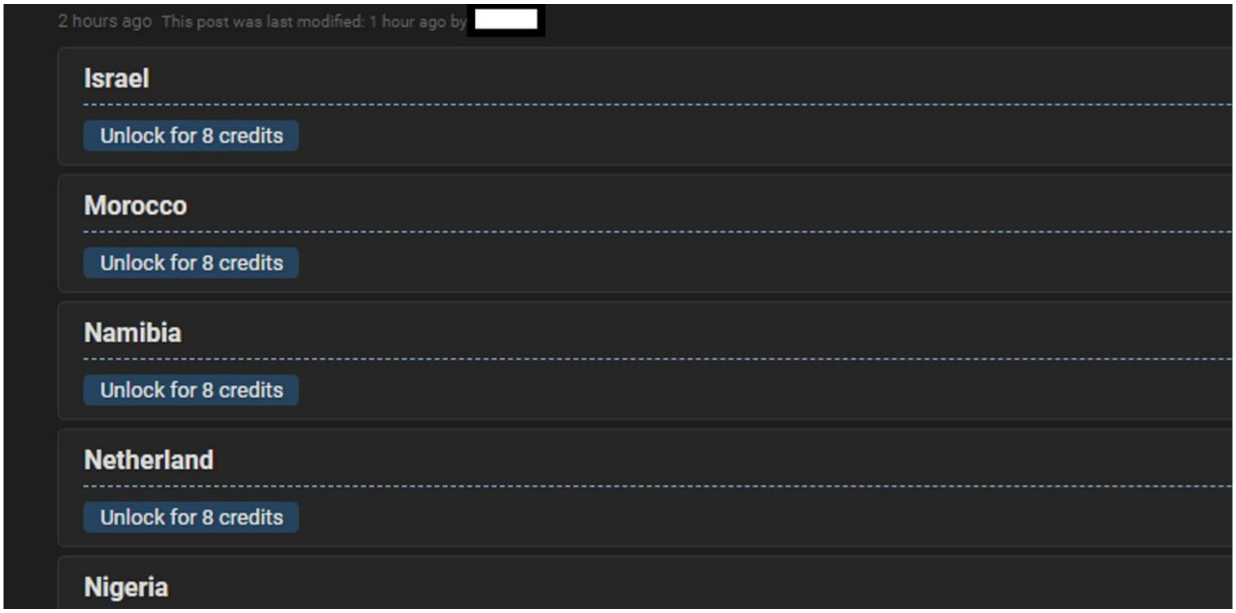
Facebook data breach: What happened and why it's hard to know if your data was leaked

April 6 2021, by Paul Haskell-Dowland



2 hours ago This post was last modified: 1 hour ago by [redacted]

Israel

Unlock for 8 credits

Morocco

Unlock for 8 credits

Namibia

Unlock for 8 credits

Netherland

Unlock for 8 credits

Nigeria

Credit: Alon Gal/Twitter

Over the long weekend reports emerged of an alleged data breach, impacting half a billion Facebook users from 106 countries.

And while this figure is staggering, there's more to the story than 533 million sets of data. This breach once again highlights how many of the systems we use aren't designed to adequately protect our information from cyber criminals.

Nor is it always straightforward to figure out whether your data have been compromised in a breach or not.

> In early 2020 a vulnerability that enabled seeing the phone number linked to every Facebook account was exploited, creating a database containing the information 533m users across all countries.
>
> It was severely under-reported and today the database became much more worrisome 1/2 pic.twitter.com/ryQ5HuF1Cm
>
> — Alon Gal (Under the Breach) (@UnderTheBreach) January 14, 2021

What happened?

More than 500 million Facebook users' details were published online on an underground website used by cyber criminals.

It quickly became clear this was not a new data breach, but an older one which had come back to haunt Facebook and the millions of users whose data are now available to purchase online.

The data breach is believed to relate to a vulnerability which Facebook reportedly fixed in August of 2019. While the exact source of the data can't be verified, it was likely acquired through the misuse of legitimate functions in the Facebook systems.

Such misuses can occur when a seemingly innocent feature of a website is used for an unexpected purpose by attackers, as was the case with a PayID attack in 2019.

In the case of Facebook, criminals can mine Facebook's systems for users' personal information by using techniques which automate the process of harvesting data.

This may sound familiar. In 2018 Facebook was reeling from the Cambridge Analytica scandal. This too was not a *hacking* incident, but a misuse of a perfectly legitimate function of the Facebook platform.

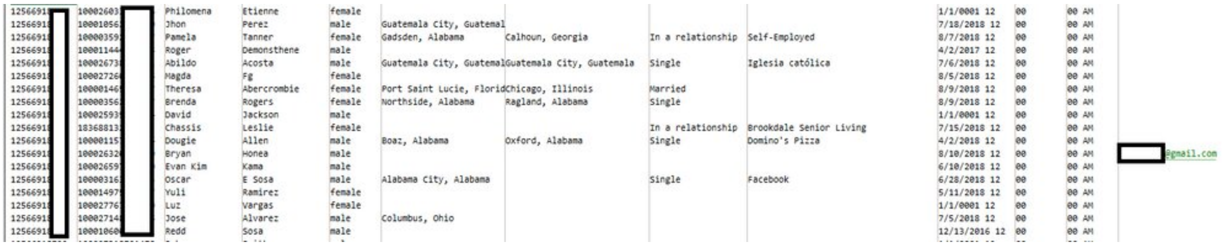
While the data were initially obtained legitimately—as least, as far as Facebook's rules were concerned—it was then passed on to a third party without the appropriate consent from users.

Were you targeted?

There's no easy way to determine if your details were breached in the recent leak. If the website concerned is acting in your best interest, you should at least receive a notification. But this isn't guaranteed.

Even a tech-savvy user would be limited to hunting for the leaked data themselves on underground websites.

The data being sold online contain plenty of key information. According to haveibeenpwned.com, most of the records include names and genders, with many also including dates of birth, location, relationship status and employer.



1256691	[redacted]	10002603	[redacted]	Philomena	Etienne	female					1/1/0001 12	00	00 AM	
1256691	[redacted]	10001056	[redacted]	Jhon	Perez	male	Guatemala City, Guatemal				7/18/2018 12	00	00 AM	
1256691	[redacted]	10000359	[redacted]	Pamela	Tanner	female	Gadsden, Alabama	Calhoun, Georgia	In a relationship	Self-Employed	8/7/2018 12	00	00 AM	
1256691	[redacted]	10001144	[redacted]	Roger	Demonsthene	male					4/2/2017 12	00	00 AM	
1256691	[redacted]	10002673	[redacted]	Abildo	Acosta	male	Guatemala City, Guatemal	Guatemala City, Guatemala	Single	Iglesia católica	7/6/2018 12	00	00 AM	
1256691	[redacted]	10002726	[redacted]	Magda	Fg	female					8/5/2018 12	00	00 AM	
1256691	[redacted]	10000146	[redacted]	Theresa	Abercrombie	female	Port Saint Lucie, Florid	Chicago, Illinois	Married		8/9/2018 12	00	00 AM	
1256691	[redacted]	10000356	[redacted]	Brenda	Rogers	female	Northside, Alabama	Ragland, Alabama	Single		8/9/2018 12	00	00 AM	
1256691	[redacted]	10002593	[redacted]	David	Jackson	male					1/1/0001 12	00	00 AM	
1256691	[redacted]	18368813	[redacted]	Chassis	Leslie	female			In a relationship	Brookdale Senior Living	7/15/2018 12	00	00 AM	
1256691	[redacted]	10000115	[redacted]	Dougie	Allen	male	Boaz, Alabama	Oxford, Alabama	Single	Domino's Pizza	4/2/2018 12	00	00 AM	
1256691	[redacted]	10002632	[redacted]	Bryan	Honea	male					8/10/2018 12	00	00 AM	[redacted]@gmail.com
1256691	[redacted]	10002659	[redacted]	Evan Kim	Kama	male					6/10/2018 12	00	00 AM	
1256691	[redacted]	10000316	[redacted]	Oscar	E Sosa	male	Alabama City, Alabama		Single	Facebook	6/28/2018 12	00	00 AM	
1256691	[redacted]	10001497	[redacted]	Yuli	Ramirez	female					5/11/2018 12	00	00 AM	
1256691	[redacted]	10002776	[redacted]	Luz	Vargas	female					1/1/0001 12	00	00 AM	
1256691	[redacted]	10002714	[redacted]	Jose	Alvarez	male	Columbus, Ohio				7/5/2018 12	00	00 AM	
1256691	[redacted]	10001060	[redacted]	Redd	Sosa	male					12/13/2016 12	00	00 AM	

Chief technology officer of cybercrime intelligence firm Hudson Rock, Alon Gal, discovered the leaked database, posting screenshots on Twitter. Credit: Twitter

Although, it has been reported only a small proportion of the stolen data contained a valid email address (about 2.5 million records).

This is important since a user's data are less valuable without the corresponding email address. It's the combination of date of birth, name, phone number and email which provides a useful starting point for identity theft and exploitation.

If you're not sure why these details would be valuable to a criminal, think about how you confirm your identity over the phone with your bank, or how you last reset a password on a website.

Haveibeenpwned.com creator and web security expert Troy Hunt has said a secondary use for the data could be to enhance phishing and SMS-based spam attacks.

> I've had a heap of queries about this. I'm looking into it and yes, if it's legit and suitable for @haveibeenpwned it'll be searchable there shortly. https://t.co/QPLZdXATpt
>
> — Troy Hunt (@troyhunt) April 3, 2021

How to protect yourself

Given the nature of the leak, there is very little Facebook users could have done proactively to protect themselves from this breach. As the attack targeted Facebook's systems, the responsibility for securing the data lies entirely with Facebook.

On an individual level, while you can opt to withdraw from the platform, for many this isn't a simple option. That said, there are certain changes you can make to your social media behaviors to help reduce your risk from data breaches.

(1) Ask yourself if you need to share all your information with Facebook

There are some bits of information we inevitably have to forfeit in exchange for using Facebook, including mobile numbers for new accounts (as a security measure, ironically). But there are plenty of details you can withhold to retain a modicum of control over your data.

(2) Think about what you share

Apart from the leak being reported, there are plenty of other ways to harvest user data from Facebook. If you use a fake birth date on your account, you should also avoid posting birthday party photos on the real day. Even our seemingly innocent photos can reveal sensitive information.

(3) Avoid using Facebook to sign in to other websites

Although the "sign-in with Facebook" feature is potentially time-saving (and reduces the number of accounts you have to maintain), it also increases potential risk to you—especially if the site you're signing into isn't a trusted one. If your Facebook account is compromised, the attacker will have automatic access to all the linked websites.

(4) Use unique passwords

Always use a different password for each online account, even if it is a pain. Installing a password manager will help with this (and this is how I have more than 400 different passwords). While it won't stop your data from ever being stolen, if your password for a site is leaked it will only work for that *one* site.

If you really want a scare, you can always download a copy of all the data Facebook has on you. This is useful if you're considering leaving the platform and want a copy of your data before closing your account.

This article is republished from The Conversation under a Creative Commons license. Read the original article.

Provided by The Conversation

Citation: Facebook data breach: What happened and why it's hard to know if your data was leaked (2021, April 6) retrieved 20 April 2024 from
https://techxplore.com/news/2021-04-facebook-breach-hard-leaked.html