

# Exhibit 84

[REDACTED]  
[REDACTED] Kevin Berlin [REDACTED] Mado McGriff [REDACTED]

[REDACTED]

If there is no location in the [REDACTED] and none in location history, then the Feed backend [REDACTED] never calls [REDACTED] and never snaps the user to anything (including home/work). This is implemented in the [REDACTED]

This has nothing to do with whether an inferred or explicit home/work exists for the user. The [REDACTED] team infers home/work locations and there might be an inferred home/work based on previous data, even if the user has since turned off location history. You need to confirm that with the [REDACTED] team.

On Sun, Sep 30, 2018 at 11:27 PM [REDACTED] wrote:

[REDACTED] did this ever launch?  
[REDACTED]

It looks like it's set in a launch layer, but that it expires tomorrow:  
[REDACTED]

On Fri, Sep 28, 2018 at 8:24 PM [REDACTED] wrote:

[REDACTED] for confirmation.  
>> In proactive, we read [REDACTED] and try to match the device location in the request OR a location history point  
>> [REDACTED] of the location in that [REDACTED] column, we snap them to that location. Otherwise, we call the [REDACTED] and trust that response.>>

[REDACTED] do you know where the above logic is called? If the device location is wiped out in the [REDACTED] (code), will the [REDACTED] never be called and there is no inferred home/work?

On Fri, Sep 28, 2018 at 6:15 PM, [REDACTED] wrote:

Berlin  
EXHIBIT NO. 24  
P. Frederickson, CSR, CCR

Thanks [REDACTED] So this is before the [REDACTED] call, right? Meaning we never make the call to [REDACTED] because we [REDACTED] and [REDACTED] [REDACTED]?

On Fri, Sep 28, 2018 at 5:50 PM [REDACTED] wrote:

Hi [REDACTED]

We have wiped out the location in this [code](#) [REDACTED]

According to [this](#), "this is the earliest place we see the [REDACTED] itself in our GWS plugin."

On Fri, Sep 28, 2018 at 5:42 PM, [REDACTED] wrote:

[REDACTED]

So my read after chatting with [REDACTED]:

- we compare the [REDACTED] data to what we think is actual user location, which we get from device location or Location History. Since for new devices with LH-off we have access to neither (we stopped sending up device location, and we can't check Location History), we do not check the [REDACTED] data.
- for old devices, we still send up device location but scrub in the logs. [REDACTED] implemented the scrubbing of this location in the logs ([http://\[REDACTED\]](#) - can you guys let us know where this scrubbing take place so we can figure out if this [REDACTED]?)

On Fri, Sep 28, 2018 at 4:45 PM [REDACTED] wrote:

Thanks for consolidating this into a single thread :)

( [REDACTED] who is the expert on this computation.)

On Fri, Sep 28, 2018 at 4:44 PM [REDACTED] wrote:

In proactive, we read [REDACTED] and try to match the device location in the request OR a location history point [REDACTED] of the location in that [REDACTED] column, we snap them to that location. Otherwise, we call the [REDACTED] and trust that response.

Newer client versions do not send a device location in the request for LH off users.

On Fri, Sep 28, 2018 at 3:56 PM Kevin Berlin [REDACTED] wrote:

Hey Marlo, [REDACTED] et. al.,  
[REDACTED] (cc'ed) and I were discussing location usage in Search just now, and had a few points we wanted to confirm with you about [REDACTED] behavior for users with Location History paused:

1. If a user pauses Location History but [REDACTED] has already made an inference as to the user's home/work locations, we retain that inference until account deletion, correct? Do we also remove that inference if a user deletes the place visits that led to that inference?
2. Would a service that integrates with Location History be able to retrieve those home/work inferences while the UDC bit for the service is paused?
3. Could services that consume data directly from PlaceVault continue to read that data for a specific user when LH is paused for that user?

Thanks so much!

-Kevin

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Kevin Berlin  
Senior Privacy Engineer  
Google



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