IEEE P802.11  
Wireless LANs

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| --- | --- | --- | --- | --- |
| Proposed Changes for 9.6.7.bc.5 | | | | |
| Date: 2020-08-18 | | | | |
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|  |  |  |  |  |

Abstract

This document describes proposed changes for clause 9.6.7.bc.5 in D0.1.

Comments

|  |  |  |
| --- | --- | --- |
| **CID** | **Comennts** | **Proposed Changes** |
| 16 | Is the length of all the Content Info fields the same or different? If different, we need a Length field within each Content Info field. | As in comment |
| 320 | Within Figure 9-bc20, there are many option sub-fields. Either a length field or a bit in a control field needs to be specified, so that a receiver can parse this frame. | Either define some length sub-fields or define a new control field at the start of the frame. In addition, this frame is rather long and could be divided into 2 smaller frames. |
| 19 | There are many optional fields (with different lengths), the Content Information Control field should have additional entries to identify which fields in the Content Info field are present or absent. | As in comment |
| 321 | Within Figure 9-bc20, there is a missing control bit for the Allowable Time Difference sub-field. There are possibly some others also missing | Add an additional control bit for the Allowable Time Difference sub-field |

Discussion

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Content ID | Authentication Algorithm | Content Information Control | Content Destination Address Type | Content Destination Address | Title Length | Title |
| Octets: | 1 | 1 | 1 | 1 | variable | 1 | variable |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Negotiation Method | Time Of Termination | Next Schedule |
| Octets: | 1 | 0 or 2 | 0 or 2 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Allowable Time Difference | HCFA Base Key | Previous Period HCFA Base Key 0 Sequence | Previous Period HCFA Base Key 0 | Previous Period HCFA Base Key 1 Sequence | Previous Period HCFA Base Key 1 |
| Octets: | 0 or 2 | variable | 0 or 1 | variable | 0 or 1 | variable |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | HCFA Key Change Interval | Number Of Instant Authenticators | Instant Authenticator Hash Distance 0 | … | Instant Authenticator Hash Distance N-1 |
| Octets: | 0 or 1 | 0 or 1 | 0 or 1 |  | 0 or 1 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Instant Authenticator 0 | … | Instant Authenticator N-1 | Data Length | Data |
| Octets: | variable |  | variable | 0 or 1 | variable |

**Figure 9-bc20 Content Information field format**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | B0 | B1 | B2 | B3 | B4 | B5 | B6 | B7 |
|  | Time Of Termination Present | Next Schedule Present | Reserved | | | | | |
| Bits: | 1 | 1 | 6 | | | | | |

**Figure 9-bc22 Content Information Control subfield format**

The presence of the optional fields and the length of the variable length fields are determined as follows:

|  |  |
| --- | --- |
| **Field** | **How to determine** |
| Content Destination Address | Value of Content Destination Address Type field. |
| Time Of Termination | Time Of Termination Present bit in the Content Information Control subfield. |
| Next Schedule | Next Schedule Present bit in the Content Information Control subfield. |
| Allowable Time Difference | Value of the Authentication Algorithm field. (present in case of PKFA or HCFA) |
| HCFA Base Key | Value of the Authentication Algorithm field. (present in case of HCFA) |
| Previous Period Base Key 0 Sequence | Value of the Authentication Algorithm field. (present in case of HCFA) |
| Previous Period Base Key 0 | Value of the Authentication Algorithm field. (present in case of HCFA) |
| Previous Period Base Key 1 Sequence | Value of the Authentication Algorithm field. (present in case of HCFA) |
| Previous Period Base Key 1 | Value of the Authentication Algorithm field. (present in case of HCFA) |
| HCFA Key Change Interval | Value of the Authentication Algorithm field. (present in case of HCFA) |
| Number Of Instant Authenticators | Value of the Authentication Algorithm field. (present in case of HCFA) |
| Instant Authenticator Hash Distance n | Value of the Number Of Instant Authenticators field. |
| Instant Authenticator n | The length of each field is determined from the value of the Authentication Algorithm field  The number of the fields is determined from the value of the Number Of Instant Authenticators field. |
| Data Length | Require presence indication. |
| Data | Require presence indication. |

Resolution

*Modify Figure 9-bc22 as follows:*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | B0 | B1 | B2 | B3 | B4 | B5 | B6 | B7 |
|  | Time Of Termination Present | Next Schedule Present | Data Present | Reserved | | | | |
| Bits: | 1 | 1 | 1 | 5 | | | | |

**Figure 9-bc22 Content Information Control subfield format**

*Insert the following sentences at P33L11. (after “The Next Schedule subfield indicates whether the Next Schedule field is present.”):*

The Data Present subfield indicates whether the Data Length field and the Data field are present.

Comments

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| --- | --- | --- |
| **CID** | **Comennts** | **Proposed Changes** |
| 185 | "will refer" -- when? Tomorrow? And what does "refer" mean to here anyway? | As it says in the comment |

Resolutions

*Replace the paragraph starting at P34L31 as follws:*

~~The Negotiation Method subfield, the Time Of Termination subfield, the Next Schedule subfield will refer the eBCS Termination Notification frame.~~

The Time Of Termination subfield is 2 octets in lengths and indicates the number of TBTTs until the content identified by the content ID contained in the Content ID subfield is terminated. The value 0 indicates that the content identified by the content ID in the Content ID subfield will be terminated at the following TBTT. The value 65535 indicates that the content identified by the conent ID in the Content ID subfield has no specific termination time.

The Next Schedule subfield is 2 octets in length and indicates the number of TBTTs until the content by the content ID contained in the Content ID subfield is transmitted again. The value 0 indicates that the content identified by the content ID in the Content ID subfield will be started to transmit at the following TBTT. The value 65535 indicates that the content identified by the content ID in the Content ID subfield has no specific transmission starting time.