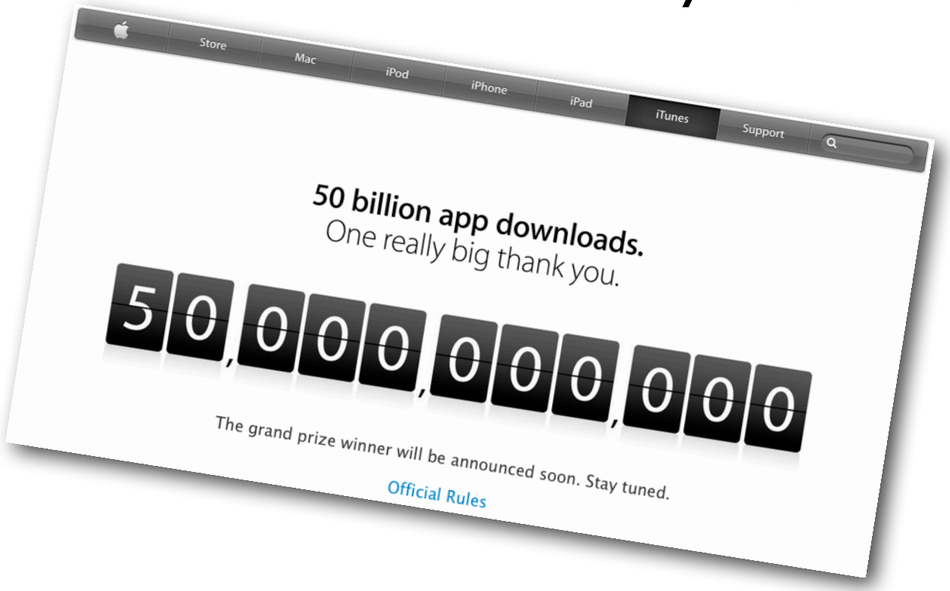
Cove Apple Club

May 22, 2013

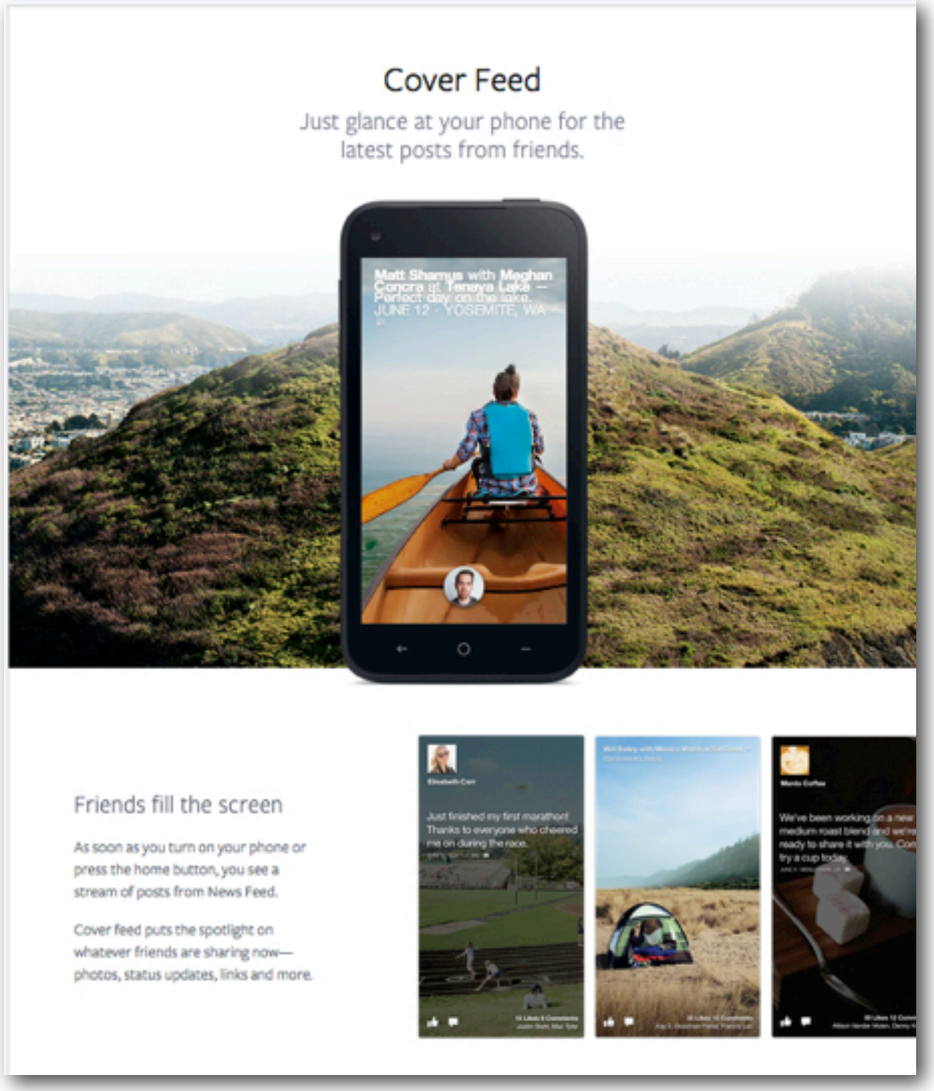


Tonight's Topics

- Apple In The News
- Apple's New Mothership at Mall at Millenia
- Add Facebook Chat to Messages
- Password Hashing: Fun-to-Know

Facebook Home Flops

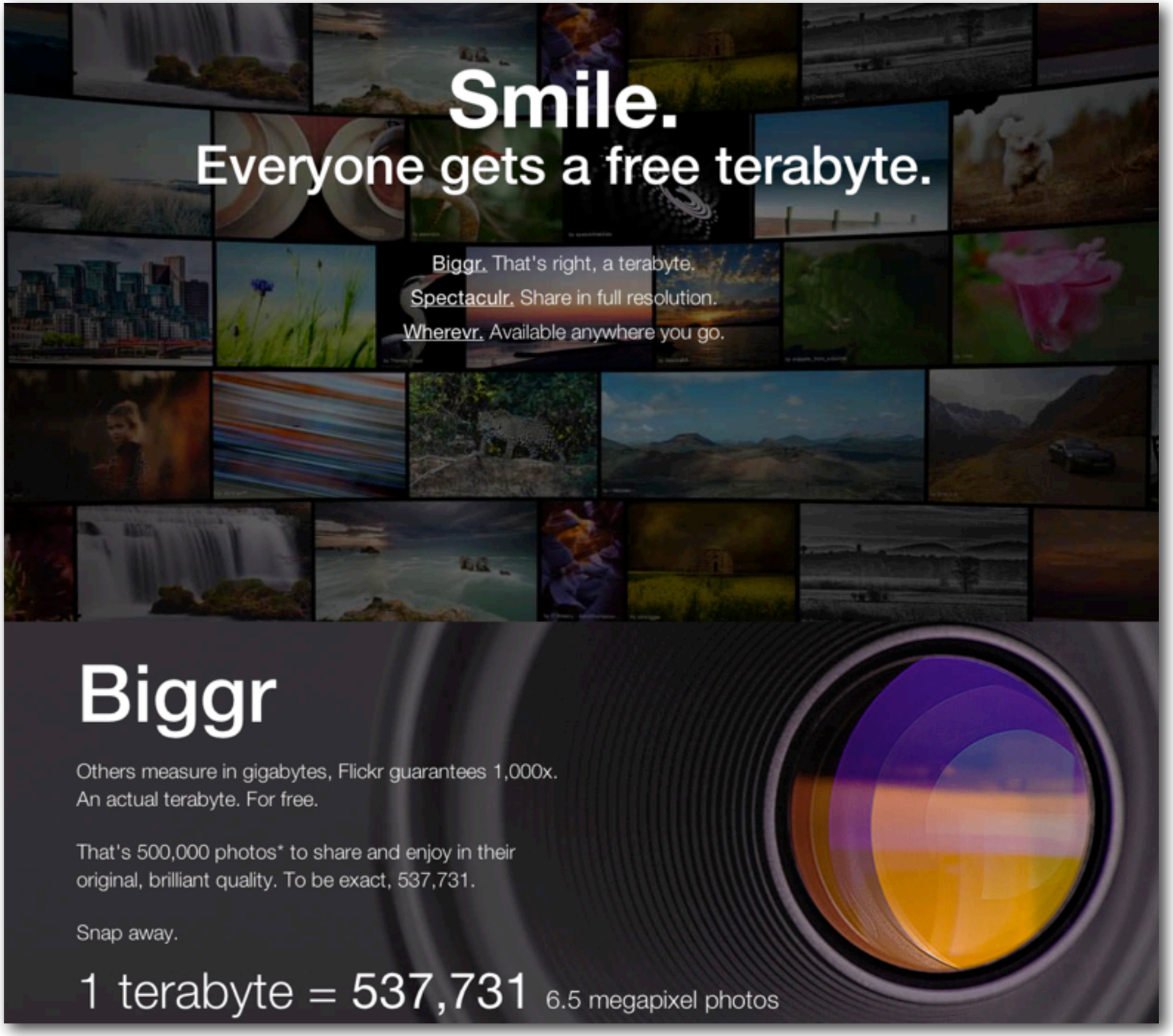
- Much-hyped Android home screen app & dedicated HTC One smartphone
- Less than 1,000,000 downloads after 10 days; Facebook has 1,000,000,000 users
- AT&T dropped price of HTC One phone from $99 to $0.99 after just two weeks, a 99% price drop

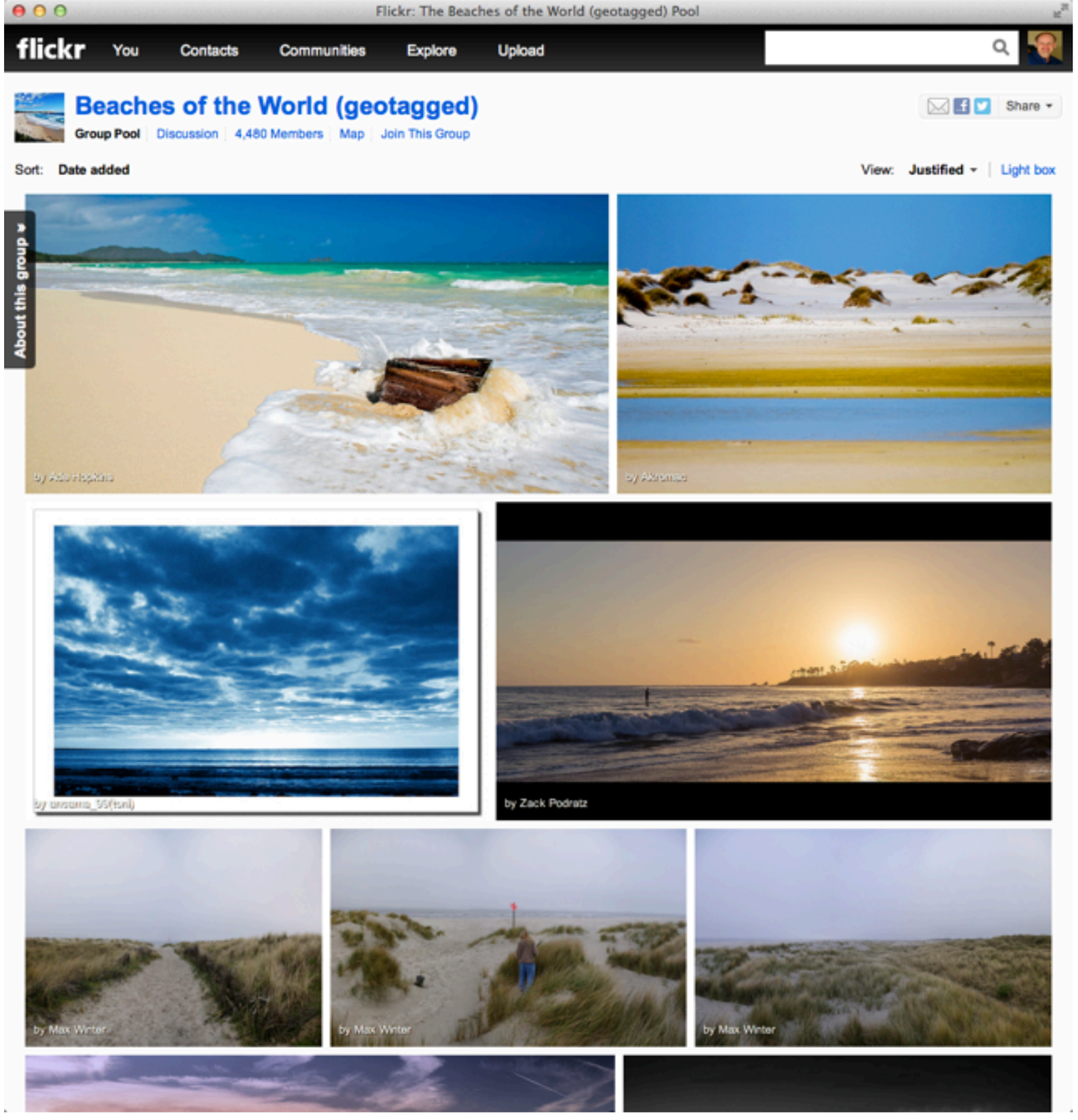


Flickr: Your New Online Photo Album?

- Much-neglected photo sharing site bought by Yahoo! in 2005
- Under Yahoo!'s neglect Flickr missed the huge mobile photo-sharing revolution brought about by iPhone, Instagram, Tumblr, Facebook, PhotoStream
- Finally getting some love by new Yahoo! CEO Marissa Meyer, hoping to get the photo-sharing of mojo back

- 1Tb free for all comers
- “Take a photo every hour for 40 years...”
- All-new seamless displays highlight photos & sets beautifully
- New lightbox views & uploader




Flickr: The Beaches of the World (geotagged) Pool
flickr
You
Contacts
Communities
Explore
Upload
Beaches of the World (geotagged)
Group Pool
Discussion
4,480 Members
Map
Join This Group
Share
Sort:
Date added
View:
Justified
Light box
About this group
by Zack Podratz
by Max Winter
by Max Winter
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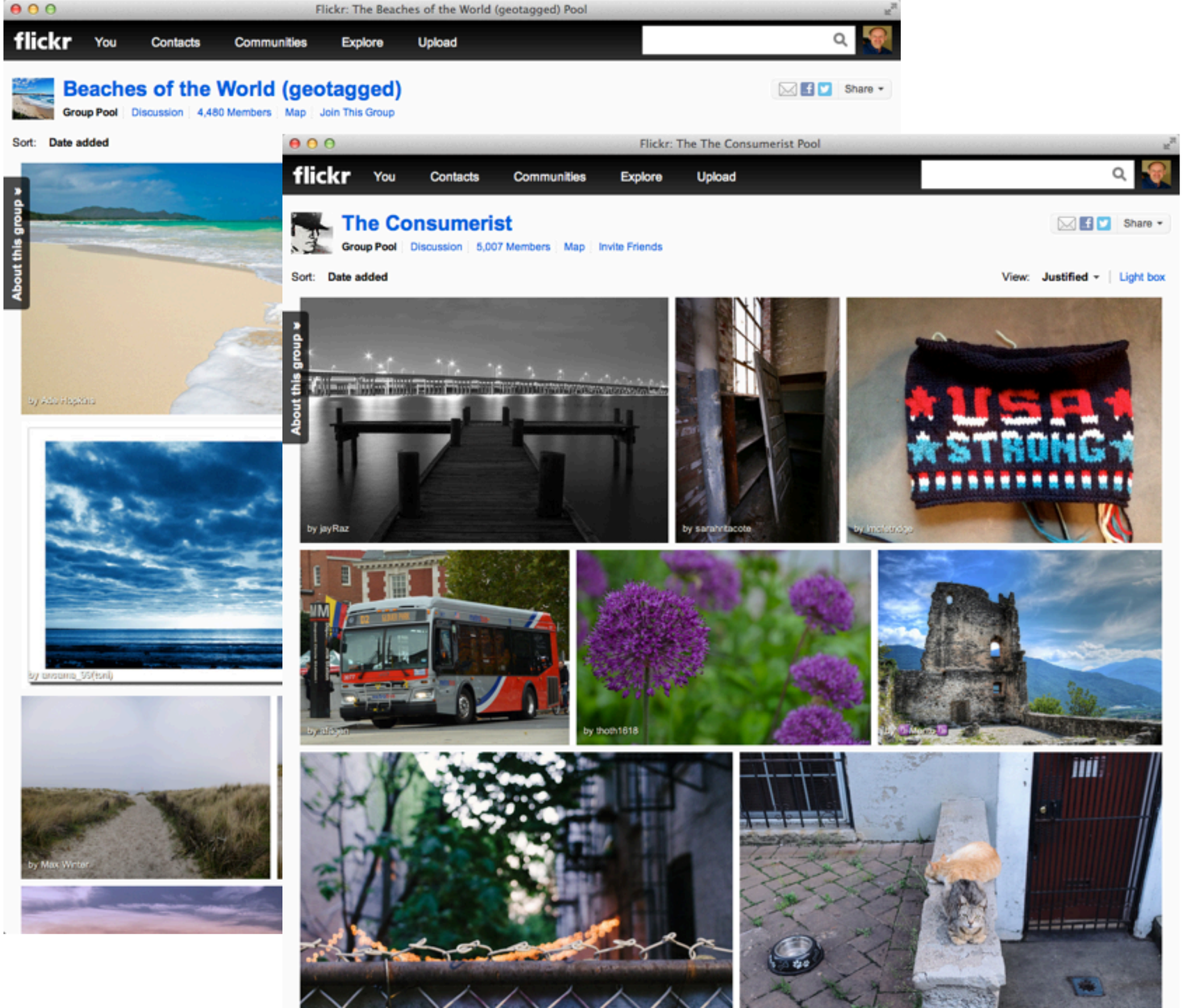
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Group Pool | Discussion | 4,480 Members | Map | Join This Group
Share
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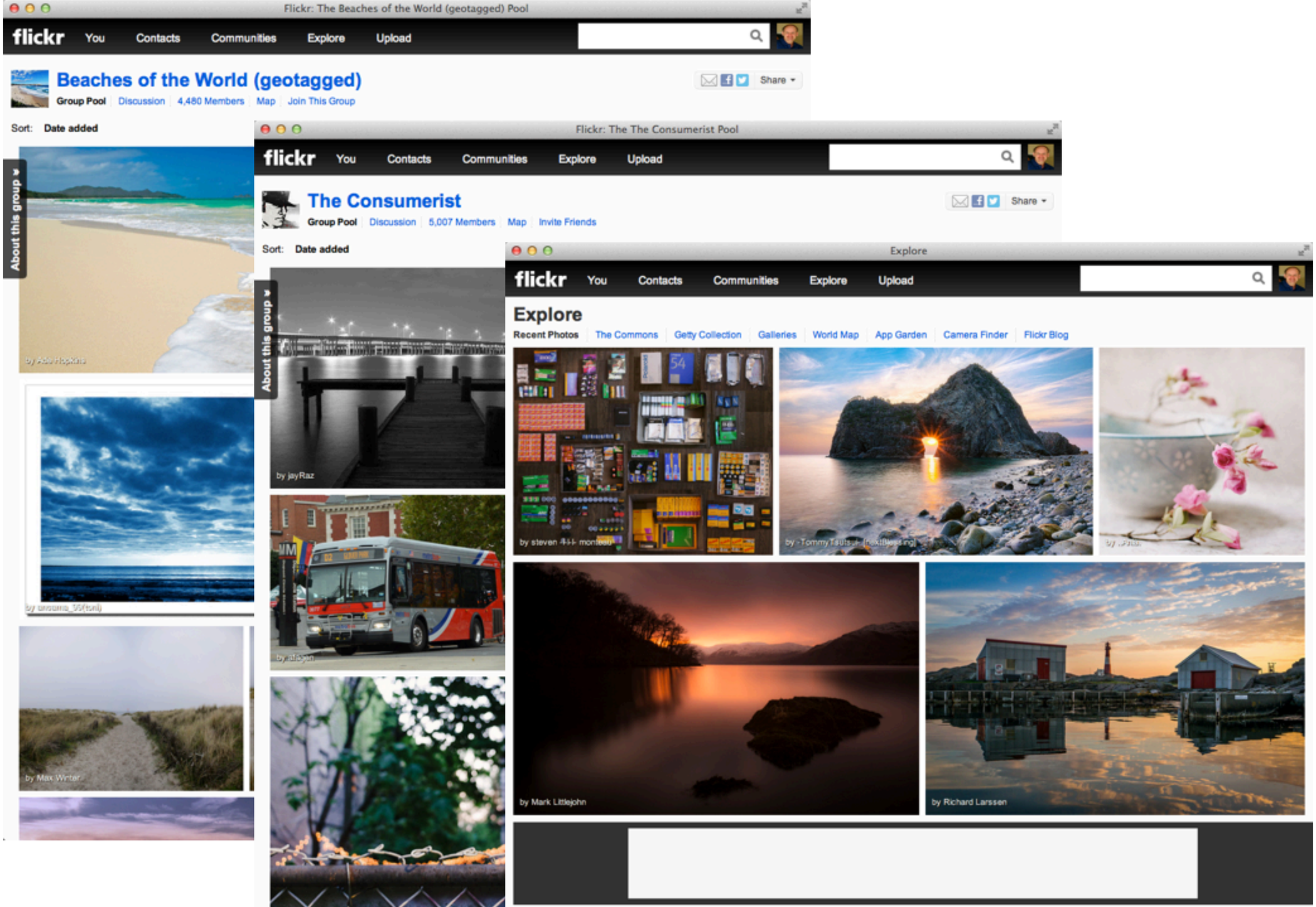
The Consumerist
Group Pool | Discussion | 5,007 Members | Map | Invite Friends
Share
Sort: Date added
View: Justified | Light box
About this group
by jayRaz
by sarahritacote
USA
STRONG
by thoth1618
by Max Writer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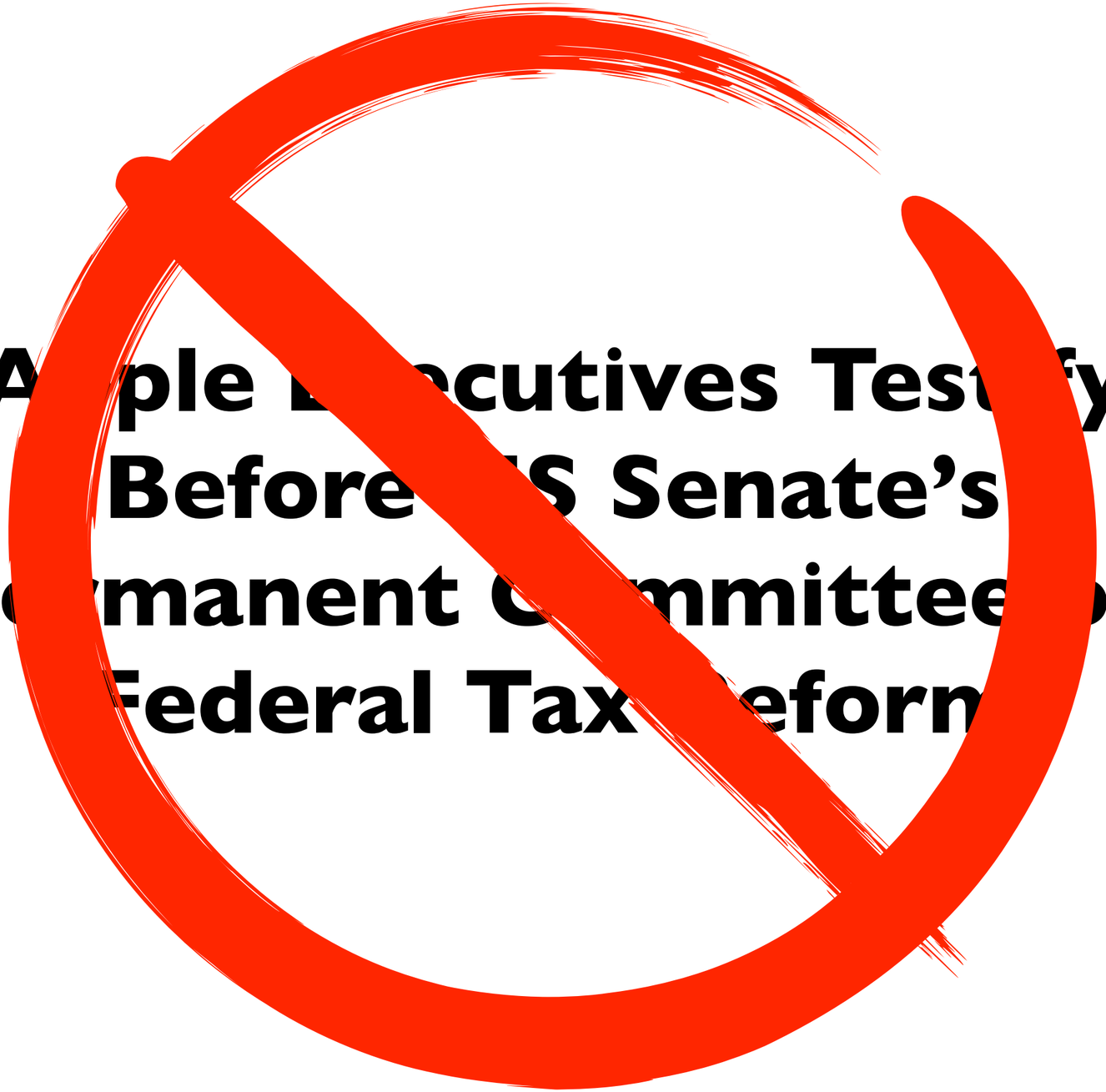
The Commons
Getty Collection
Galleries
World Map
App Garden
Camera Finder
Flickr Blog
by jayRaz
by Max Writer
by Mark Littlejohn
by Richard Larssen

Worth a look, but...

- “If you are not paying for it, you are not the customer. You are the product being sold.”
- Be careful about using Flickr for your most-precious photos and always have them backed up somewhere else
- Consider a **paid** photo hosting site like SmugMug if you are really serious about keeping your photos online, safe and available

Apple Executives Testify Before US Senate's Permanent Committee on Federal Tax Reform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Apple Executives Testify Before US Senate's Permanent Committee on American Competitiveness

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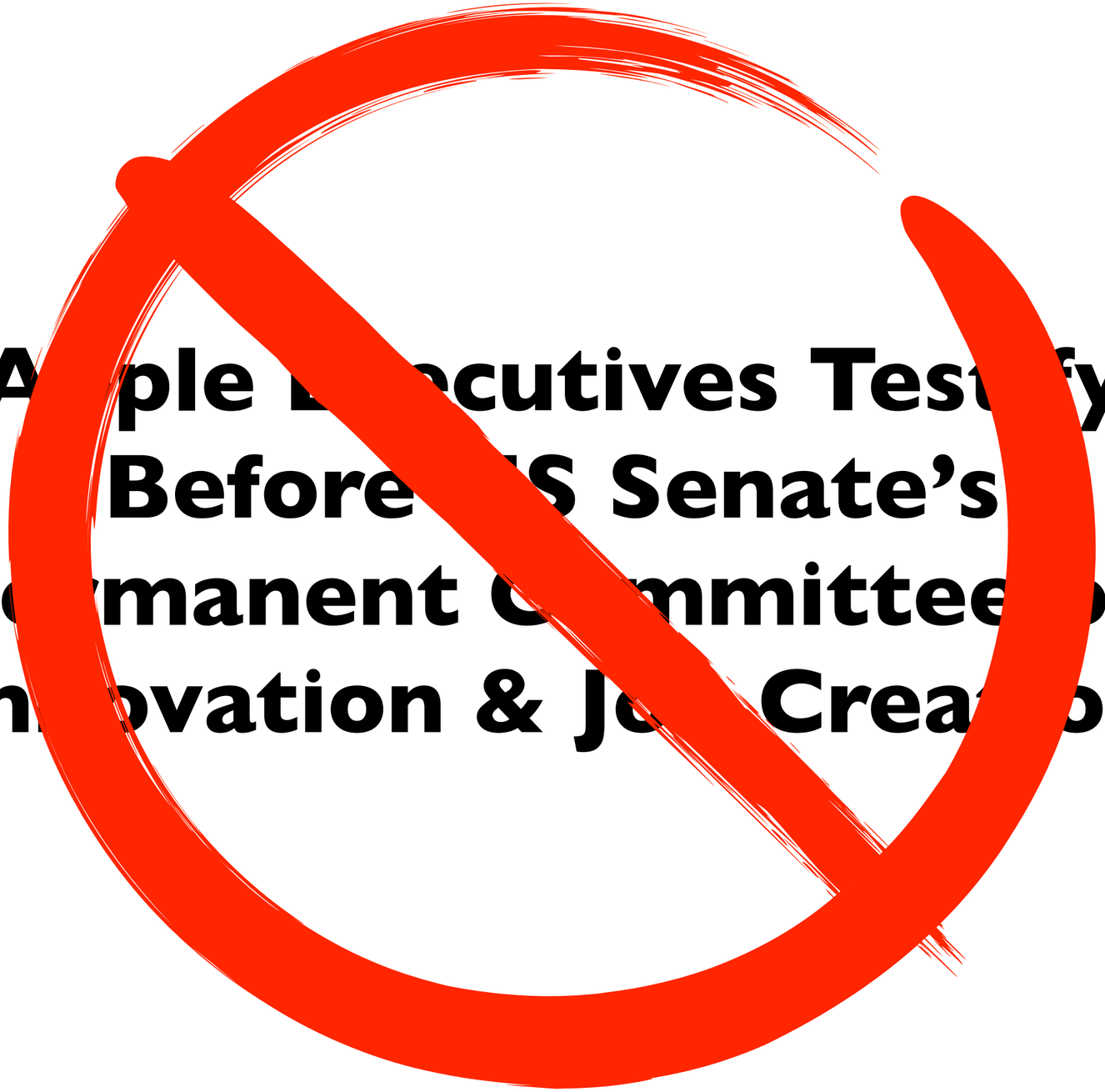
Apple Executives Testify Before US Senate's Permanent Committee on Innovation & Job Creation


Apple Executives Testify
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Apple Executives Testify Before US Senate's Permanent Committee on Science & Technology

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Apple Executives Testify Before US Senate's Permanent Committee on *Homeland Security???*

Apple Executive Testifies Before U.S. Senate's Permanent Committee on *Homeland Security???*

The Senate's Shameful Show Trial

- Apple is accused of no wrongdoing, and in fact is heavily scrutinized and audited by IRS and found to be complying with all US tax laws
- Apple has created over 600,000 US jobs since 1997; started from nothing in a garage in 1974; still and always will be headquartered in Cupertino as a California corporation
- Apple paid $6-billion in US taxes last year, plus paid over $20-billion in US salaries and wages, sales and excise taxes including $9-billion to App Store developers (which the developers pay tax on)
- Committee hearing was not in pursuit of any policy change initiative or any overall effort at federal tax reform

Meanwhile...

- 30 huge US-based corporations paid **$0** in federal taxes from 2008 through 2010
- Companies include Pepsico, GE, Verizon, Boeing, Wells Fargo, DuPont, PG&E, Con-Way Trucking, Duke Energy
- Source: Citizens for Tax Justice (ctj.org)

CTJ Citizens for Tax Justice

Monday, April 9, 2012
Contact: Bob McIntyre
202-299-1066 ext. 22
8 pages

Big No-Tax Corps Just Keep on Dodging

Last November, Citizens for Tax Justice and the Institute on Taxation and Economic Policy issued a major study of the federal income taxes paid, or not paid, by 280 big, profitable Fortune 500 corporations. That report found, among other things, that 30 of the companies paid no net federal income tax from 2008 through 2010. New information for 2011 shows that almost all these 30 companies have maintained their tax dodging ways.

In fact, all but four of the 30 companies remained in the no-federal-income-tax category over the 2008-11 period.

Over the four years:

- 26 of the 30 companies continued to enjoy negative federal income tax rates. That means they still made more money after tax than before tax over the four years!

How 30 No-Tax Corporations in 2008-10 Fared in 2008-11

Federal Income Tax Rates on U.S. Profits

	08-10	08-11
Pepco Holdings	–57.6%	–39.5%
General Electric	–45.3%	–18.9%
PG&E Corp.	–21.2%	–18.4%
Wisconsin Energy	–4.9%	–13.2%
NiSource	–16.4%	–13.0%
Paccar	–32.8%	–13.0%
Integrys Energy Group	–11.3%	–11.6%
CenterPoint Energy	–14.7%	–11.3%
Atmos Energy	–11.6%	–9.6%
Tenet Healthcare	–11.6%	–8.2%
American Electric Power	–9.2%	–6.4%
Boeing	–1.8%	–5.5%
Ryder System	–7.3%	–5.4%
Con-way	–9.1%	–5.4%

Sen. Paul (R., KY) Rips Levin a New One

Source: paul.senate.gov

https://www.youtube.com/watch?v=9rjLhjxQTws

50,000,000,000 App Downloads

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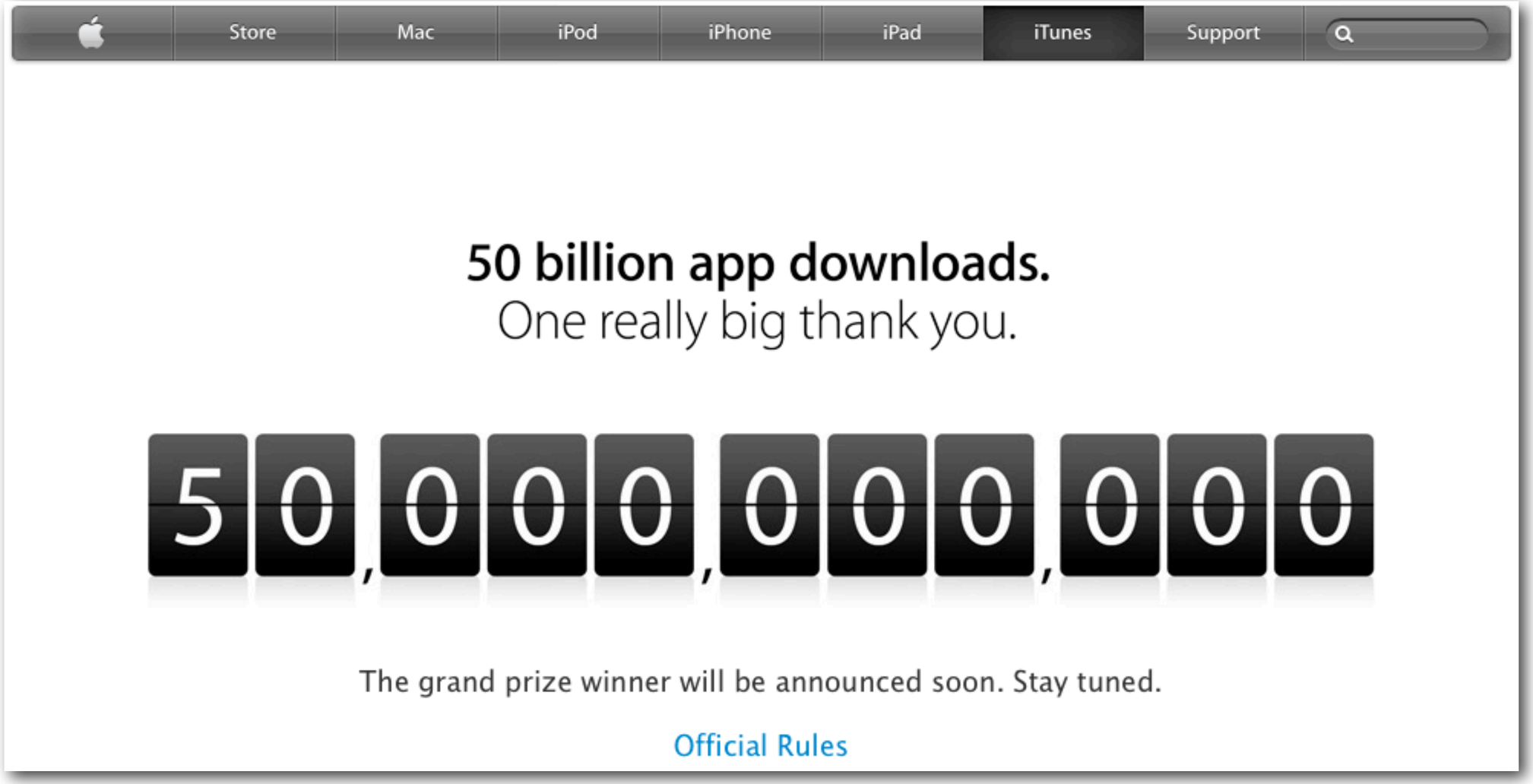


0 to 50,000,000,000 in < 5 Years

- App Store (and the whole idea of 3rd-party Apps) didn't exist for the first 15 months of iPhone's existence
- App Store opened in July, 2008 with 500 apps
- Now over 850,000 apps in 61 languages available in App Stores in 155 countries around the world
- Now over 800 apps downloaded ***per second***

New Mothership at Mall at Millenia

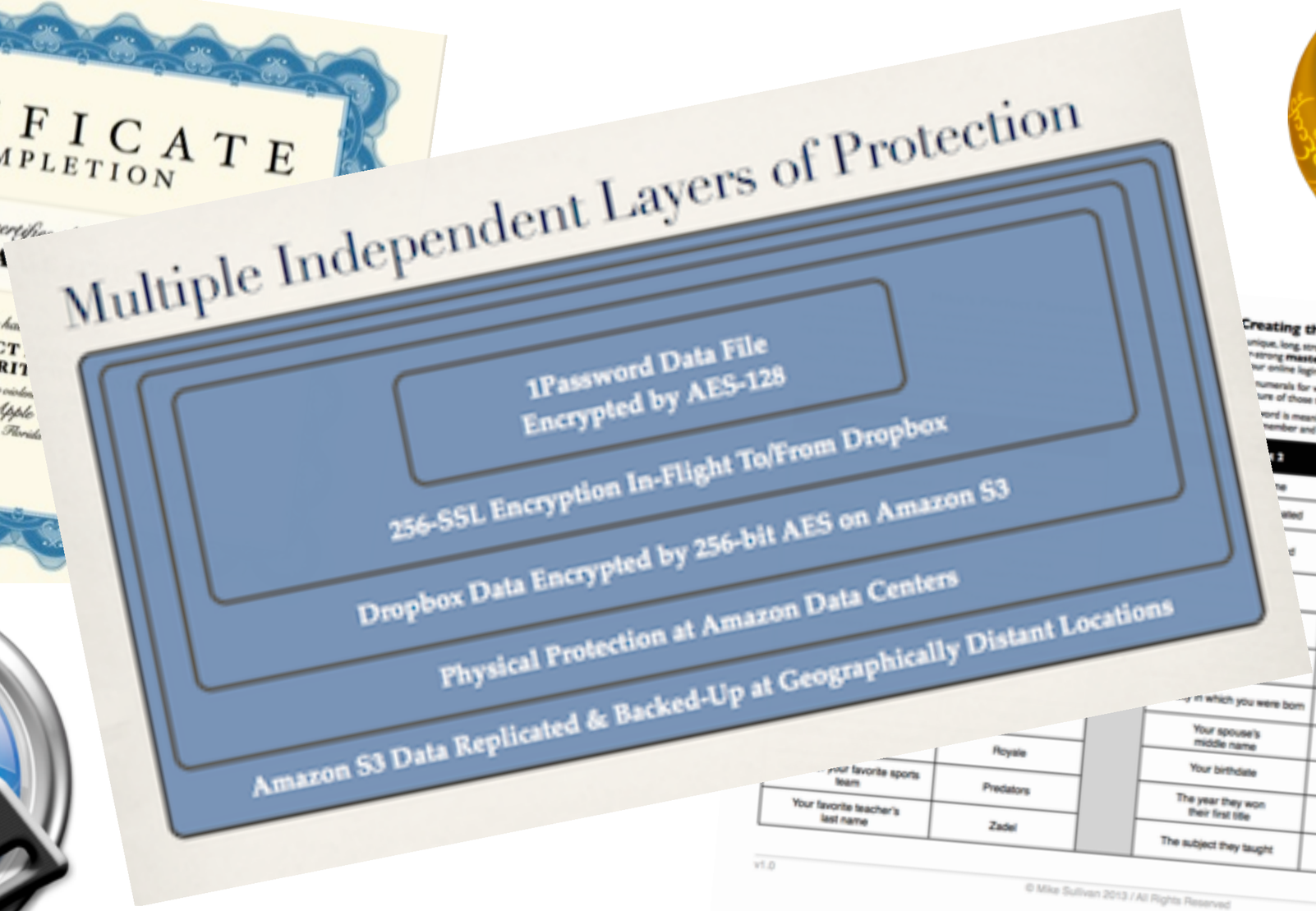
COACH
MAC

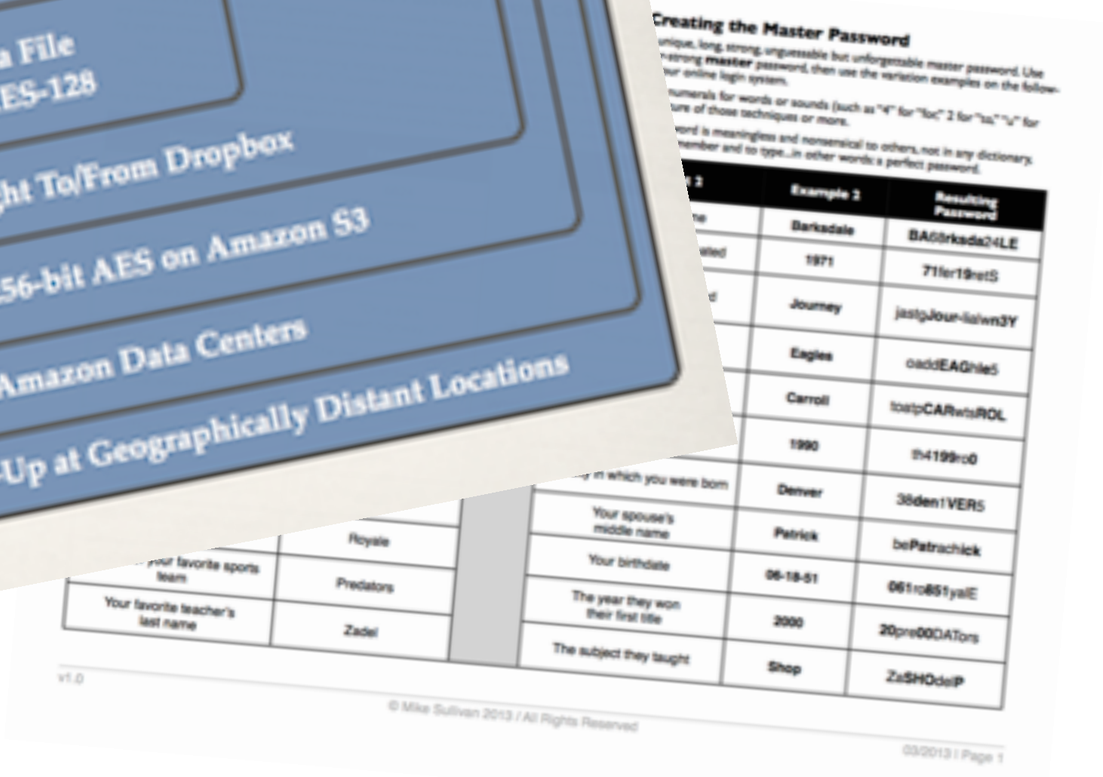
Genius
Welcome to the Genius Bar.

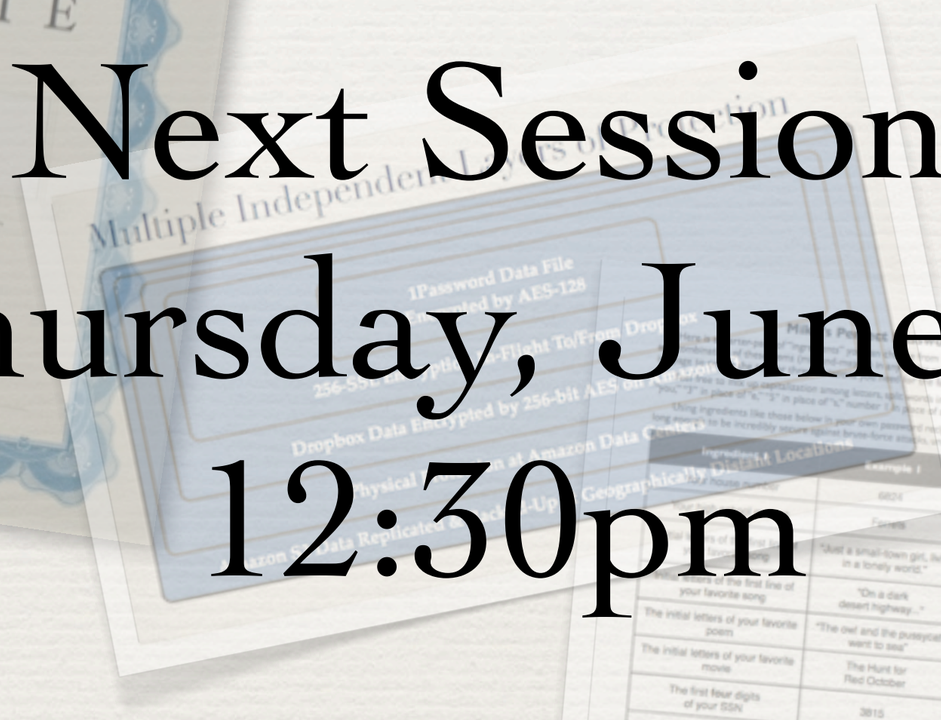
Welcome to the Genius Bar.
If you have an appointment, please let us know you're here.
If you don't, we'll do our best to find one for you.
Genius

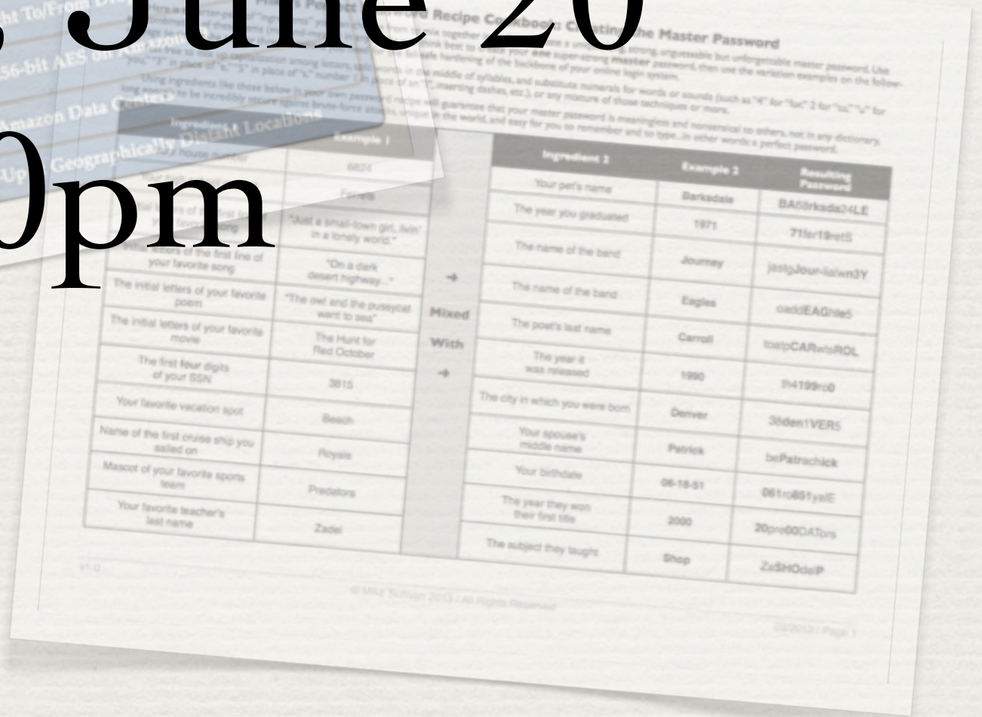
MAC

Mike's Perfect Password System Workshop









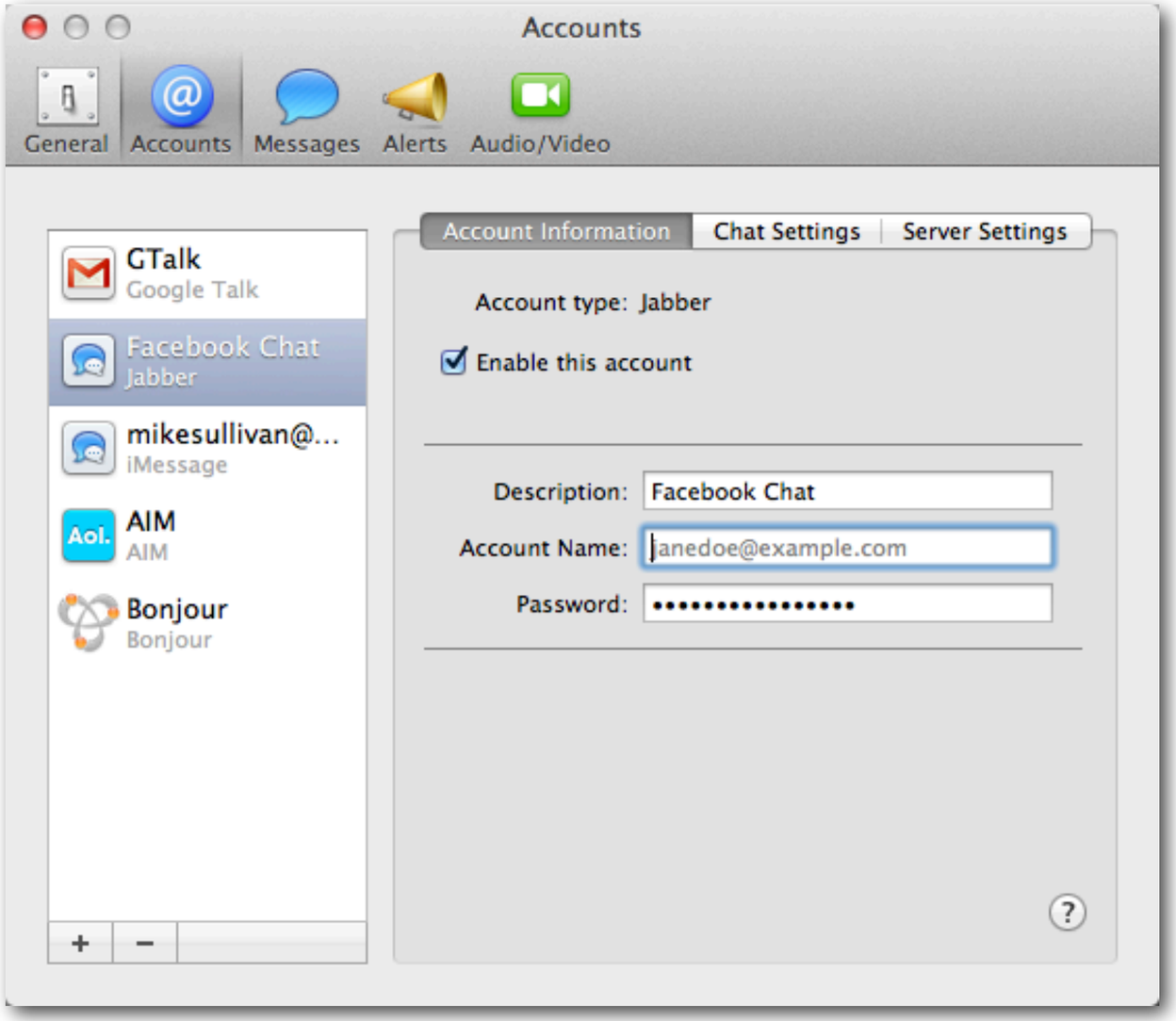
Next Session:
Thursday, June 20
12:30pm

Mike's Perfect Password System

- Get your online security practices under control, once and for all
- Easy system for fail-safe password management, backup & encryption
- Mac-only
- Free
- 2 hours of mandatory pre-class prep
- Sign-up invitations going out tomorrow; 15 spots first-come, first-served
- Check your Inbox tomorrow!

JUN
20
Password Seminar
12:30 PM - 3:30 PM

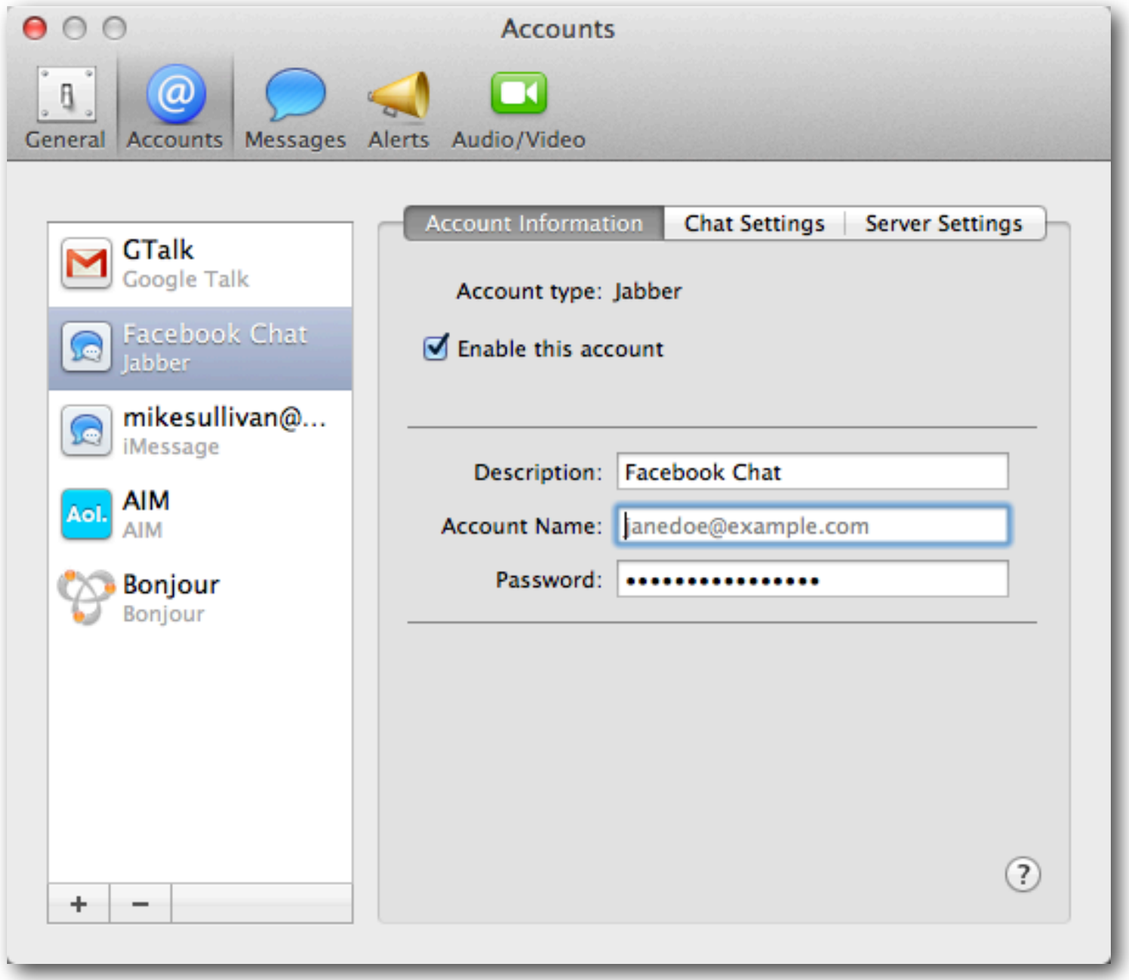
Add Facebook Chat to Messages on Mac



Add Facebook Chat to Messages

- Facebook Chat normally runs in the lower-right corner of your browser window when you are on Facebook.com
- Facebook Chat uses the cross-platform open-source Jabber protocol, which is directly supported by Messages on Mac
- Adding a Facebook Chat account to Messages keeps you online with Facebook Chat even when you are not on Facebook.com in your browser

Demo

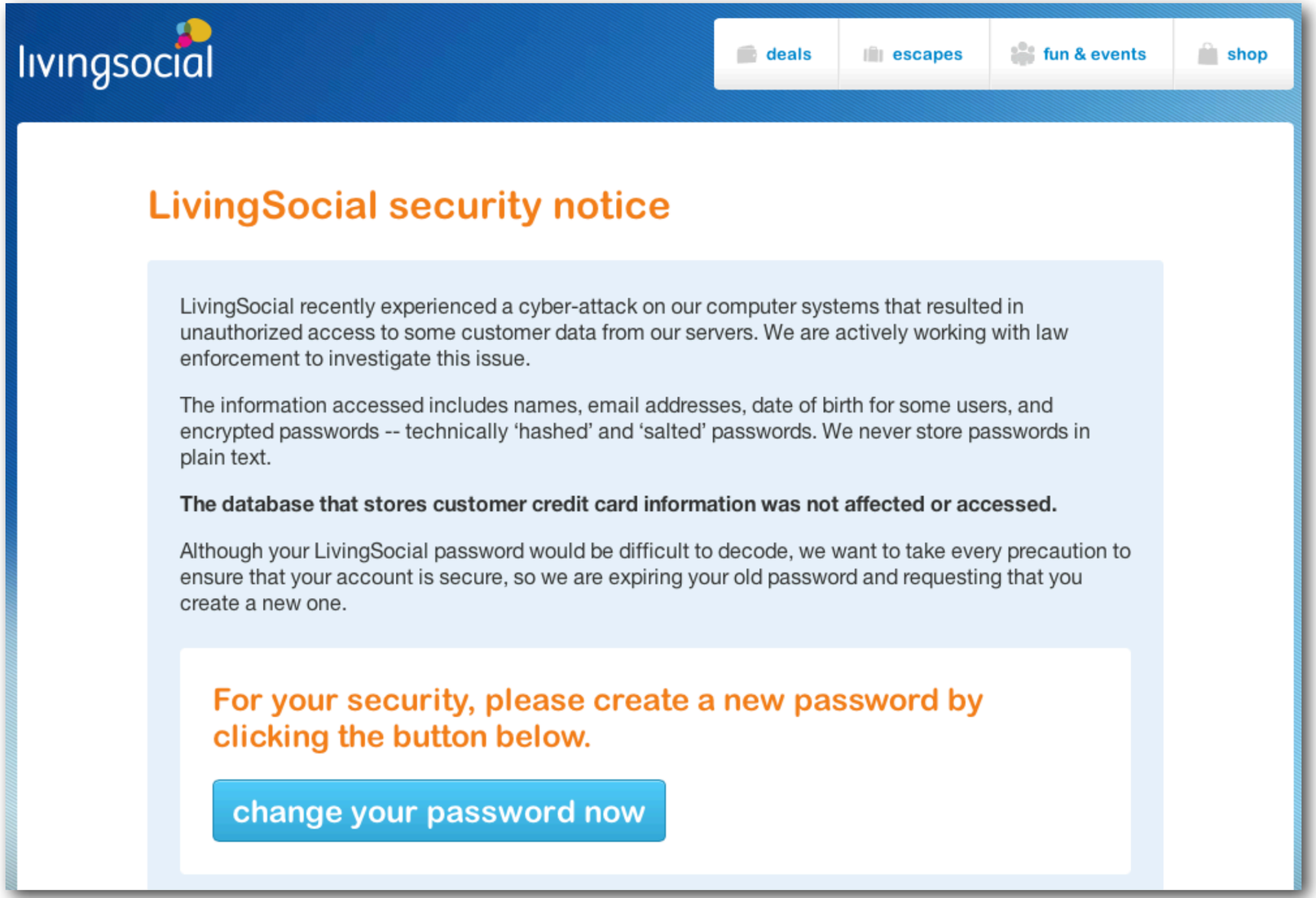

Accounts
General
Accounts
Messages
Alerts
Audio/Video
GTalk
Google Talk
Facebook Chat
Jabber
mikesullivan@...
iMessage
AIM
AIM
Bonjour
Bonjour
Account Information
Chat Settings
Server Settings
Account type: Jabber
Enable this account
Description: Facebook Chat
Account Name: janedoe@example.com
Password:
+
−
?

Password Cracking

Security Break-Ins at Big Web Sites

- Many big sites, from LinkedIn to Vudu to Consumerist to Yahoo! to Sony to Reputation.com to LivingSocial have had major thefts of user password files in the past few years

LivingSocial.com: 50 Million Accounts April 2013



Sony PlayStation Network: 77 Million Accounts June, 2011

VIDEO GAMES

Sony: PlayStation Breach Involves 70 Million Subscribers

CNBC

Text Size

Published: Tuesday, 26 Apr 2011 | 5:24 PM ET

By: Chris Morris

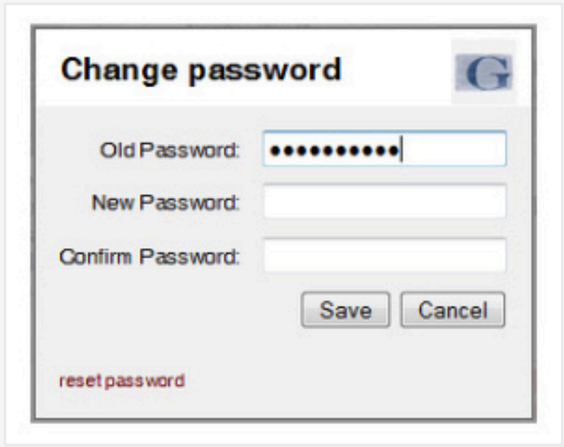
Special to CNBC.com

Six days after a security breach of its PlayStation Network, **Sony** said Tuesday that the incursion was much worse than expected and hackers had obtained personal information on 70 million subscribers.

The company, in a blog entry posted Tuesday afternoon, added it is still unsure if

Gawker Network: 12 million accounts December, 2010

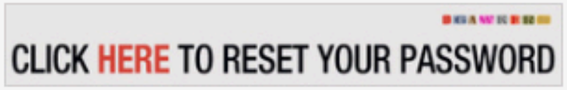
Gawker Security Breach Update: How to Reset Your Password



You may have seen our alerts that on Sunday afternoon, we learned that our user database was compromised. If you haven't changed your Gawker password yet—or you've have had trouble doing so—please try again now.

Resetting Your Password

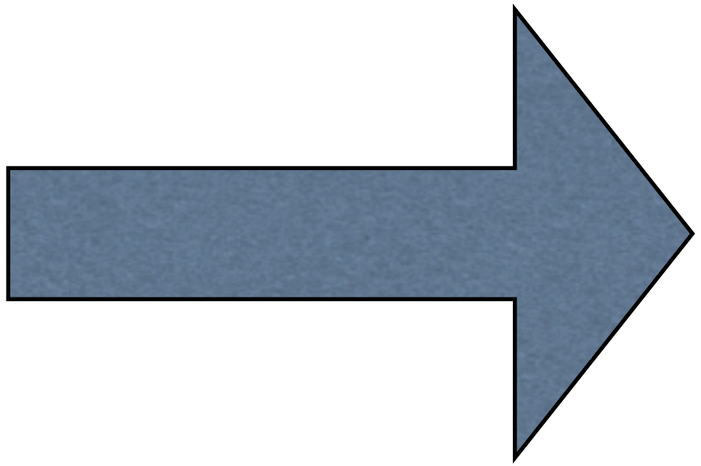
Here's how it works: Click the big Reset Password button below. If you're signed in, it will prompt you to enter your old password, followed by a new password (and a confirmation). Hit "save" and your password should update. If you're not logged in, the button below will prompt you to log in; once you do, you'll be presented with the same password reset dialog. Enter your old password, followed by your new password and confirmation, then hit "save."

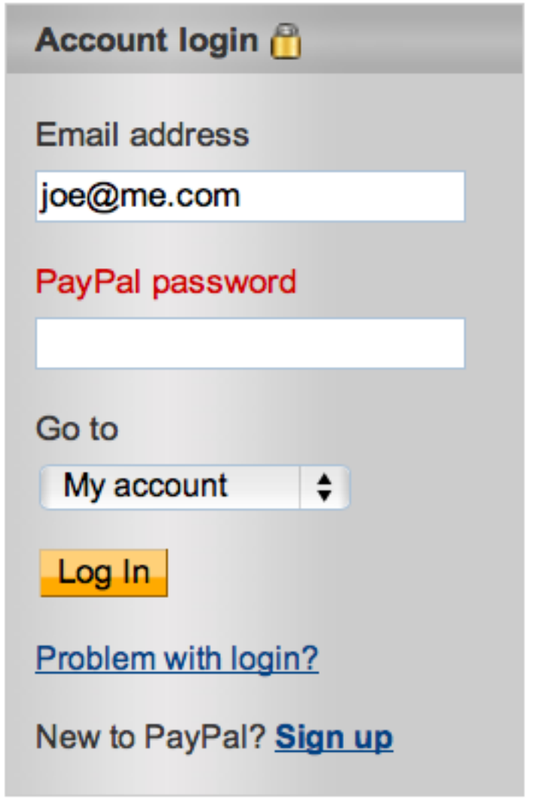


If that doesn't work, and you've associated an email with your account, you can click the "reset password" link at the bottom of the

How It Works: Your Browser

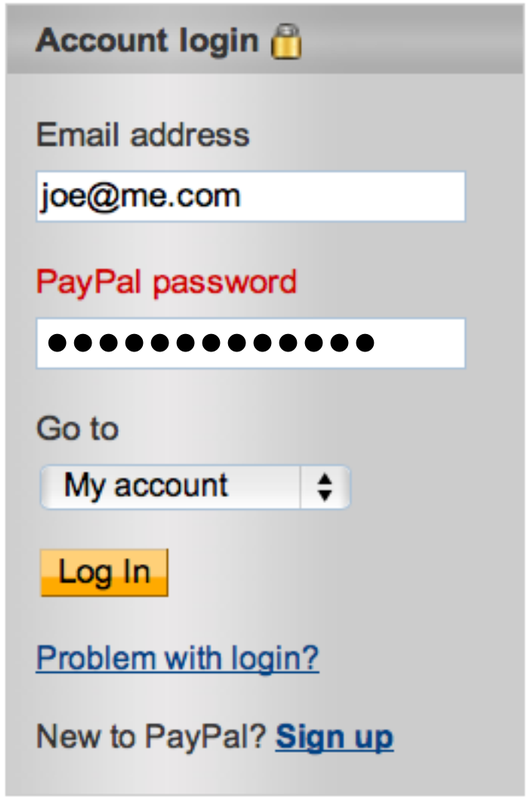
mydoghasfleas

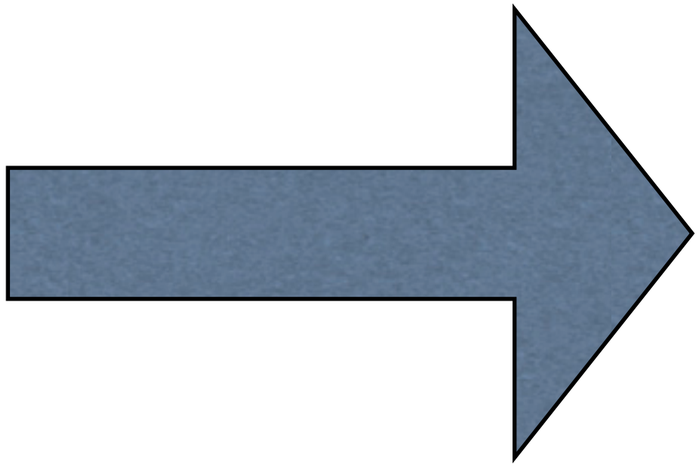




You type your password into a login field in a form on a secure, encrypted Web page

How It Works: In-Flight



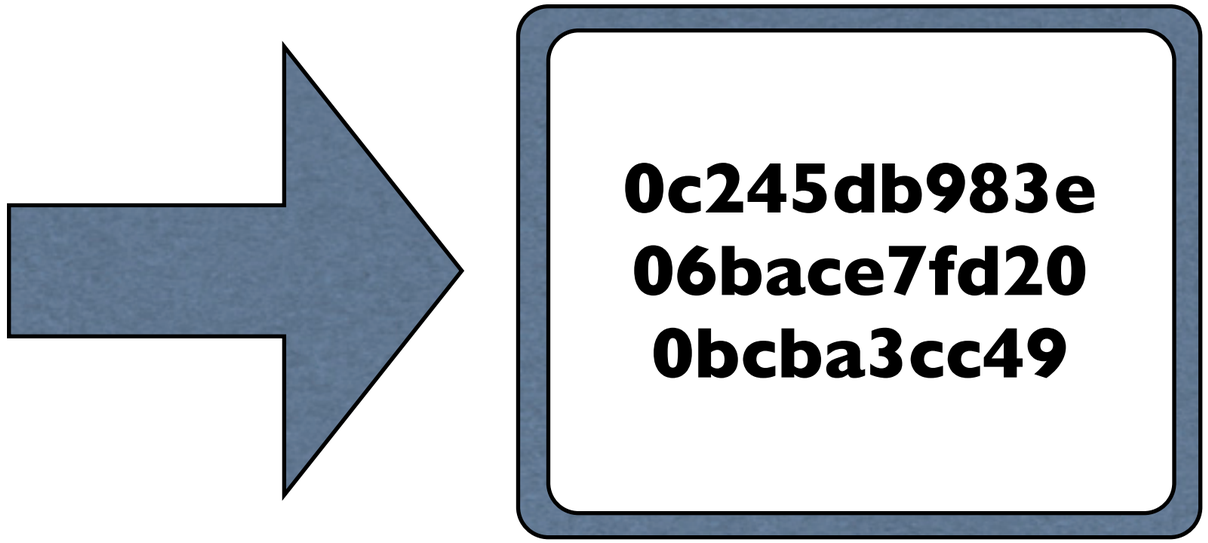


PayPal®

The plaintext of your password is sent over the wire to the PayPal server through an encrypted connection.

How It Works: Hashing

mydoghasfleas

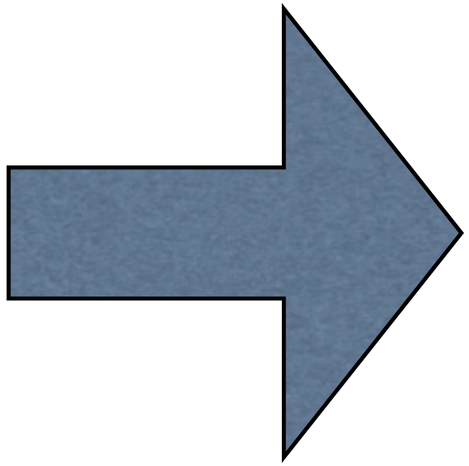


MD5 Hash Function

PayPal sends your plaintext password through a one-way cryptographic hash function, then throws away the plaintext

How It Works: Compare

0c245db983e
06bace7fd20
0bcba3cc49



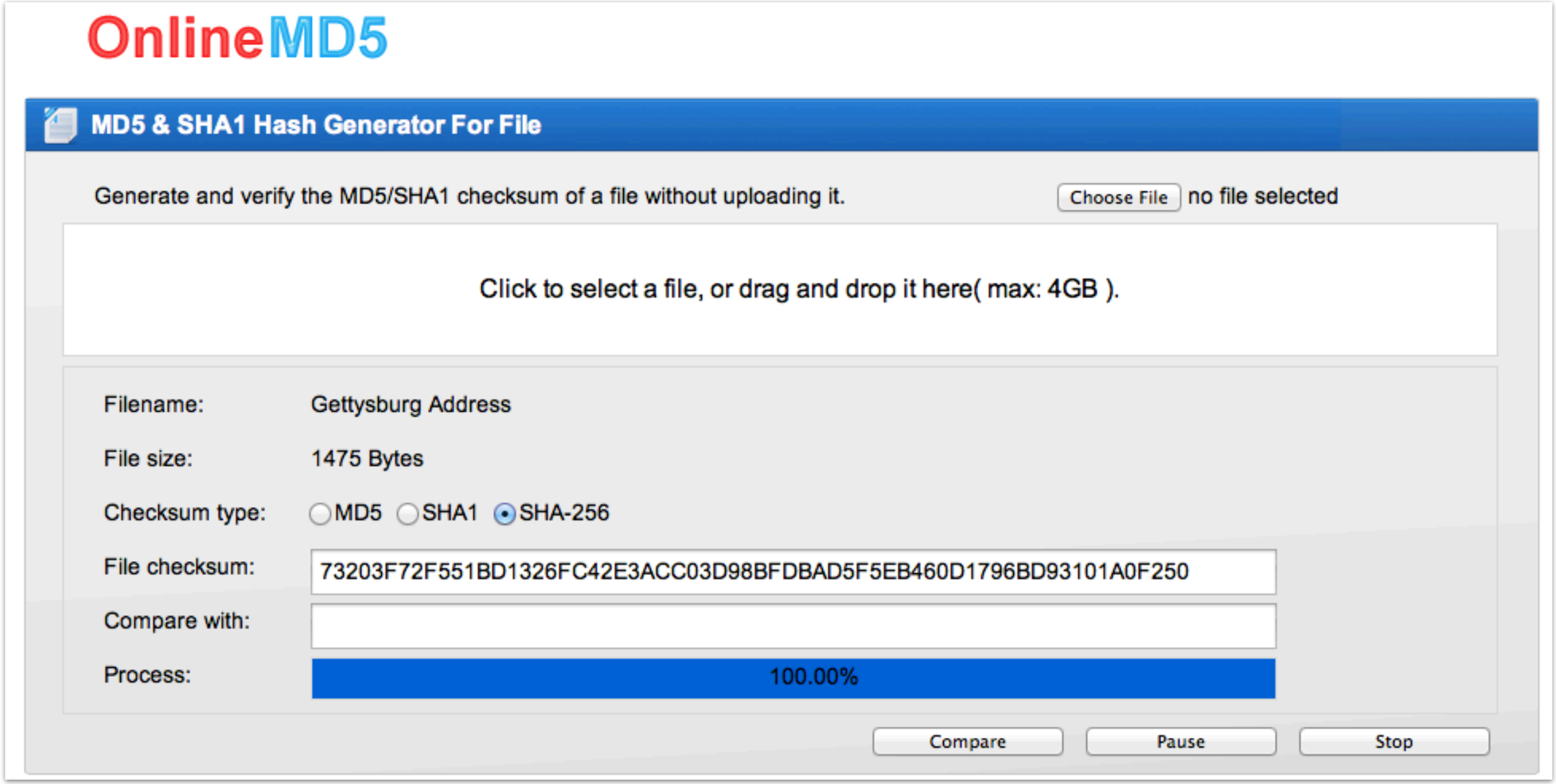
	CustomerKey	CustomerAlternateKey	MD5	Hashbytes
9083	20082	AW00020082	0xAC9325C61694B8563B5ADDEDDBAC4901	0xAC9325C61694B8563B5ADDEDDBAC4901
9084	20083	AW00020083	0xB8B1001C3B8BB4E3E814BF6170BF2674	0xB8B1001C3B8BB4E3E814BF6170BF2674
9085	20084	AW00020084	0x28DD066F78A497D17CC4D47DEEAD30FA	0x28DD066F78A497D17CC4D47DEEAD30FA
9086	20085	AW00020085	0x49624F3C48B4FC7B5B91F66985224627	0x49624F3C48B4FC7B5B91F66985224627
9087	20086	AW00020086	0x7C8185E4A48EE9A608B8406EC3505533	0x7C8185E4A48EE9A608B8406EC3505533
9088	20087	AW00020087	0xF758EB7C0027D1F2EA3752CC4D53F0A1	0xF758EB7C0027D1F2EA3752CC4D53F0A1
9089	20088	AW00020088	0x3FACC1B0A742761A2DB00E26437154CB	0x3FACC1B0A742761A2DB00E26437154CB
9090	20089	AW00020089	0xE3358D9B2AD7D80E2873281A7B285BF7	0xE3358D9B2AD7D80E2873281A7B285BF7

PayPal compares the hashed value
against their stored hashed value
for your user name/email address

Hashing Creates a Unique Fingerprint for Each Specific Input

Input	MD5 Hash
mydoghasfleas	`0c245db983e06bace7fd200bcba3cc49`
Mydoghasfleas	`e23ee6ab1875056074e9cf0c42159e72`
Gettysburg Address	`dd430a6ece53e060521096c20bb3a247`
G.A. less final "."	`0edeecc05a7b154fee586f93b4e01f0c`

Hash Function Demo



So, What's The Problem?

- Hackers have gotten hold of huge plaintext password files giving them insight into actual user passwords in-the-wild
  - In 2009, RockYou.com has 14.5-million plaintext user passwords stolen
- Hackers can pre-compute the hash tables for these commonly-used passwords
- If they obtain the hash table from a compromised site, they just look for the pre-computed hash values in the stolen files, and they have your password

What The Good Sites are Doing About It

- "Salting" their hash tables with an unknown, random "seed" value before hashing your password
- Some sites are doing the hashing in-browser using JavaScript
- Using much more secure hash functions like SHA1 & SHA2, soon moving to SHA3, with no known vulnerabilities
- Requiring or making optional a 2-step verification, such as text message authentication code, for additional password security

Lessons Learned

- Unless your password was generated by Mike's Perfect Password System or another strong, random password generator, it is probably very, very weak and will be broken instantly by hackers if they breach a Web site you visit
- Do NOT use the same password for any two sites
- Buy and **USE** a password manager like 1Password for ALL your passwords and other sensitive data

For Further Reading

- Two excellent articles from Ars Technica
- Find them in the meeting notes for tonight on the Cove Apple Club Bulletin Board at **coveappleclub.com/bb**

Dan Goodin: How I Became a Password Cracker

1. Find a set of passwords to crack
2. Find a free password cracker online
3. Find a set of high-quality wordlists
4. Get all that running on mid-priced laptop hardware
5. Successfully crack at least one password
6. In one day

Password Cracking

Cove Apple Club

Have fun & do more with your Apple gear!

The next time you need some new Mac gear, start your online shopping session with the link to Amazon on this page. Your purchase will earn a little money for the Cove Apple Club, which we'll use to buy a new widescreen video projector for the club! We'll also update club members on the earnings every month.

So be sure to click the Amazon logo below when you need to shop for Mac products online...and "give back" to the Cove Apple Club -- without costing you an extra cent! Thanks!

On an iPhone or iPad? Amazon Banner above not displayed?
Tap this link instead

On a Mac? Make it even easier!
Just drag this link to your Bookmarks bar: Amazon

Cove Apple Club
Meeting Schedule
Past Meeting Archives
Products from our meetings
Shop the Cove Apple Club!
Donate to the Club
Bulletin Board
Join the Mailing List
Contact Us

iPad 2:14 PM 72%

coveappleclub.com/shop.html Reader Search

Cove Apple Club - Shop!

Install the Amazon page bookmark on your iPad: tap and then **Add to Home Screen**.

gear!

The next time you need some new Mac gear, start your online shopping session with the link to Amazon on this page. Your purchase will earn a little money for the Cove Apple Club, which we'll use to buy a new widescreen video projector for the club! We'll also update club members on the earnings every month.

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Cove Apple Club
Meeting Schedule
Past Meeting Archives
Products from our meetings
Shop the Cove Apple Club!
Donate to the Club
Bulletin Board
Join the Mailing List
Contact Us

Earnings Report Totals

Glossary

May 8, 2013 to May 8, 2013

	Items Shipped	Revenue	Advertising Fees
Total Amazon.com Items Shipped	16	$612.06	$30.49
Total Third Party Items Shipped	28	$677.07	$34.98
Total Items Shipped	**44**	**$1,289.13**	**$65.47**
Total Items Returned	**0**	**$0.00**	**$0.00**
Total Refunds	**0**	**$0.00**	**$0.00**
TOTAL ADVERTISING FEES	**44**	**$1,289.13**	**$65.47**

Earnings Report Totals

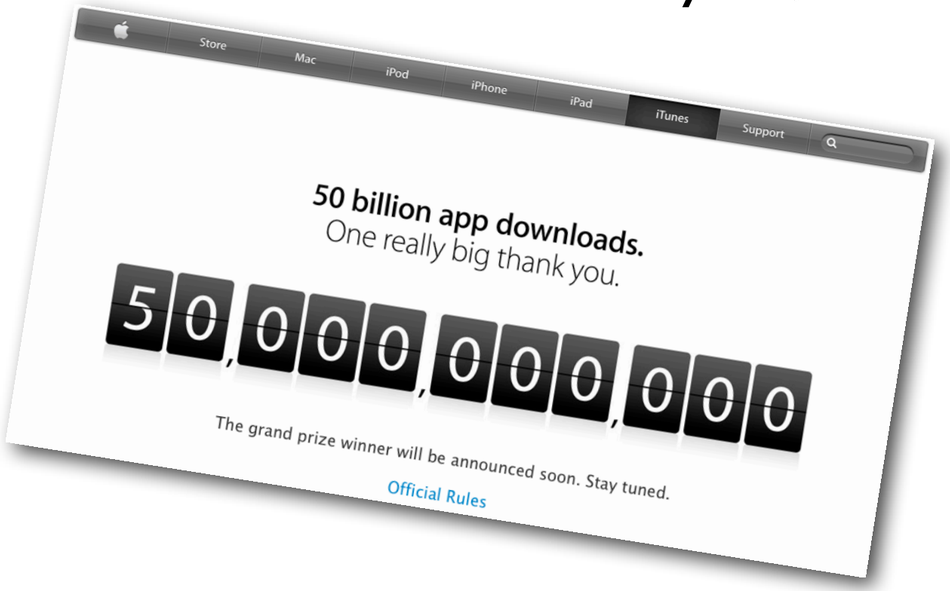
Glossary

January 1, 2013 to May 21, 2013

	Items Shipped	Revenue	Advertising Fees
Total Amazon.com Items Shipped	160	$8,303.20	$377.57
Total Third Party Items Shipped	242	$5,603.14	$316.38
Total Items Shipped	**402**	**$13,906.34**	**$693.95**
Total Items Returned	**0**	**$0.00**	**$0.00**
Total Refunds	**0**	**$0.00**	**$0.00**
TOTAL ADVERTISING FEES	**402**	**$13,906.34**	**$693.95**

JUN
12
Cove Apple Club
7:00 PM - 8:15 PM

JUN
12
PRESENTERS NEEDED!
Cove Apple Club
7:00 PM - 8:15 PM

Cove Apple Club

May 22, 2013