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Exercising the CCPA Opt-out Right on Android: Legally Mandated but Practically Challenging

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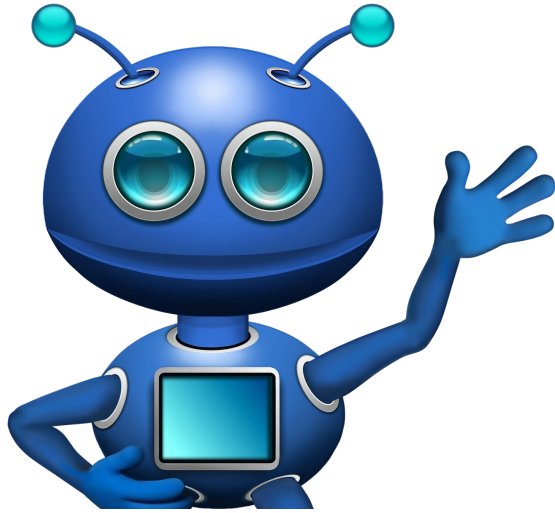
Take control of your privacy.

Online privacy should be accessible to everyone. It starts with a simpler way to exercise your rights.

GET STARTED

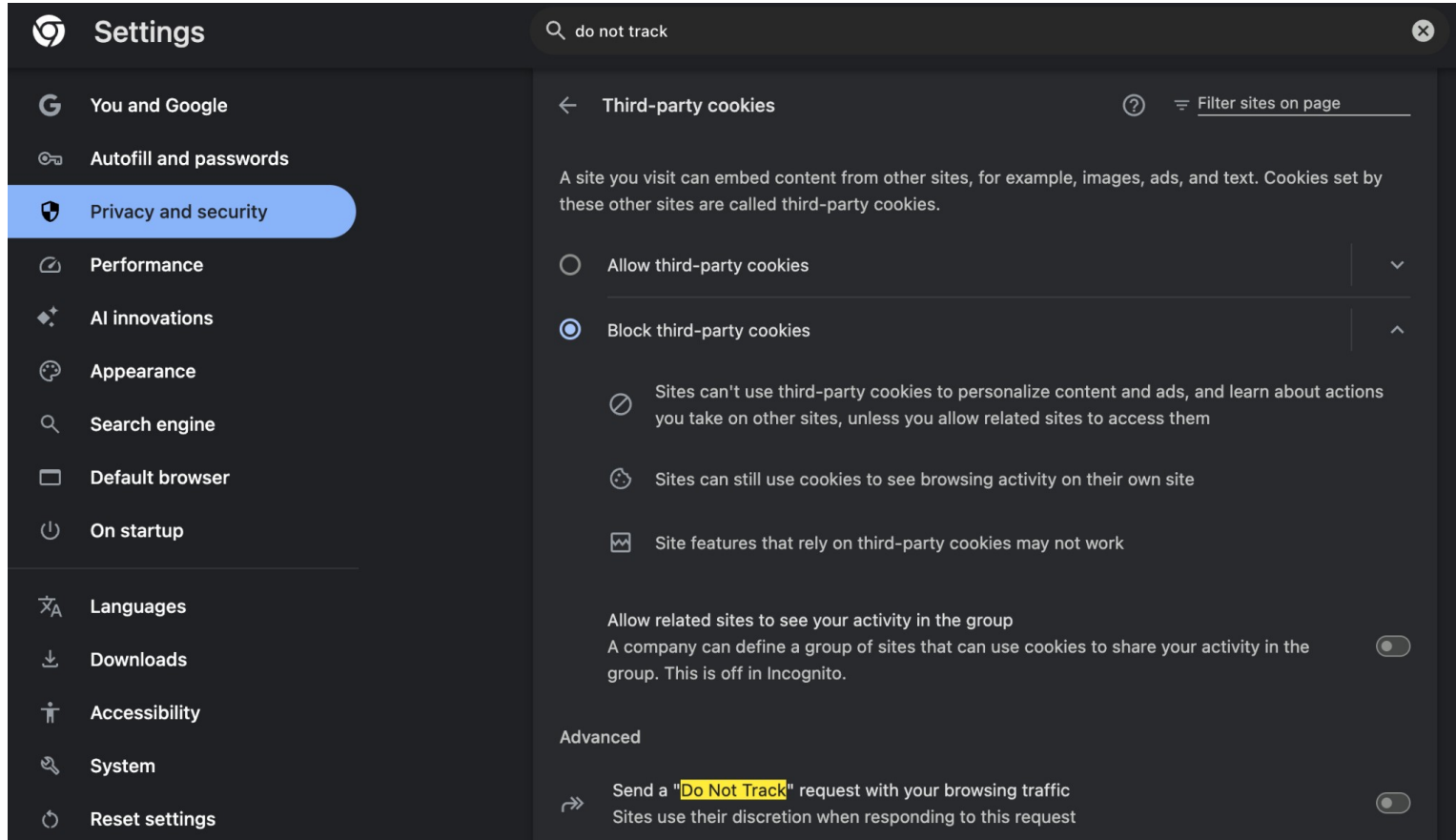
GET INVOLVED





- GPC is like a little robot pushing the opt-out button
- Opt out for all websites or just some
- For websites, mobile apps, ...
- Consumers have a right to opt out on every “device,” i.e., “any physical object that is capable of connecting to the internet” CCPA §1798.140(o)
- Whether you go through the UI or send a signal, the effect should be the same

Wait a minute, don't browsers have Do Not Track already?





- California Consumer Privacy Act
- Colorado Privacy Act
- Connecticut Data Privacy Act
- New Jersey Privacy Act
- Oregon Consumer Privacy Act

EU?



OFFICE OF THE ATTORNEY GENERAL
CONNECTICUT

09/09/2025

Connecticut, California and Colorado Announce Joint Investigative Privacy Sweep

States Investigating Businesses Refusing to Honor Consumers' Right to Opt-Out of the Sale of Their Personal Information

(Hartford, CT) — Connecticut Attorney General William Tong and the attorneys general of California and Colorado and the California Privacy Protection Agency today announced an investigative sweep involving potential noncompliance with Global Privacy Control, or GPC, an easy-to-use browser setting or extension that automatically signals to businesses a consumer's request to stop selling or sharing their personal information to third parties. As part of the sweep announced today, the coalition sent letters to businesses that do not appear to be processing consumer requests to opt out of the sale of their personal information submitted via the GPC as required by law and requested that those businesses come into immediate compliance. This sweep reinforces the three states' 2025 Data Privacy Day **educational efforts** on the GPC.

Building Privacy into the Structure of the Web

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Global Privacy Control (GPC)

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▼ More details about this document

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<https://w3c.github.io/gpc/>



ReSpec

How Does GPC Work?

- HTTP Header
- DOM Property



Research Questions

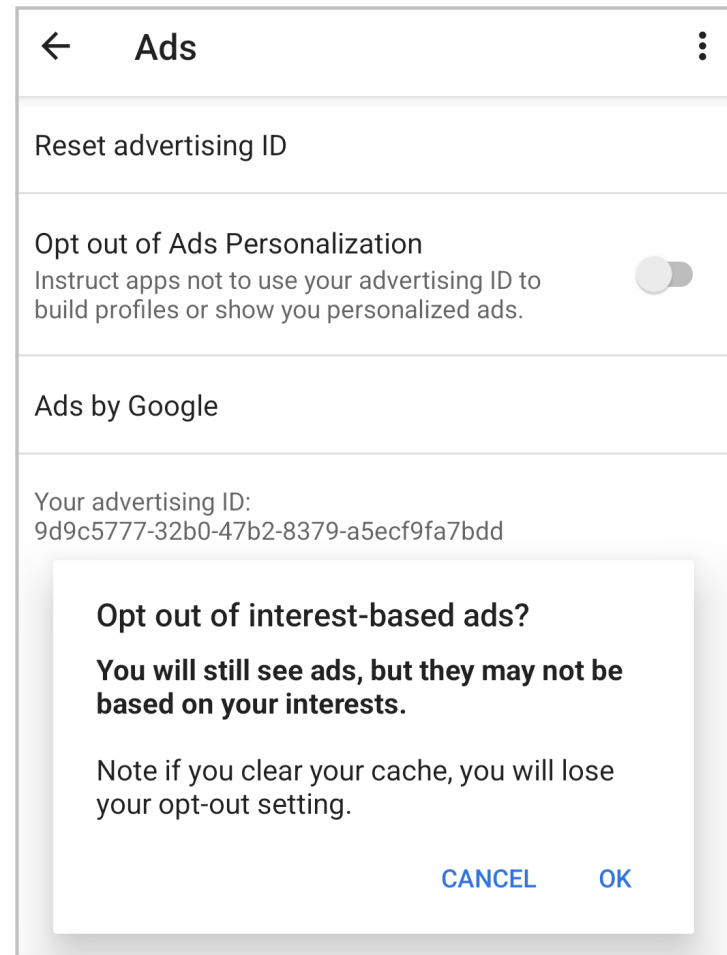
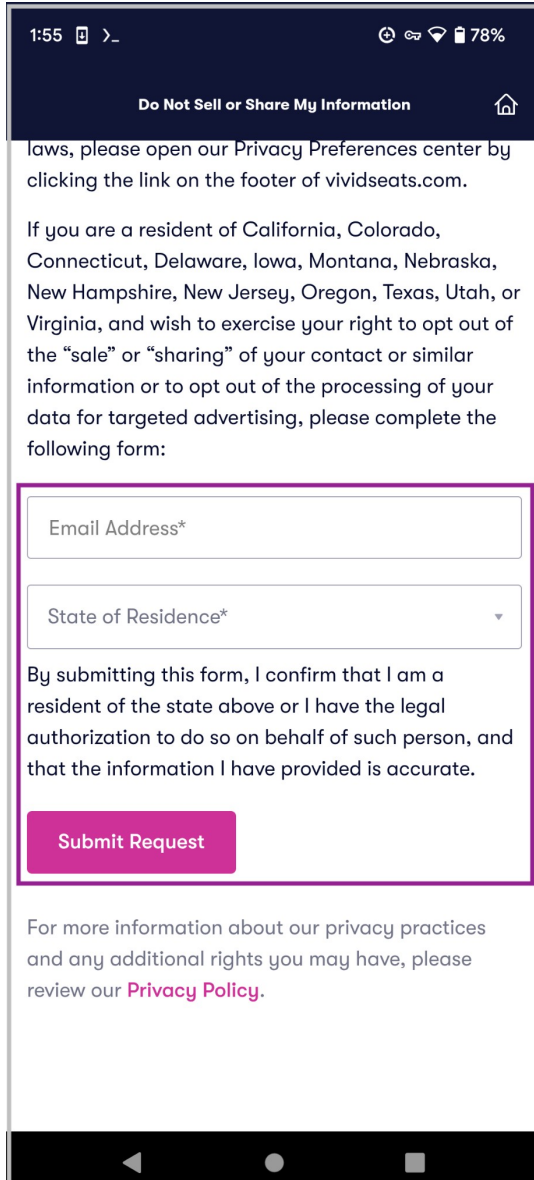
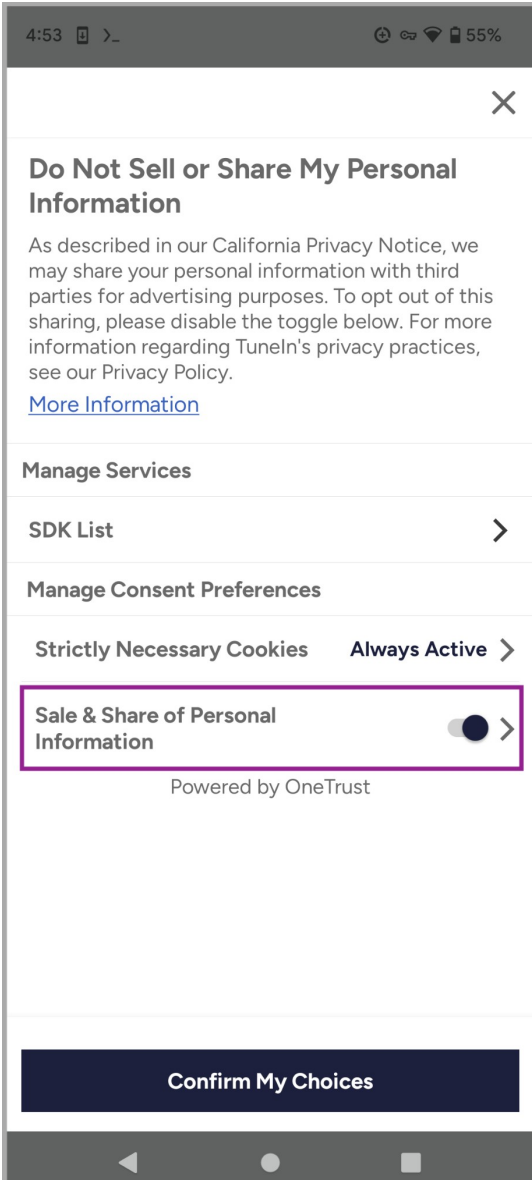
RQ1: UI Opt-out Evaluation

For a set of 100 popular Android apps, do those apps enable California residents to opt out per the CCPA?

RQ2: GPC Opt-out Evaluation

For a set of 1,811 popular Android apps, what effect does sending GPC signals have for opting out per the CCPA? What effect does disabling the AdID have?

RQ1: UI Opt-out Evaluation



	Count	Confidence Interval
Opt-out Right Setting	30	21%–39%
Generic/SDK/Cookie Opt-Out Setting	8	3%–13%
Opt-out Right Form	10	4%–16%
Privacy Policy Link	45	35%–55%
No Opt-out Setting or Privacy Policy Link	7	2%–12%

Only 48 of the 100 apps we evaluated implement the legally mandated CCPA opt-out setting, which suggests that CCPA opt-out right compliance on the Android platform is generally low.

RQ2: GPC Opt-out Evaluation

Privacy Preference Signals



Privacy Flags



People

First Party Websites

Third Party Websites

Streaming Services
News Publishers
Online Retailers

Ad Networks
Data Brokers
Social Networks



	Google rdp 0, 1, %	Supersonic/Unity do_not_sell false, true, %	Vungle ccpa status opted_in, opted_out, %
AdID	12, 29, 71%	152, 2, 1%	339, 23, 6%
AdID + GPC	12, 30, 71%	154, 2, 1%	341, 23, 6%
No AdID	12, 31, 72%	156, 2, 1%	337, 24, 7%
No AdID + GPC	12, 31, 72%	155, 4, 3%	338, 26, 7%

Counts and percentages of apps that set company-specific privacy flags.

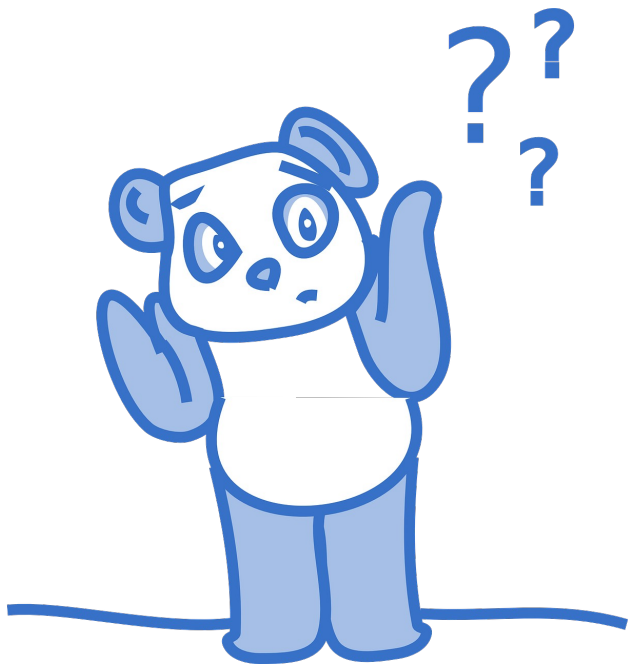
For example, when sending GPC signals and disabling apps' access to the AdID, 338 apps still had the `ccpa status` of the ad network Vungle set to `opted_in` while only 26 had set it to `opted_out`, which corresponds to only 26/364 (7%) of the total apps.

Android's Opt-out Right Gap

- **Android AdID** setting has no substantial effect on apps' opt-out behavior
- **GPC**: Apps' sharing and selling of personal information also generally continues despite enabling GPC
- **UI**: Many apps do not have a dedicated CCPA opt-out setting, and some that do are not propagating California residents' opt-out preferences to third parties



Two Settings for One Task



- Android has two types of opt-out settings: the platform-level AdID and app-level CCPA UI opt-out settings. The AdID setting is not intended for exercising the opt-out right per the CCPA or other privacy laws
- **But:** if a user has disabled the AdID, operators “may not use the advertising identifier for creating user profiles for advertising purposes or for targeting users with personalized advertising” [1]
- Despite this similarity the AdID setting is without legal meaning outside the contractual relationship that Google has with the app operators

[1] Google. 2025. Play Console Help Ads. <https://support.google.com/googleplay/android-developer/answer/9857753>.

Re-purposing the AdID Setting

- Disabling the AdID should be interpreted as exercising the opt-out right
- Android should surface a prompt for universally opting out as part of the setup of a new or reset Android device
- Android could also surface such prompt upon first start of an app that is selling or sharing personal information.
- Any prompt should contain an option for applying a user's preference across all apps



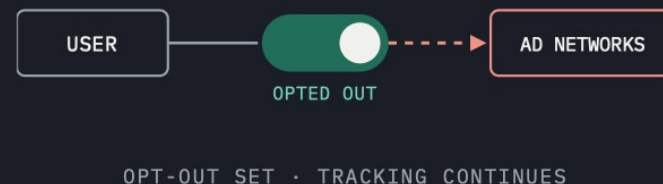
Legislative and Regulatory Support



- New California **Assembly Bill 566**, the California Opt Me Out Act, is effective January 1, 2027 and requires businesses to “not develop or maintain a browser that does not include functionality configurable by a consumer that enables the browser to send an opt-out preference signal.”
- California **Assembly Bill 3048** had required businesses to implement in mobile operating systems a setting for consumers to send opt-out preference signals

Thank you!

California law lets residents *opt out* of the sale and sharing of their data. We tested whether Android apps honor that choice. Across two experiments, the switch flips – but the tracking *doesn't stop*.



<https://petsymposium.org/popets/2026/popets-2026-0065.pdf>

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