IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| RSN capability indication for P802.11bh | | | | |
| Date: 2022-05-13 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jouni Malinen | Qualcomm |  |  | jouni@qca.qualcomm.com |
|  |  |  |  |  |

Abstract

This document proposes changes to P802.11bh/D0.1 to replace the unprotected capability indication in Extended Capabilities element with a protected one in RSNXE.

## Proposed changes to P802.11bh/D0.1

**9.4.2.26 Extended Capabilities element**

*Remove all changes to 9.4.2.26 (Extended Capabilities element) from the P802.11bh draft.*

**9.4.2.241 RSN Extension element (RSNXE)**

*Insert the following new row in Table 9-363 (header row shown for convenience):*

**Table 9-363—Extended RSN Capabilities field**

|  |  |  |
| --- | --- | --- |
| **Bit** | **Information** | **Notes** |
| <ANA> | Device ID Support | The STA sets the Device ID Support field to 1 to indicate support for Device ID indication. Otherwise, the STA sets the Device ID field to 0. |

**12.2.11 Device ID indication**

*Modify 12.2.11 as shown:*

An AP may provide an identifier to a non-AP STA and the non-AP STA may opt-in to providing that identifier to any AP in the same ESS to allow the network to recognize the same non-AP STA when it returns to the ESS even if it changes its MAC address. Exchanges of this identifier information are protected from third parties to limit the tracking capability to the APs in an ESS.

A non-AP STA indicates support for this capability in the Device ID Support subfield in the Extended RSN Capabilities field (see 9.4.2.241). An AP shall not send an identifier to a non-AP STA that does not indicate support for this capability.

When using FILS authentication, the non-AP STA sends the identifier, if it has one and opts-in to using it, in the Association Request frame and the AP sends a new identifier in the Association Response frame. When using FT, the non-AP STA sends the identifier, if it has one and opts-in to using it, during the initial mobility domain association the EAPOL-Key message 2/4 and the AP sends a new identifier in the EAPOL-Key message 3/4; the identifier or a new identifier are not exchanged during the FT protocol reassociations within the same ESS. For other cases, the non-AP STA sends the identifier, if it has one and opts-in to using it, during the initial 4-way handshake in the EAPOL-Key message 2/4 and the AP sends a new identifier in the EAPOL-Key message 3/4. When the non-AP STA sends the opaque identifier, it shall send the most recently received value from an AP in the ESS without modification.