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IEEE 802.1CQ interaction with IEEE 802.11

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Comments related

- **CID 1 and 2 relate to wireless technologies**
- **Our proposal is to introduce a section explaining the mechanism proposed herein**
- **This presentation is based on**
<https://mentor.ieee.org/802.11/dcn/18/11-18-1934-01-0arc-mac-address-assignment-in-ieee-802-11.pptx>
 - Presented in IEEE 802.11 ARC in 2018

Motivation for a specific mechanism in IEEE 802.11

- **MAC address is part of the state information required for the association and security in WLAN**
 - Any modification of MAC address in WLAN forces a new association and security association establishment
- **MAC assignment is required in pre-association**

Proposal

- **Advertisement of local MAC address policy can be done through ANQP (Access Network Query Protocol).**
 - This is already included in IEEE 802.11-2020 latest draft
 - Could use a reserved bit to advertise the presence of IEEE 802.1CQ server
- **Use IEEE 802.11 Pre-Association Discovery (PAD), through Generic Advertisement Services (GAS) mechanisms, to provide server-based MAC address assignment in pre-association state**
 - Use of Service Hint/Hash to advertise IEEE 802.1CQ service
 - Use new protocol within Service Information Request/Response Element in PAD to negotiate MAC address (note this protocol is out of scope of .11 → we may specify it in 802.1CQ)

Exchanging messages with the IEEE 802.1CQ Server → Procedure (.11aq compatible)

