IEEE P802.11  
Wireless LANs

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| LB 204 Comment resolutions related to Common ANQP Group | | | | |
| Date: 2014-11-3 | | | | |
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Abstract

This contribution proposes resolutions to the CIDs: 6010, 6215, 6222, 6969, 6914

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| **CID** | **Clause Number(C)** | **Page(C)** | **Line(C)** | | **Comment** | **Proposed Change** | **Resolution** |
| 6010 | 8.4.2.172 | 43 | 64 | "The Common ANQP Group (CAG) is a group of ANQP elements, which do not change on a rapid basis". Please learn the difference between "that" and "which". While syntactically correct, "that" is the correct word here, because "do not change" is part of the definition of a CAG. | | ", which" -> "that" | Accept |
| 6215 | 8.4.2.172 | 43 | 64 | Need to compare this clause with 8.4.4.23 (Common Group ANQP-element). The words/phrasing needs to be more compatible and cross-referencing between them to clarify their relationship. | | Harmonize these two clauses, both in terms of the names being used and how they relate to each other. | Revised. See the proposed text from the Doc: 11-14-1457-00-00ai |
| 6222 | 8.4.4.23 | 66 | 64 | Lots of confusion between this and 8.4.1.172. For instance, what is the difference between a "CAG Version" used here and a "CAG Number element" used there? The descriptions seem to be the same. If there is a difference, it needs to be explicitly stated. | | Review and revise as needed. | Revised.  See the proposed text from the Doc: 11-14-1457-00-00ai |
| 6969 | 8.4.2.172 | 44 | 21 | I think the sentences at P44.21 and P44.25 require some more explanation as to what happens what the CAG version reaches 255. | | Change the sentences to read:  The CAG Version is incremented every time the value of, or presence of, an advertisement protocol element within the CAG of the associated advertisement protocol or InfoID are added, deleted, or changed. The CAG Version shall increment from 255 to 1, so that if a STA receives a value of zero in this subfield, this will be discarded. | Accept |
| 6914 | 8.4.4.20 | 64 | 45 | If an AP supports multiple BSSID, each BSS may have different ANQP information. The name of "AP List ANQP" is not adequate. | | Replace "AP List ANQP" by "BSSID List ANQP" throughout the draft. | Accept. . |

# Conventions

Red color is used to show changes to the revision D3.0.

# Proposed Changes to 802.11ai/D2.1 Specification Text

**CID** 6010, 6215, 6222, 6969

*Instruct the editor to make the following changes:*

**8.4.2.172 CAG Number element**

The Common ANQP Group (CAG) is a group of ANQP elements **that** do not change on a rapid basis.

The CAG Number element provides the current version number of the CAG. The CAG Number element is an **information element provided by the AP** and used by the STA to determine if a change in the CAG occurred from the last visit of the STA to a particular AP. The CAG Number element is optionally present in the Beacon or Probe Response frame to reduce ANQP exchanges when dot11InterworkingServiceActivated is true and dot11FILSActivated is true.

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

The CAG Version is a 1-octet field whose value is an unsigned positive integer indicating the **current** version **number** of the CAG. ~~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.~~

**The CAG Version is incremented every time the value of, or presence of, an advertisement protocol element within the CAG of the associated advertisement protocol or InfoID are added, deleted, or changed. The CAG Version shall increment from 255 to 1, so that if a STA receives a value of zero in this subfield, this will be discarded.**

The Scope is a 1-octet field that indicates the valid scope of the information represented by the CAG Version

Number. A field value of 0 indicates that the CAG is only valid in the current BSS (identified by the BSSID

value), a field value of 1 indicates that the CAG is only valid in the Homogeneous ESS (identified by the

HESSID value), and a field value of 2 indicates that the CAG is valid for the ESS (union of BSSs with the

same SSID). Field values of 3-255 are reserved.

***Insert new clause as follows:***

**8.4.4.23 Common Group ANQP-element**

The Common **G**roup ANQP-element provides the Info IDs for the ANQP-elements contained within a CAG

and the current value of the CAG Version **as defined in** **8.4.2.172**,



**Figure 8-604e—Common Group ANQP-element**

The selection of the specific number of Info IDs and the specific values of Info IDs in CAG is left to the implementation and is beyond the scope of this document.

The Info ID is a 2-octet field whose value is equal to the value in Table 8-258 (ANQP-element definitions).

The Length field is a 2-octet unsigned positive number whose value is set to the length in octets of remaining

fields.

The CAG Version isa 1-octet field and it indicates the current version of the CAG. The CAG Version

changes when the CAG changes (either the Info IDs of the ANQP-elements contained in the CAG or any

value of the attributes and information within those ANQP-elements). **The CAG Version contained in the Common Group ANQP element and that contained in CAG Number element (as defined in 8.4.2.172) are identical.**

The Info ID field is a 2-octets field whose value represents an ANQP-element Info ID specified in Table 8-

258 (ANQP-element definitions).

**CID 6914**

Resolution:Accept

*Instruct the editor to make the following changes:*

Replace "AP List ANQP" by "BSSID List ANQP" throughout the draft.