## Exhibit 69

## Google <br> Product Review: Precise Realtime 2014.02.14

## Google

## Agenda

Why are we here?

## Analysis results

## Potential Impact

Risks
Options

## Google

## Why are we here?

We can make a portion of our IP to location mapping precise $\rightarrow$ more awesome + more risk

What we want:
Approval on our aggregation level and next steps
Feedback on control/notification options

## Google

## Real Time



## Coogle

Not just 94041 but the Starbucks on Castro street...







## Google

## Why is this risky?

## Expectations around GLS data usage

IP moving towards PII boundary?
User surprise
Ex1: Person lives in a shared house and has opted out of Google location. Opens Google Maps and gets house-level accurate location.

Ex2: iOS user goes to google.com and says no (browser prompt) to allowing device location usage. He then uses a coffee shop's wifi

```
Slide 12
```

- 

1 I would like to suggest two concrete examples to make this clearer:
Example 1:

- Person lives in a shared house. Has opted his phone out of Google location (phone is anonymous). Opens Google Maps. Suddenly Google maps has house-level accurate location. User left wondering: how does Google know my location? I thought I said no location!

Example 2:

- iOS user in same shared house. Goes to google.com and says "I don't want google.com to use my location" a few days before. But yet, we do know their location and we can use it. User left wondering: what? I thought I told Google it was not allowed to use my location!
+, 2/13/2014


## Google

## Risk Management

Enough anonymization. $1 \mathrm{~km}^{\wedge} 2$ is not useful
Index is ephemeral

## logging anonymizes precise before logging

Products/services will not automatically get precise IP data; they must explicitly ask to consume this data via and comply with approval processes

Provide controls and notification

## Google

## ULC

If a user has said not to use location we won't use precise IP

|  | Localion History | GLS | plogs | $\frac{\text { tradtional anonymous }}{\operatorname{logs} \text { (anonymous) }}$ | anonvmous ad logs |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Loggedoin ULC=opled-in. LH=ON | ON | ON | ON | N.A. | ON with fine location |
| Logoed-in <br> ULC=opledin, LH=OFF | OFF | ON | ON | NA. | ON with fine location |
| Lomed -m ULC=opled-out | OFF | OFF | Only coarse location | N.A. | Only coarse location |
| Stgred-out | OFF | OFF | OFF | Use fine, store fine temporarily $/$ store coarse permanently | Use fine, store fine temporarly store coarse permanently |

## Google

## Options for user notifications and control

Ideal: On
Precise is used as a fallback for device location whenever it is available because the current aggregation levels are anonymous

Current notifications are adequate



## Google

## Option: Opt out

For the signed out case, and in advance of ULC launch, we would have a browser based cookied opt-out.

Leverage existing search opt-out:
Precise Location ?

- Use new precise locations from my device.

Do not allow

## Recent Locations?

e Save recent locations
( Do not save

Addl transparency in footer:

San Francisco, CA - Location based on IP

- Learn more

```
Slide 16
1 maybe:

\section*{Google}


Guogte Coniesjotatind Prapictary

\section*{Appendix}

\section*{Google}

\section*{Google}

Google


Cooziesurfolonvatandermpobisty

\section*{Google}
\begin{tabular}{|c|c|}
\hline Google & Search se \\
\hline \multirow{3}{*}{Control options} & Search histor \\
\hline & Satesearch Fi \\
\hline & Show most \\
\hline \multirow[t]{5}{*}{- Signed in follow ULC setting - ULC says signed out gets fine but we log coarse} & - Fillere explic \\
\hline & Handwrite e? \\
\hline & Enable \\
\hline & - Disable \\
\hline & Precise Locati \\
\hline - Button/bubble to allow, similar to mobile browser permissioning, can be prompted for local queries (localness score, & - Use new pr Do not allot \\
\hline - Group with sign in flow & Recent Locali \\
\hline - Cookied opt out - settings & - Save recen \\
\hline - Wifi opt-out & \\
\hline - None & Private results 6. Use private \\
\hline & Donotuse \\
\hline & \begin{tabular}{l}
Language in \(c\) \\
(Interlace, text al
\end{tabular} \\
\hline
\end{tabular}





Notes Summary:

```

