IEEE P802.11
Wireless LANs

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| LB201-Comment resolution on CIDs on FILS Indication Element and IP address assignment |
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|  |  |  |  |  |

Abstract

This document provides comment resolutions on CIDs *4284, 4793, 5065, 4559, 4459, 4561, 5038, 4207, 4143, 4564, 4865, 4574, 4210, 4867, 4611, 4457, 4270, 4271, 4565, 4372, 4184, 4823, 4433, 4087*

*Resolution to CIDS: 4284, 4793, 5065, 4559, 4459, 4561, 5038, 4207, 4143, 4564*

**8.4.2.179 FILS Indication Element**

***Insert the following after line 28***

The Element ID and Length fields are defined in 8.4.2.1 (General).

***Please correct Figure 8-401cw as shown below***

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | B0 –B2 | B3-B5 | B6 | B7 | B8-B9 | B10 | B11-B15 |
|  | FILS Seccirty Type | Number of Domains | FILS IP Address Configuration | Subnet ID Token Present | Public Key Information type | Cache Supported | Reserved |
| Bits: |  |  |  |  |  |  |  |

***Replace the last sentence on lines 10-12 on page 47 as follows***

The STA should use ANQP to obtain domain information of other domains that are not included in the FILS indication element (10.25.3.2 ANQP procedures).

***Replace lines 48-49 on page 47 as follows***

The Number of Domains entry in the FILS information field should indicates the number of Domain Information entries in the Domain Information field of the FILS Indication element. One Domain Information entry is shown in Figure 8-401cx. Upto 6 entries may be carried in FILS Indication element.

***Replace caption for Table 8-401cx to:*** *“***Figure 8-401cx—Domain Information entry”**

***Insert the following text Table X2 after line 61 on page 47***

The IP address type field is set as shown in Table X-1

|  |  |
| --- | --- |
| Bit Value | IP address type |
| 000 | IPv4 only |
| 001 | IPv6 only |
| 010 | IPv4 and IPv6 |
| 011-111 | Reserved |

**Table – X1**

***Replace lines 8-10 on page 48 with the following***

The Subnet-ID Token is used by the STA to select an AP that is connected to the same IP domain as the current AP. The exact method of creating a Subnet-ID token is out of scope of this specification.

***Replace lines 16-23 on page 48 with the following:***

The Public Key information field of the FILS indication element is set as show in Table –X2

|  |  |
| --- | --- |
| Public Key Information Type | Public Key Information |
| 0 | Reserved: |
| 1 | X.500 Distingugied Name of the issuer of AP certificate |
| 2 | SHA256 hash of the AP’s raw public key |
| 3-255 | Reserved |

**Table – X2**

*Resolution to CIDs: 4865, 4574, 4210, 4867*

**8.4.2.181.1 IP Address Data field for Request**

***Replace Figure 8-401da as follows***

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
|  | IP Address Request Control | Requested IPv4 address (present if indicated by IP address Request control) | Requested IPv16 address (present if indicated by IP address Request control) |
| Octets | 1 | 4 (if present) | 16 (if present) |

***Replace lines 37 to 49 on page 50 with the following***

Bits B0,B1 are set as shown in Table –X3. Bits B2,B3 are set as shown in Table –X4.

|  |  |  |
| --- | --- | --- |
| B0 | B1 | Explanation |
| 0 | Reserved |  |
| 1 | 0 | STA is requesting a new IPv4 address |
| 1 | 1 | STA is requesting the IPv4 address present in the TLV |

**Table – X3**

|  |  |  |
| --- | --- | --- |
| B2 | B3 | Explanation |
| 0 | Reserved |  |
| 1 | 0 | STA is requesting a new IPv6 address |
| 1 | 1 | STA is requesting the IPv6 address present in the TLV |

**Table – X4**

***Remove lines 54 to 60 on page 50***

*Resolutions to CIDS: 4611, 4457, 4270, 4271, 4565*

**8.4.2.181.2 IP Address Data Field for Response**

***Replace Table8-221j (page 53) with Table 8-221j1 and 8-221j2 shown below***

**Table 8-221j1—IP Address Response Control Field with B0 = 0**

|  |  |  |  |
| --- | --- | --- | --- |
| Bit Field | Value | Function of the field | Explanation  |
| B0 | 0 | IP Address Pending | An AP sets IP address assignment pending subfield to 0 if an IP address is included in the frame :B1 to B6 are set as shown below in this table when B0 = 0 . |
| B1 | 0 or 1 | IPv4 Assigned | An AP sets IPv4 Assigned subfield to 1 if Assigned |
| B2 | 0 or 1 | IPv4 Gateway Included | An AP sets IPv4 Gateway subfield to 1 if IPv4 Gateway address and IPv4 Gateway MAC address are included in the element and sets it to 0 otherwise. |
| B3 | 0 or 1 | IPv6 Assigned | An AP sets IPv6 Assigned subfield to 1 if Assigned IPv6 address and Prefix Length are included in the element and sets it to 0 otherwise. |
| B4 | 0 or 1 | IPv6 Gateway Included | An AP sets IPv6 Gateway subfield to 1 if IPv6 Gateway address and IPv6 Gateway MAC address are included in the element and sets it to 0otherwise. |
| B5 | 0 or 1 | TTL IPv4 ncluded | An AP sets TTL IPv4 included subfield to 1 if IPv4 Assigned subfield is 1 and the Time to Live for IPv4 is included in the element. If this field is 0, and if IPv4 Assigned is 1, then the IPv4 is assumed to be valid during the entire time of Association with the AP. |
| B6 | 0 or 1 | TTL IPv6 included | An AP sets TTL IPv6 included subfield to 1 if IPv6 Assigned subfield is 1 and the Time to Live for IPv6 is included in the element. If thisfield is 0, and if IPv6 Assigned is 1, then the IPv6 is assumed to be valid during the entire time of Association with the AP. |
| B7 | 0 or 1 | Reserved |  |

**Table 8-221j1—IP Address Response Control Field with B0 = 1**

|  |  |  |  |
| --- | --- | --- | --- |
| Bit Field | Value | Function of the field | Explanation  |
| B0 | 1 |  | An AP sets IP address assignment pending subfield to 1 if an IP addres is present in the frame. B1 to B6 are set as shown below in this table when B0 = 1. |
| B1 – B6 | Var | IP address requesttimeout | IP address request timeout value is the maximum estimated time in the unit of seconds within which the AP may assign an IP address to the requesting STA. |
| B7 |   | Reserved |  |

***Change text on lines 1 and 2 of page 54 to the following***

If the AP sets the IP Address Assignment Pending bit to 1, then the IP address assignment should be sent in a later transmission.

*Resolution to CIDs: 4372, 4184, 4823, 4433*

**10.44.3.2 FILS IP Address Configuration**

***Replace lines 47 to 61 on page 95 with the following***

In order to request an IP address, a STA can include a FILS IP Address Assignment element in the Association/Reassociation Request frame or FILS Secure Container Action frame that it sends to the AP.

The AP can send the STA its assigned IP address in a FILS IP Address Assignment element (8.4.2.181) that is included in a Association Response frame or FILS Secure Container Action frame. Methods for determining the IP address to be assigned to an STA are out of scope in this document.

*Resolution to CIDs: 4087*

**10.44.4 FILS Authentication and higher layer setup capability indications**

***Replace line 5 in Page 96 with the following***

H = L(CRC32(D,0,16),0,15)