

# The Social Web: An Implementer's Guide

**Joseph Smarr**

Chief Platform Architect



Google I/O 2009

27 May 2009

Google Moderator: <http://is.>

# Last year at Google I/O...

[All Sessions](#)[Google I/O Website](#)

## OpenSocial, OpenID, and OAuth: Oh, My!

Joseph Smarr (Plaxo)

A number of emerging technologies will soon collectively enable an open social web in which users control their information and it can flow between multiple sites and services. OpenID, OAuth, microformats, OpenSocial, the Social Graph API, friends-list portability, and more will be discussed, as well as a coherent vision for how the pieces fit together and how developers can start taking advantage of them now.



...how do the pieces fit together?

...and what will the new  
Social Web look like?

Joseph Smarr





# The Social Web

Identity Providers

Social Graph Providers

Content Aggregators

# A Day in the Life of the Social Web



John checks out  
a new site

Using an existing  
account and profile

Identity Providers



He finds who  
he knows there

Using his current  
address book/friends-list

Social Graph Providers



He creates some content  
and shares it back

His friend Joseph discovers it  
—and the new site

Content Aggregators

The Virtuous Cycle  
Repeats

# Later that year...

# A New Open Stack is Emerging



MySpace  
DataAvailability



Yahoo!  
Y! OS



Google  
FriendConnect



Plaxo  
Pulse

Open ID

XRDS-Simple

OAuth

PortableContacts

OpenSocial

# So, where are we now?

## A Big Day for the Open Stack: Y!OS Launches

October 17, 2008 in Uncategorized | Tags: OAuth, OpenID, Y!OS, Yahoo (Edit)

## Windows Live Adds Support For OpenID, Calls It De Facto Login Standard

by Jason Kincaid on October 27, 2008

54 Comments 

## Your Gmail Account is Now An OpenID

by Erick Schonfeld on October 29, 2008

112 Comments 

Yahoo and AOL Enhancing OpenID with Data Portability via the “Simple Registration” Extension

## Facebook Connect Is Now Generally Available. Let the Identity Wars Begin

By Michael Calore  December 04, 2008 | 4:14:16 PM Categories: Facebook, OpenID

Wednesday, March 18, 2009

## MySpace Launches New Features for MySpaceID; Functionality Live Today

Open Stack FTW: Facebook joins the OpenID Foundation!

## Portable Contacts lets you get friends' info on other sites

ERIC ELDON | MARCH 26TH, 2009

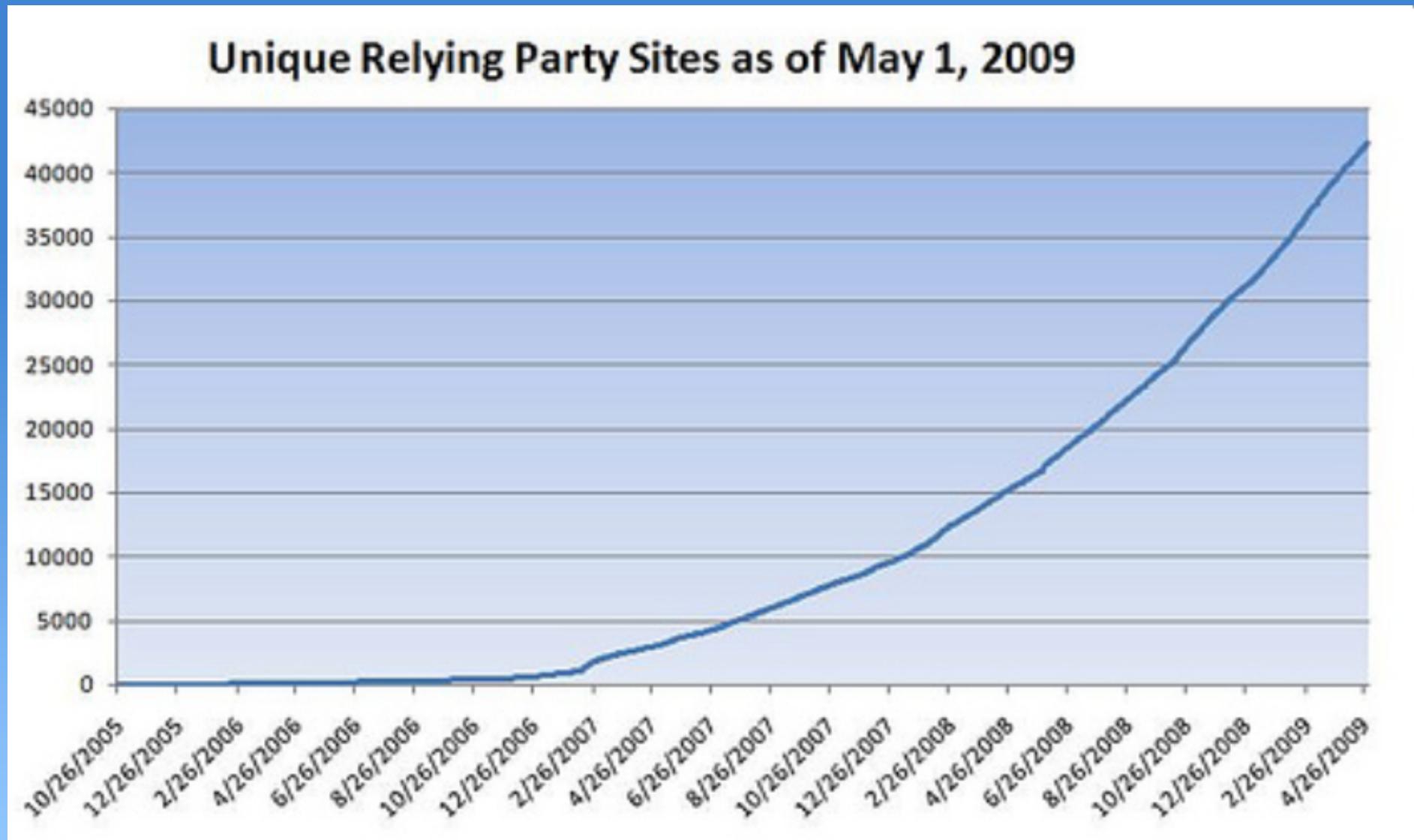
## Google Implements New Open Standard for Friends Lists

Written by Marshall Kirkpatrick | March 26, 2009 10:23 AM / 12 Comments

« Prior Post Next Post »

Joseph Smarr

# OpenID adoption continues to grow...



# Too many OAuth APIs to count...



VIEW EDIT

## ServiceProviders

last edited by  Dave Engberg 1 wk ago

 Page history

Please list support sites and their respective endpoints/documentation here.

- [Photobucket's API](#) now uses OAuth for all [consumer authentication](#). They've got a number of apps connecting already, and public key signups.
- [SmugMug supports OAuth](#) on its [API](#).
- [Twitter](#). [FAQ](#). [App registration](#).
- [Ma.gnolia](#). [Developer Center](#). [Register your app](#).
- [88 Miles](#). [Developers Pages](#).
- [thmbn1](#). [Developer Wiki](#).
- [Pownce](#). [API Signup and Docs](#). [API Google Group](#)
- [Google](#). [Docs](#). [Federated login research](#).
- [MySpace](#). [Documentation](#)
- [Agree2](#) supports OAuth. [API Signup](#)
- [Brightkite API](#). [Docs](#).
- [Fire Eagle](#). [Docs](#).
- [Praized](#). [API Signup](#). [API Docs](#) (draft, better soon). [OSS code](#).
- [Meetup.com](#). [Docs](#).
- [OpenSocial](#). [Docs](#).
- [Yammer](#). [Docs](#).
- [GetSatisfaction](#). [Docs](#).
- [Netflix](#). [Docs](#).
- [Ohloh](#). [Docs](#).
- [Iron Money](#). [Docs](#).

# Tons of feeds, including mainstream sites

## Find your websites

Enter a username that you commonly use. We'll help you find the websites you use.

Username:  Find my sites

## Add more websites

### Blogs and Status

-  au one blog
-  Baidu
-  Blog
-  Blogbus
-  Disqus
-  excite blog
-  Jaiku
-  livedoor
-  LiveJournal
-  Sina
-  Tumblr
-  Twitter
-  Xanga

### Events and Travel

-  Socializr
-  TravelPod
-  Triplt
-  Upcoming

### Reviews and Wishlists

-  Amazon Wish List
-  goodreads
-  Netflix Ratings
-  RateItAll
-  Yelp

### News and Bookmarks

-  Bloglines
-  Delicious
-  Digg
-  Google Reader
-  Reddit

### Photos and Files

-  Flickr
-  ImageShack
-  Picasa
-  SlideShare
-  SmugMug
-  WebShots

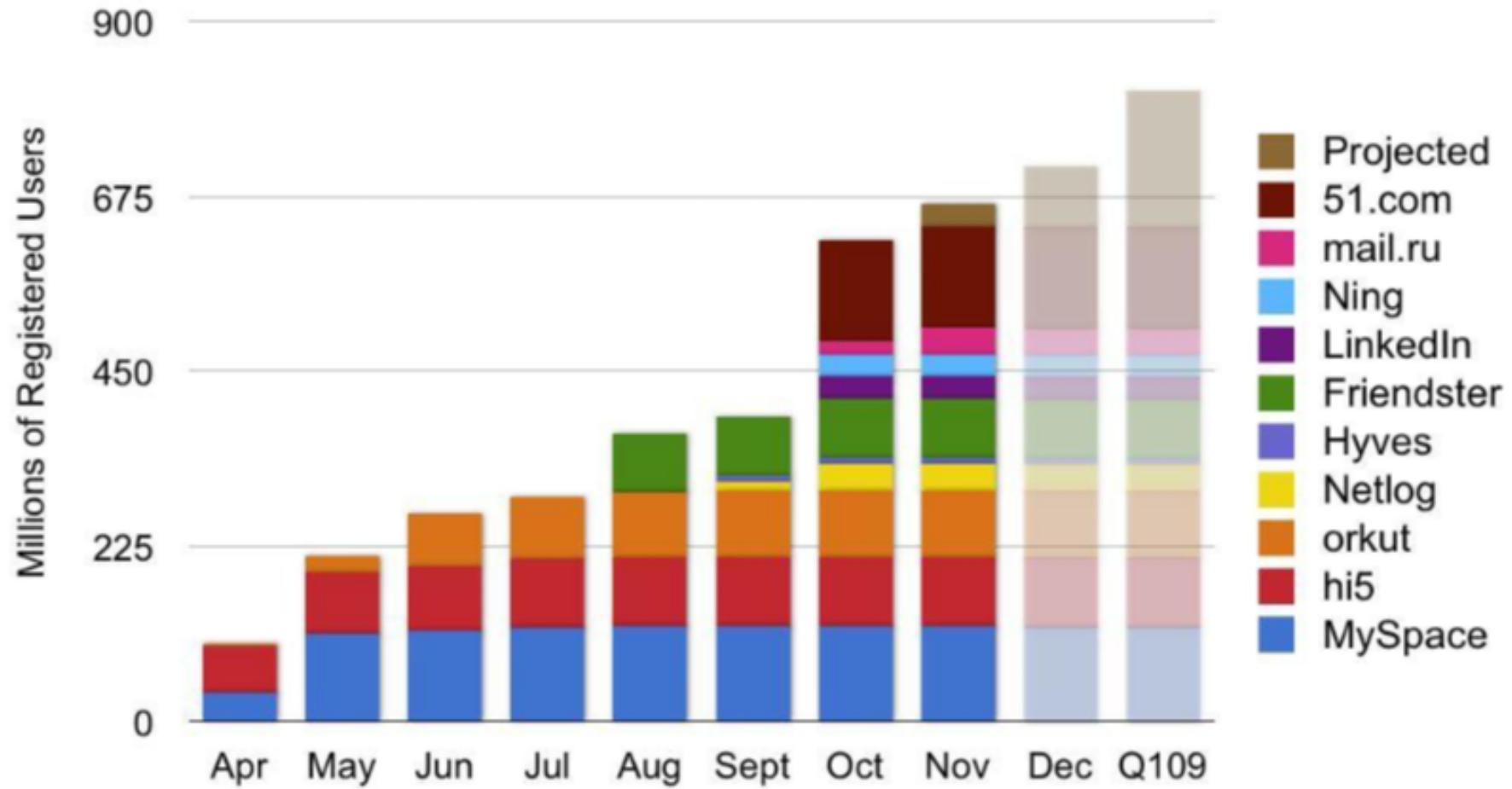
### Music and Videos

-  DailyMotion
-  iLike
-  Last.fm
-  Vimeo
-  YouTube

### Social Networks

-  Bebo
-  Facebook
-  Multiply
-  MySpace
-  TierraNatal
-  Windows Live Spaces
-  Yahoo! 360

# OpenSocial has seen widespread adoption



Over 600M in a year – and more to come!

# In other words...

It's now clear.

**The Web is going social...**

**...and the Social Web is going  
open**

# And that means... Now you can:

- Streamline your sign-up flow
- Put an end to “re-friend madness”
- Kill the “password anti-pattern”
- Ride the “virtuous cycle of social discovery”

# Let's see it in action...

**Let's see it in action...**

**Demo:  
“2-Click Sign-up”  
Google • Plaxo**

# 2-Click Sign-up: How does it work?

- **Invitation sent to @gmail.com address**
  - User is likely to have Google profile / contact list
  - Gmail user is already signed in when responding
- **OpenID + OAuth “hybrid” login to Plaxo**
  - Also requests name, email, etc. via AX
  - Response includes profile data and OAuth token
- **Portable Contacts to find connections**

# 2-Click Sign-up: How well does it work?

- Users prefer “Sign in with Google Account” more than sign-up from scratch
- Of users sent off to Google, 92% return!
- Returning users import and connect more
- Hybrid users visit Plaxo more often (no lost passwords)

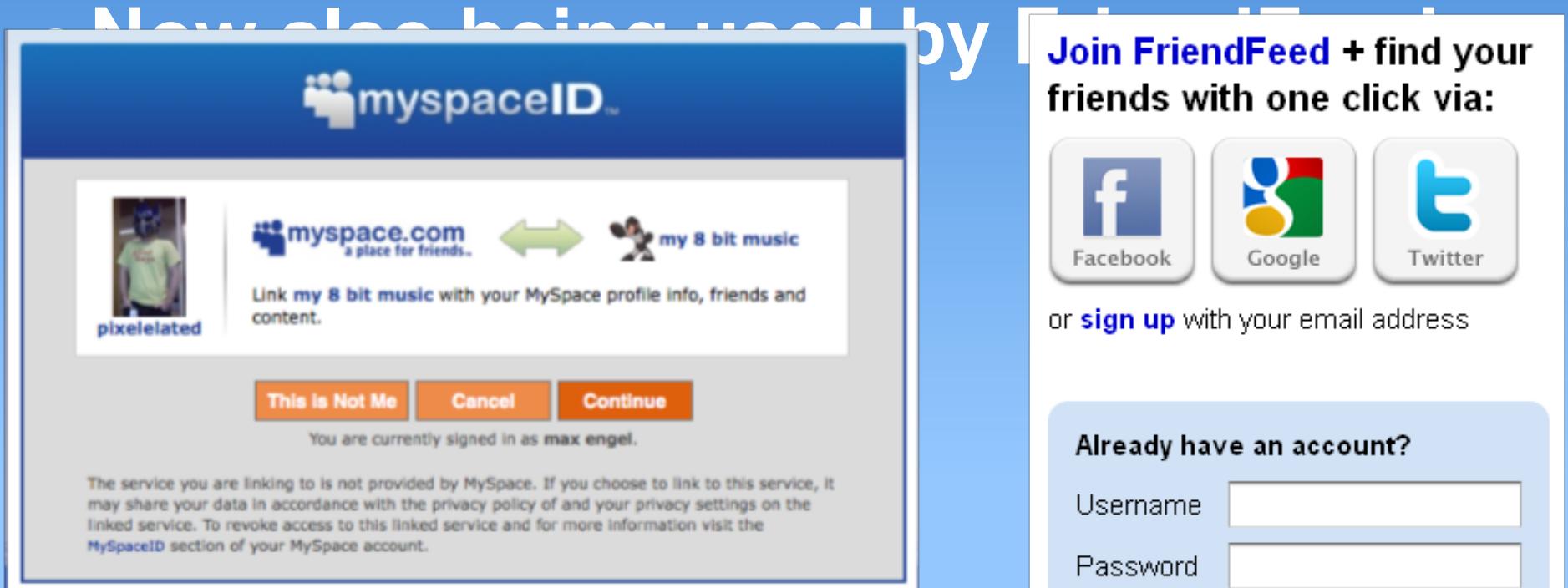
  

- Now being used with 100% of gmail

# 2-Click Sign-up: Everyone's invited

- All built on open standards
  - Works “out of the box” with MySpace
  - No need for prior bizdev arrangements

Now also being used by [Facebook](#) and [Twitter](#)



**myspaceID**

 [myspace.com](#) a place for friends.  [my 8 bit music](#)

Link [my 8 bit music](#) with your MySpace profile info, friends and content.

[This is Not Me](#) [Cancel](#) [Continue](#)

You are currently signed in as max engel.

The service you are linking to is not provided by MySpace. If you choose to link to this service, it may share your data in accordance with the privacy policy of and your privacy settings on the linked service. To revoke access to this linked service and for more information visit the MySpaceID section of your MySpace account.

**Join FriendFeed + find your friends with one click via:**

 [Facebook](#)    [Google](#)    [Twitter](#)

or [sign up](#) with your email address

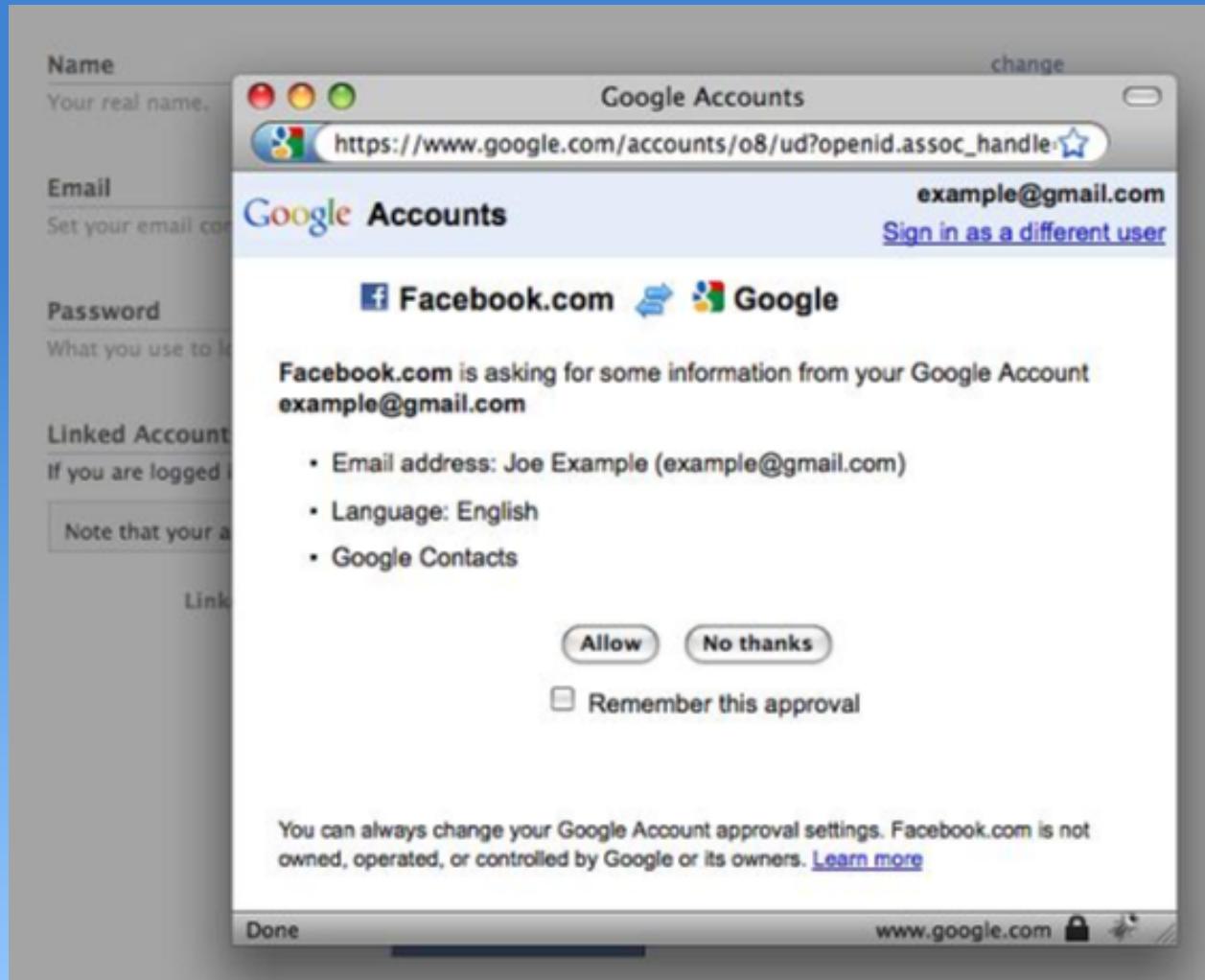
**Already have an account?**

Username

Password

 [Plaxo](#)

# ...and, as of last week, by Facebook too!



**Let's see it in action...**

**Demo:  
“2-Click Sign-up”  
MySpaceID**

please login:



Login with MySpaceID

Welcome to 8-Bit Music: a community to  
share and discover video game tunes.  
Please login!



© 2008-2009, 8-Bit Music. All Rights Reserved.  
This site supports OpenID authentication.

MySpace - Mozilla Firefox

http://api.myspace.com/openid?openid.ns=http%3A%2F%2Fspecs.openid.net%2Fauth%2F2.0&openid.ns

**myspaceID™**

  
josephsmarr

**myspace.com**  
a place for friends.   my 8 bit music

Link **my 8 bit music** with your MySpace profile info, friends and content.

**This is Not Me** **Cancel** **Continue**

You are currently signed in as Joseph Smarr.

The service you are linking to is not provided by MySpace. If you choose to link to this service, it may share your data in accordance with the privacy policy of and your privacy settings on the linked service. To revoke access to this linked service and for more information visit the [MySpaceID](#) section of your MySpace account.

©2003-2009 MySpace.com. All Rights Reserved.

Done

**Let's see it in action...**

**Demo:  
Ending “Re-friend Madness”  
with Facebook Connect**



My Profile

Connections

More



Post message



Add photos



Share link

Show: Everyone

**“Lisa Stevens is lovin' the new Facebook Connect integration! ”**

7 seconds ago via Facebook

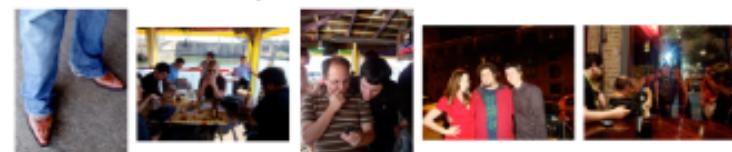
[Add comment](#) [More](#)

Sam Patel, Annette Banesh and 3 other people liked this.



I really like that events I RSVP to on Facebook get added to my Plaxo calendar.

Charles Wildavsky 1 second ago

[Add a comment...](#)**“John McCrea added 5 photos on Facebook”** 5 minutes ago

SXSW 2009

[More](#)**“You linked with your Facebook account and connected with [Melissa Brown](#), [Sam Patel](#), [Zoe Clinton](#), [Trevor Lee](#), [Charles Wildavsky](#), [Grace Gill](#), and 10 others via Facebook Connect.”**[Tell your Facebook friends to link their accounts, too »](#)**“Charles Wildavsky rated a video on Netflix”** 1 day ago

Persepolis (2007)

Synopsis: Marjane (voiced by Chiara Mastroianni) just wants to be an ordinary kid, but that isn't easy in 1978 Iran. This profound animated film follows Marjane's childhood in a repressive society, her... [more »](#)[Add comment](#) [I like it!](#) [More](#)**“Joseph Smarr shared a link on Facebook”** 9 hours ago

Interesting story of interaction between man and nature

[A Little Air Pollution Boosts Vegetation's Carbon Uptake / Science News](#)The world's vegetation soaked up carbon dioxide more efficiently under the polluted skies of recent decades than it would have under a pristine atmosphere, a new analysis in the April 23 *Nature* suggests. The trend hints that relying on forests and other vegetation to sequester carbon may not be effective if skies continue to clear, researchers say. [more »](#)[Add comment](#) [I like it!](#) [More](#)**New stuff**

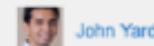
- You have 1 connection request
- You have 1 new notification

Lisa is lovin' the new Facebook Connect integration!

2 minutes ago

[Update status...](#)**Lisa Stevens**

Dayton, OH

[Edit profile](#)**People you may know**

John Yard



Deb Perry



Michael Broussard

[More people »](#)

# Ending “re-friend madness”: How does it work?

- **Store identity mapping (FB ↔ Plaxo)**
  - Established each time a user connects accounts
- **Access FB user's friends list (FB IDs)**
  - Find subset that are mapped to Plaxo IDs
- **Establish connection for friends on Plaxo**
  - Keep connections up-to-date in the background
  - Users can opt to keep their graphs separate
- **Show FB users' content in Plaxo**

**Let's see it in action...**

**Demo:  
Killing the “password anti-pattern”**

[Advanced search  
Tools](#)

## Friend Search

### Find your friends

[Email invitations](#) to your friends not yet using FriendFeed

### Automatically find the people you know on FriendFeed

Import your address book to see which of your friends are already using FriendFeed. (Don't worry, we won't spam anyone!)



Facebook



Twitter



Gmail



Yahoo



Hotmail

### Recommended friends

These folks are popular among your friends. You might know them, too.



Robert Scoble



michael arrington



Loic Le Meur



Tim O'Reilly



Scott Beale



Jason Calacanis



mashable



Jeremy Zawodny

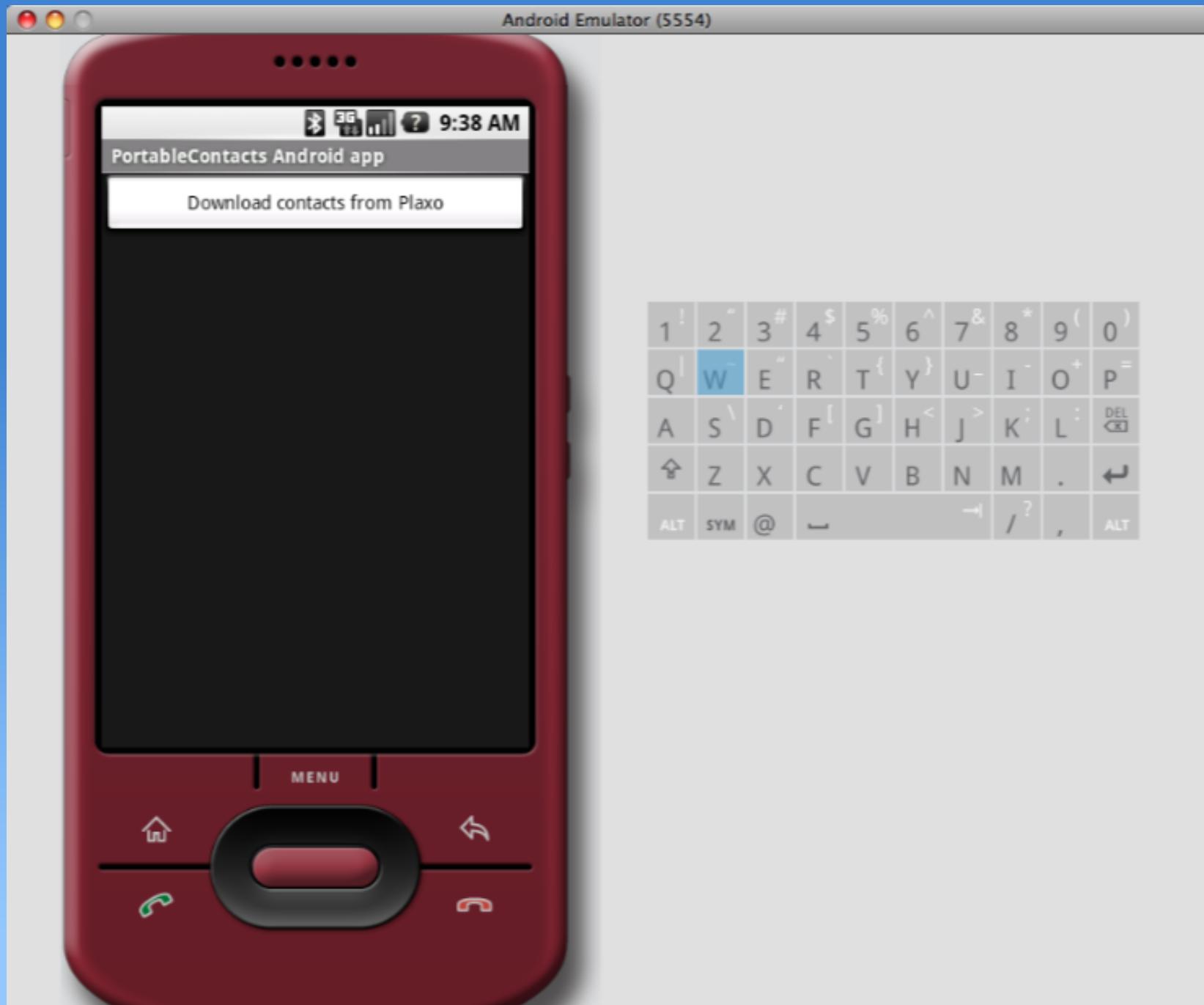
## Portable Contacts

### About

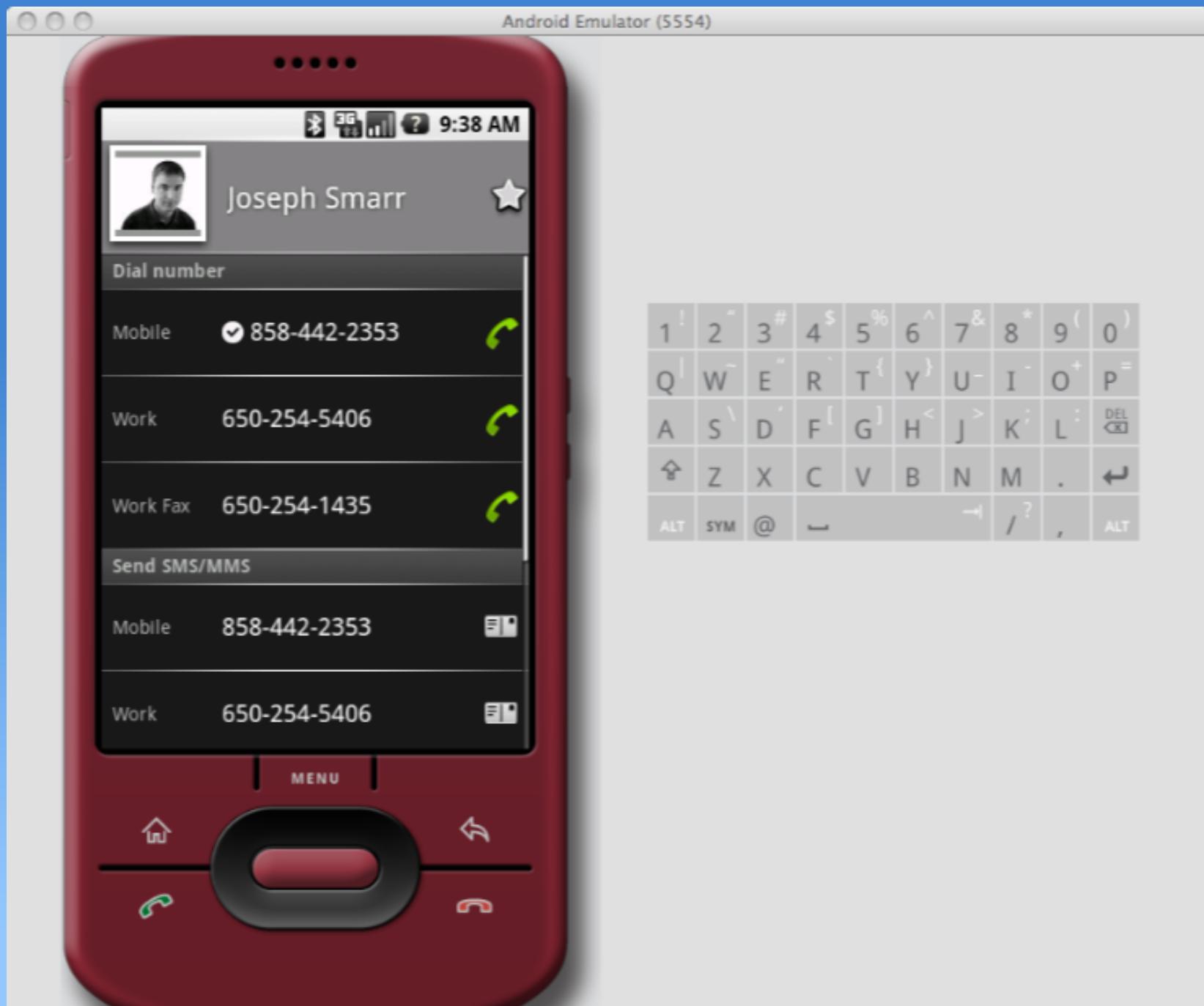
The vision for Portable Contacts has been around for a long time. Sites large and small share the goal of providing users a secure way to access their address books and friends lists without having to take their credentials or scrape their data. But only in recent weeks has it begun to feel that **now is the right time to rally the community and the industry to work together to make this vision real** by developing an open spec for exchange of contact info that everyone can embrace.

### Why now?

The momentum began building for 'data portability' last year, and we are now at a point where there is strong support for the principle that **users should be in control of their data** and have the freedom to access it from across the web. And the major players have all recognized that they and their users are better off with secure contacts APIs (rather than having third-party services ask for users' credentials in order to scrape their data). As a result, we're seeing major Internet companies making contacts APIs available, such as Google's GData Contacts API, Yahoo's Address Book API, and Microsoft's Live Contacts API (with more to come). Not surprisingly though, each of these APIs is unique and proprietary. We believe this creates the ideal conditions for developing a common, open spec that everyone can benefit from. Just as OAuth has provided a standard to unify the various proprietary schemes for delegated authorization, we believe we can do the same thing for securely sharing address book and friends list data.







Let's see it in action...

Demo:  
Sharing activity streams  
FriendConnect • Plaxo



# my latest piece

by Zeke Shore

2 Sign-in



Joseph Smarr  
[Options](#) ▾



Members (6403) [More ▾](#)



1 Watch-it

## My Latest Piece - Settings - Mozilla Firefox



### My Latest Piece

Basics

[Sites you've joined](#)

[Manage friends](#)

Your profile



Joseph Smarr

[Edit Google profile](#)



Currently using your Google profile [Change](#)

#### Settings for My Latest Piece

[Unjoin this site](#)

Your profile is visible to anyone

Connect with friends from social networks on this site



Google



Plaxo



Twitter

[+ Add / Remove](#)

Publish my activities to sites I've joined and connected networks

[Done](#)

[Fewer options](#)

# What about Facebook?



239  
tweets

retweet

Open Stack

OpenID

February 5, 2009

OpenID, Plaxo



It's a great day for the growing social web. It's a great day for the growing social web that "op-

# Inside Facebook

Tracking Facebook and the Facebook Platform for Developers and Marketers

Home Facebook Marketing Bible Agencies & Brands Contact About Advertise

 **Tatto Media** – **Highest eCPMs Guaranteed.** Turn your traffic to cash today. Check out our latest rates.

## Facebook Launches OpenID Support - Users Can Now Login With Gmail Accounts [May 18th, 2009](#)

Last month, Facebook announced that users would soon be able to login to the site via



OpenID. Today, Facebook has officially become an OpenID relying party: users can now register for Facebook using their Gmail accounts and any OpenID provider that supports automatic login. As such, Facebook has become the largest OpenID relying party on the web.

Now, once users link their Facebook account to a Gmail address (or OpenID URL), they'll be automatically logged in when they go to Facebook after having logged into that service. Facebook says that in its user testing so far, users who register through OpenID actually get engaged with Facebook more quickly than others.

Facebook Launches OpenID Support  
<http://www.insidefacebook.com/2009/02/05/facebook-launches-openid-support-users-can-now-login-with-gmail-accounts/>

a corporate member of the OpenID Foundation. Sweet! Breaking coverage:  
VentureBeat, CNET, TechCrunch.

Your Voice

Publish Your Own Books

## Embrace

84 Comments 

community day at what they are making party developers, not around OpenID, announcement is that party, meaning Microsoft is in beta)

that allows people to do things in new ways "g parties" or as

# So, in conclusion...

**The Web is going social...**

**...and the Social Web is going  
open**

# Time to get involved!

- Open your site to users' existing accounts
- Provide them a socially-tailored experience
- Let them share activity out into other sites

Ride the virtuous cycle!

## Who owns your data and content?

Why don't the social networks and communication tools you use work well together? Tune in each week to learn about the progress being made toward opening up the Social Web.

With a revolving cast of characters, we'll have some of the key technologists working on building the Social Web to explain what is going on; but this isn't a show about technology. It's about explaining what's going on in the fight to make sure you have control of your data, your content, and your privacy -- and the freedom to access your stuff from all over the Web.



## The Panellists



John McCrea  
therealmccrea.com  
john@plaxo.com



David Recordon  
davidrecordon.com  
david@sixapart.com



Joseph Smarr  
josephsmarr.com  
joseph@plaxo.com

## Episode 16: "OpenID's Historic Week: Microsoft and Google Go Live"

In what will likely be remembered as an historic week for OpenID and for opening up the Social Web, John, David, and Joseph take the show on the road, over to Google headquarters. Special guest Eric Sachs, from the Google's Security Team, shares the backstory behind Google becoming an OpenID provider and talks about how he sees OpenID and OAuth fitting together to solve problems on the Web and in the enterprise. Since we shot this episode yesterday, [Google has now removed their whitelist](#) meaning that any OpenID site can use their OpenID Provider.

[Watch HiRes](#)

Links related to this episode:

- [Windows Live ID Becomes an OpenID Provider](#)

<http://thesocialweb.tv>