

# The next generation of Google APIs

Ade Oshineye

[www.oshineye.com/+](http://www.oshineye.com/+)

Let's talk about the future

Take the tour Circles Hangouts Instant Upload Sparks Huddle JOIN THE PROJECT +1

# the Google+ project.

## This is just the beginning.

Thanks for checking out the first features of the Google+ project. We're just getting warmed up and we're already pretty excited about what's coming next. For now, we're launching with what we call a field trial period, an invitation-only approach to help smooth out the rough edges as we start the project. Please bear with us if you're not able to start using Google+ today.

To stay updated as the project develops and get a heads-up when invitations are available, click the link below. Hope to see you in a hangout soon! :)

**This. Is. Not. A. Vendor. Pitch.**

This is not a vendor pitch

+Ade Search Images Maps YouTube News Gmail Documents Calendar More -

Google+ Search Google+ Ade Oshineye 7 + Share

### Ade Oshineye

A chaotic neutral point of view

Send a message Send an email

In Ade's circles (0)  
Edit your profile to change who is visible in your network.  
[Change who is visible here](#)

Posts **About** Photos Videos +1's View profile as...

**Introduction** I make things (code/photos/words) and wave my arms around a lot when I talk.

I'm a Developer Advocate at Google in the Google+ Developer Relations team. In general I work on the stack of protocols, standards and APIs that power the social web. In practice that means I look after the Google+ APIs and +1 button with a focus on Europe, Middle East and Africa (EMEA).

I'm also the co-author of O'Reilly's "Apprenticeship Patterns: Guidance for the aspiring software craftsman" and you can find out more about that book here: <http://www.oshineye.com/books.html>

I'm also part of the small team behind <http://developerexperience.org/> which is an attempt to see if we can successfully apply the techniques of user experience professionals to products and tools for developers. We call it Developer Experience or #devexp for short.

**Other profiles**

- oshineye.com
- Heuristic Outco...
- My Jaiku account
- Amazon author ...
- Flickr - adewale\_...
- Google Reader (...)
- Google Reader (...)
- FriendFeed
- Reddit - ade
- YouTube - adew...
- Upcoming
- Advogato - ade
- del.icio.us - ade
- Github
- Identica
- <http://huffduffer...>
- BookShelved

[www.oshineye.com/+](http://www.oshineye.com/+)

I work on the Google+ Project



A long time ago I wrote a short book

“We’re working on a project to bring you a new and improved Google experience, and over the next few months, you’ll continue to see more updates to our look and feel”

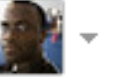
<http://googleblog.blogspot.com/2011/06/evolving-google-design-and-experience.html>

One unified user experience

Ade Oshineye

0

+ Share



# Google



Google Search

I'm Feeling Lucky

Calling all young science enthusiasts: [Enter the 2012 Google Science Fair](#)

This is great for users.

What about a unified  
*developer* experience?

What about developers?  
What if developers were people too?

## Inspiring developers everywhere

+1 5.4k



**Showcase**  
Be inspired by how others are using Google technologies.

**Share your Story**  
What inspires you as a developer? Share your story—we're listening.

### Google Developers News

**Embedding Google AdMob Ads Within A UITableView** Google Ads Developer Blog - March 6, 2012

We previously talked about docking AdMob ads to the bottom or top of a UITableView. In response to that post, we've had a lot of developers asking us about embedding AdMob ads ... [more](#)

**Resources to help with the migration to AdWords API AdHoc reports** Google Ads Developer Blog - March 6, 2012

Last week we sunset all versions of the AdWords API prior to v201109. If you have not yet migrated to v201109, you will now receive errors when making calls using previous versions. ... [more](#)

**Discover DFP API v201201: Syncing Up** Google Ads Developer Blog - March 6, 2012

In the newest version of the API, v201201, we've added a feature to streamline the syncing of information in your DFP network to another system. Previously, this was possible but required repeatedly ... [more](#)

### Master our APIs and Technologies

**Google+**  
Increase traffic and engagement to your content by using Google+ plugins and APIs.

**Google Maps**  
The easy way to build interactive data visualizations on a map and location-based apps.

**Android**  
Reach hundreds of millions of users on the world's fastest-growing mobile platform.

**Google TV**  
Build apps for the big screen.

**Chrome**  
Create high performance web apps using the latest technologies the open web has to offer.

**Commerce**  
Increase traffic, help customers find products, and process payments with Commerce APIs.

### Developer Tools



API Console



App Engine Console



OAuth 2.0 Playground



Project Hosting

### Developer Programs

**Startups**  
Resources for startups to build, measure, and enhance your apps.

**GTUGs**  
Find a Google Technology User Group near you.

**Open Source**  
Explore the different ways Google serves the open source community.



Google Developers on 2 circles

+1 +85479

### Join a Hangout (View all)

**App Engine Hangout**  
March 6 from 5 p.m.-6 p.m. US/Pacific

### Attend an Upcoming Event (View all)

**App Engine Chat Time**  
irc://irc.freenode.net/#appengine • March 7, 2012

**Apps Script Hackathon Washington, DC**  
1101 New York Ave NW, Washington, DC 20005 • March 7, 2012

**Google TV Developer Lab**  
Toronto, CA • March 7, 2012, 2 p.m.

**Android EMEA DevRel Office Hours**  
London, UK and Munich, DE • March 7, 2012, 2 p.m.

**Google TV Office Hours and App Review**  
Google+ Hangout • March 7, 2012, 9 p.m.

### Get Inspired

Watch our YouTube Channel

#### Community

[Upcoming Events](#)  
[Meet the Developer Team](#)  
[Showcase](#)  
[Follow us on Google+](#)

#### Featured Products

[Google+](#)  
[Android](#)  
[Chrome](#)  
[Google Maps](#)  
[Google TV](#)  
[Commerce](#)

#### Developer Tools

[API Explorer](#)  
[API Console](#)  
[App Engine Console](#)  
[OAuth 2.0 Playground](#)  
[Project Hosting](#)

#### Other References

[chromium.org](#)  
[dartlang.org](#)  
[developer.android.com](#)  
[golang.org](#)  
[html5rocks.com](#)

Developers get their own site. All our developer documentation is migrating here. But it's not enough to unify the documentation if you don't unify the APIs...



# Mistakes made and lessons learned

How do we get to this promised land of unified APIs?  
Let's go back then forwards

# GDData APIs

## ★ Google Data Protocol

### What is the Google Data Protocol?

The Google Data Protocol is a REST-inspired technology for reading, writing, and modifying information on the web.

Many services at Google provide external access to data and functionality through APIs that utilize the Google Data Protocol. The protocol currently supports two primary modes of access:

- **AtomPub**: Information is sent as a collection of Atom items, using the standard Atom syndication format to represent data and HTTP to handle communication. The Google Data Protocol extends AtomPub for processing queries, authentication, and batch requests.
- **JSON**: Information is sent as JSON objects that mirror the Atom representation.

ReST, Atom, AtomPub, standards.  
JSON is just a second-class representation of the Atom

- Google Data APIs**
- API Directory
  - [Client Library Downloads](#)
- Google Data Protocol**
- [Developer's Guide](#)
  - Version 2.0
  - Version 1.0
  - [JSON Alt Type](#)
  - [Batch Processing](#)
- More Resources**
- Authentication
  - Client Library
  - [Resumable Upload](#)

## API Directory

The following Google services provide APIs that implement the Google Data Protocol.

Each API has its own set of guides and resources, including information about using client libraries. If you're trying to accomplish a certain task with an API, the Developer's Guide for that API should point you in the right direction. Most APIs also include code samples and other easy ways to get started.

API Home	Guides	Client Libraries
 <a href="#">Google Analytics Data Export API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (JS, Java, PHP, Python, Ruby)
 <a href="#">Google Apps APIs</a>	<a href="#">List of All Apps APIs</a>	
 <a href="#">Google Base Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	
 <a href="#">Blogger Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, .NET, PHP, Python, JS, Obj-C)
 <a href="#">Google Booksearch Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, PHP)
 <a href="#">Google Calendar Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, .NET, PHP, Python, JS, Obj-C)
 <a href="#">Google Code Search Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	
 <a href="#">Google Contacts Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, .NET, Python, JS, Obj-C)
 <a href="#">Google Documents List Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, .NET, PHP, Python, Obj-C)
 <a href="#">Google Finance Portfolio Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	
 <a href="#">Google Health Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, .NET, PHP, Python, Ruby)
 <a href="#">Google Maps Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	
 <a href="#">Picasa Web Albums Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, .NET, PHP, Python, Obj-C)
 <a href="#">Google Project Hosting Issue Tracker API</a>	<a href="#">Reference Guide</a>	
 <a href="#">Google Sidewiki Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, JavaScript)
 <a href="#">Google Sites Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, .NET, PHP, Python, Obj-C)
 <a href="#">Google Spreadsheets Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, .NET, PHP, Python, Obj-C)
 <a href="#">Google Translator Toolkit Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	
 <a href="#">Google Webmaster Tools Data API</a>	<a href="#">Developer's Guide</a> <a href="#">Reference Guide</a>	
 <a href="#">YouTube Data API</a>	<a href="#">Developer's Guide</a>	<a href="#">Client Libraries and Sample Code</a> (Java, .NET, PHP, Python, Obj-C)

Big investment across the entire company  
 Many years, multiple revisions  
 Lots of iteration and refinement

## Writing a "Hello World" Example

Let's start with a simple example. Here's a short program to print a list of all of the documents in your [Google Documents](#) account:

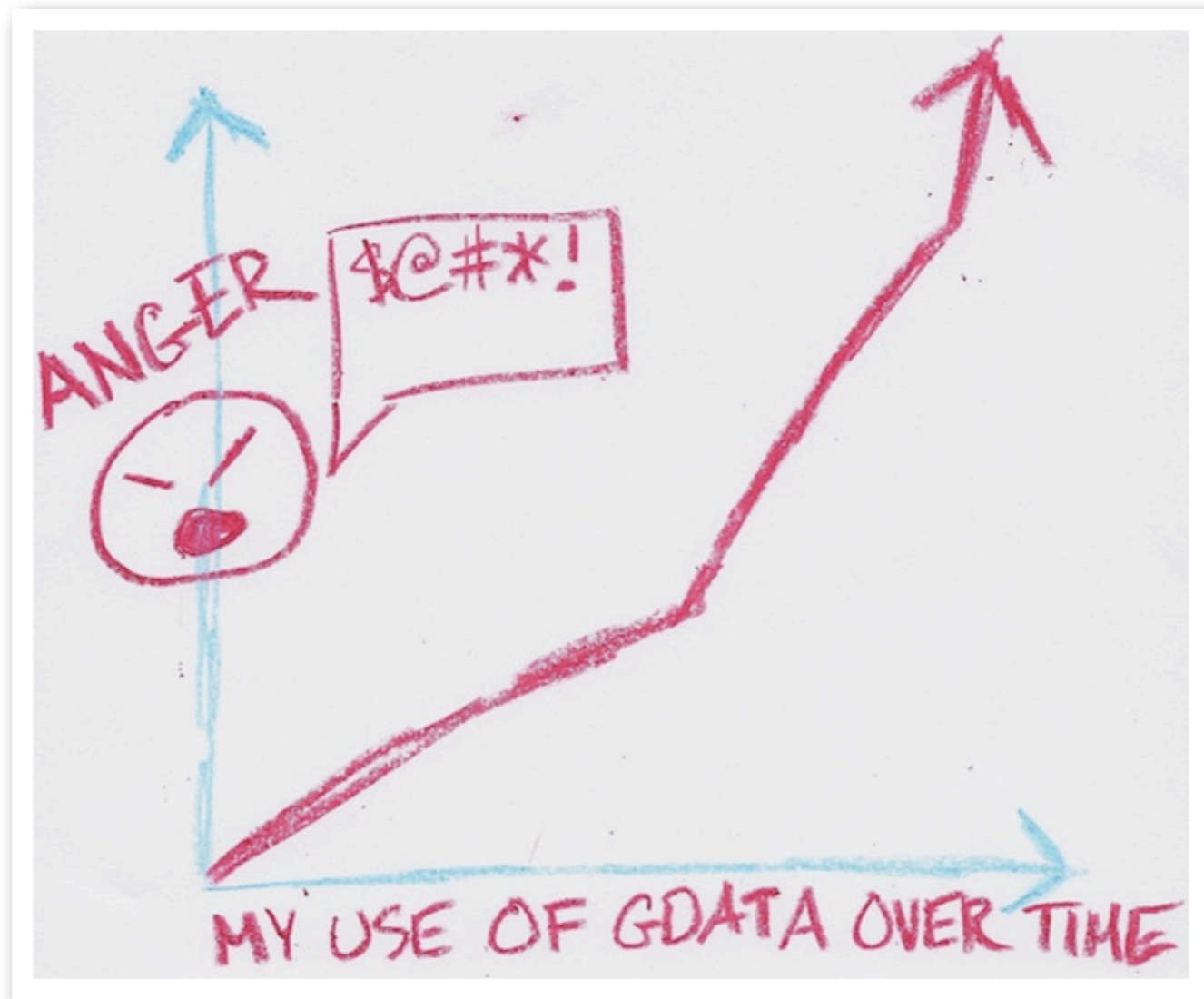
```
import gdata.docs.service

# Create a client class which will make HTTP requests with Google Docs server.
client = gdata.docs.service.DocsService()
# Authenticate using your Google Docs email address and password.
client.ClientLogin('jo@gmail.com', 'password')

# Query the server for an Atom feed containing a list of your documents.
documents_feed = client.GetDocumentListFeed()
# Loop through the feed and extract each document entry.
for document_entry in documents_feed.entry:
    # Display the title of the document on the command line.
    print document_entry.title.text
```

Either save the above code snippet as a file and run it, or paste the code into the Python interpreter to see the Google Data Python client library at work.

What's wrong with this picture?



## Feedback

GData made all APIs look like atom:entries  
It didn't model the domain  
It put ReST and AtomPub compliance before developer convenience  
This made simple things hard

# Buzz API

**Wednesday, May 19, 2010**

## Introducing the Google Buzz API

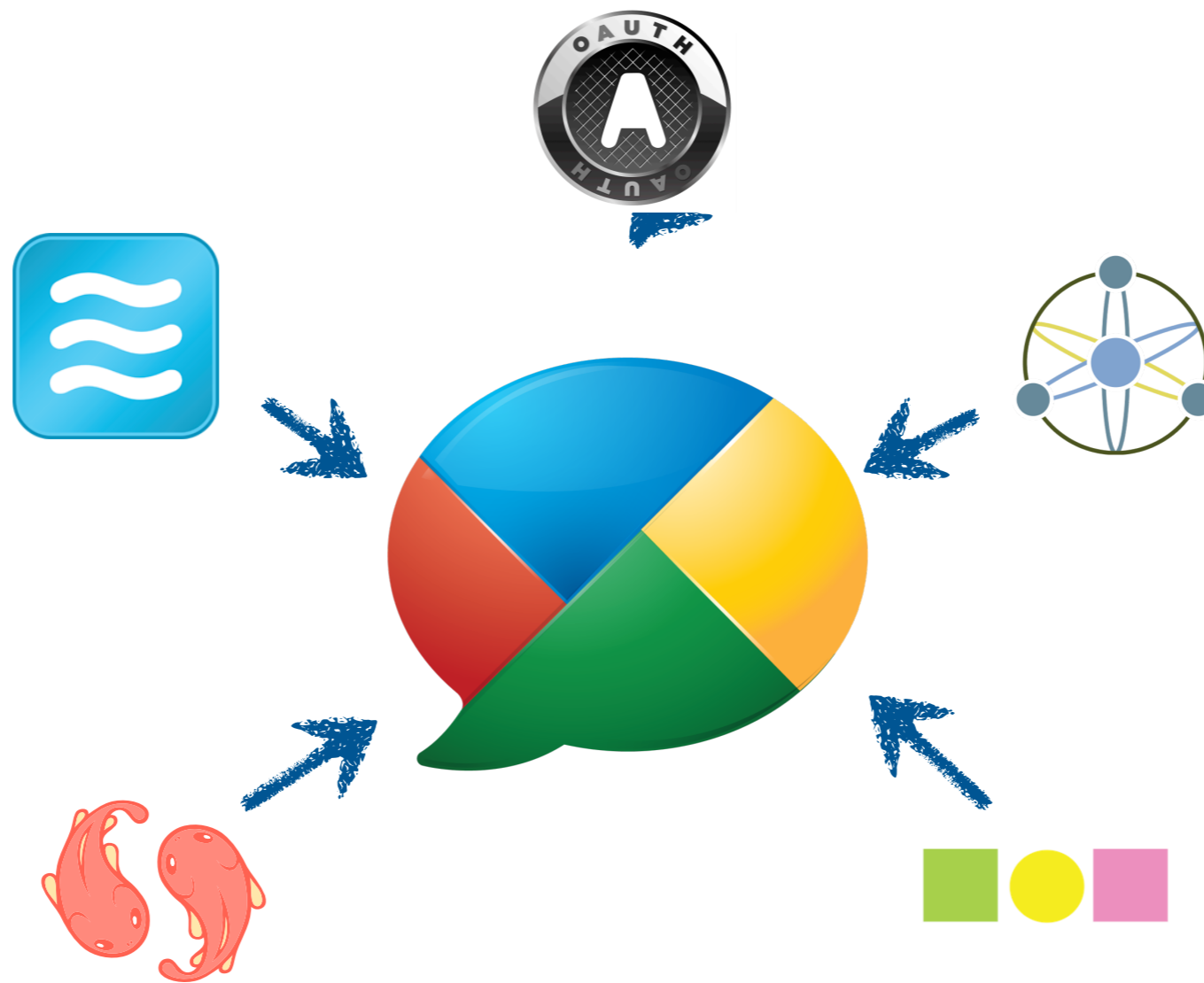
With [Google I/O 2010](#) finally upon us, what better time to introduce developers to the latest updates to the [Google Buzz API](#)?

As [announced at the launch of Google Buzz](#), the Google Buzz API aligns itself with the ever-growing family of freely available and community-developed protocols, formats, and standards for sharing and consuming social content on the web, including ActivityStreams, Atom, AtomPub, JSON, OAuth, PubSubHubbub, MediaRSS, PortableContacts, and more.

The Google Buzz API, a member of the [Google Code Labs](#), is very much a work in progress — we intend to continue to iterate out in the open as we go along — and we hope the features we are making available today will help inspire developers and provide a solid foundation for new applications to be built.

ActivityStreams, Atom, AtomPub, JSON, OAuth, PSHB, MediaRSS, Portable Contacts





Lots of standards. Reused and composed standards.  
Focussed on letting you rebuild our UI.  
Modeled the domain.

**JSON client library**

**Standards first**

**Developer interviews**

**UI reflects API**

**API models domain**

## Good news

- Anybody could build their own client library on top of HTTP
- Possible to reuse existing technology like Google Reader because we reused Atom
- Brought attention to niche specifications like GeoRSS
- Made more people aware of OAuth

## Bad news

- Made more people aware of OAuth
- Discovered bugs in niche specifications like GeoRSS
- Composing specifications meant you had to read standards documents
- Specifications != Standards
- People kept trying to write their own client libraries

**Google+ API**



# DEVELOPER EXPERIENCE



USER EXPERIENCE APPLIED TO DEVELOPERS, BECAUSE DEVELOPERS  
ARE PEOPLE TOO.



*Posted 9 months ago*

## What is Developer Experience?

<http://blog.oshineye.com/2011/05/what-is-devexp.html>

Developer Experience (**#devexp**) is an aspirational movement that seeks to apply the techniques of User Experience (UX) professionals to the tools and services that we offer to developers.



**1** UX techniques for developer-facing products

---

**2** Focus on the OOB experience

---

**3** Use convention over configuration

---

**4** Design away common problems



#devexp

developereexperience.org  
@devexpftw  
+Developer Experience

**What does this mean  
for Google+?**

# Build cool technology



Design is how it works. This is not something you can apply later to make things pretty. It has to be designed-in. It's not just about having pretty documentation.

'Indifference towards people  
and the reality in which they  
live is actually the one and only  
cardinal sin in design.'

Dieter Rams.

**Solve real problems for  
real people**

**1** Users

---

**2** External developers

---

**3** Internal developers

---

Who are these real people?

# Problems & solutions

**People don't want to  
learn ReST, OAuth,  
HTTP, etc**

They just want to write code and solve the problem they're being paid to solve



## Downloads

When you use the Google APIs Client Libraries, you benefit from better language integration, improved security, and support for making authenticated calls.

In the table below, the first column shows each library's stage of development; note that some are still in early stages. The second column links to the main page for each library.

The third column provides links to starter projects in each language for various platforms, such as Android and App Engine. These starter projects are the easiest way to get up and running with each library. They include everything needed to use OAuth authentication and demonstrate a few simple API calls. Even though some languages may not have starter projects, you can still use those libraries with Google+. Check the project home page for the library for instructions on how to get started.

Client Library	Project Home	Starter Project
Google APIs Client Library for .NET (beta)	<a href="#">google-api-dotnet-client</a>	
Google APIs Client Library for Go (alpha)	<a href="#">google-api-go-client</a>	<a href="#">google-plus-go-starter</a> (Command Line, App Engine)
Google APIs Client Library for Google Web Toolkit (alpha)	<a href="#">gwt-google-apis</a>	
Google APIs Client Library for Java (beta)	<a href="#">google-api-java-client</a>	<a href="#">google-plus-java-starter</a> (Command Line, App Engine, J2EE, Android)
Google APIs Client Library for JavaScript (alpha)	<a href="#">google-api-javascript-client</a>	
Google APIs Client Library for Objective C (alpha)	<a href="#">google-api-objectivec-client</a>	
Google APIs Client Library for PHP (beta)	<a href="#">google-api-php-client</a>	<a href="#">google-plus-php-starter</a> (Web App)
Google APIs Client Library for Python (beta)	<a href="#">google-api-python-client</a>	<a href="#">google-plus-python-starter</a> (Command Line, App Engine)
Google APIs Client Library for Ruby (alpha)	<a href="#">google-api-ruby-client</a>	<a href="#">google-plus-ruby-starter</a> (Sinatra)

Give them client libraries that do the right thing by default

**We can't afford to  
build/maintain every  
language+API  
combination**

JSON Document describing all our APIs

JSON Document per API

Libraries could read those documents and statically/dynamically provide classes

1 library per language not per API or version

```
kind: "discovery#restDescription",
discoveryVersion: "v1",
id: "discovery:v1",
name: "discovery",
version: "v1",
title: "APIs Discovery Service",
description: "Lets you discover information about other Google APIs",
icons: {
  x16: "http://www.google.com/images/icons/feature/filing_cabinet",
  x32: "http://www.google.com/images/icons/feature/filing_cabinet",
},
documentationLink: "http://code.google.com/apis/discovery",
protocol: "rest",
baseUrl: "https://www.googleapis.com/discovery/v1/",
basePath: "/discovery/v1/",
parameters: {
  - alt: {
    type: "string",
    description: "Data format for the response.",
    default: "json",
    - enum: [
      "json"
    ],
    - enumDescriptions: [
      "Responses with Content-Type of application/json"
    ],
    location: "query"
  },
  - fields: {
    type: "string",
    description: "Selector specifying which fields to include in the response.",
    location: "query"
  },
  - key: {
    type: "string",
    description: "API key. Your API key identifies your project.",
    location: "query"
  },
  - oauth_token: {
    type: "string",
    description: "OAuth 2.0 token for the current user.",
  },
}
```

People don't want to  
deal with the  
impedance mismatch  
between their  
languages and AtomPub

External developers aren't as excited about Atom as we are

```
{
  kind: "discovery#restDescription",
  discoveryVersion: "v1",
  id: "plus:v1",
  name: "plus",
  version: "v1",
  revision: "20120227",
  title: "Google+ API",
  description: "The Google+ API enables developers to build on top of the Google+ platform.",
  - icons: {
    x16: "http://www.google.com/images/icons/product/gplus-16.png",
    x32: "http://www.google.com/images/icons/product/gplus-32.png"
  },
  documentationLink: "http://developers.google.com/+/api/",
  protocol: "rest",
  baseUrl: "https://www.googleapis.com/plus/v1/",
  basePath: "/plus/v1/",
}
```

## Default to JSON

Let them eat JSON

```
{
  kind: "discovery#restDescription",
  discoveryVersion: "v1",
  id: "plus:v1",
  name: "plus",
  version: "v1",
  revision: "20120227",
  title: "Google+ API",
  description: "The Google+ API enables developers to build on top of the Google+ platform.",
  - icons: {
    x16: "http://www.google.com/images/icons/product/gplus-16.png",
    x32: "http://www.google.com/images/icons/product/gplus-32.png"
  },
  documentationLink: "http://developers.google.com/+/api/",
  protocol: "rest",
  baseUrl: "https://www.googleapis.com/plus/v1/",
  basePath: "/plus/v1/",
}
```

## Correction: Default to pretty-printed JSON

The overhead is worth it in terms of debugging time saved. It can always be switched off.

People want to play  
with your API before  
they make a  
commitment

APIs Explorer

Authorize using OAuth 2.0:  ON

Select a service	Select a version	Select a method	Fill in parameters
<p>and badges in Orkut. More stuff coming in time.</p> <p> <b>pagespeedonline</b> Lets you analyze the performance of a web page and get tailored suggestions to make that page faster.</p> <p> <b>plus</b> The Google+ API enables developers to build on top of the Google+ platform.</p> <p> <b>prediction</b> Lets you access a cloud hosted machine learning service that makes it</p>	<p>v1 <a href="#">Documentation</a></p>	<p><b>comments.get</b> Get a comment.</p> <p><b>comments.list</b> List all of the comments for an activity.</p> <p><b>people.get</b> Get a person's profile.</p> <p><b>people.listByActivity</b> List all of the people in the specified collection for a particular activity.</p> <p><b>people.search</b> Search all public profiles.</p>	<p>*userId = <input type="text" value="me"/> The ID of the person to get the profile for. The special value "me" can be used to indicate the authenticated user. (string)</p> <p>fields = <input type="text"/> Selector specifying which fields to include in a partial response. <a href="#">Open fields editor</a></p> <p><input type="button" value="Execute"/> * required field</p>

History

```

200 OK
- Show headers -
- {
  "kind": "plus#person",
  "etag": "\"rRfsvTRgEvHLgkzTy4DjAw62J44/ZJtqaB5DLJ1ImCnld1H7PgQuhHE\"",
  "id": "105037104815911535953",
  "displayName": "Ade Oshineye",
  "name": {
    "familyName": "Oshineye",
    "givenName": "Ade"
  },
  "tagline": "A chaotic neutral point of view",
  "gender": "male",
  "aboutMe": "<div>I make things (code/photos/words) and wave my arms around a lot when I talk.</div><div><br></div><div>I'm a Developer Advocate at Google in the Google+ Developer Relations team. In general I work on the stack of protocols, standards and APIs that power the social web. In practice that means I look after the Google+ APIs and +1 button with a focus on Europe, Middle East and Africa (EMEA).</div><div><br></div><div>I'm also the co-author of O'Reilly's "Apprenticeship Patterns: Guidance for the aspiring software craftsman" and you can find out more about that book here: <a href='\"http://www.oshineye.com/books.html\"'>http://www.oshineye.com/</a></div><div><br></div><div>I'm also part of the small team behind <a

```

http://code.google.com/apis/explorer/#\_s=plus&\_v=v1&\_m=people.get&userId=me

Give them an API Explorer that uses Discovery




People hate waiting to  
get hold of API keys in  
order to use your API

This is magnified if they're using multiple APIs











Google apis

Caxton ▾ All (31) Active (5) Inactive (26)

Overview  
Services  
Team  
API Access  
Billing   
Reports  
Quotas  
Hangouts

### Active services

Select services for the project.

Service	Status	Notes
 Freebase API 	<input checked="" type="checkbox"/> ON	Courtesy limit: 100,000 queries/day
 Google+ API 	<input checked="" type="checkbox"/> ON	Courtesy limit: 10,000 queries/day
 Google+ Hangouts API 	<input checked="" type="checkbox"/> ON	
 Latitude API 	<input checked="" type="checkbox"/> ON	Courtesy limit: 1,000,000 queries/day
 Prediction API 	<input checked="" type="checkbox"/> ON	<a href="#">Pricing</a> • Courtesy limit: 100 queries/day

Give them a unified API console for managing API keys and billing

# The Circle Of Life

for APIs

**1** Launch

---

**2** Use and abuse

---

**3** Feedback and iteration

---

**4** Revision and replacement

# There will be mistakes

- Provide a public issue tracker
- Have a mailing list for questions and discussion
- Get feedback on your documentation
- Go out and ask your customers what they think of your API
- Run 'office hours'

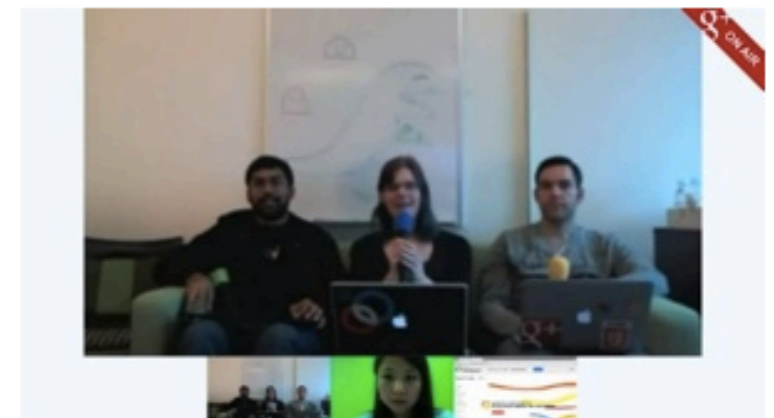
## Developer Office Hours

Let's hangout! Google+ hangouts are being used in new ways every day. So, we've decided to host our Office Hours in where else, but a Google+ hangout. We will be hosting weekly developer office hours via a hangout with members of the Google+ platform DevRel, Engineering, and Product teams. Come chat with the +Platform team, get your questions answered, and provide feedback.

**When:** Every Wednesday at 11:30am - 12:15pm PST. That's 1930 to 2015 UTC.

**Where:** In a hangout on air! Once we begin you can see the live stream on the [Google+ Developers page](#) or view past sessions on [YouTube](#).

**What:** Most weeks we'll have a specific topic. We'll announce that topic each Monday on the [Google+ Developers page](#). If you have a question for us, please post it as a comment on this announcement post.



**Religion**

# ReST versus RPC

We support both. Web developers seem increasingly fond of RPC.  
They both have their place.



# Versioning

Content negotiation, custom headers or different domains.  
We just put it in the URL because it's simpler for people to handle without reading documentation.  
We seldom increment the version.

# Should your APIs reflect your UI?

No.

It slows down the evolution of your UI and API because you have to maintain dead endpoints.  
It encourages you to just throw your internal APIs over the wall.  
It blinds you to the actual needs of external developers. They're not like you.  
It limits what external developers can build.

# JSON > XML/Atom

JSON is slowly reinventing the XML wheel (for example JSON Schema) but it's what developers want and need.

You have to give the people what they want.

# Snowflakes versus Standards/Specifications

Snowflakes have the benefit of internal consistency  
Standards have the benefit of external consistency



## Chris Chabot ✓

Distilling fact from the vapors of nuance

6 circles

You are also in Chris Chabot's circles

Distilling fact from the vapors of nuance



```
- {
  "kind": "plus#person",
  "etag": "\"rRfsvTRgEvHLgkzTy4DjAw62J44/_woOAYG29Ktmehw-YgYod06Xhgg\"",
  "id": "108189587050871927619",
  "displayName": "Chris Chabot",
  "name": {
    "familyName": "Chabot",
    "givenName": "Chris"
  },
  "tagline": "Distilling fact from the vapors of nuance",
  "gender": "male",
  "aboutMe": "<span><p><span>I'm a Developer Advocate at Google who's passionate about the social web, social identity, open source, innovative web technologies and trying to do the impossible on a daily basis.</span></p></span>",
  "url": "https://plus.google.com/108189587050871927619",
```



## Chris Chabot ✓

Distilling fact from the vapors of nuance

6 circles

You are also in Chris Chabot's circles

Distilling fact from the vapors of nuance



## **JSON Web Token (JWT) draft-jones-json-web-token-07**

### **Abstract**

JSON Web Token (JWT) is a means of representing claims to be transferred between two parties. The claims in a JWT are encoded as a JSON object that is digitally signed using JSON Web Signature (JWS) and/or encrypted using JSON Web Encryption (JWE).

The suggested pronunciation of JWT is the same as the English word "jot".

<http://self-issued.info/docs/draft-jones-json-web-token.html>

Or would you just use a `verified="true"` parameter?



When the data  
disagrees with your  
beliefs, change your  
religion

**Thank You!**