IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Normative text for fomment resolutions of lb204 | | | | |
| Date: 2015-01-12 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jarkko Kneckt | Nokia | Otaniementie 19b, 02150 Espoo Finland | +358-50-4821550 | [Jarkko.kneckt@nokia.com](mailto:Jarkko.kneckt@nokia.com) |
| Mark Rison | Samsung |  |  | m.rison@samsung.com |

Abstract

The submission contains normative text for lb204 comments that are assigned to Jarkko Kneckt in the submission 11-14-1351.

***Instructions to the Editor: The submission contains resolutions to all CIDs in 11-14-1502r0 which sheet contains name Jarkko Kneckt and have proposed resolution REVISED.***

**3.2 Definitions specific to IEEE Std 802.11**

**ActiveScanningTimer:** A timer to measure the time from the transmission of the Probe Request frame. During the time, the STA ~~to~~ receives Probe Response, Beacon, FILS Discovery and~~or~~ Measurement Pilot frames in order to discover suitable APs for association.[CID6933]

**FILSProbeTimer:** A timer used by a FILS STA to measure time from the expiration of Probe Delay or a PHY-RXSTART.indication primitive reception. During the time, the STA ~~to~~ receives Probe Request, Probe Response, Beacon, FILS Discovery and Measurement Pilot frames in order to skip the transmission of Probe Request frame. [CID6935]

**6.3.7.2 MLME-ASSOCIATE.request**

**6.3.7.2.2 Semantics of the service primitive**

**6.3.7.3.2 Semantics of the service primitive**

**6.3.7.4.2 Semantics of the service primitive**

**6.3.7.5.2 Semantics of the service primitive**

**6.3.8.2.2 Semantics of the service primitive**

**6.3.8.3.2 Semantics of the service primitive**

**6.3.8.4.2 Semantics of the service primitive**

**6.3.8.5.2 Semantics of the service primitive**

***Instructions to the Editor: For all above mentioned clauses, change the description of the FILSHLPContainer as shown:***

A set of elements containing ~~An~~ encapsulated data of higher layer protocol frames (e.g., DHCP message) that is transported in FILS association.The parameter is optionally present if dot11FILSActivated is true. [CID6706]

**6.3.11.2.2 Semantics of the service primitive**

***Instructions to the Editor: Change the Valid Range of the Known OUIs in page 26, line 58 as shown:***

As defined in ~~8.4.2.28(EDCA Parameter~~ ~~Set element)~~ 8.4.1.31(Organization Identifier field). [CID6873]

***Instructions to the Editor: Change the Description of the Known OUIs in page 26, line 58 as shown:***

Zero or more elements that ~~S~~specify the OUIs ~~and their values~~ known by the AP.

**6.33.3.2**

***Instructions to the Editor: Change the SSID row as as shown:***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Name | Type | Valid range | Description | IBSS adoption |
| SSID / Short SSID [CID6953] | Octet String | 0-32 octets | The SSID or Short SSID of the found BSS. [CID6953] | Do not Adopt. |

**8.4.2.169.1 Neighbor AP Information field**

The TBTT Information Length subfield is 1 octet in length and contains the length in octets of the TBTT

Information field that is included in the Neighbor AP Information field. When the value of TBTT Information Length subfield is 1, the TBTT Information field contains the TBTT Offset subfield. When the value of TBTT Information Length subfield is 7 or 11, the TBTT Information field contains the TBTT Offset and the BSSID subfields. If the TBTT Information Length subfield is 5 or 11, the Short-SSID subfield is included in TBTT Information field to indicate the Short-SSID of a neighbor AP. Other values are reserved.

**8.4.2.172 CAG Number element**

The CAG Version ~~is a 1-octet~~ field ~~whose value~~ is an unsigned positive integer indicating the version of the CAG. The value 0 is reserved. The use of CAG Version is explained in 10.25.3.2.12 (CAG procedure). [CID6143]

~~The CAG Version is incremented every time the value of, or presence of, an ANQP-element within the CAG or InfoID are added, deleted, or changed. CAG Version is always positive, therefore a value of zero in this field will be neglected by the receiving STA.~~ [CID6143]

The Scope ~~is a 1-octet~~ field ~~that~~ indicates the valid scope of the information represented by the CAG Version field of the CAG Number element. [CID6143]

**8.4.2.173 FILS Request Parameters element**

The RCPI Limit field is an unsigned integer in units of 1 dB. ~~The receiver of Probe Request frame responds, if the RCPI of the received Probe Request frame is equal or higher than -90 dBm + value of RCPI Limit field. Value 255 indicates that receiver responds regardless of the reception power of the Probe Request frame.~~ The use of the RCPI Limit field is explained in 10.1.4.3.4(Criteria for sending a response). [CID6499]

**10.1.4.3.2 Active scanning procedure for a non-DMG STA**

When all channels in the ChannelList have been scanned, and the ReportingOption of the MLME-SCAN.request primitive is AT\_END, the MLME shall issue an MLME-SCAN.confirm primitive with the one or more BSSDescriptionSet, BSSDescriptionFromFDSet, or BSSDescriptionFromMeasurementPilotSet containing all of the information that can be indicated in the elements and is gathered during the scan. [CID6375]

**10.1.4.3.4 Criteria for sending a probe response**

***Instructions to the Editor: append the following criteria to the list.***

l) The STA is a FILS STA, the Probe Request frame includes FILS Request Parameters element

~~STAs with dot11FILSActivated equal to true and the Probe Request frame contains a FILS Request Parameters element~~ and all of the following criteria are met: [CID6301]

1. If the FILS Criteria field is present in the FILS Request Parameters element and [CID6301] the Max Delay Limit field of the FILS Request Parameters indicates a delay shorter than the selected average access delay of the responding STA. The BSS Delay Criteria field of the FILS Criteria field of the FILS Request Parameters element indicates the selected average access delay for the comparison as defined in Table 8-22f (BSS Delay Criteria field). The Max Delay Limit field indicates the length of the selected average access delay. If the compared Average Access Delay indicates Measurement not available, the STA shall respond and the response shall include BSS AC Access Delay element as described in 8.4.2.43 (BSS AC Access Delay element) and Average Access Delay as described in 8.4.2.38 (BSS Average Access Delay element). If the compared Average Access Delay indicates Service unable to access channel, the response shall not be transmitted.
2. If the FILS Criteria field is present in the FILS Request Parameters element and [CID6301] the PHY Support Criteria of the FILS Criteria field of the FILS Request Parameters element is 1 and the responding STA is not HT capable.
3. If the FILS Criteria field is present in the FILS Request Parameters element and [CID6301] the PHY Support Criteria of the FILS Criteria field of the FILS Request Parameters element is 2and the responding STA is not VHT capable.
4. If the Minimum Data Rate field is present in the FILS Request Parameters element and [CID6301] the Minimum Data Rate field of the FILS Request Parameters element indicates a data rate higher than the one that can be provided over the MAC SAP.
5. If the RCPI Limit field is present in the FILS Request Parameters element and either of the following conditions is true:
   1. The RCPI of the Probe Request frame > -90dBm + the value of the RCPI Limit field of the FILS Request Parameters element.
   2. The RCPI Limit field of the FILS Request Parameters element contains value 255. [CID6499]
6. If the OUI Response Criteria field is present in the FILS Request Parameters element and [CID6301] the values of the Known OUIs elements of the MLME-START.request that the STA has received do not equal to the values of OUIs as specified by the OUI Response Criteria of the FILS Request Parameters element ( 8.4.2.173 (FILS Request Parameters element)).

**10.1.4.3.5 Contents of a probe response**

— Each element requested by a non-FILS STA in a Request element shall be included in the Probe Response ~~or a Beacon~~ frame if the responding STA supports that element. Each element requested by a FILS STA in a Request element shall be included in the Probe Response or a Beacon frame if the responding FILS STA supports that element. [CID6724]

When the MaxChannelTime field is present in any of Probe Request frames, the STA with dot11FILSActivated true ~~should~~ shall respond with a Beacon frame to Probe Request frames addressed to individual or broadcast address if all of these conditions are met: [CID6737]

If a FILS STA receives two or more Probe Request frames, subject to the criteria above, and the STA has dot11OmitReplicateProbeResponses equal to true, the responding STA ~~may~~ shall transmit a Probe Response ~~rame~~ or a Beacon frame as a response to all Probe Request frames. [CID6737]

**11.11.2.1 Discovery of a FILS capable AP**

A STA discovers ~~a FILS-capable~~ an AP that is capable of performing FILS Public Key authentication ~~AP~~ through advertisement of public key indicators (see 8.4.2.176 (FILS Public Key element)). [CID6634]

**C.3 MIB Detail**

dot11DILSActivated OBJECT-TYPE

SYNTAX TruthValue

MAX-ACCESS read-write

STATUS current

DESCRIPTION

"This is a ~~capability~~ control variable. It is written by an external management entity. Changes take effect as soon as practical in the implementation. This attribute, when true, indicates that differentiated initial link setup [CID6734] is enabled.”~~Its value is determined by device capabilities.~~

~~This attribute, when true, indicates that the station implementation is capable of supporting fast initial link setup category. The~~

~~capability is disabled, otherwise."~~ [CID6754]

DEFVAL{false}

dot11FILSFDFrameBeaconMinimumInterval OBJECT-TYPE

SYNTAX Unsigned32(~~0..255~~ 0..10000) [CID6739]

UNITS "TUs" [CID6736] [CID6733]

MAX-ACCESS read-write

STATUS current

DESCRIPTION

“This is a control variable. It is written by an external management entity. Changes take effect as soon as practical in the implementation. This attribute indicates the duration in units of TUs ~~milliseconds~~ [CID6736]. The STA is allowed to transmit a FILS Discovery frame, if a duration defined by this value has elapsed since the previous Beacon or FILS Discovery frame transmission and the next TBTT is within a duration defined by this value.”

~~indicates a duration s the minimum duration from the transmission of a FILS Discovery frame and the transmission of a Beacon frame. The FILS Discovery frame shall not be transmitted before or after a Beacon frame transmission within a duration defined by this value.”~~[CID6735]

DEFVAL {20}

dot11BeaconResponseWindow OBJECT-TYPE

SYNTAX Unsigned32(~~0..100~~ 0..1000000) [CID6738]

dot11FILSProbeDelay OBJECT-TYPE

SYNTAX Unsigned32(~~0..100~~ 0..100000) [CID6740]

UNITS "microseconds" [CID6733]

MAX-ACCESS read-write

STATUS Current

DESCRIPTION

"This is a control variable. It is written by an external management entity. Changes take effect as soon as practical in the implementation. This attribute indicates the duration in units of ~~0.1~~ microseconds. This delay specifies a time that the STA with dot11FILSActivated equal to true waits for Probe Request, Probe Response, Beacon, FILS Discovery and Measurement Pilot frames in order to cancel transmission of own Probe Request frame.

DEFVAL {200}