IEEE P802.11
Wireless LANs

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| Comment resolution for CID 3460 |
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Abstract

This document provides resolution for CID#3460:

| **CID** | **Page** | **Clause** | **Resn Status** | **Comment** | **Proposed Change** | **Resolution** | **Owning Ad-hoc** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 3460 | 1551.439 | 10.2.2.16.4 |  | No behaviour is indicated for "Alternate Preferred, due to existing stream with different delivery interval", "Alternate Preferred, due to policy limits on AP" and "Alternate Preferred, due to AP changed the delivery interval" (and maybe others?) | Add normative behaviour for all statuses |  | MAC |

Discussion:

Note that “Alternate Preferred...” was changed to “Alternate Proposed ....” as approved in CID 3462.

In

The following status values are defined in Table 8-193—FMS Element Status and TFS Response Status definition:

|  |  |
| --- | --- |
| **Value** | **Description** |
| 0 | Accept |
| 1 | Deny, due to request format error or ambiguous classifier. |
| 2 | Deny, due to lack of resources on AP. |
| 3 | Deny, due to requested classifier(s) matching 2 or more existing streams on different intervals. |
| 4 | Deny, by policy, requested stream or filter is not permitted to participate in the service. |
| 5 | Deny, reason unspecified. |
| **6** | **Alternate Proposed(#3462), due to existing stream with different delivery interval.** |
| **7** | **Alternate Proposed(#3462), due to policy limits on AP.** |
| **8** | **Alternate Proposed(#3462), due to AP changed the delivery interval.** |
| 9 | Alternate Proposed(#3462), due to AP multicast rate policy. |
| **10** | **Terminate, due to AP policy change.** |
| **11** | **Terminate, due to lack of resources of AP.** |
| **12** | **Terminate, due to other FMS stream with higher priority.** |
| 13 | Alternate Proposed(#3462), due to AP changed the maximum delivery interval. |
| 14 | Alternate Proposed(#3462), due to AP unable to provide requested TCLAS-based classifiers. |
| 15–255 | Reserved |

**Issue #1:** Missing decription for 3 “Alternate Propossed …” status codes and 3 “Terminate …” status codes as marked “Bold”.

The behavior of the status code 6, 7, and 8 can be same as the behavior of status code 13 since all are about alternate proposed delivery interval.

* If the Element Status value in FMS Status subelement is Alternate Proposed due to AP changed the maximum delivery interval:
* The AP does not deliver the requested streams at the delivery interval as specified by the non-AP STA in the FMS Request element. The delivery interval specified in the FMS Status subelement specifies a delivery interval that the AP is willing to accept for the specified streams if the non-AP STA sends another FMS Request with that delivery interval specified.
* The non-AP STA may submit a new FMS Request that includes the delivery interval value received from the AP. If the AP accepts this new FMS Request, it shall respond as described in 10.2.2.16.2 (FMS general procedures).

Suggest adding behavior for “Terminate...”

**Issues #2**: Status codes used in at 1551.61 and 1552.8 are not consistant with Table 8-193, where they are defined.

At 1551.61, change “If the Element Status value in FMS Status subelement is Alternate Preferred due to AP changed the maximum delivery interval”.

To: “If the Element Status value in FMS Status subelement is “Alternate Preferred, due to AP changed the maximum delivery interval””

At 1552.8, change “If the Element Status value in FMS Status subelement is Alternate Preferred due to AP unable to provide requested TCLAS-based classifiers” to

“If the Element Status value in FMS Status subelement is “Alternate Preferred, due to AP unable to

provide requested TCLAS-based classifiers””.

Proposed Changes:

***TGmc Editor: Change section 10.2.2.16.4 (in D3.4) as suggested below:***

* + - * 1. FMS Response procedures

Upon reception of an FMS Response element in a frame that has a value in (#3387) Address 1 that matches its MAC address or that is a group address corresponding to a group of which it is a member and that was transmitted by the AP with which it is associated, a non-AP STA that supports FMS shall use the following procedures, based on the value of the Element Status value in FMS Status subelement in the received FMS Response element.

* If the Element Status value in FMS Status subelement is Accept:
* The AP has accepted the FMS subelement contained within the FMS Request element. If the FMS Request element specified a nonzero delivery interval, the AP will deliver the requested streams at the delivery interval as specified by the non-AP STA in the FMS Request element.
* After receiving the FMS Response element, the non-AP STA shall be awake for the next DTIM beacon so that the non-AP STA can synchronize with the FMS Current Count for the requested FMS Stream. Once synchronized with the FMS Current Count, the non-AP STA need not wake up at every DTIM interval to receive group addressed BUs.
* If the Element Status value in FMS Status subelement is Deny:
* The AP will not deliver the requested streams at the delivery interval as specified by the non-AP STA in the FMS Request element. If the AP denies the usage of FMS for a particular stream, the stream is transmitted at every DTIM interval.
* If the Element Status value in FMS Status subelement is one of following values “Alternate Proposed, due to existing stream with different delivery interval”, "Alternate Proposed, due to policy limits on AP", "Alternate Proposed, due to AP changed the delivery interval”, and “Alternate Proposed, due to AP changed the maximum delivery interval”:
* The AP does not deliver the requested streams at the delivery interval as specified by the non-AP STA in the FMS Request element. The delivery interval specified in the FMS Status subelement specifies a delivery interval that the AP is willing to accept for the specified streams if the non-AP STA sends another FMS Request with that delivery interval specified.
* The non-AP STA may submit a new FMS Request that includes the delivery interval value received from the AP. If the AP accepts this new FMS Request, it shall respond as described in 10.2.2.16.2 (FMS general procedures).
* If the Element Status value in FMS Status subelement is “Alternate Proposed, due to AP unable to provide requested TCLAS-based classifiers”:
* The AP does not deliver the requested streams at the delivery interval as specified by the non-AP STA in the FMS Request element. The TCLAS element(s) or TCLAS Processing element in the TCLAS Status subelement contains one or more fields or subfields whose values have been modified by the AP. The AP may include fewer TCLAS elements in the FMS Response element than were present in the request; when the AP’s response includes a single TCLAS element, it does not include a TCLAS processing element. If the AP changes a TCLAS element’s Classifier Type field in the FMS Response element but is unable to suggest a value for the Classifier Mask field, it shall set that field to 0. If the AP changes a TCLAS element’s Classifier Type field or Classifier Mask field in the FMS Response element but is unable to suggest values for one or more Classifier Parameter subfields, it shall set those fields to 0.
* A non-AP STA receiving a modified TCLAS element having a Classifier Mask field equal to 0 or Classifier Parameter subfields equal to 0 shall interpret these values as meaning that no suggested value has been provided by the AP.
* If the Element Status value in FMS Status subelement is one of following values “Terminate, due to AP policy change”, “Terminate, due to lack of resources of AP”, and “Terminate, due to other FMS stream with higher priority”:
* The AP will terminate the use of FMS transmission rules for any FMS stream identified by FMSID. If the AP terminates the usage of FMS for a particular stream, the stream is transmitted at DTIM interval.
* The non-AP STA shall wake up at every DTIM interval to reeive group addressed BUs after receiving the FMS Response element.