

Exhibit 24

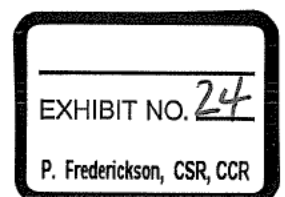


Impact of the AP Location History news coverage on Google users

Exploring user trust & trust related behavior

August 16, 2018 • [REDACTED]

Google | Proprietary & Confidential



Summary

- Sharp increase in visitors to products where users can adjust/monitor their privacy settings (Activity Controls) after AP news cycle started (8/13/2018)
- Nevertheless, the absolute # of users visiting Google privacy products was fairly small (average [REDACTED])
- [REDACTED] increase in the proportion of users reporting "low trust" in Google amongst visitors of the Activity Controls page [REDACTED]
- [REDACTED]



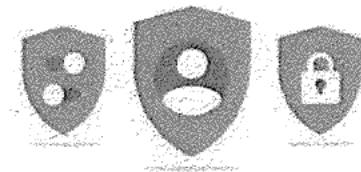
Section 01

Visits to trust related surfaces

My Account, My Activity, Google Takeout & [REDACTED]

My Account and other Google surfaces related to privacy contain trust signals

- Visit and action volumes on Google's privacy offerings are likely a proxy for user privacy concerns
- Some privacy related surfaces/products are:
 - [Activity controls](#) allows users to control [REDACTED] [REDACTED] (e.g., Web & Apps Activity, Location History, ...)
 - [Google Takeout](#) allows users to download their data
 - [My Activity](#) allows users to review the data we collected about them
 - [My Account](#) - Large destination that either hosts or has prominent entry points to sections above. In addition to privacy settings, it also hosts security related information and other account settings (e.g. language settings)

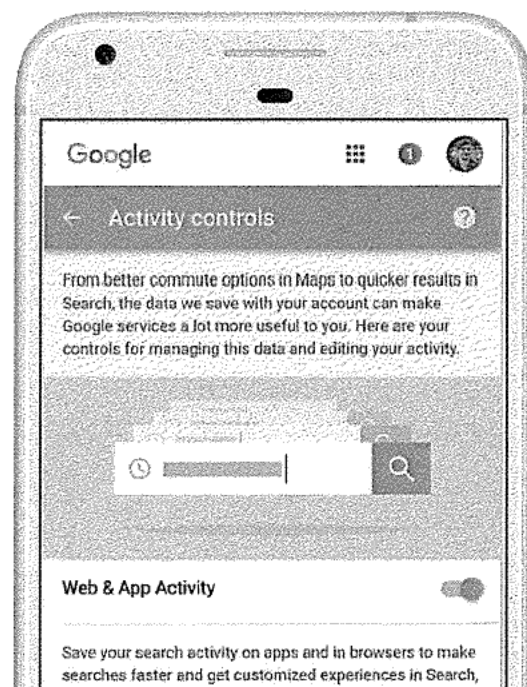


Slide 4

1 For completeness: [REDACTED]
[REDACTED]
[REDACTED], 8/17/2018

Activity Controls

10 UX Research



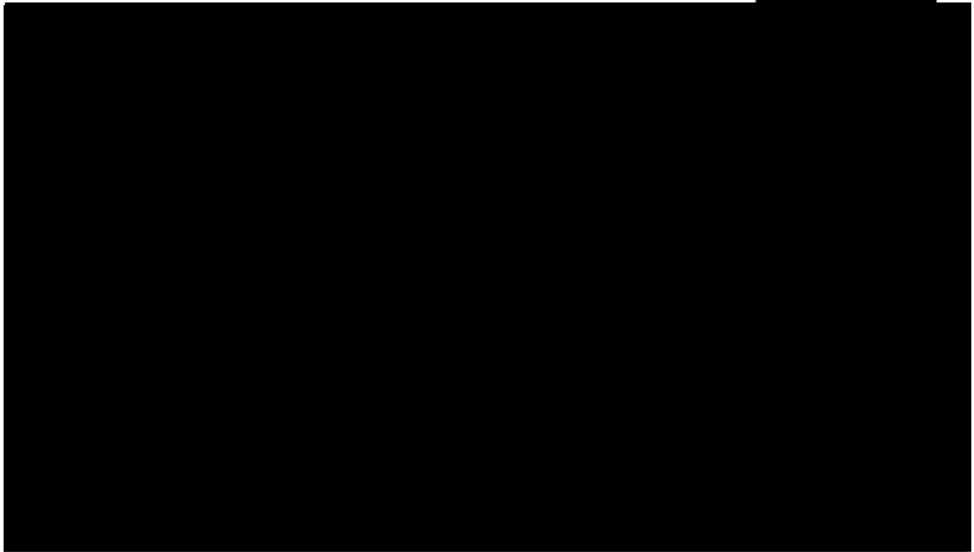
increase in users visiting the Activity Controls page that hosts

- The average # of visitors to My Account Activity Controls increased by about [REDACTED] since the AP report on 8/13
- The increase peaked [REDACTED]
- Over the past 3 days, about [REDACTED] users visited Activity Controls
- On 8/15 the visitor numbers strongly decreased, [REDACTED]



[REDACTED] increase of users disabling at least 1 [REDACTED] setting [REDACTED]

- On 8/14, an [REDACTED] [REDACTED]
- Despite the increase [REDACTED], it's still only a very small proportion of [REDACTED] [REDACTED]



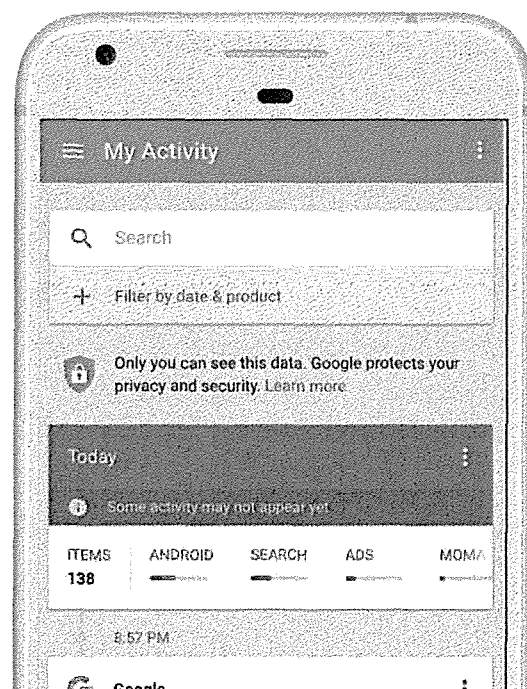
disable increase

- Location History and WAA setting was at the center of most news reports, thus [REDACTED]

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My Activity

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Given the [REDACTED], impact is less noticeable

- [REDACTED]
- [REDACTED],
[REDACTED] increase [REDACTED]
[REDACTED] compared to lower
traffic [REDACTED]
- On average, slightly [REDACTED]
[REDACTED] this proportion didn't
[REDACTED] over the last
3 days

ID US Research

Section 02

User trust impact for Google Account visitors overall & Activity Controls visitors specifically

Strong drop in user trust sentiment

- [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
- Across My Account overall, [REDACTED]
[REDACTED]
[REDACTED] AP news led to a [REDACTED]
[REDACTED] increase [REDACTED]
[REDACTED]

I trust Google with my data

More info about in-product trust survey [in appendix](#)

Notes: ¹⁾ We define users a "low trust" if they strongly or somewhat disagree with the statement: "I trust Google with my personal data". ²⁾ This change seems to be driven [REDACTED]
[REDACTED]

[REDACTED] Users with "low trust" are [REDACTED] more likely to [REDACTED]

- Users who visit Activity Controls page and report "low trust" show a [REDACTED] increase in disabling at least [REDACTED]
- [REDACTED]



Section 03

Traffic from news article to Activity Controls

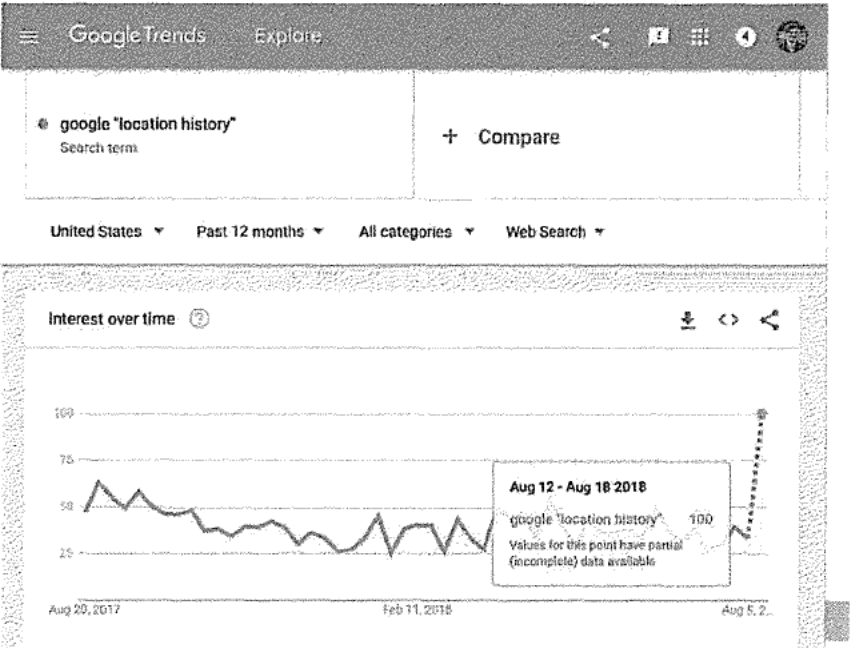


Section 04

Google Trends

Strong increase for queries related to 'Google location history'

- Based on Google Trends, the search term "Google 'location history'" saw a significant increase



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Appendix

Trust & Privacy survey

- [REDACTED] we launched an [REDACTED] survey on [REDACTED] to track user sentiment related to privacy & trust [REDACTED]
- We track trust sentiment:
 - On pages [REDACTED]
 - On pages [REDACTED]
- 5 Agreement questions: *To what extent do you agree or disagree:*
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]
 - [REDACTED]

UX Research

Notes Summary:

Slide 19:

REDACTED - PRIVILEGE

Exhibit 43

From: [REDACTED] >
To: [REDACTED]
Sent: Fri, 17 Nov 2017 23:35:50 +0000
Subject: Re: Scanning Settings - Invitation to edit
Cc: [REDACTED]
[REDACTED]

Yes, I have a feeling next week is going to be super productive :-).
[REDACTED]

On Fri, Nov 17, 2017 at 3:21 PM [REDACTED] wrote:

[REDACTED] as FYI

Thanks [REDACTED]!

Are you available on Monday at 12 noon to re-review this with our PWG/ Legal?

Thanks!
[REDACTED]

On Fri, Nov 17, 2017 at 12:15 PM, [REDACTED] wrote:

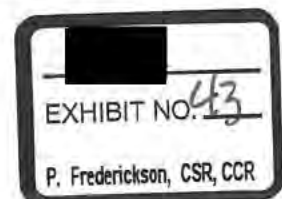
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Thanks,
[REDACTED]

On Fri, Nov 17, 2017 at 9:15 AM, [REDACTED] > wrote:

Thanks [REDACTED]!

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]



Thanks!

[REDACTED]

On Fri, Nov 17, 2017 at 4:58 AM [REDACTED] wrote:

Hi all,

[REDACTED]

Key changes:

[REDACTED]

[REDACTED]

Thanks,

[REDACTED]

On Wed, Nov 15, 2017 at 2:48 PM, [REDACTED] > wrote:

I see. So at least for O, to get the results of a scan - [REDACTED]
[REDACTED] must have location permission?

On Wed, Nov 15, 2017 at 12:53 PM, [REDACTED] wrote:

[REDACTED]

[REDACTED] App: For [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

cs link for the comment:

[REDACTED]

On Wed, Nov 15, 2017 at 11:49 AM, [REDACTED] > wrote:

Thank you!

Just to make sure I understand -- today, regardless of [REDACTED], any app (system or 3P) can [REDACTED]

[REDACTED]. Is that correct?

However, you mentioned that getting the results of that scan is based on app permissions - what permissions? app-level location permission?

Thanks!

[REDACTED]

On Wed, Nov 15, 2017 at 11:34 AM, [REDACTED] wrote:

just double checked - [REDACTED]

[REDACTED]

[REDACTED] Only system apps can request wifi scans?
i believe scan requests will be honored - need to confirm

[REDACTED]

[REDACTED] Only system apps can request wifi scans;
however, location doesn't request any wifi scans
no scans will be done - need to confirm

[REDACTED]

no problem!

[REDACTED]

On Wed, Nov 15, 2017 at 10:21 AM, [REDACTED] wrote:

Thanks [REDACTED]!

Just following up on these two states:

[REDACTED]: Only system apps can request wifi scans?

i believe scan requests will be honored - need to confirm

[REDACTED]: Only system apps can request wifi scans; however, location doesn't request any wifi scans

no scans will be done - need to confirm

Can you confirm whether scanning is available to no one, only system apps, or 3P apps?

Thank you!

On Sun, Nov 5, 2017 at 9:42 PM, [REDACTED] > wrote:

Let's see if I can fill in the blanks - but, admittedly, there is a bit of a mess that we are working to clear up.

On Thu, Nov 2, 2017 at 2:34 PM, [REDACTED] > wrote:

I think it would help just to understand what happens today in the 2^3 options for location toggle, scanning toggle, and connectivity toggle:

[REDACTED]
[REDACTED]
[REDACTED])

[REDACTED]: System apps and 3P apps can request wifi scans

yep

[REDACTED]: Only system apps can request wifi scans?

i believe scan requests will be honored - need to confirm

[REDACTED] Since wifi is on, System apps and 3P apps can request wifi scans

yep

[REDACTED] No wifi scans by anyone

correct

[REDACTED] System apps and 3P apps can request wifi scans, location doesn't request any wifi scans

correct - but only bc [REDACTED]

[REDACTED] Only system apps can request wifi scans; however, location doesn't request any wifi scans

no scans will be done - need to confirm

[REDACTED] System apps and 3P apps can request wifi scans, location doesn't request any wifi scans

correct

[REDACTED] No wifi scans by anyone

correct

[REDACTED]

Took a stab at what happens, but likely wrong...

On Thu, Nov 2, 2017 at 6:18 AM, [REDACTED] > wrote:

I agree, it would be good to confirm this.

Thanks,
[REDACTED]

On Wed, Nov 1, 2017 at 7:48 PM, [REDACTED] wrote:

What happens if the toggle is OFF but WiFi for connectivity/networking purposes is enabled? From the thread, I assume that [REDACTED] [REDACTED]. That's understood but not explicitly stated below.

On Wed, Nov 1, 2017 at 6:07 PM, [REDACTED] wrote:

Thanks [REDACTED]

[REDACTED] - can you please confirm what [REDACTED] is stating below?

From our previous thread, my understanding of how it works today is [REDACTED]
[REDACTED]
[REDACTED]

Thanks,
[REDACTED]

On Wed, Nov 1, 2017 at 5:57 PM, [REDACTED] wrote:

Hey folks,
Following up from our yesterday's call - I discussed this issue with both [REDACTED] and [REDACTED] and here is [REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] [REDACTED]

thanks,
[REDACTED]

On Sun, Oct 29, 2017 at 9:55 PM Ronald Ho [REDACTED] > wrote:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

thanks,
[REDACTED]

On Sun, Oct 22, 2017 at 10:05 PM, [REDACTED] > wrote:

[REDACTED]
[REDACTED]

[REDACTED]

On Mon, Oct 23, 2017, 8:00 AM [REDACTED] wrote:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

On Fri, Oct 13, 2017 at 2:26 AM, [REDACTED] > wrote:

[REDACTED]

On Thu, Oct 12, 2017 at 7:57 PM, [REDACTED] wrote:

Decided to change [REDACTED] to make it broader to device experience.

We will still keep the [REDACTED] under security.

Lastly we need to a [REDACTED] for [REDACTED]..

On Oct 12, 2017 6:50 PM, [REDACTED] wrote:

hi [REDACTED], just checking in here, how's did the meeting with privacy team go?

Thanks,

[REDACTED]

On Sep 29, 2017 02:02, [REDACTED] wrote:

got it, thanks for driving this [REDACTED]

[REDACTED]

On Fri, Sep 29, 2017 at 12:06 AM, [REDACTED] wrote:

[REDACTED] has invited you to edit the following presentation:

Scanning Settings

Here is deck for our chat around BT/WiFi Scans.

[Open in Slides](#)

Google Slides: Create and edit presentations online.

Google Inc. [1600 Amphitheatre Parkway, Mountain View, CA 94043, USA](#)

You have received this email because someone shared a presentation with you from Google Slides.

Exhibit 47

From: [REDACTED]
To: [REDACTED]
Sent: Thu, 24 May 2018 10:15:09 -0700
Subject: Re: Note about today's location meeting
Cc: [REDACTED]

Jeez. Ok sorry about all this.

On Thu, May 24, 2018, 10:06 AM [REDACTED] wrote:

Sigh. I'm on vacation and [REDACTED] is in training, neither of us were even planning to attend. Now [REDACTED] is, because we thought you wanted an update. So we've all been scrambling for the wrong reasons. Let me start a thread with the relevant folks and you to clarify the agenda.

On Thu, May 24, 2018 at 9:25 AM, [REDACTED] > wrote:

I'm so confused. I'm only attending because the meeting landed on my calendar and I didn't know if you all wanted me there or not to support you in whatever was going to be discussed.

[REDACTED]
[REDACTED]

On Thu, May 24, 2018 at 9:19 AM [REDACTED] wrote:

[REDACTED], we were told that you are attending so you would like to hear about certain topics (like tri-state), so I guess we should ask you if thats accurate :).

[REDACTED]
[REDACTED]

On Thu, May 24, 2018 at 8:58 AM, [REDACTED] wrote:

got it thanks

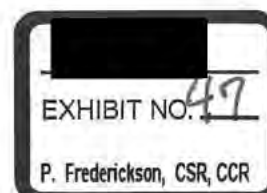
On Thu, May 24, 2018 at 8:57 AM [REDACTED] wrote:

Ge [REDACTED]

On Thu, May 24, 2018 at 8:51 AM, [REDACTED] > wrote:

sounds good -- who's meeting is this anyway? e.g. who set it up and who runs it?

On Thu, May 24, 2018 at 7:42 AM [REDACTED] > wrote:



Hi [REDACTED],

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

Thank you!

[REDACTED]