Uses of mobile WiFi Access Points: Entertainment and Fun

Increasing use of WiFi Access Points in Vehicles

- Infotainment
- Internet connectivity (via cellular networks)
- Connecting Smartphones:
  - Android Auto
  - Apple CarPlay

Form factors:

WiFi identifiers never change

Ullmann et al: “secondary vehicle identifiers”
Location services systematically track (mobile) access points

dense network of “listening stations”
(location service clients)

location service clients report also positions of mobile APs to central locations

No possibility to distinguish between mobile and fixed AP

and several others

**Recommendations**

**Context: WiFi tracking**
*(mobile APs, location services)*

**Who:** IEEE P802E

**Proposed Action:**

Mandate to mark all mobile Access Points with **locally administered** MAC addresses

**Benefits:**

- Location service clients can then **recognize** and **exclude** mobile APs from processing
- **Ongoing** systematic, global tracking of mobile APs can be stopped

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Figure from [https://en.wikipedia.org/wiki/MAC_address](https://en.wikipedia.org/wiki/MAC_address), CC BY-SA 2.5, By Inductiveload, modified/corrected by Kju - SVG drawing based on PNG uploaded by User:Vtraveller. This can be found on Wikipedia [here](https://en.wikipedia.org/wiki/MAC_address).
Detailed Report:

- [https://uldsh.de/lstrack](https://uldsh.de/lstrack)

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