**IEEE P802.11
Wireless LANs**

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| CR for editorial fix in device ID mechanism |
| **Date**: Sep 5, 2025.  |
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 **Abstract**

This submission proposes resolution for following 12 CIDs of LB289:

8, 9, 11, 53, 54, 55, 56, 58, 59, 61, 62, 63, 64

**Revisions:**

Rev 0: Initial version of the document.

***TGm editor: The baseline for this document is P802.11mfD1.0***

Interpretation of a Motion to Adopt

A motion to approve this submission means that the editing instructions and any changed or added material are actioned in the TGm Draft. This introduction is not part of the adopted material.

***Editing instructions formatted like this are intended to be copied into the TGmf Draft (i.e., they are instructions to the 802.11 editor on how to merge the text with the baseline documents).***

***TGm Editor: Editing instructions preceded by “TGm Editor” are instructions to the TGm editor to modify existing material in the TGm draft. As a result of adopting the changes, the TGm editor will execute the instructions rather than copy them to the TGm Draft.***

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| --- | --- | --- | --- | --- | --- |
| CID | Clause | Page/Line | Comment | Proposed Change | Resolution |
| 8 | 12.2.14.1 | 3232.18 | change "that is sent to an affiliated non-AP STA" to "that is sent by an affiliated non-AP STA" | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #8 in 11-25/1491r0 |
| 9 | 12.2.14.1 | 3232.53 | change NOTE1 to "NOTE 1--The criteria and mechanism to distribute device IDs to the either or both of APs and AP MLDs in the ESS is out of scope of this standard" | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #9 in 11-25/1491r0 |
| 11 | 12.2.14.1 | 3234.21 | AP MLD recognizes the non-AP MLD missing | change to "indicate that the AP or AP MLD recognizes the non-AP STA or non-AP MLD and set the Device ID field to zero length (indicating the current device ID is maintained) in an Association Response frame or message 3 of the 4-way handshake" | **Accepted.**TGm editor, please make the changes tagged by CID #11 in 11-25/1491r0 |
| 53 | 12.2.14 | 3231.12 | FILS authentication is a kind of association. Please remove FILS authentication, which is covered by a future association | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #53 in 11-25/1491r0 |
| 54 | 12.2.14.1 | 3232.14 | move the second sentence of this paragraph to a new paragraph after the paraghraph 'A non-AP STA that has dot11MACPrivacyActivated and dot11DeviceIDActivated..' | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #54 in 11-25/1491r0 |
| 55 | 12.2.14.1 | 3232.14 | a non-AP MLD should also consider dot11MACPrivacyActivated | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #55 in 11-25/1491r0 |
| 58 | 12.2.14.1 | 3233.32 | Please change 'For non-AP MLD' to 'For non-MLO' | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #58 in 11-25/1491r0 |
| 59 | 12.2.14.1 | 3234.12 | For MLOthe entity should be non-AP MLD and AP MLD instead of non-AP STA and AP | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #59 in 11-25/1491r0 |
| 61 | 12.2.14.1 | 3235.16 | 'non-AP STA'' is missing. | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #61 in 11-25/1491r0 |
| 62 | 12.2.14.1 | 3235.16 | For FILS authentication, the device ID is carried in the Device ID element instead of Robust Device ID element | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #62 in 11-25/1491r0 |
| 63 | 12.2.14.1 | 3235.16 | there is no PASN Status field in the Robust PASN ID element. Please remove it | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #63 in 11-25/1491r0 |
| 64 | 12.2.14.1 | 3235.23 | For FILS authentication, the device ID is carried in the Device ID element instead of Robust Device ID element | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #64 in 11-25/1491r0 |
| 56 | 12.13.3.2 | 3439.01 | elements in PASN Encrypted Data element should be Robust Device ID element, Robust IRM element and Robust PASN ID element instead of Device ID element, IRM element and PASN ID element. Please correct all through 11mf D1.0 | as the comments | **Accepted.**TGm editor, please make the changes tagged by CID #56 in 11-25/1491r0 |

**Discussion**

This submission proposes that AP MLD may provide non-AP MLD a PASN ID to be used, when the non-AP MLD becomes a non-AP STA, for identification of the non-AP STA during PASN authentication for the purpose of communicating with an AP in the same ESS; otherwise, the non-AP STA and non-AP MLD may be recognized as different devices, which leads to the missing of shared identity state

**12.2.14 Identifying a non-AP STA or a non-AP MLD with changing MAC address**

P3231L10

***TGm editor: Please channge the paragraph as follows:***

The first mechanism(#11be) is referred to as the device ID mechanism, where the AP provides an identifier to the non-AP STA during 4-way handshake, FILS authentication or PASN authentication that the non-AP STA then reports back to the AP during a future association(#53) or PASN authentication as defined in 12.2.14.1 (Device ID).

**12.2.14.1 Device ID**

P3232L11

***TGm editor: Please channge the paragraph as follows:***

For non-MLO, an AP that has dot11DeviceIDActivated equal to true advertises support for the device ID mechanism by setting the Device ID Support field to 1 in the Extended RSN Capabilities field in the RSNXE (see 9.4.2.240 (RSNXE)) in Beacon and Probe Response frames.

For MLO, an AP MLD that has dot11DeviceIDActivated equal to true advertises support for the device ID mechanism by setting the Device ID Support field to 1 in the Extended RSN Capabilities field in the RSNXE (see 9.4.2.240 (RSNXE)) in Beacon and Probe Response frames transmitted by each of its affiliated AP(s). .

A non-AP STA that has dot11MACPrivacyActivated and dot11DeviceIDActivated equal to true sets the Device ID Support field to 1 in the Extended RSN Capabilities field in the RSNXE to indicate that the device ID mechanism is supported. The RSNXE with the Device ID Support field equal to 1 is present in either (Re)Association Request frames or the first PASN frame that is sent to an AP that advertises support for the device ID mechanism.

(#8,#54,#55)A non-AP MLD that has dot11MACPrivacyActivated and dot11DeviceIDActivated equal to true sets the Device ID Support field to 1 in the Extended RSN Capabilities field in the RSNXE to indicate that the device ID mechanism is supported. The RSNXE with the Device ID Support field equal to 1 is present in (Re)Association Request frame that is sent to an AP MLD that advertises support for the device ID mechanism

P3232L49

***TGm editor: Please channge the paragraph as follows:***

For correct operation of the device ID mechanism, (#11be)all AP MLDs and all APs in an ESS need to have dot11DeviceIDActivated set to true.

NOTE 1—The criteria and mechanism to distribute device IDs to the APs (#9)and the AP MLDs in the ESS is out of scope of this standard.

P3233L32

***TGm editor: Please channge the paragraph as follows:***

For (#58)non-MLO, if an AP with dot11DeviceIDActivated equal to true receives from a non-AP STA a first PASN frame that includes an Extended RSN Capabilities field with the Device ID Support field equal to 1 but no PASN ID element, the AP shall provide a device ID in the Robust Device ID element and a PASN ID in the Robust PASN ID element in the second PASN frame.

P3234L12

***TGm editor: Please channge the paragraph as follows:***

(#59)For MLO, when a non-AP MLD sends a device ID to an AP MLD, it shall use the device ID most recently received from any AP or AP MLD belonging to the same ESS.

P3234L16

***TGm editor: Please channge the paragraph as follows:***

When an AP (#11be)or an AP MLD with dot11DeviceIDActivated equal to true receives an Association Request frame or message 2 of the 4-way handshake, containing a device ID from a non-AP STA or a non-AP MLD and the AP or the AP MLD recognizes the received device ID, the AP or the AP MLD shall perform one of the following actions:

1) Set the Device ID Status field of the Device ID KDE or Device ID element to 0 to indicate that the AP recognizes the non-AP STA (#11)or the AP MLD recognizes the non-AP MLD and set the Device ID field to zero length (indicating the current device ID is maintained) in an Association Response frame or message 3 of the 4-way handshake.

2) Assign a new device ID value in the Device ID field and set the Device ID Status field of the Device ID KDE or Device ID element to 0 and, if dot11PASNActivated is true, assign a new PASN ID value in the PASN ID field and set the PASN ID Status field of the PASN ID KDE or PASN ID element to 2, in an Association Response frame or message 3 of the 4-way handshake.

P3235L16

***TGm editor: Please channge the paragraph as follows:***

For non-MLO, when a (#61)non-AP STA receives a frame that contains a Device ID Status field in a Device ID KDE or (#62) Device ID element equal to 1, or a PASN ID Status field(#63) in a Robust PASN ID element equal to 1, indicating Not Recognized, it shall assume that no shared identity state exists with the AP or the ESS (as per the concepts of 12.2.14 (Identifying a non-AP STA or a non-AP MLD with changing MAC address(#11bh)(#11be))).

For MLO, when a non-AP MLD receives a frame that contains a Device ID Status field in a Device ID KDE or (#64) Device ID element equal to 1, indicating Not Recognized, it shall assume that no shared identity state exists with the AP MLD or the ESS (as per the concepts of 12.2.14 (Identifying a non-AP STA or a non-AP MLD with changing MAC address(#11bh)(#11be))).

P3239L1

***TGm editor: Please channge the paragraph as follows:***

A non-AP STA should change the IRM for each association or PASN authentication. (#11be)For MLO, a non-AP MLD should change its IRM in each association and should use randomized MAC addresses for its affiliated non-AP STAs.

NOTE 4—When using PASN authentication, the (#56)Robust IRM element is included in the Encrypted Data field of the PASN Encrypted Data element (see 12.13.11 (Encrypting the Encrypted Data field for PASN(#11bh))).

P3439L1:second PASN frame

***TGm editor: Please channge the paragraph as follows:***

—(#56) If dot11DeviceIDActivated is true, including a Robust PASN ID element and optionally a Robust Device ID element as defined in 9.4.2.321 (PASN ID element(#11bh)) and 9.4.2.317 (Device ID element(#11bh)) in the PASN Encrypted Data element, if required per the procedure in 12.2.14.1 (Device ID). The PASN Encrypted Data element shall be encrypted as defined in 12.13.11 (Encrypting the Encrypted Data field for PASN(#11bh))

—(#56) If dot11IRMActivated is true, including a Robust IRM element as defined in 9.4.2.318 (IRM element(#11bh)) in the PASN Encrypted Data element, if required per the procedure in 12.2.14.2 (Identifiable random MAC address (IRM)). The PASN Encrypted Data element shall be encrypted as defined in 12.13.11 (Encrypting the Encrypted Data field for PASN(#11bh)).

P3440L34:third PASN frame

***TGm editor: Please channge the paragraph as follows:***

— (#56)If dot11IRMActivated is true and the PASN frame is from an AP that indicated support for the IRM mechanism in its Beacon or Probe Response frame(s), including a Robust IRM element as defined in 9.4.2.318 (IRM element(#11bh)) in a PASN Encrypted Data element, if required per the procedure in 12.2.14.2 (Identifiable random MAC address (IRM)). The PASN Encrypted Data element shall be encrypted as defined in 12.13.11 (Encrypting the Encrypted Data field for PASN(#11bh)).