IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Unsolicited Block ACK Resolutions | | | | |
| Date: 2018-11-15 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Chris Hansen | Peraso |  |  | chris@covariantcorp.com |
| Joe Andonieh | Peraso |  |  | joe@perasotech.com |

Abstract

Resolutions for CIDs 3252, 3253, 3254, 3255, 3256, 3257, 3269, 3403, 3419, 3428

|  |  |  |  |
| --- | --- | --- | --- |
| **CID** | **Clause** | **Comment** | **Proposed Change** |
| 3252 | 6.3.7.4.2 | Use of Unsolicited Block Ack extension should not be limited to EDMG STAs. | Remove the sentence "The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise." from the table. |
| 3253 | 6.3.7.5.2 | Use of Unsolicited Block Ack extension should not be limited to EDMG STAs. | Remove the sentence "The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise." from the table. |
| 3254 | 6.3.8.1.2 | Use of Unsolicited Block Ack extension should not be limited to EDMG STAs. | Remove the sentence "The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise." from the table. |
| 3255 | 6.3.8.2.2 | Use of Unsolicited Block Ack extension should not be limited to EDMG STAs. | Remove the sentence "The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise." from the table. |
| 3256 | 6.3.8.3.2 | Use of Unsolicited Block Ack extension should not be limited to EDMG STAs. | Remove the sentence "The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise." from the table. |
| 3257 | 6.3.8.4.2 | Use of Unsolicited Block Ack extension should not be limited to EDMG STAs. | Remove the sentence "The parameter is present if dot11EDMGOptionImplemented is true and is absent otherwise." from the table. |

Resolution: Accept

Discussion:

The Unsolicited Block Ack feature is not specific to EDMG and so this sentence is not necessary. Other optional parts of the service primitive, such as QoSMapSet and VendorSpecificInfo do not incorporate language of this type and so it is unnecessary.

*Instruct the Editor to change as noted.*

|  |  |  |  |
| --- | --- | --- | --- |
| 3269 | B.4.31.1 | Use of Unsolicited Block Ack extension should not be limited to EDMG STAs. | Move Unsolicited Block Ack to B4.4.12 QoS base functionality and Replace "CFEDMG:O" with "CFQoS:O". |

Resolution: Accept

Discussion:

The Unsolicited Block Ack feature can be used by any QoS STA, including DMG, EDMG, and others. Therefore, it is inconsistent to have the PICs tie it to EDMG STAs. Changing the PICs to CFQoS:0 makes the PICs consistent with the text.

*Instruct the Editor to change as noted.*

|  |  |  |  |
| --- | --- | --- | --- |
| 3403 | 9.6.4.2 | Not clear why ADDBA request is sent for unsolicited BA agreement | add a NOTE for an example |

Resolution: Reject

Discussion: In an unsolicited Block ack agreement, a STA may send an ADDBA request when protected management frames are employed and the STA cannot send a BAR. Instead the STA must send a robust ADDBA Request to advance the SSN, as a BAR should not be used under PMF (see 10.24.9 Protected block ack agreement in 802.11-2016 as modified by 802.11ay D2.0 10.26.7).

|  |  |  |  |
| --- | --- | --- | --- |
| 3419 | 10.26.5.6.1 | like 10.26.5.3, the text should also describe how winStart/End\_B is initialized for unsolicited BA agreement | use sync MPDU SN as winStart\_B or WinEnd\_B |

Resolution: Revise.

Discussion: Clause 10.26.5.6.1 is an introduction to the HT-immediate block ack extensions clause and does not need to include all the technical content of the clause. This information is already contained in Clause 10.26.10.5 Receive reordering buffer control operation. Thus, we just need to clarify that the text in 10.26.5.6.1 does not apply to unsolicited block ack agreements.

Instruct the editor to modify text in 10.26.5.6.1 to read:

*Change the third, fourth, fifth and sixth paragraphs as follows*

For each HT-immediate block ack agreement that does not use segmentation and reassembly and is not part of an unsolicited Block ack agreement, WinStart and WinEnd variables shall be initialized as follows

|  |  |  |  |
| --- | --- | --- | --- |
| 3428 | 10.26.10.5 | Shall not transmit an A-MPDU' but in p204 L28 the sync MPDU is in an AMPDU | remove the 'shall not' requirement |

Resolution: Revise

Discusssion: Text is inconsistent as noted by commenter. Revised text is provided to cover both the unsolicited block ack case and the traditional block ack case.

*Instruct the Editor to modify the first bullet of 10.26.10.6 Originator behaviour and block ack state maintenance as follows:*

**

Shall not transmit an A-MPDU corresponding to a tuple <TA, RA, TID> before synchronizing at the recipient the SSN, WinStartR, and WinStartB parameters for the specific tuple unless the A-MPDU consists of a single MPDU that is used to synchronize an unsolicited block ack agreement. The originator may transmit either a MPDU or a BAR frame to initiate the synchronization. Synchronization is confirmed by reception of an Ack frame from the recipient when a MPDU was used, or by a Block Ack frame when a BAR was used.