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BUSINESS INSIDER

This Flaw In Facebook Lets You Create As Many Fake Likes As You Want

JIM EDWARDS
OCT. 5, 2012, 9:54 AM

Yesterday we told you that Facebook quietly scans your messages, searching for URLs that you've sent to your friends. When it sees one, it increases the number of Facebook Likes on that URL.

The business media — Wall Street Journal, Forbes, and Gizmodo — have portrayed this as a privacy invasion.

But perhaps more importantly, it appears to be a massive source of bogus Likes. Put simply, by using your own Facebook messages you can drive up the apparent number of likes any non-Facebook page gets, even if the messages you send don't indicate that you actually like the page.

Illustration: Ellis Hamburger

Facebook CEO Mark Zuckerberg

FB Mar 27 11:53AM		
83.35	Change +0.34	% Change +0.41%

This is important for two reasons:

- Facebook has been repeatedly sued by advertisers claiming their pages have seen too much click fraud. (There's a proposed class action case pending in a California federal appeals court, for instance). While click fraud is NOT the same thing as fake likes, plaintiffs' lawyers are clearly interested in any information that might indicate that Facebook generates the appearance of something being clicked on

when in fact it has not.

- Facebook recently purged hundreds of thousands of fake fans and likes from its system; an admission that the social network is riddled with bogus accounts.

Naturally, we tried to generate some fake clicks for ourselves, just to see how it works.

Here's our guide on how to do that.

First, we selected a Business Insider page that wasn't getting much traffic, so that we could see our own visits to the page in isolation from BI's general traffic. The page we chose was this Q&A with Edelman CEO Richard Edelman.

Then I took a snapshot of the page BEFORE I manipulated it through Facebook.

Note that in the social sharing buttons at the top of the story, the page had been viewed 225 times and "recommended" on Facebook just five times:

Then I sent a colleague, Christina Austin, a Facebook message that clearly indicated I had negative feelings about this story:

(For the record: **I obviously DO NOT think that Richard Edelman sucks!** This is just an experiment. Many companies monitor words like "sucks" next to their brand names in order to gauge negative consumer sentiment. Use of the word "sucks" is one of the easiest ways to alter any algorithm that is attempting to detect user sentiment.)

After Christina looked at the message, I refreshed my view of the Edelman page and — lo and behold! — the view counter had gone up by one, to 226, as expected, but the Facebook share button had increased by two, to seven recommendations:

To someone who knows nothing about Facebook's messaging system — which is to say, virtually everyone — it appears as if a single page visit triggered two Facebook likes on the page.

A Facebook spokesperson tells us:

> This counter reflects the number of times people have clicked those buttons and also the number of times people have shared that page's link on Facebook.
>
> We did recently find a bug with our social plugins where at times the count for the Share or Like goes up by two, and we are working on a fix to solve the issue now. To be clear, this only affects social plugins off of Facebook and is not related to Facebook Page likes.

In sum, Facebook is dishing out recommendations and likes all over the web, to the millions of pages that are now sown with Facebook sharing buttons, when nobody has actually clicked or recommended those pages.

Worse, those likes may actually reflect negative consumer sentiment.

And even though Facebook is going to fix the double-like bug, it's not going to alter its message-liking system.

Related:

- These 20 Brands Lost The Most Facebook Likes The Day Of The Fake Fan Purge

December 20, 2012

Update to Messaging and a Test

Over the past several years, we've been working to improve Facebook Messenger on mobile and Facebook Messages on the web:

One ongoing conversation
Now all your messages, emails, chat and text messages are combined together in one ongoing conversation, whether they're sent from mobile or desktop.

The Other folder
In ~~2011~~ 2010 we introduced the Other folder, where less relevant messages go.

Messenger for Android
This month, we introduced a way to sign up for Messenger with just your name and phone number.

New filters for managing your Inbox
We've heard that messages people care about may not always be delivered or may go unseen in the Other folder.

As we announced last month, we're replacing the "Who can send me Facebook Messages" setting with up-front filters that help to address this feedback.

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There are two options for new Inbox filtering:

Basic Filtering

If you select Basic Filtering, you'll see mostly messages from friends and people you may know (for example, friends of friends) in your Inbox. People who had the previous setting set to "friends of friends" or "everyone" will have Basic Filtering on.

Strict Filtering

If you select Strict Filtering, you'll see mostly messages from friends in your Inbox. People who had the previous setting set to "friends" will have "Strict Filtering" on.

With filters, the following types of messages may reach your Inbox that before would not:

- Someone using Messenger for Android, who is not on Facebook but has your contact info in their phone, wanted to send you a message

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- A friend of a friend wanted to include you in a message about a party along with some of your mutual friends
- A friend wanted to send a message to your @facebook.com address

If you see a message from someone you don't want to hear from in your Inbox, you can always select "Move to Other" or "Report Spam" from the Actions menu. You can also block people that you don't want to hear from on Facebook.

Inbox delivery test

Facebook Messages is designed to get the most relevant messages into your Inbox and put less relevant messages into your Other folder. We rely on signals about the message to achieve this goal.

Some of these signals are social – we use social signals such as friend connections to determine whether a message is likely to be one you want to see in your Inbox.

Some of these signals are algorithmic – we use algorithms to identify spam and use broader signals from the social graph, such as friend of friend connections or people you may know, to help determine relevance.

Today we're starting a small experiment to test the usefulness of economic signals to determine relevance. This test will give a small number of people the option to pay to have a message routed to the Inbox rather than the Other folder of a recipient that they are not connected with.

Several commentators and researchers have noted that imposing a financial cost on the sender may be the most effective way to discourage unwanted messages and facilitate delivery of messages that are relevant and useful.

This test is designed to address situations where neither social nor algorithmic signals are sufficient. For example, if

you want to send a message to someone you heard speak at an event but are not friends with, or if you want to message someone about a job opportunity, you can use this feature to reach their Inbox. For the receiver, this test allows them to hear from people who have an important message to send them.

This message routing feature is only for personal messages between individuals in the U.S. In this test, the number of messages a person can have routed from their Other folder to their Inbox will be limited to a maximum of one per week.

We'll continue to iterate and evolve Facebook Messages over the coming months.

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Social (http://venturebeat.com/category/social/)

Facebook tweaks Messages with inbox filters and tests pay-to-deliver option

December 20, 2012 10:00 AM
JVG (http://venturebeat.com/author/jvg/)

What messages do you want see in your Facebook Messages inbox? The social network hopes to answer, or at least better understand, that question with two releases: brand-new message filtering options for your inbox and a way to pay to ensure your messages are delivered to someone's inbox.

Facebook announced (http://newsroom.fb.com/News/558/Update-to-Messaging-and-a-Test) Thursday that it was tweaking the Facebook Messages inbox experience to better ensure that relevant messages get to your inbox, as opposed to being dumped into the "Other" folder, which is Facebook's equivalent of the spam folder.

The new inbox filters, which are rolling out globally, are Facebook's way of correcting a broken system. The company currently routes messages to your inbox or other folder based on your settings, but it has found that it pushes too many "high signal" messages (read as: messages you

probably want) to your Other folder, where they likely go unseen. To fix the problem, Facebook has created two filters, basic and strict, that will allow certain types of messages to reach your inbox that otherwise would not.

(http://venturebeat.com/wp-content/uploads/2012/12/inbox-filters.png?)

If you opt for the basic filter, Facebook will deliver "mostly messages from friends and people you may know" to your inbox. This means that messages from friends and friends of friends will go straight to your inbox. The strict filter is, well, stricter. Select this if you "mostly" want to receive messages from friends.

Both options, however, use the "mostly" terminology to allow for instances when Facebook puts its algorithmic magic to work and determines that a high signal message should get through. What's a high signal message? One that comes from a Facebook Messenger for Android user (http://venturebeat.com/2012/12/04/facebook-messenger-android-update-sms/) who is not your friend but has your number, or an event invitation from someone you don't know when the invite is going out to some of your mutual friends. Messages from a friend who emails your @facebook.com address will also get delivered.

There's one additional high signal type of message that can get through to your inbox beginning today — but the signal in question is payment. Facebook is kicking off a small test in the U.S. that will let people you are not friends with pay a small fee to send messages directly to your inbox. The fee will vary, as it's just a test, but prices start at $1 per message. The theory is that the fee will serve as a solid indicator that this message is important.

"The test is designed to address situations where neither social nor algorithmic signals are sufficient," Facebook said in a blog post. "For example, if you want to send a message to someone you heard speak at an event but are not friends with, or if you want to message someone about a job opportunity, you can use this feature to reach their inbox."

A Facebook spokesperson would not provide additional guidance on the pay-to-deliver test, other than to add that you'll only be able to receive one paid-for message in your inbox each week.

Facebook photo (http://www.shutterstock.com/pic-90929051/stock-photo-palo-alto-ca-dec-facebook-s-massive-overhaul-to-user-profiles-dubbed-timeline-is-now.html) via Shutterstock

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VentureBeat's VB Insight team is studying email marketing tools. Chime in here, and we'll share the results (http://insight.venturebeat.com/email-marketing).

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FB000000220

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Facebook: We're Not Liking Brand Pages For You

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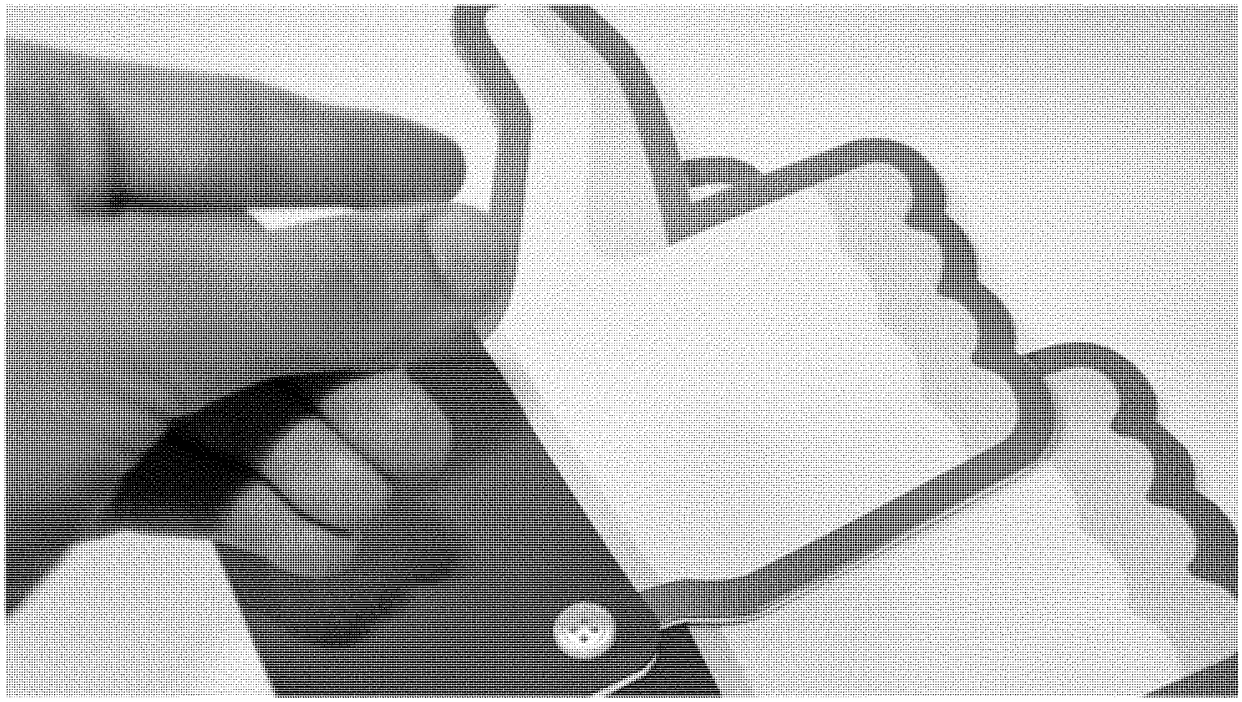
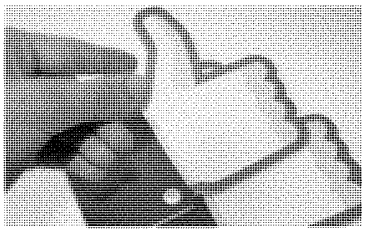


BY SAMANTHA MURPHY KELLY
OCT 04, 2012



Facebook users may hand-pick brand pages to Like on the site, but a series of new reports suggest that the social network has been auto-Liking some additional pages based on links sent to friends.

However, Facebook told *Mashable* it is not auto-Liking pages for its users and isn't invading anyone's privacy.

It's been widely reported on Thursday that Facebook is scanning messages sent to others with attached links to better gauge their interests and add to a brand's Link count. Although clicking on a link will add to the Like number on a brand page, it's used only on the back-end for publishers to see the analytics of articles and shared URLs.

This is how the Share and Like count for web pages has always worked, according to Facebook.

SEE ALSO: Want to Highlight Your New Facebook Pictures? Pay to Promote Them

"Absolutely no private information has been exposed," a Facebook spokesperson told *Mashable*. "Each time a person shares a URL to Facebook, including through messages, the number of shares displayed on the social plugin for that website increases. Our systems parse the URL being shared in order to render the appropriate preview, and to also ensure that the message is not spam. These counts do not affect the privacy settings of content, and URLs shared through private messages are not attributed publicly with user profiles."

Email services such as Gmail have long taken this approach to target its users with ads or fight against viruses based on content written.

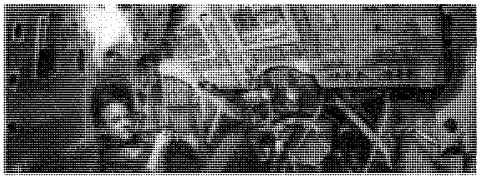
"We did recently find a bug with our social plugins where at times the count for the Share or Like goes up by two, and we are working on fix to solve the issue now," the spokesperson added. "To be clear, this only affects social plugins off of Facebook and is not related to Facebook Page likes. This bug does not impact the user experience with messages or what appears on their timelines."

Facebook's developer page related to the Like button states that the number of

Likes is derived by the number of likes in the URL and the number of shares. This includes copying and pasting a link back to Facebook. It also includes the number of inbox messages containing the URL as an attachment.

Image courtesy of Flickr, GOIABA (Goiabarea)

TOPICS: FACEBOOK, PRIVACY, SECURITY, SOCIAL MEDIA



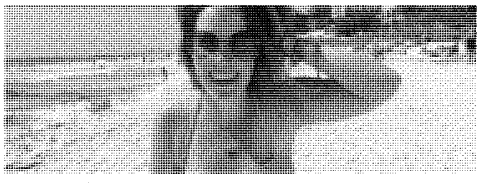
World

'This is about to get real': NASA twin astronaut prepares for a year in space

Andrew Freedman

NASA astronaut Scott Kelly is set to launch on a yearlong mission to the International Space Station on Friday that will also involve his twin brother, Mark.

744 shares 2 hours ago



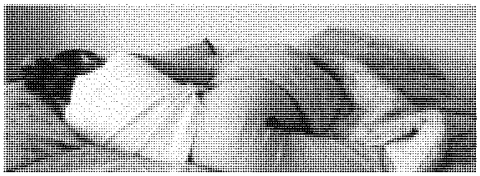
Watercooler

Mom proudly shares her stretch marks in viral bikini photo

Laura Vitto

The photo of Hollis smiling wide while dressed in a bikini, and its corresponding caption, has been Liked more than 400,000 times, and shared more than 50,000 times.

1.3k shares 2 hours ago



Watercooler

Woman gets Instagram to accept periods are normal after her photo is removed twice

Andrea Romano

Periods are normal for women, whether Instagram wants to see it or not.

2.5k shares 2 hours ago
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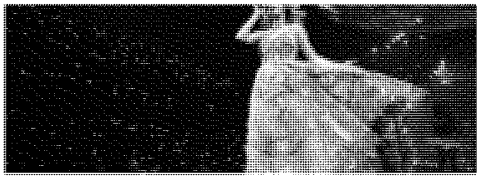


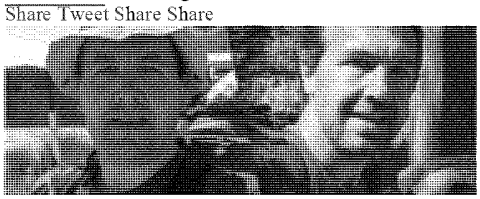
Entertainment

Meerkat and Periscope for concerts? Katy Perry says 'embrace the future'

Brian Anthony Hernandez

"You've got to embrace the future or you're left behind," Katy Perry told 'Mashable.' "I think that, when you see a phone, that is like the new applause."

1.2k shares 2 hours ago
Share Tweet Share Share



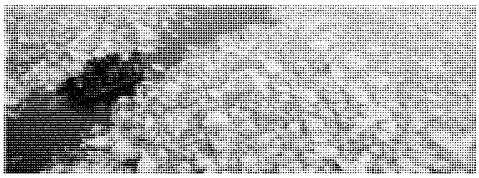
Travel

Hiker's incredible transformation captured in selfies over 2,600 mile journey

Max Knoblauch

The change in the landscape, scenery and Davidhazy's weight and facial hair are incredible to watch.

1.9k shares 21 hours ago
Share Tweet Share Share



World

West Antarctic ice losses have surged by 70% in the last decade

Andrew Freedman

Antarctic ice melt is proceeding faster than previously known, particularly the thinning of ice shelves that hold back a ticking sea level rise time bomb.

3k shares 15 hours ago
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Social networks: can robots violate user privacy?

August 27, 2013

Recent news in the international media has revealed numerous Internet privacy concerns that definitely deserve attention and further investigation. This is why we, at High-Tech Bridge, decided to conduct a simple technical experiment to verify how the 50 largest social networks, web services and free emails systems respect - or indeed abuse - the privacy of their users. The experiment and its results can be reproduced by anyone, as we tried to be as neutral and objective as possible.

The nature of the experiment was quite simple: we deployed a dedicated web server and created secret and totally unpredictable URLs on it for each tested service, something similar to:

```
http://www.our-domain-for-test.com/secret/18354832319/sgheAsZaLq/
```

Then we used various legitimate functionalities (detailed in the table below) of the tested services to transmit the secret URLs, carefully monitoring our web server logs for all incoming HTTP requests (to see which services followed the secret link that was not supposed to be known and accessed by anyone).

During the 10 days of our experiment, we trapped only six services out of the 50. However, among those six were four of the biggest and most used social networks: Facebook, Twitter, Google+ and Formspring. The remaining two were URL shortening services: bit.ly and goo.gl.

If for the URL shortening services such behavior may be part of their legitimate functionalities, it should not also be the case with social networks such as Facebook and Twitter. Taking into consideration that some of the services may have legitimate robots (e.g. to verify and block spam links) crawling every user-transmitted link automatically, we also created a robots.txt file on our web server that restricted bots accessing the server and its content. Only Twitter respected this restriction, all other social networks simply ignored it, accessing the secret URL.

Below is our table detailing this experiment's testing results:

Service Name	Functionality Tested	Potential Spying
AOL Mail	Sent email with a link	NO
AOL Web Search	Text search of a link	NO
Ask.com	Text search of a link	NO
Ask.com	Creating new question with a link	NO
Bing	Text search of a link	NO
bit.ly	Shorting the link	YES
Facebook	Private message with a link	YES
Formspring	Creating new question to user with a link	YES
Foursquare	Text search of a link	NO
goo.gl	Shorting the link	YES
Google Calendar	Creating event with a link	NO
Google Disk	Save text with a link on Google disk	NO
Google Docs	Creating document with a link	NO
Google GMail	Sent email with a link	NO
Google Groups	Creating message in a private group	NO
Google Search	Text search of a link	NO
Google Talk	Message with a link	NO
Google Translate	Translate text with a link	NO
Google+	Share text with link to circle with 0 people	YES
Google+	Text with link in Hangouts	NO
ICQ	Offline message with a link	NO
Jabber (jabber.org server)	Unencrypted offline message with a link	NO

Jabber (jabber.ru server)	Unencrypted offline message with a link	NO
LinkedIn	Private message with a link	NO
LiveJournal	Private message with a link	NO
Mail.com	Sent email with a link	NO
MS Outlook (mail.live.com)	Sent email with a link	NO
Mail.ru Agent	Message with a link	NO
Mail.ru Agent	Message with a link to ICQ gate	NO
Mail.ru Email	Sent email with a link	NO
MSN	Message with a link	NO
MySpace	Private message with a link	NO
Odnoklassniki.ru	Private message with a link	NO
Pastebin	Creating private HTML doc with a link	NO
Skype	Offline text message with a link	NO
Sourceforge	Private message with a link	NO
Twitter	Private message with a link	YES
Viadeo	Private message with a link	NO
Vimeo	Private message with a link	NO
vk.com (vkontakte)	Private message with a link	NO
Webmoney	Private message with a link	NO
Wikipedia	Text search of a link	NO
Windows Live Messenger	Message with a link	NO
Xing	Reply to a contact message	NO
Xing	Private message with a link	NO
Yahoo Email	Sent email with a link	NO
Yahoo Messenger	Message with a link	NO
Yahoo Web Search	Text search of a link	NO
Yandex Mail	Sent email with a link	NO
Yandex Web Search	Text search of a link	NO
Yandex.Disk	Save text with a link in google disk	NO

Below, you can find HTTP requests of trapped services that accessed the secret URLs:

```
Bit.ly:
IP: 50.17.69.56
User-Agent: bitlybot

Facebook:
IP: 173.252.112.114
User-Agent: facebookexternalhit/1.1
(+http://www.facebook.com/externalhit_uatext.php)

Formspring:
IP: 54.226.58.107
User-Agent: Mozilla/5.0 (Windows NT 6.2; WOW64) AppleWebKit/537.31 (KHTML,
like Gecko) Chrome/26.0.1410.64 Safari/537.31

goo.gl:
IP: 66.249.81.112
User-Agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.4 (KHTML, like
Gecko; Google Web Preview) Chrome/22.0.1229 Safari/537.4

Google+:
IP: 66.249.81.112
User-Agent: Mozilla/5.0 (Windows NT 6.1; rv:6.0) Gecko/20110814 Firefox/6.0
Google (+https://developers.google.com/+/web/snippet/)

Twitter:
IP: 199.59.148.211
User-Agent: Twitterbot/1.0
```

Marsel Nizamutdinov, Chief Research Officer at High-Tech Bridge, comments: "The results of this experiment are quite interesting actually. The four trapped social networks justify their activities by "automated verifications". However, it is technically impossible to verify what is really going on and how the information obtained on the user-transmitted URLs is being used. Today, quite a lot of web applications omit authentication and rely on temporary or unpredictable URLs to hide some content and, when users transfer such URLs via social networks, they cannot be sure that their

information will indeed remain confidential. Unfortunately there is no way to keep the URL and its content confidential [if there is no authentication of course] while transferring the URL via social networks."

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Best Community Share Login

Chris Whissen • 2 hours ago
Google+ automatically generates a snippet and thumbnail(if available) of the link shared. Does this not account for the request from Google+?
Reply • Share ›

Sarang • 3 days ago
Whatsapp????
Reply • Share ›

One Voice • 4 days ago
Makes one wonder how all those Target cards were exposed. Probably a company 'bot', but they'll never admit it.
Reply • Share ›

Biff Spackle • 4 days ago
Nice work. Have you tried other payloads? Wondering about sending a list of, say, honey-pot email addresses, phone-numbers, even postal addresses to see if they get hit?
Reply • Share ›

Ricardo Mesquita • 4 days ago
nice work, nice setup, nice findings. but Im surprised Gmail didnt harvested those links in the email for their publicly known 'data mining quest' and not surprised at all that Facebook did it. Just take note that facebook do scrap urls in the search for metadata that follow their requesites to construct previews of the content to be displayed to the users. Has someone that devs and uses their (bloated) apis its well know that 'preview' effect. And Im pretty sure they run a urls prefetch table. As in 'to accelerate the process of 'construction' those preview media screenshots. Not mentioning that fact on the eula its probably a side effect easily justified by the 'extra bonus' of providing that 'extra bonus' feature to the 'client'. Another use its to run those urls against a malicious signaled table of urls for the 'protection' of their product and users. I can be wrong but I see no space here for a lawsuit
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FACEBOOK'S E-MAIL CENSORSHIP IS LEGALLY DUBIOUS, EXPERTS SAY

When The Pirate Bay released new Facebook features last month, the popular social networking site took evasive action, blocking its members from distributing file-sharing links through its service.

Now legal experts say Facebook may have gone too far, blocking not only links to torrents published publicly on member profile pages, but also examining private messages that might contain them, and blocking those as well.

"This raises serious questions about whether Facebook is in compliance with federal wiretapping law," said Kevin Bankston, a lawyer with the Electronic Frontier Foundation, responding to questions from a reporter about the little-noticed policy that was first reported byTorrentFreak.

Facebook private messages are governed by theElectronic Communications Privacy Act, which forbids communications providers from intercepting user messages, barring limited exceptions for security and valid legal orders.

While the sniffing of e-mails is not unknown — it's how Google serves up targeted ads in Gmail and how Yahoo filters out viruses, for example — the notion that a legitimate e-mail would be not be delivered based on its content is extraordinary.

Facebook chief privacy officer Chris Kelly acknowledged that the site censors user messages based on links. But he insisted that Facebook has the legal right to do so, because it tells users they cannot "disseminate spammy, illegal, threatening or harassing content."

"Just as many e-mail services do scanning to divert or block spam, prevent fraudulent, unlawful or abusive use of the service — or in the case of some services, to deliver targeted advertising — Facebook has automated systems that have the capability to block links," Kelly said in an e-mail. "ECPA expressly allows Facebook to operate these systems."

"The same automated system that blocks these links may also be deployed where

there is a demonstrated disregard for intellectual property rights," he added.

Facebook declined to answer questions about whether it similarly searched private messages for references to illegal drugs, underage drinking or shoplifting.

EFF lawyers suggested that the legality of Facebook's censorship turns on Facebook's Terms of Service, how and when the blocking takes place, and whether the messaging system affects interstate commerce (thus giving the federal government jurisdiction).

It's not clear, however, how links to torrents are spammy, harassing or illegal. Torrents themselves are not copyright-infringing, nor would Facebook be liable for their users' communications under federal law even if the files were infringing.

Wired.com confirmed Facebook is blocking private messages by sending a link to a Pirate Bay torrent feed of a book in the public domain. Such content is freely available to everyone, as all copyrights have expired. Nevertheless, the message bounced twice, returning the following failure notice: "This Message Contains Blocked Content. Some content in this message has been reported as abusive by Facebook users." (Facebook's link-censoring system is may be just tilting at windmills, however, because removing a single vowel from the domain name lets the URL go through.)

In the case of Wired.com's test, there were only two Facebook users who should have been aware of the content — Wired.com editor John C. Abell and his message's intended recipient, who was sitting five feet from him — and neither had the slightest objection to it whatsoever.

The EFF's Bankston suggests that the real answer to the legal confusion over what providers can and cannot do with users' online communications needs to come from federal lawmakers, who authored the statutes about e-mail privacy in the 1980s when the technology was much different.

"It is often unclear whether or how these Web 2.0 companies are covered by federal electronic privacy statutes, and that's why Congress needs to update and revisit the law," he said.

Oliver Chiang (http://www.forbes.com/sites/oliverchiang/) Forbes Staff
Gaming The System
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11/15/2010 @ 2:52PM | 9,307 views

Facebook Messages Isn't A Gmail Killer -- And That's The Problem

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Email is broken, this is something Facebook chief Mark Zuckerberg

Image via CrunchBase

(http://www.forbes.com/profile/mark-zuckerberg?partner=forbesblogs) knows. At a Facebook press event on Monday, Zuckerberg launched a new messaging system called Facebook Messages. It's not a Gmail killer, says Zuckerberg, and he's right in more ways than one.

Zuckerberg kicked off the press event by talking about how he noticed that for teens, email is "too slow." The process of writing a subject line, addressing the recipient, signing off — "It adds a lot of friction and cognitive load to the process of sending email and communicating," he said. Younger users tend to prefer the more spontaneous SMS or chat systems as a primary method of communicating.

Email is also not good at (and was not built for) collecting and storing messages from these multiple systems. Finally, while Gmail has made strides with its spam filtering technology and learning which users are more important and should be at the of your inbox (see Gmail's Priority Inbox), it's still not a perfect system by far. Email users in general often spend too much of their time sorting through and responding to emails.

Enter Facebook Messages. It doesn't aim to "kill" Gmail — email itself is a worn-down system that needs to evolve. But maybe it should have.

The quick rundown of Facebook Messages is this. Within the next two months, everyone will eventually be able to get a Facebook email address (@facebook.com). But they don't have to if they don't want to, and Messages is not solely about email. Facebook describes it as "seamless messaging" because Messages integrates the various messaging systems you're on — Email, SMS, IM, etc. — into a single conversation thread with the other person (or people if you have group threads).

(http://blogs-images.forbes.com/oliverchiang/files/2010/11/fbmsgs01.jpg)

Messages takes all these bits of conversation and keeps a collective conversation history. Vice versa, you can shoot a message back to the recipient at whichever system they're on. It has three main folders, 'Messages,' 'Others' and "Junk.' It filters messages based on your Facebook social graph, so you will automatically see messages from your mom (if she's on Facebook) in the Messages folder. But people who are not your friends on Facebook will end up in Others. Traditional spam emails will end up in Junk. You will have control over this filtering too; if Facebook places a message you think belongs in a different folder, you can move it manually. The system will remember your choices and change your filtering preferences accordingly.

But Facebook Messages inherits legacy issues from email and messaging systems that came before it, and may even create new problems. The main problem Facebook hasn't solved yet, apparently, is that you not only want to filter who is able to hit the top of your inbox with messages, you also want to be able to filter *what* is hitting the top. Facebook Messages has no way of telling if your mother is sending an important email about your cousin's wedding, or a forwarded email about the billionth funny cat video ever made.

(http://www.forbes.com/sites/oliverchiang/2010/11/15/facebook-messages-isnt-a-gmail-killer-and-thats-the-problem/2/)

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Facebook's Like number is more than just people clicking Like.

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1

It seems that every site now has a Facebook Like button

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on it, but did you know that the number of Likes is made up of more than just people clicking Like?

The number shown on a Like button is the sum of:

- The number of likes for the URL
- The number of shares for the URL – This includes copy/pasting a link back to Facebook.
- The number of likes and comments on stories on Facebook about the URL
- The number of inbox messages containing the URL as an attachment

So lets say you have a blog post that had a Like button on it. The Like number showing would include:

- The number of times someone clicks the Like button.

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- The number of times someone shares the blog post URL on Facebook.
- The number of comments that shared blog post gets on Facebook; across all shares.
- The number of comments on the blog post if the user is using the Facebook comment system.
- The number of times someone has sent the blog post URL to a friend via Facebook's messaging system.

Basically, anytime that blog post URL is active on Facebook, a Like is added to the count.

This means that the number can be really inflated.

Some sites have chosen to use the Facebook comment

system instead of their blog's default comment system. So anytime someone leaves a comment, the Like number goes up.

This also means that, with so many factors influencing the Like number, one little change by Facebook could make the share number plummet.

Just yesterday I had a site drop from 250+ Likes to 3. Turns out Facebook temporarily stopped counting shares and comments and were only counting actual clicks. Few hours later it went back up. Facebook's system is fragile; just ask any Facebook developer.

Ohh and then think of the ways you could increase the number of Likes by being creative with your content.

The system is easy to game.

In the end this is all just a big marketing scheme to get people to use Facebook more. They know we are already addicted to the Like button, or actually the number on the Like button, and now they want us to use their comment system and share our URLs on Facebook as much as possible so they are using those to increase the Like number.

It really makes you wonder if the number of Likes is a sign of quality content, or just another number.

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Thomas

Thomas is a web developer at The Nerdery specializing in front-end development, WordPress and Facebook.

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Facebook launches anti-malware URL scanning service

Posted on 10/03/2011 by Julian

Facebook is introducing URL (link scanning) protection for its users as from today (Oct 3rd, 2011). When a user clicks on any link in Facebook, Websense using its ThreatSeeker Cloud Malware Identification Platform, will analzye each URL in real-time for potential malicious content. If ThreatSeeker finds malicious content the user will be warned "Security Alert: This Link May Not Be Safe". An image of what this alert will look like can be seen below:

There are a number of Facebook apps from reputable security vendors that scan URLs, protect your privacy and reputation (including comments, posts, messages etc) and then there is the small matter of whether Facebooks relationship with Web of Trust (WOT) is of any benefit now, given this latest announcement. I've never been one for 'community-based website ratings' like WOT, mainly due to the high false positive rates i.e. safe sites can be rated dangerous and dangerous sites rated safe. You can make your own mind up here.

Facebook already scans URLs for malicious links, but by adding Websenses cloud-based malware technology (Websense are not the only company that uses the cloud to scan for malicious content – most if not all security vendors do this in some way or another), they further enhance the security offering to Facebook users. One can only applaud Facebook for continuing to build user privacy and protection, even if it is becoming rather more complex for end users to understand.

Safe surfing folks!

FB000000248

Julian

This entry was posted in facebook, malware, privacy. Bookmark the permalink.

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2 Responses to *Facebook launches anti-malware URL scanning service*

Matt Bancroft *says:*

10/04/2011 at 09:58

This technology could be useful in helping users from falling for one of the many social engineering scams common on Facebook that seek to trick members into clicking on a malicious link by playing to their curiosity but this has to overlooked because there are some issues still faced by Facebook users, read what kinds of issues are faced http://radiomobiletech.com/blogposts/facebook-announces-new-protection-against-malicious-and-malware-sites.html

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Pingback: *Facebook launches anti-malware URL scanning service | News | IT Security Magazine - Hakin9 www.hakin9.org*

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The Reengineering of Facebook Messages

How do you completely redesign the software used by 750 million people—without hitting the pause button?

By Tekla S. Perry
Posted 2 Nov 2011 | 12:51 GMT

Photo: Tekla S. Perry

Message Master: Engineering director Andrew Bosworth.

Upgrading any kind of software (http://spectrum.ieee.org/computing/software) usually requires that its users stop using it, at least briefly, to enable the new software to replace the old and to transfer any stored information before users start working with the new version. We're all familiar with messages from systems administrators reminding us that servers we're using will be off-line for a couple of hours in the middle of the night for maintenance.

But when you've got three-quarters of a billion users around the world, there's no "middle of the night." And in an era when people have come to expect e-mails and texts and tweets and posts to arrive within seconds of sending them, there's little patience for pauses of any kind.

So when Facebook (http://www.facebook.com/IEEE.Spectrum) decided in 2009 to completely redesign its messaging system, the engineers on the project knew that the toughest part of the change was not going to be creating the new software but rather getting it out to users without interrupting their individual message flows in any way.

A little background: Since launching in 2004, Facebook (http://spectrum.ieee.org/static/special-report-the-social-web) has offered users ways to communicate publicly—albeit to a select audience (the Wall)—and privately (messages). Back in 2009, the messaging function looked a lot like other Web-based e-mail systems—you entered a subject line and a message. Replies were threaded—that is, stacked under each individual subject, and your personal mailbox sorted everything by subject and date.

But e-mail came out of the business world (http://spectrum.ieee.org/computing/it/how-to-beat-information-overload), and Facebook's goal is to enable social communication, something Facebook software engineer Kenny Lau says is altogether different.

"The genesis," recalls Andrew Bosworth, director of engineering, "was a realization from Zuck [Facebook CEO Mark Zuckerberg] that smaller, real-time, more-contextual messages were just taking over communication. E-mail messages were increasingly seen as too slow—not technological slowness, but philosophical slowness—with a bit of formality to them."

From that realization, Bosworth says, came the idea of a product that combined different technologies, like e-mail and chat, with different devices, like phones and computers. The first thing to go was the subject line.

"Subject lines are a barrier," Lau says. Looking at existing Facebook messages, engineers noticed that 30 or 40 percent had no subject; another significant percentage just used "hey" as a subject. And personally, Lau had found it very stressful to fill in the subject line when he was dating online. "Do I put something witty there? Is it mean if I leave it blank? Sometimes I didn't message people because I couldn't think of something appropriate to put in the subject line."

> **"Yes, it's awesome, but it's kind of scary in that your illusions of who you are may get confused with what's actually there."**
> **—Kenny Lau, Facebook software engineer, on the presentation of messages as a "canonical thread"**

So subject lines were out. Instead, messages are threaded by person. In the new Facebook messaging setup, if you start a new message to one of your contacts, all the messages you've ever sent that person pop up—even if the last one was a year ago or more. The Facebook engineers call this the "canonical thread." "I can look at all the communication I've ever had with my girlfriend in one thread," says Lau, "and see everything we've ever talked about." Of course, sometimes that might bring up discussions you'd just as soon forget, but "that's the reality, and yes, it's awesome, but it's kind of scary in that your illusions of who you are may get confused with what's actually there," he says.

Next up was tearing down the walls between messages (which had been, like e-mail, not conducted in real time),

Photo: Tekla S. Perry

Keep Calm: Software engineers Karthik Ranganathan and Kenny Lau.

chat (which is live communication), and texts (which even Facebook users turn to when they are away from their computers or don't want to burden the data plans on their smartphones). The new messaging system stores live chats in the same thread as messages that are sent when one of the users isn't on Facebook, and any message turns into a chat if both users are online and have indicated that they're available. Users can opt to have messages sent as texts to their cellphones when they're not on Facebook and can reply via text as well. (A few months ago, Facebook added a messaging app for smartphones that works better than text for mobile communications—particularly group communications—but the SMS option is still there.)

Essentially, all e-mail became chat in its informal formatting, but all chat and texts became e-mail, in that they are no longer ephemeral.

That's how the user experience changed. But for the engineers working on the project, the big change they would have to consider was how all these messages would be stored. Facebook was going to have to hang on to a lot more data—previously, chats weren't saved—and be ready to retrieve it in an instant. Whenever you messaged anybody, you would instantly see all your past shared communications.

"We spent the second half of 2009 figuring out the storage system," recalls Karthik Ranganathan, an engineer on the project. They knew that "the storage system needed to take a lot of writes"; that is, users would be creating vast amounts of new data. In Facebook's other popular communication tool, the Wall, users read more postings than they write; a personal messaging system is more balanced. And, said Ranganathan, we knew "that many of the messages being read would be the most recent, but some would be completely random."

They decided that the messaging system would monitor when users are active on Facebook (not just logged in, because some people stay logged in all the time), predict what messages a user is likely to view (with most recent messages weighted more heavily than older messages), and pull those off disk storage and into a cache so

they could be delivered quickly if needed. To make sure no one ever loses a message, each message is stored in each user's account, and that's replicated three times, so a one-on-one conversation has six copies. After much discussion, the engineers settled on a system called HBase (https://www.facebook.com/note.php?note_id=454991608919), an open-source database written in Java that stores data on multiple machines.

"We spent three months investigating storage systems," Bosworth says. "And maybe because we picked well—or maybe because it didn't matter that much—we haven't had a problem with it. In developing software, the thing you worry most about tends to go well because you're focused on it. It's the things you aren't worried about enough" that cause problems, he says.

> **"A source of complexity is a source of bugs."**
> **—Andrew Bosworth, Facebook director of engineering**

In fact, he says, the engineers actually overbuilt the storage system, developing a technology they called Atlas, which figures out where to send a user's data among clusters of machines running HBase. (Storing data on multiple clusters enables systems managers to fix problems or perform maintenance without turning off access for all users.) But the engineers overloaded Atlas with other features, so they ended up turning it off because it made the system more complex. Says Bosworth: "A source of complexity is a source of bugs." The effort wasn't a total waste, though. They'll likely have to bring Atlas back into the system in a few years, Bosworth says, when the number of data centers increases.

After figuring out how to store the messages, the engineers turned to the problem of spam, a bane of e-mail services. While traditional spam filters look mostly at message content, the spam filters built into Facebook messages also pay a lot of attention to who the message senders are. Messages from your friends and friends of friends bypass the spam filters and go directly into your in-box, unless you've changed the default or previously moved messages from that person out of your in-box; messages from people you aren't connected to through a friend, along with announcements from organizations or businesses, go into a folder called "other." Messages with spamlike content and no friend-of-friend connection go into a separate spam file, the link to which is tucked away at the bottom of the "other" mailbox and requires scrolling past every message in that mailbox to be seen.

The biggest problem facing the engineers was the old Facebook messaging system, with its 750 million users sending 7 billion messages a day and about seven years of messages stored in a variety of formats. "We had to morph all that data into data that would fit in with this new system," says Ranganathan, "and then actually move the data, because we were going to be storing it on a different set of servers. And we had to do all that while people were sending messages, making sure we didn't drop any messages."

> **"If you lose the message that was sent 3 minutes before the upgrade, that's the worst, because it's probably the one you care most about."**
> **—Kenny Lau, Facebook software engineer**

"That was one of the biggest engineering challenges I've ever faced," says Lau. "If you lose the message that was sent 3 minutes before the upgrade, that's the worst, because it's probably the one you care most about."

The solution, Ranganathan says, was for the migration software to briefly send messages to two places—the old data store and the new one. While a user was being moved, the new data store held messages without sorting them, while the user continued to use the old data store. When all of a user's data completed the transfer from the old servers to the new, the software took the brakes off and started sorting the messages into threads and displaying them to the user. The user never spotted a pause.

Most users were on the new system three months after the official November 2010 launch; 95 percent had moved after six months; today, roughly a year later, all users are on the new system.

While the vast majority of users didn't notice their moving days, behind the scenes the engineers weren't quite so calm. They moved over the first million or so users and let them invite their friends to join them on the new system. Then they looked at the server usage to see if their estimates of how many servers this new messaging system would require were correct. And then they got a little nervous.

> **"It looked like we'd probably need a hundred times more machines than we had actually ordered." —Karthik Ranganathan, Facebook software engineer**

Says Ranganathan, "If we extrapolated this, it looked like we'd probably need a hundred times more machines than we had actually ordered."

What was going on? Had they made a mistake?

The engineers debated intensely for a couple of days, Ranganathan recalls, before zeroing in on what was causing the discrepancy. The first million users migrated were particularly active Facebook users, chosen because the developers figured these users would appreciate the new software the most. The friends they invited were also likely to be particularly active users.

The engineers changed their rollout strategy, adding more randomness in the user selection, and breathed a sigh of relief when it looked like their projected storage requirements were going to hold.

The migration went along smoothly for a while after that. Then, after about half of Facebook's then 600 million-plus users had been moved over, the engineers realized they had another problem—new Facebook users were initially going on the old messaging system, joining the migration queue. "We hadn't thought about the new users," Ranganathan says. "We knew we had 500 or 600 million people to move, not [thinking] about who joins every day. But then we realized that we had a boat with a hole in it, and we're trying to bail out the water, but the water is going to keep coming until you plug the hole."