"Airsnitch" - Recommendations for Client Isolation

A recent paper titled "AirSnitch: Demystifying and Breaking Client Isolation in Wi-Fi Networks" published at the NDSS Symposium 2026 describes a set of mechanisms to bypass client isolation. These mechanisms do not attempt to break the security of Wi-Fi encryption.

We recommend that customers adhere to industry-standard best practices to isolate clients and use Cambium Networks Enterprise Wi-Fi features such as ePSK to mitigate such attacks. In particular

- Enable client isolation on untrusted networks (Available under WLAN -> Basic Settings -> Client Isolation). Set the client isolation mode to "Network Wide" to also prevent client - client communication between clients on different APs
- On shared networks using PSK authentication, use ePSK to assign each user a unique passphrase and VLAN, ensuring isolation between users.
- Use unique VLANs per SSID to segment traffic and do not share VLANs between trusted and untrusted networks
- Disable DGAF in Passport networks (Available under WLAN -> Passport -> Basic Settings -> DGAF). When this is done Cambium Networks Wi-Fi APs send a random IGTK in the four-way handshake, FILS. Handshake, and FT and WNM sleep responses.
- Implement ACLs on routers to block communication from untrusted networks to any local networks. If your router allows "hairpin" routing between IP addresses in the same subnet, disable this.
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In addition, evaluate the following recommendations. These may not be appropriate in all networks due to client limitations or incompatibilities

- Use Enterprise authentication instead of PSKs where possible. Use WPA3 SAE instead of Open and WPA3 PSK security instead of WPA2/WPA3 PSK and WPA2 PSK.
- Enable 802.11w to prevent forgery of management frames
- Enable GTK per VLAN as described in the user guide under the heading "Configuring the Wireless LAN
  Groupwise Transient Key (GTK) per VLAN". Test this setting before deploying in

production as some IoT devices and older Wi-Fi devices experience connectivity issues when this is enabled.

- Enable dynamic ARP inspection as described in the user guide under the heading "Dynamic ARP Inspection"