IEEE P802.11
Wireless LANs

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| P802.11bh Activated vs Supported |
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Abstract

This document provides a resolution to the CID 3030

# Comment

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| **CID** | **Page** | **Clause** | **Comment** | **Proposed Change** |
| 3030 | 27.06 | 9.4.2.240 | The distinction between a feature being "active" vs "supported" is not clear, particularly in the context of on-air signaling (as opposed to the MIB). In this case we don't even have a capability indication for the feature and so "active" appears to be a poor substitute for "capability" (i.e., support). And this is doubly true since we are using it in a "Capability" element. We might want "active" semantics in the MIB where an management entity can enable or disable a feature. But we don't need to reflect this in the OTA signaling; as for as the OTA protocol is concerned the feature is either supported or not supported. It a management entity has not activated it, then it is not supported. | Change "Device ID Active" to "Device ID Support". Change "IRM Active" to "IRM Support". At 34.51 change "A non-AP STA that has dot11DeviceIDActivated equal to true indicates the device ID mechanism is activated by setting the Device ID Active field to 1..." to "A non-AP STA that has dot11DeviceIDActivated equal to true shall set the Device ID Support field to 1 to indicate that the device ID mechanism is supported..." (note the shall -- normative requirement to keep the MIB and OTA signaling aligned) At 37.52 change "An AP that has dot11IRMActivated equal to true advertises activation of the IRM mechanism by setting the IRM Active field to 1..." to "An AP that has dot11IRMActivated equal to true shall set the IRM Support field to 1 to indicate that the IRM mechanism is supported..." At 37.54 change "A non-AP STA that has dot11IRMActivated equal to true indicates the IRM mechanism is active by setting the IRM Active field to 1..." to "A non-AP STA that has dot11IRMActivated equal to true shall set the IRM Support field to 1 to indicate that the IRM mechanism is supported.." |

# Discussion

The problem identified by the comment is the confusing use of “active” semantics vs the more typical “support” semantics used for other features in the standard.

However, there is a further problem in the MIB. The MIB currently provides only a read-write object dot11DeviceIDActivated. The SME is unable to determine from the MIB whether the feature is implemented. An SME would have to try setting the dot11DeviceIDActivated object and then test if it was successful in order to determine that the feature was implemented. This is an oversight that is also corrected by the proposed resolution.

# Proposed resolution

REVISED –

In addition to the problem identified by the comment there is an issue with the MIB. The MIB currently provides only a read-write object dot11DeviceIDActivated. The SME is unable to determine from the MIB whether the feature itself is implemented. An SME would have to try setting the dot11DeviceIDActivated object and then test if it was successful in order to determine that the feature was implemented. This is an oversight that is also corrected by the edits.

Apply the edits in <this document>, which are similar to the proposed change but add a new MIB object to indicate whether or not the feature is implementation.

# Editing instructions

***At 27.06 (3x), 35.06, .10, .12, .23, 36.24 change "Device ID Active" to "Device ID Support".***

***Change the paragraph at 34.46 as follows:***

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.

***Change the paragraph at 34.51 as follows:***

A non-AP STA that has 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.

In Annex C,

***Insert the following at the end of the "dot11StationConfigEntry” of the “dot11StationConfig TABLE”:***

dot11DeviceIDImplemented TruthVlue,

***Insert the following at the end of the "dot11StationConfigTable” element definitions:***

dot11DeviceIDImplemented OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-only

STATUS current

DESCRIPTION

"This is a capability variable.

Its value is determined by STA capabilities.

This attribute, when true, indicates that the station implementation supports the device ID mechanism. Support is not present, otherwise."

::= { dot11StationConfigEntry <ANA>}

***Change the dot11DeviceIdActivated element as follows:***

dot11DeviceIDActivated OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-write

STATUS current

DESCRIPTION

“This is a control variable. It is written by an external management

entity or the SME. Changes take effect as soon as practical in the implementation.

This attribute, when true, indicates that the device ID mechanism is active.”

DEFVAL { false }

::= { dot11StationConfigEntry 236 }