

Get Some REST

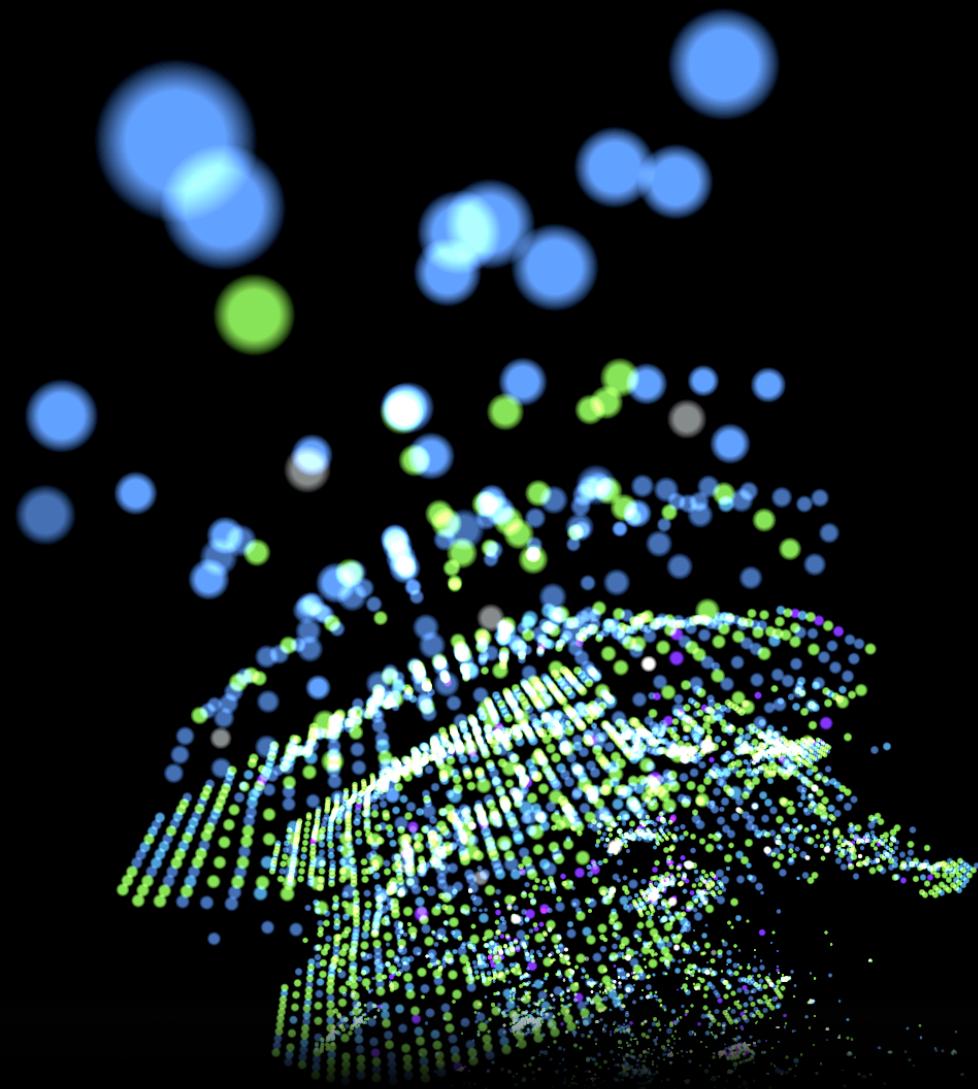
The why and how of great APIs

Allen Pike, Steamclock Software



steamclock
software





TNW
THE NEXT WEB

CNNMoney

POPULAR
SCIENCE

THE
FUTURE
NOW

★ DARING FIREBALL
GIZMODO

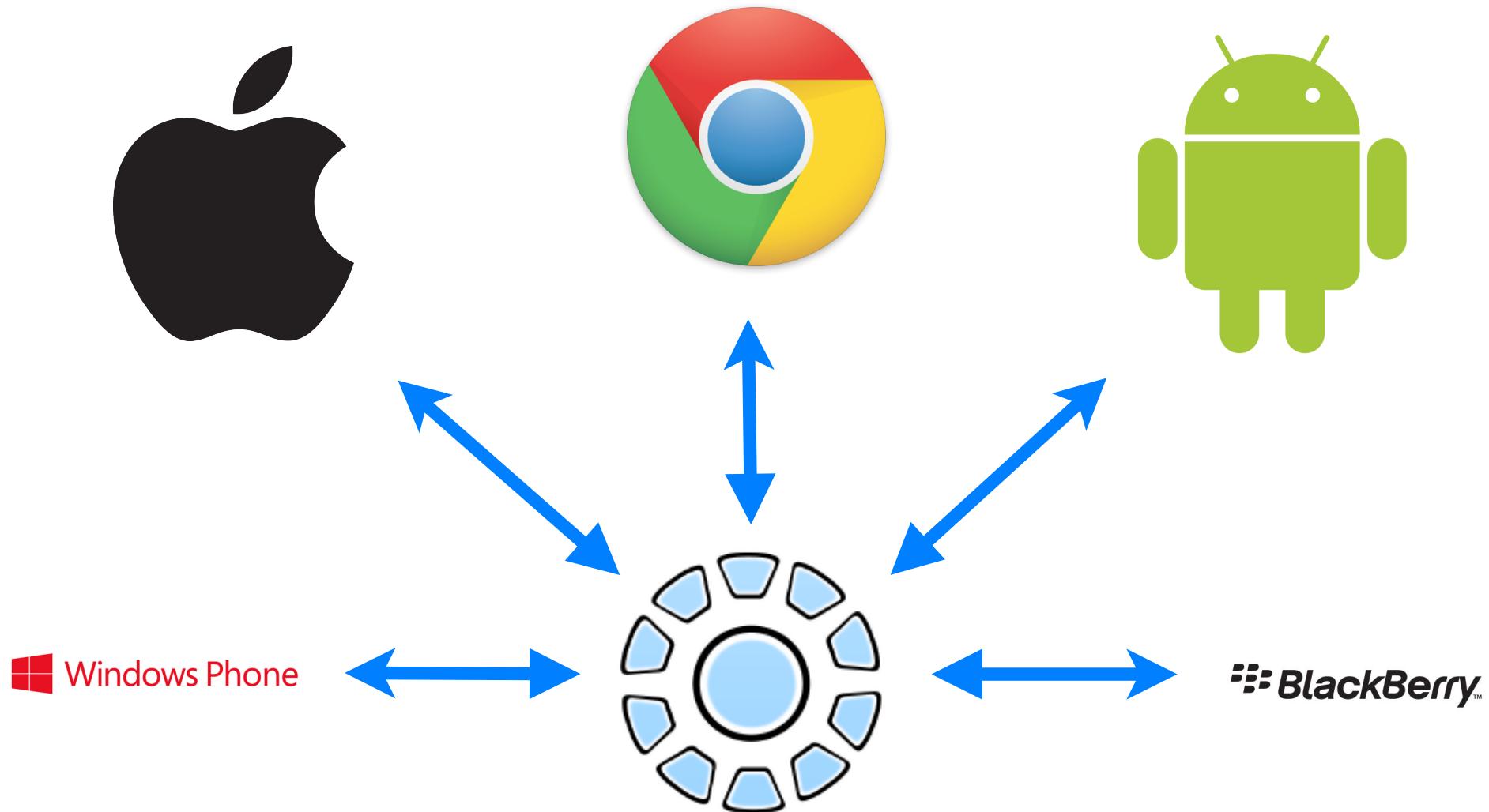
FAST
COMPANY

APIs in 2013

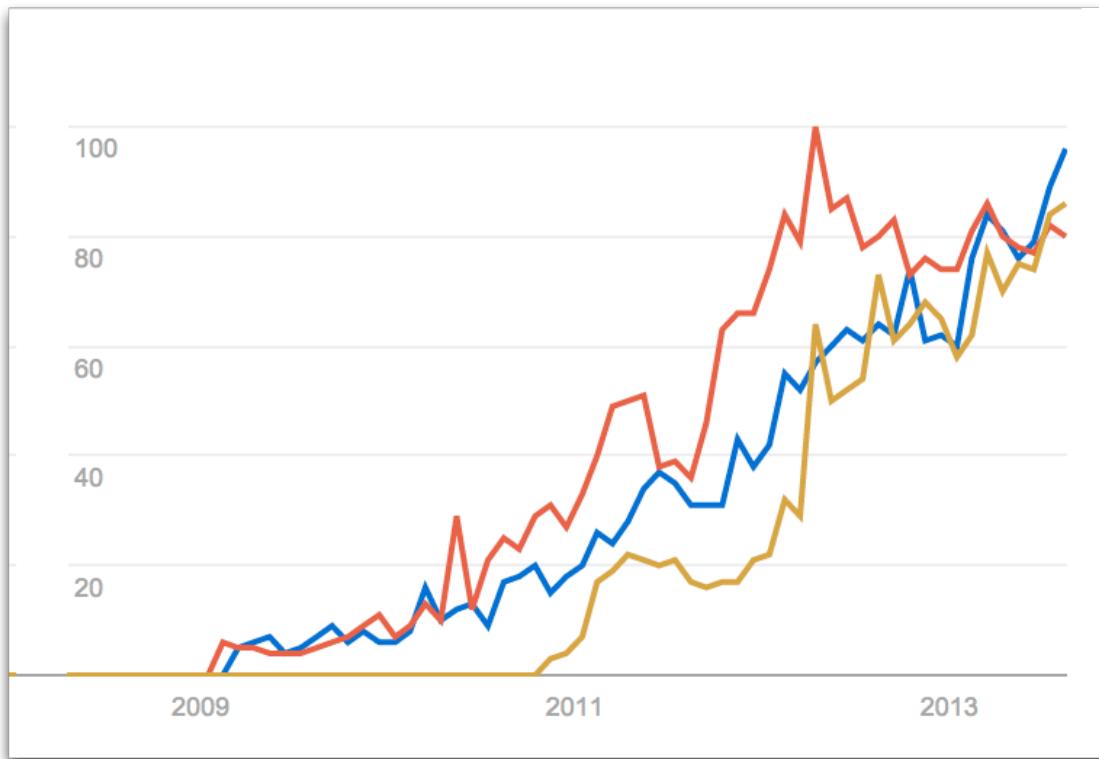
Great APIs are table stakes

- UI is for users
- API is for developers
- They need to be clear, fast and easy

Mobile Platforms

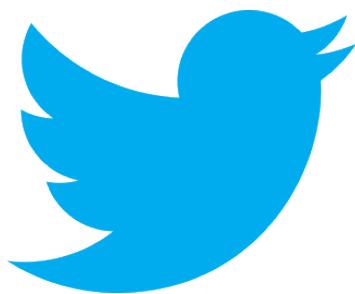


APIs are spreading



Github API, Dropbox API, Instagram API

APIs are restricting



Different models, different APIs

- Up front purchase
- Pure adoption
- A subscription SaaS
- API is the product

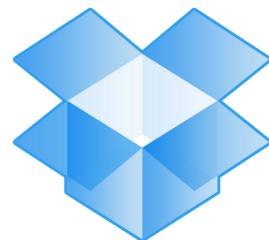


Help us help you

- Internal developers
- Consultants
- Partners
- Customers
- Fans

Building a great API

APlaaS



Dropbox



iCloud

Parse

No surprises please

- Consistent
- Standard
- Plain
- Boring

#!QOX!#

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Enter REST

- REpresentational State Transfer
- The modern best practice
- Uniform methods, no surprises
- Contrasts with SOAP RPC

RESTing up

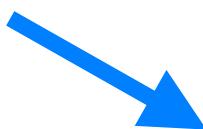
- GET, POST, PUT, PATCH, DELETE
- Embraces HTTP
- Explorable with simple tools
- Fundamentally scalable

JSON

```
{  
    "XML": [  
        "Verbose",  
        "Heavy Handed",  
        "Overkill"  
    ],  
  
    "JSON": [  
        "Human Readable",  
        "Lightweight",  
        "The new gold standard"  
    ]  
}
```

The magic formula

JSON



gzip



https

Care and feeding

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Collaborators

Learn how to setup your App to work with a team

How does it work?

You can add collaborators to work on the same project as you.

To share your app you need to do two things:

1. Add the person that you want to your App's Collaborators through [harp.io](#)
2. Share your App's directory in Dropbox with them (through Dropbox website)

Staying organized

When someone shares an app with you, move it into your [Dropbox/harp.io/apps](#) folder. This will make things easier when transferring ownership, or running the multihost server.

Swagger API Explorer

my-awesome-api.com

user

Show/Hide | List Operations | Expand Operations | Raw

word

Show/Hide | List Operations | Expand Operations | Raw

GET /word.json/{word}/entries Return entries for a word

GET /word.json/{word}/examples Returns examples for a word

POST /word.json/{word}/examples Fetches examples for a word

POST /word.json/{word}/wordForms Adds a Relationship Map to a word

GET /word.json/{word}/wordForms Returns other forms of a word

DELETE /word.json/{word}/wordForms Deletes a relationship from a word

GET /word.json/{word} Given a word as a string, returns the WordObject that represents it

Parameters

Parameter	Value	Description
word	(required)	String value of WordObject to return
useCanonical		If true will try to return the correct word root ('cats' -> 'cat'). If false returns exactly what was requested.
includeSuggestions		Return suggestions (for correct spelling, case variants, etc.)
shouldCreate		Create word if not existing

Try it out!

GET /word.json/{word}/definitions Return definitions for a word

GET /word.json/{word}/stats Returns word statistics

GET /word.json/{word}/topExample Returns a top example for a word

GET /word.json/{word}/contextualLookup Returns definitions for a word based on the sentence in which it is found

```
$ curl https://api.stripe.com/v1/charges \
-u sk_test_mkGsLqEW6SLnZa487HYfJVLf: \
-d amount=400 \
-d currency=usd \
-d "description=Charge for test@example.com" \
-d "card[number]=4242424242424242" \
-d "card[exp_month]=12" \
-d "card[exp_year]=2014" \
-d "card[cvc]=123"
```

Create a new charge

using

curl

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[iOS 7 preview: Sprite Kit and UIKit dynamics promise easier games ...](#)



www.imore.com/ios-7-preview-sprite-kit ▾

by Rene Ritchie - in 8,255 Google+ circles

Jun 28, 2013 - A flexible **API** lets developers control sprite attributes such as position, ... Neither the new **UIKit dynamics** or Sprite Kit are user-facing feature.

[iOS 7 Parallax Home Screen & UIKit Dynamics | PlayControl Software](#)

playcontrol.net/ewing/jibberjabber/ios-7-home-screen--uikit.html ▾

As I sit here and type this, I realize that from a business standpoint, **UIKit Dynamics** is brilliant in that it is a fairly low-risk **API** for them while both giving them a ...

[iOS 7 beta for Developers - Apple Developer](#)

<https://developer.apple.com/ios7/> ▾

Download the **SDK** today and take advantage of the new multitasking **APIs**, dynamic motion controls in **UIKit**, AirDrop, Sprite Kit, enhanced video **APIs**, new ...

[The iOS7 features that were quietly released during the last year ...](#)

petosoft.wordpress.com/.../the-ios7-features-that-were-quietly-released-d... ▾

Jun 15, 2013 - **UIKit Dynamics**: ... deeper access than I dreamed of, and were actually in a clandestine beta test of private **APIs** (normally completely forbidden) ...



API to make a phone call



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About 5,260,000 results (0.41 seconds)

Ad related to API to make a phone call ⓘ

[Automatic API Phone Calls - CDYNE.com](http://www.cdyne.com/)

www.cdyne.com/ ▾

Utilize this Web Service XML API and send out **calls** for any reason.

[Twilio Docs - API REST Making Calls](http://www.twilio.com/docs/api/rest/making-calls)

www.twilio.com/docs/api/rest/making-calls ▾

REST API: **Making Calls**. Using the Twilio REST API, you can **make** outgoing **calls** to **phones**, SIP-enabled endpoints and Twilio Client connections. Note that ...

[Twilio Cloud Communications - APIs for Voice, VoIP and Text ...](http://www.twilio.com)

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Make **phone calls** globally and buy numbers & receive **calls** in a growing number ...
regular **phone numbers** and short codes through a single, simple REST **API**.

[Twilio Voice - Build Voice Communications into your Web Apps | Twilio](http://www.twilio.com/voice)

www.twilio.com/voice ▾

Build apps that **make** and receive **phone calls**. Your code decides what to **do** with each **call** in real time. Our flexible **API** seamlessly integrates into existing ...

Future proof your API

- Always version
- Sometimes you release a bad API
- New versions mark breaking changes
- Deprecate and document

Support your API

- Documentation is just the seed
- Blog for news
- Forums and Stack Overflow for help
- Intercom.io for actual support

Drive adoption

- Promote novel API uses
- Fund hackathons and sponsorships
- SEO
- Double down on examples and docs
- Royal decree



Recap

- APIs are crucial
- Follow standard REST design
- Return JSON, gzipped, over https
- Support with great documentation
- Scale with versioning and marketing

Go make great things.



Get the slides here!

steamclock.com