"Won't Somebody Think of the Children?"

Examining COPPA Compliance at Scale

Irwin Reyes, Primal Wijesekera, Joel Reardon, Amit Elazari Bar On, Abbas Razaghpanah, Narseo Vallina-Rodriguez, and Serge Egelman

COPPA?

- Age 13 and under

- Bans collecting certain data
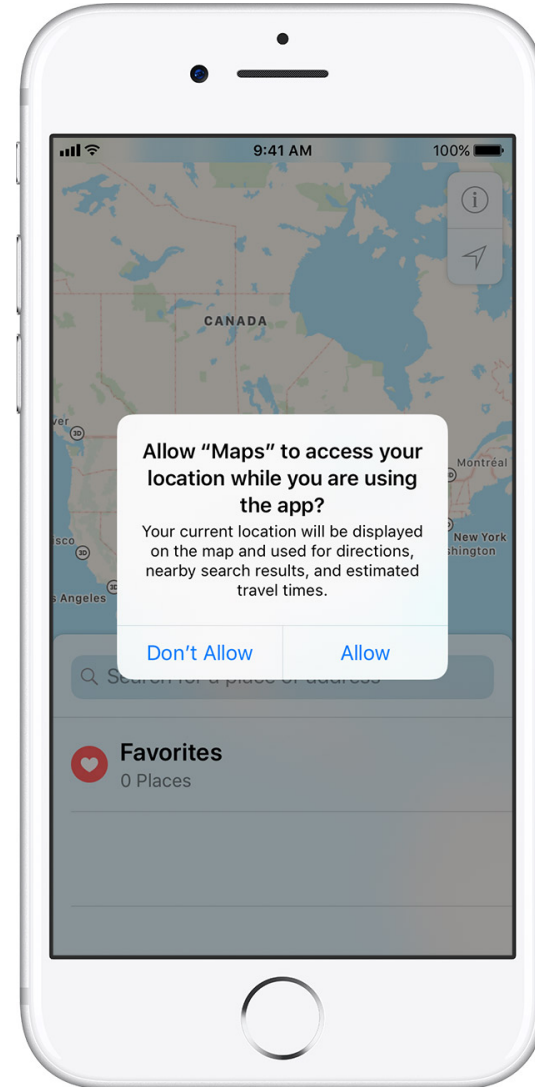
- Some (verifiable) parental consent required

How would you "Solve" COPPA?

be able to ensure that the person giving consent is the child's parent. **Acceptable methods of verifiable parental consent:**

- sign a consent form and send it back to you via fax, mail, or electronic scan;
- use a credit card, debit card, or other online payment system that provides notification of each separate transaction to the account holder;
- call a toll-free number staffed by trained personnel;
- connect to trained personnel via a video conference; or
- provide a copy of a form of government issued ID that you check against a database, as long as you delete the identification from your records when you finish the verification process.

451 Unavailable For Legal Reasons

apility   badip   Cloudflare Workers   quarantine

GDPR for lazy people: Block all European users with Cloudflare Workers

By   Diego Parrilla   –   On   May 25, 2018

Problems

Cult of Mac

Analysis Environment
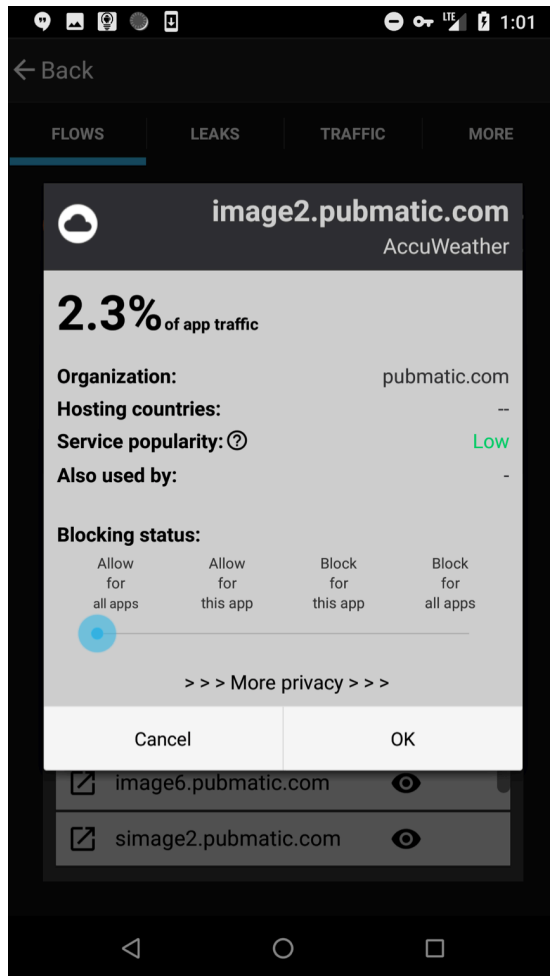
Lumen Privacy Monitor

```
~  ▶  adb shell monkey ...
```
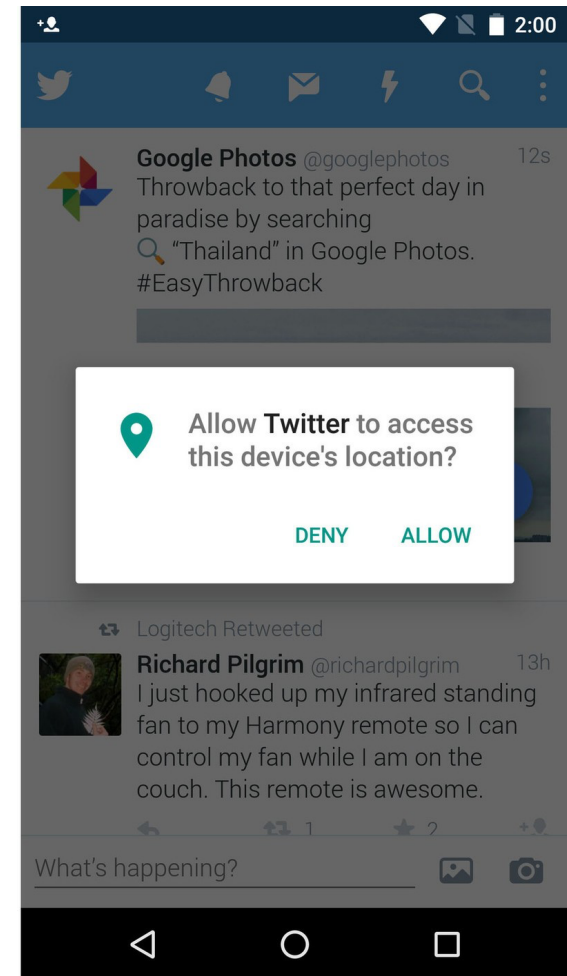

Android Central

Charles Proxy
@charlesproxy

Charles Proxy
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Charles Proxy is now available on iOS. Read the release announcement: charlesproxy.com/documentation/…

Or visit the App Store:

Charles Proxy
Charles Proxy for iOS lets you capture and inspect network requests and responses on your iOS device. You can view metadata, headers and bodies in the app, so you can finally d...
4.5/5.0 stars – 54 ratings

7:02 PM - 27 Mar 2018

Charles Web Debugging Proxy. HTTP Proxy / HTTP Monitor tool for web developers.

📍 Auckland, New Zealand

🔗 charlesproxy.com

📅 Joined April 2009

384 Retweets **579** Likes

💬 32   ⟲ 384   ♡ 579   ✉

Tweet your reply

🇪🇺🇬🇧 **Adam Bulmer** 🇬🇧🇪🇺 @mintuz · Mar 28   ⌄
Replying to @charlesproxy
How the heck has @charlesproxy got passed the iOS app review process, want to buy but imagine it's going to get pulled pretty soon that's insane.

💬 1   ⟲   ♡   ✉

Charles Proxy @charlesproxy · Mar 28   ⌄
It uses frameworks provided in order for people to develop interesting network products. The value for debugging will be huge. Also the value of visibility into what has previously been hard to see.

💬 1   ⟲   ♡   ✉

🇪🇺🇬🇧 **Adam Bulmer** 🇬🇧🇪🇺 @mintuz · Mar 28   ⌄
I'm aware what benefit it provides (I have the OSX app) I'm just surprised Apple

Overall Results

- 28% of 5,855 apps

- 73% transmitted sensitive data

- **None** attained parental consent - let alone verifiable

Location Data

- 706 apps had fine or coarse location permissions

- 235 used system location API

- 184 shared location data

- 101 apps shared Wi-Fi MAC address

HACKERNOON

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building great things. breaking others. | infosec, cyber, CANEX, mobile phone (iOS) hacking. | e: will@wstraf.me
Aug 21, 2017 · 3 min read

Advisory: AccuWeather iOS app sends location information to data monetization firm

Other data, such as Wi-Fi network information that is not user information, was for a short period available on the Reveal SDK, but was unused by AccuWeather. In fact, AccuWeather was unaware the data was available to it. Accordingly, at no point was the data used by AccuWeather for any purpose.

Allow "AccuWeather" to access your location even when you are not using the app?

By allowing background location access, we can alert you to severe weather in your area, provide critical updates, make the app launch faster, and more!

https://techcrunch.com/2017/08/22/accuweather-revealmobile-ios/

Transmission Analysis

- COPPA - need to use TLS for **all** data transmissions

- 2,344 "designed for families" apps did not use TLS in at least one transmission

- So… 3,511 apps are good?

SDKs

"…&coppa=true…"

Home   Moments   Notifi...   Tweet   ✕

Daniel McGee @danielmcgee134 · 29 May 2017
@OvercastFM just cureious why Cromecast isn't supported in the app? Would use it, even if it couldn't cast smart speed and is only audio.

💬 2   🔁   ♡   ✉️

Overcast ✓
@OvercastFM   Following ⌄

Replying to @danielmcgee134

Chromecast requires including a closed-source Google library in my app that could do anything. I don't want to risk my users' privacy.

9:20 AM - 30 May 2017

1 Retweet   **11** Likes

💬 3   🔁 1   ♡ 11   ✉️

🧑 [Tweet your reply   ]

Daniel McGee @danielmcgee134 · 30 May 2017
Replying to @OvercastFM
That's a pity because I would use it all the time. However, I respect your decision from a developer's point of view and 4 security as well.

💬   🔁   ♡ 1   ✉️

Chris Benard @cbenard · May 4
Replying to @OvercastFM @danielmcgee134
Could you revisit this now that VLC supports it without including the closed bits? They reimplemented the protocol in an open source manner.

💬 1   🔁   ♡ 5   ✉️

Chris Benard @cbenard · May 10
Ping again @marcoarment Chromecast code exists open source due to VLC 3's additions.

💬 1   🔁   ♡ 1   ✉️

Brad Joe @txchou · May 29

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Overcast ✓
@OvercastFM

A powerful, simple iPhone podcast app.

📍 New York
🔗 overcast.fm
📅 Joined August 2013

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👥 **26 Followers you know**

📷 **30 Photos and videos**

Following

Who to follow · Refresh · View all

1Password ✓ @1Password   ✕
Follow

Pocket Casts ✓ @pocket...   ✕
Follow

Reeder @reederapp   ✕
Follow

✉️ **Find people you know**
Import your contacts from Gmail

Connect other address books

Trends for you · Change

Jonathan Toews

Cubs
21.5K Tweets

#NLDS

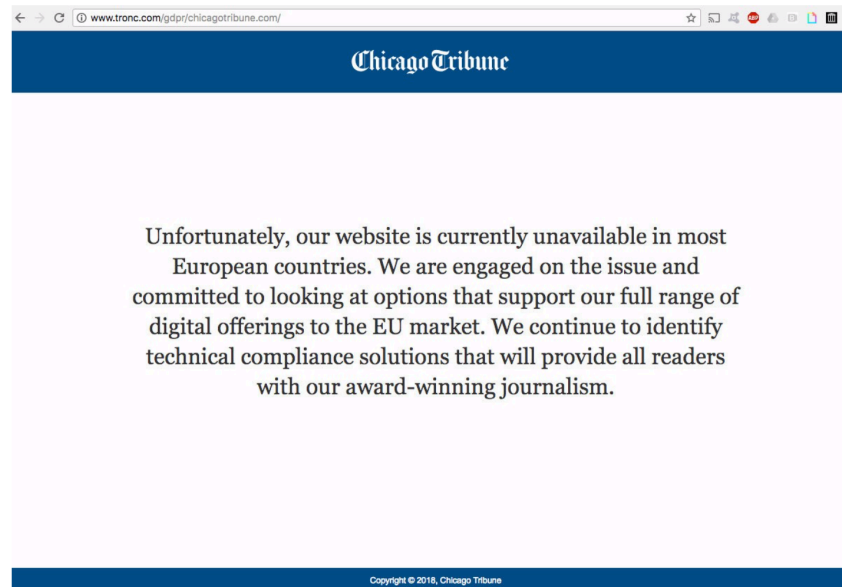"…we suspect that many privacy violations are unintentional and caused by misunderstandings of third-party SDKs."

–Reyes et al.

U.S. News Outlets Block European Readers Over New Privacy Rules

Unfortunately, our website is currently unavailable in most European countries. We are engaged on the issue and committed to looking at options that support our full range of digital offerings to the EU market. We continue to identify technical compliance solutions that will provide all readers with our award-winning journalism.

The home page of the Chicago Tribune on Friday, as viewed from Europe.

By Adam Satariano

May 25, 2018

LONDON — American news outlets including The Chicago Tribune, The Los Angeles Times and The Arizona Daily Star abruptly blocked access to their websites from Europe on Friday, choosing to black out readers rather than comply with **a strict new data privacy law** in the European Union that limits what information can be collected about people online.

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Paul Calvano
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Web Performance Architect @ Akamai

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Joined June 2013

Paul Calvano
@paulcalvano

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@USATODAY launched a lightweight version of their site for the EU to comply with #GDPR. The US site is 5.5MB and contains 835 requests loaded from 188 hosts. When loaded from France it's 297KB, 36 requests and contains no 3rd party content. And it's a lot faster! #perfmatters

USAToday: US vs EU
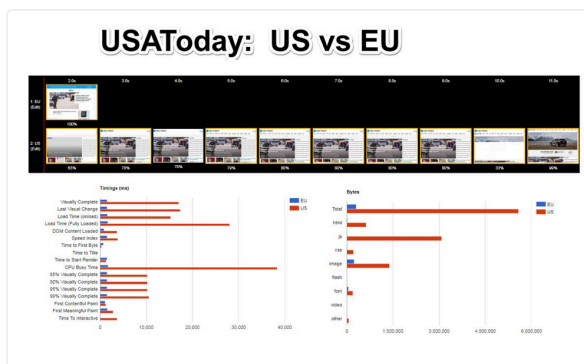
2:20 PM - 25 May 2018

494 Retweets **725** Likes

18   494   725

Tweet your reply

Paul Calvano @paulcalvano · May 25

Code

```
1    module.exports = leftpad;
2    function leftpad (str, len, ch) {
3      str = String(str);
4      var i = -1;
5      if (!ch && ch !== 0) ch = ' ';
6      len = len - str.length;
7      while (++i < len) {
8        str = ch + str;
9      }
10     return str;
11   }
```

https://www.davidhaney.io/npm-left-pad-have-we-forgotten-how-to-program/