IEEE P802.11
Wireless LANs

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| Proposed Resolution Text for CIDs 6903 6503 6530 |
| Date: 2015-1-13 |
| Author(s): |
| Name | Affiliation | Address | Phone | email |
| Santosh Abraham | Qualcomm Inc. | 5775 Morehouse Drive, San Diego, CA 92121 |  | sabraham@qti.qualcomm.com |

Abstract

The text presented here addresses the CIDs 6903, 6503, 6530. The public key need not be carried in the FILS indication element as another element is present for providing the public key. The text removes public key information field from the FILS indication element there by resolving the comments.

 ***Modifiy Clause 8.4.2.179 as shown below***

* FILS Indication element

The FILS Indication element contains information related to FILS authentication and higher layer setup capabilities of the AP.

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| --- | --- | --- | --- | --- | --- | --- |
| [CID 4551]  | Element ID | Length | FILS Information | Cache Identifier (optional)[14/0052r2] | Domain Information (optional)[14/0003r3][CID 4129][CID 6383 multiple places]  | ~~Public Key Information(conditional)~~ |
| Octets: | 1 | 1 | 2 | 0 or 16 [CID 4863] | Variable  | ~~Variable~~ |

 [13/1311r3, CID 2821][CID 4552]

The Element ID and Length fields are defined in 8.4.2.1 (General). [CID 4553, 14/0768r1]

The format of the FILS Information field is shown in Figure 8-574m (FILS Information field definition):.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| [13/1311r3] | B0 B2 | B3 | B4 B6 | ~~B7 B8~~ | B7 | B8 | B19 B15 |
| [CIDs 4923, 4202, 4048, 4131, 4554,14/0768r1] [CID 6216]  | FILS Security Type | Cache Supported [14/0052r2] | Number of Domains | ~~Public Key Information Type[14/0003r3]~~ | FILS IP Address Configuration [14/0138r4] | Subnet ID Token Present | Reserved |
| Bits: | 3 | 1 | 3 | ~~2~~ | 1 | 1 | 7 |
| * FILS Information field definition
 |

In the FILS Indication element presence of the following fields is indicated in the FILS Information field: [14/0927r1][CIDs 6383, 6390, 6391, 6146]

* Cache Identifier is present if the Cache Supported subfield in FILS Information field equals 1. [CID 6526]
* Domain Information field is present if the Number of Domains indicated in the FILS Information field is greater than zero. A domain indicates either the NAI Realm or the Home network realm (see  10.45.4 (FILS authentication and higher layer setup capability indications)). [14/1505r0]

The Cache Identifier field contains the 16 octet number used by a FILS device to identify itself to stations when PMK caching is supported. [14/0052r2][CIDs 4132, 4357] [14/0948r4 CID 5062]

The Cache Supported bit is set in the FILS Indication element when PMK caching is supported. [14/0948r4 CID 5062]

Table 8-257e (FILS Security Type) shows the possible subfield values for the FILS Security Type field

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| * FILS Security Type [13/1311r3]
 |
| Bit values | FILS Security Type |
| 0 | The FILS authentication exchange using FILS shared key without PFS. [CIDs 4204, 4786, 4785]  |
| 1 | The FILS authentication exchange using FILS shared key with PFS |
| 2 | The FILS authentication exchange with a public key and with PFS [CIDs 4421, 4133, 5063] [CID 6501]  |
| 3-7 | Reserved |

 [13/1311r3, CIDs 2664, 2823, 2215, 2570, 3114, 3204, 3045][CID 4555]

[Para deleted per 11/1311r3 and CID 3205 prior to deletion had resolved CID 2665 per 13/1354r2]

When the value of the FILS Security Type subfield of the FILS Information field is 0 or 1 (indicating shared key authentication) the Domain Information field shall be present. AP sets value of the Number of Domains subfield in the FILS Information field to the number of Domain Information fields included in the FILS Indication element. [CID2447, CID2824, CID2666]When the value of the Number of Domains subfield is 7, then more than 6 domains are available, and the Domain Information field of the FILS Indication element contains information only six of those domains. The STA uses ANQP to obtain domain information about other domains that are not described in the FILS Indication element (see 10.25.3.2 (ANQP procedures)). [14/0427r2][14/0768r1, CIDs 4787, 4557, 4783, 4134]

If the value of the FILS Security Type is 2 (indicating Public Key authentication), then the Public Key Information field is obtained from the FILS Public Key element (see clause 8.4.2.176). The value of the Number of Domains subfield is 0. [14/0427r2][CID 4135] [CID 6527]

An AP sets the FILS IP Address Configuration subfield to 1 if the AP supports FILS IP address configuration. [CID 4136]

[CID2826, CID3207] The 1-bit Subnet ID Token Present subfield in the FILS Information field indicates whether or not a subnet ID token corresponding to the IP subnet to which the domain is connected is present in the Domain Information field. A bit value of 0 indicates that the token is not present. A bit value of 1 indicates that the token is present. [CID 6529] [14/0427r2][CIDs 4138, 4560] [13/1311r3][13/1311r3 CIDs 2666, 2825, 2402, 2309, 3046, 2447, 2824, 2666] [14/0003r3 deletes several paragraphs here][table removed by 14/0138r4]

The Number of Domains subfield in the FILS Information field indicates the number of Domain Information entries in the Domain Information field of the FILS Indication element. Each Domain Information entry format is as shown in Figure 8-574n (Domain Information entry). Up to 6 entries may be carried in FILS Indication element. [14/0768r1]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | B0 B15 | B16 B18 | B19 B23 | B24 B31 |
|  | Hashed Domain Name | IP Address Type | Reserved | Subnet ID Token [CID 2667] |
| Bits: | 16[CID 4562] | 3 | 5 | 8 |
| * Domain Information entry [14/0768r1]
 |

 [CIDs 6943, 6528, 6944]

The IP Address Type subfield is set as shown in Table 8-257g (IP Address Types)

|  |
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| * IP Address Type
 |
| Value | IP Address Type |
| 0 | IPv4 only |
| 1 | IPv6 only |
| 2 | IPv4 and IPv6 |
| 3-7 | Reserved |

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[CID 3071][13/1311r3]The value of the Hashed Domain Name subfield of the Domain Information entry is computed from the domain name that is compliant with the preferred name syntax defined in IETF RFC 1035 (same as the domain name used in 8.4.4.15 (Domain Name ANQP-element)). The exact computation method for the hashed domain name is given in 10.45.4 (FILS authentication and higher layer setup capability indications). [14/0427r2][CIDs 4049, 4668, 4140, 4563, 5064] [CIDs 6421, 6422]

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 [14/0003r3 paragraph and table here][13/1311r3][14/0427r2][14/0003r3 deletes paragraph which is assumed to include deletion of previous edits]

 ***[14/0413r0 deleted previous clause 8.4.2.180 FILS Container element and all of its subclauses]***