ◎ ॹ ☷ □ Preserve log						
Name						
Path	× Headers Prev	iew Response Cookies Timing				
me?http_envelope=1& public-api.wordpress.com/rest/v1	Open Link in New Tab	<pre>^>ss: 127.0.0.1:8080 https://public-api.wordpress.com/rest/v1/me?http_envelope=1&</pre>				
admin-ajax.php	Copy Link Address	200 OK				
/wp-admin	Copy Response Headers	ers				
	Copy Response	-api.wordpress.com				
	Copy as cURL					
	Copy All as HAR	v1/me?http_envelope=1&				
	Save as HAR with Content	<pre>//1.1 cation/json, text/javascript, */*; q=0.01</pre>				
	Clear Browser Cache	<pre>ing: gzip,deflate,sdch</pre>				
	Clear Browser Cookies	age: en-US, en; q=0.8, fr; q=0.6				
	Replay XHR	: X-WPC00KIE 5d42b5d0ca28cf193a24f8cb182f5f51:1:https://developer.wo izelySegments=%7B%22178845731%22%3A%22false%22%2C%22178855892%22%3A u1399092026138r0.2798187204170972; optimizelyBuckets=%7B%2275226187				
	399092027.1	1399092027.1399092027.1;utmb=214977736.1.10.1399092027;utmc=21497				
		rect) utmcmd=(none); km_ai=5b92cSfdeS5Vx5i63UMA4Q3ohMw%3D; wordpress_te				
		493700029%7Cec4c77d9b44c7fcf17f88a4b720cd704; _wpndash=5e8de6ed02b74884 press_eli=1; _ga=GA1.2.1277407286.1399092027; kvcd=1399092032845; km_ni				
2 requests 1.9 KB transferred		tectorSounder_https://www.comerce.com/Powerter/wrester/				



km_ni=jkudishtester; km_lv=1399092033; km_uq=; wpc_wpc=acco 1510c54502c371c07520c025c02025025c02826d020b++cc02524025250





10,323 Daily64,760 Weekly235,581 Monthly• 5% since yesterday• 19.2% since last week• 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

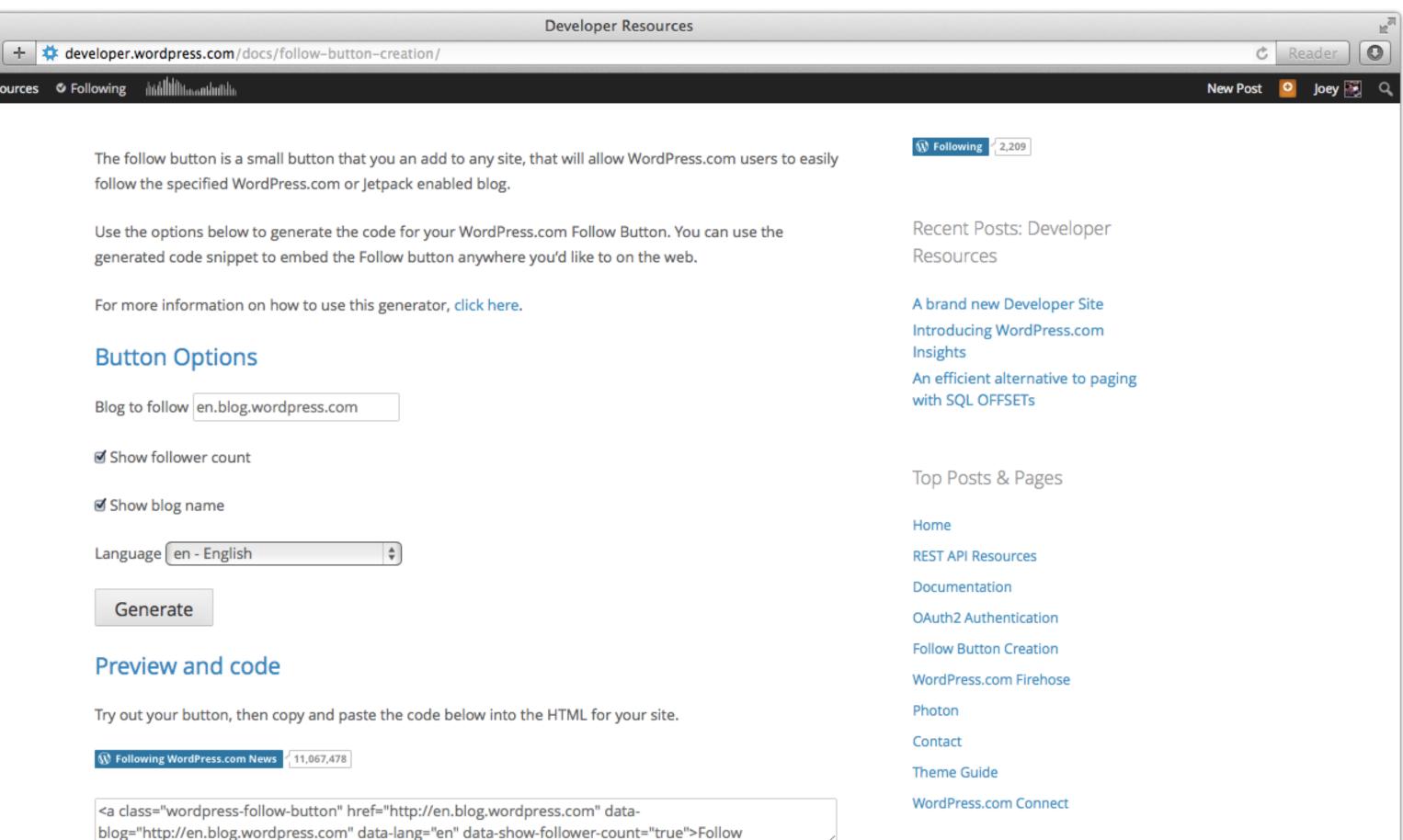


Want a follow button?

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



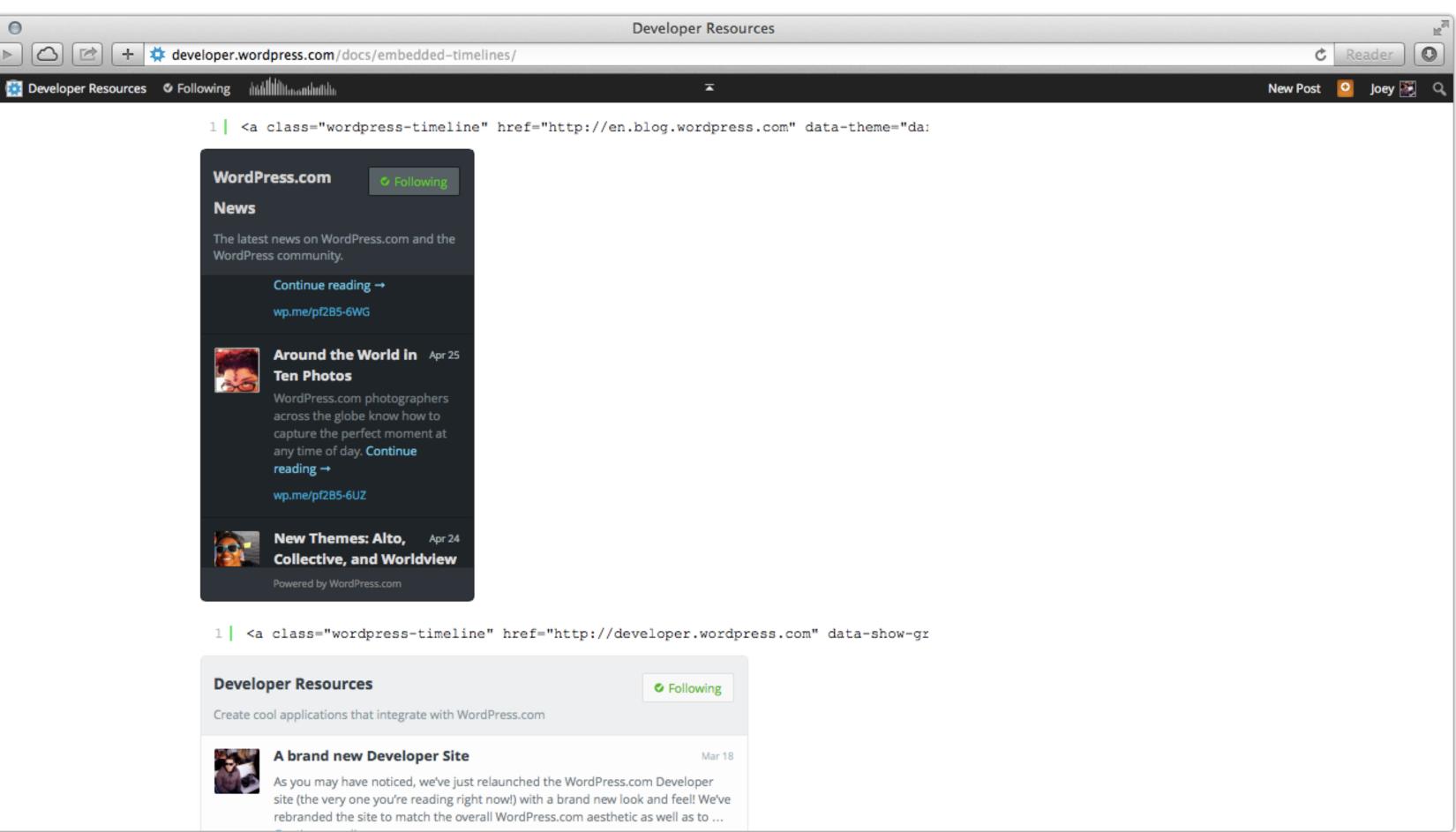
😨 Developer Resources 🔮 Following 🚻 W



Want an embeddable timeline

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

meline ded-timelines/





000

Ŵ

I'm lost, what are my resources?

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