Minutes IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IEEE 802.11 TGbh teleconference Minutes, June 4, 2024  Randomized and Changing MAC addresses (RCM) | | | | |
| Date: 2024-06-08 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Jay Yang | ZTE |  |  | Yang.zhijie@zte.com.cn |
| Peter Yee | NSA-CSD/AKAYLA |  |  |  |

R0: initial this document

R1: add attendee information

Abstract

This document contains the minutes of the IEEE 802.11bh teleconference of June 4, 2024.

Note: Highlighted text are action items.

Q- proceeds a question asked at the meeting

A- proceeds an answer

C- proceeds a comment

**Meeting** **June 4th, 2024, 9:30 a.m. to 11:30 a.m. ET**

**Chair: Mark Hamilton (Ruckus/CommScope)**

**Vice Chair: Peter Yee (NSA-CSD/AKAYLA)**

**Vice Chair: Stephen Orr (Cisco)**

**Secretary: Jay Yang(ZTE),** **Peter Yee**

**Editor:** **Carol Ansley (Cox Communications)**

**The teleconference meeting was called to order by the Chair at 9:33 a.m. ET.**

Agenda slide deck [11-24/0965r01](https://mentor.ieee.org/802.11/dcn/24/11-24-0965-01-00bh-agenda-tgbh-2024-june-4.pptx)

1. **Policies and procedures were presented by Chair Mark Hamilton. (Slides 4 to 14)**

There were no Patent declarations.

Copyright policy slides were presented (Slides 10 and 11)

1. **Agenda:**

* **Attendance, noises/recording, meeting protocol**
* **Policies, duty to inform, participation rules**
* **Organization topics:**
  + Timeline reminder (slide 16)
  + Motions record: [11-22/0651r45](https://mentor.ieee.org/802.11/dcn/22/11-22-0651-45-00bh-tgbh-motions-list.pptx)
  + Reminder: Ad hoc (F2F/Hybrid), June 18-20: [11-24/0929r1](https://mentor.ieee.org/802.11/dcn/24/11-24-0929-01-00bh-invitation-letter-for-june-tgbh-adhoc-sunnyvale.docx)
* **Comment Resolution, Initial SA ballot**
  + Comment resolution document: [11-24/0883r6](https://mentor.ieee.org/802.11/dcn/24/11-24-0883-06-00bh-p802-11bh-initial-sa-comments.xlsx)
  + Unassigned:
  + CID 3007: Jay Yang?
  + CID 3095: Discuss
  + CID 3137, 3183, 3190: Mark Rison/Discuss?
  + Editorial CIDs update: [11-24/0952r0](https://mentor.ieee.org/802.11/dcn/24/11-24-0952-01-00bh-resolutions-for-editorial-comments.xlsx) (Ansley)
  + Comment review and resolution (slide 17)

1. **Comment Resolution queue**

<https://mentor.ieee.org/802.11/dcn/24/11-24-0789-03-00bh-cr-for-pasn-id.docm> (Li) update?

<https://mentor.ieee.org/802.11/dcn/24/11-24-0916-05-00bh-cids-on-irm.docx> (Smith)

<https://mentor.ieee.org/802.11/dcn/24/11-24-0893-02-00bh-cr-for-sa-comments-in-9-4-2.docx> (Yang)

<https://mentor.ieee.org/802.11/dcn/24/11-24-0895-01-00bh-cr-for-sa-comments-in-11-10-9.docx> (Yang)

<https://mentor.ieee.org/802.11/dcn/24/11-24-0931-00-00bh-cids-3121-and-3122.docx> (de la Oliva)

<https://mentor.ieee.org/802.11/dcn/24/11-24-0968-00-00bh-tgbh-sa-ballot-misc-cids.docx> (Smith)

<https://mentor.ieee.org/802.11/dcn/24/11-24-0884-00-00bh-p802-11bh-initial-sa-comments-personal-comments.xlsx> (Hamilton)

<https://mentor.ieee.org/802.11/dcn/23/11-23-2148-01-00bh-probability-of-irm-duplicates.pptx> (Smith)

Bring back/for further discussion:

<https://mentor.ieee.org/802.11/dcn/24/11-24-0919-03-00bh-cr-on-activated-vs-supported.docx> (Stacey)

<https://mentor.ieee.org/802.11/dcn/24/11-24-0898-01-00bh-sa-cr-for-cid3131.docx> (Mutgan)

1. **SA Comments resolution in details**
2. **Mark Hamilton (Ruckus/CommScope) presented the Comment resolution document: [11-24/0883r6](https://mentor.ieee.org/802.11/dcn/24/11-24-0883-06-00bh-p802-11bh-initial-sa-comments.xlsx) , to go through the leftover CIDs.**

C: I picked up some red ones, but for the red one marked with submission required, I will jump to them.

A: OK, no worry, I won’t go through them. Thanks.

CID3007---Jay Yang can take it.

C: You can assign it to me, I can look at this one.

A: OK, let me know the DCN number. Possibly, it will be addressed in the ad-hoc meeting.

CID3095---Reject

C: You don’t need padding, by the way. I believe there is no AAD and I think the commenter is correct.

A: The current text says if you use AAD for encryption, the padding shall not used. If you don’t use AAD for encryption, then the number of AAD components will be zero.

C: As far as I remember, the original text is copied from the 4-way HS. I assume the language in the 4-way HS is correct, and thus, the text is also correct.

A: The cipher operation shall be not used.

C: For me, rejection is OK.

C: Anybody help me prepare the rejection reason or talk offline about it?

CID3137, CID3183—Dan Harkins (HPE) should take them.

C: Dan agreed to take them as they’re in the Annex AF subclause.

CID3190—Jay Yang will take it.

C: What’s exactly is the problem there? He just wants to change the language?

C: Need to carefully understand the issue and more time to think about it. You can assign it to me.

A: Absolutely, thanks Jay for working on this.

1. **Carol Ansley presented document [11-24/952r0](https://mentor.ieee.org/802.11/dcn/24/11-24-0952-00-00bh-resolutions-for-editorial-comments.xlsx), speaking about the yellow CIDs.**

CID3032

C: I don't understand device ID capable AP being equal to Device ID activated. How do we cover IRM? A lot of places use this. I think we need to have a relevant definition.

C: Do you have any idea how often like this appears in the draft?

A: I'm not sure, as I didn't count them.

C: I'm very concerned about using the word “capable”. We will open a discussion like “activated”, “supported”, “capable”, etc. I’m worried if we go down on that path.

A: Suddenly, to use a different term, I’m nervous.

C: There are 7 instances that say for device ID activated being equal to true. I won’t support the change.

C: Change to Reject. The resolution reason: doesn't make sense to use the term “capable”.

---------------------------------------------No Objection ----------

CID3115

C: We have some offline work to do on this one. Mike Montemurro (Huawei) has a document in 11be that touches on this.

A: I do support you. The resolution in [24/298r4](https://mentor.ieee.org/802.11/dcn/24/11-24-0298-04-00be-tgbe-sa1-eapol-key-notation-cleanup.docx) is posted in 11be. I could take two KDEs to figure it out.

C: I just need some kind of reference. Is it fine to say to use the new reference? I will look at it.

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*CID deferred\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

CID3142

C: CID3028 says the same thing and I resolved it in [24/968](https://mentor.ieee.org/802.11/dcn/24/11-24-0968-00-00bh-tgbh-sa-ballot-misc-cids.docx). They want to change the Device ID to Device identifier.

C: Also, CID3008 and CID3084 are similar. I would like to address them together.

C: Graham can take it in [24/968](https://mentor.ieee.org/802.11/dcn/24/11-24-0968-00-00bh-tgbh-sa-ballot-misc-cids.docx).

/\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*CID defered\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*/

1. **Graham Smith presented the document: [11-24/916r6](https://mentor.ieee.org/802.11/dcn/24/11-24-0916-06-00bh-cids-on-irm.docx)**

CID3097

C: I propose to change "may" to "can". That’s the word in the 11aq text: ”can” support.

C: "Can" implies that this is a normative allowance for it in some places. I think it is in the 11aq text, but I don’t know for certain.

C: Use the same exact wording, supposing it's ability to randomly change MAC address.

C: If we change both of them to "can", "can" supposes the normative text in some place, but not some others.

A: It's already "can" in subclause 4.5.4.10. I will copy it.

C: Is there anything done by 11aq outside of subclause 4?

A: Yes, there is whole section about enhancement on privacy, in subclause 12.2.10.

---------------------------------------------No Objection ----------

CID3096

C: Following the discussion in the May session, change "may then report back" to "then reports back"

C: OK, any objection on the resolution? --none seen.

-------------------------------No Objection --------------------------------

CID3073

C: When we actually created subclause 12.2.12 (Random changing MAC address), we very carefully created dot11PrivacyActivated to distinguish when a device uses a unique MAC or an RCM. I assume when doing IRM or device ID or using a Random MAC address, that this implies not using a global MAC address, and also implies dot11PrivacyActivated is equal to true. All the reasons for creating dot11PrivacyActivated equal to true are to trigger the requirement in subclause 12.2.10.

C: I kindly agree with you, but we don’t know whether in anywhere we said if dot11PrivacyActivated is not equal to true, then you can't use a local MAC address. Maybe we should fix to say that?

C: There is a statement somewhere that the MAC address used by the device is a global MAC address.

C: The device can use Local MAC but the device doesn’t set dot11PrivacyActivated equal to true. If you have a chance, help find that statement?

A: Yes, we have it when we defines 11aq.

C: The question is do we accept or reject the comment? It’s pretty straightforward.

C: The question for the group is I assume whether the MAC address has been used for device ID or IRM. for the requirement in to 12.2.10. There is no statement anywhere I can find in the standard, but I think we need to link device ID and IRM to the MIB variable in 12.2.10.

C: Device ID doesn't care about the MAC address, global or local. IRM does care about the MAC address.

C: If you use a universal MAC address, you don't need to care about 11bh. I’m not sure whether accept or reject it, but the entire draft assumes the device uses the local MAC address.

C: Device ID has nothing to do with MAC addresses. It’s just silent on the matter.

C: Does anybody have an issue with accepting it? ---It seems there are none.

------------------------------- No Objection --------------------------------

CID3081

C: We already state that for the IRM indicated in the association request, the initial FT mobility domain is just an example of the special case.

C: Generally, when we color the initial FT mobility domain, we color it separately from the basic association and the 4-way HS. Explicitly say something that make it clearer. The content of the 4-way HS in the initial FT mobility domain is slightly different from basic 4-way HS.

C: Add the proposed change and the change in subclause 13 to make the solution completely.

C: This is relevant to the description the IRM, so it should be added in there. And we already added the IRM KDE in subclause 13.

C: You may add IRM in the proper KDE in MSG2 and MSG3 in the FT subclause.

C: It was suggested to add a note just for FT?

A: Yes.

C: We don't change anything in FT exactly during the roaming FT.

C: You agree the IRM KDE can be exchanged in the initial FT domain, correct? What I’m stating is to color it explicitly.

C: IRM isn’t used in the BSS transition in FT reassociation.

A: You can go away and come back in the FT initial domain.

C: Mike, will you will help Graham in subclause 13?

A: Yes.

C: I will offline work with Mike.

----------------------defer it and work offline on this----

CID3197

C: The proposed change for CID3197 is shown in this document (screen).

C: If there are no objections, I think it’s good.

------------------------------------------no objection ----------------------

CID3031

C: I think Accept is OK.

C: Does the proposal change “any AP” to “an AP”?

C: The association is not requested. This is the whole point.

A: The IRM is not just for the association request, it’s for the whole association procedure.

C: For the change on “any” or “an”, as a native speaker, I think it’s the same thing. But I think “any” will be a little clearer.

C: CID3031 is revised as shown on the screen seems to be the consensus. --- Seems no disagreement, good.

------------------------------------------no objection ----------------------

CID3033

C: I don’t know, it’s consistent with other places in subclause 12. You can change “operation” to “mechanism”, I don’t care.

C: Add note to the editor to do the same thing in the title and reference (PICS).

C: CID3033 is revised as shown on the screen, any objection? --- It seems there is none, good.

------------------------------------------no objection ----------------------

CID 3195

C: It’s proposed to extend the capability compared to the original text. That is extend the RSN capabilities, so that implies that’s all that is required. He was trying to rewrite things so that the AP has to advertise the capabilities in both cases.

C: Personally, I’m fine, it may be clearer, maybe.

C: CID3195 is revised as shown on the screen; are there any comments?

C: You may bring the discussion to one on support or activation, but it’s OK.

A: I didn’t change the original ideas; it still uses activation.

C: That’s OK for me.

------------------------------------------no objection ----------------------

CID 3088

C: OK, any comment or concerns on this ---seem none, OK.

------------------------------------------no objection ----------------------

CID 3034

C: Any concerns to accept it? --- OK.

------------------------------------------no objection ----------------------

CID 3056

(the resolution is same to CID3034)

C: CID3056, any further concerns? ---OK

------------------------------------------no objection ----------------------

CID3089

C: I think that’s OK. Rejection is an interesting thing.

A: This is a proposed change to something during the first time, be it association or PASN, although somewhat different.

C: Now I understand. I’m OK with it.

------------------------------------------no objection ----------------------

CID3077

C: Correct line is line 28 (38.28) as the spreadsheet says another line.

C: It can be any MAC address, right?

A: Yes, it can.

C: You should explicitly say any local or global MAC address.

A: The thing is here, it should use any local MAC address. It’s been discussed many times that it can be global or your own, if you want to for the first time.

C: Can we say that for any groupcast or broadcast MAC address, is it still valid?

A: Should we strictly say any valid MAC address?

C: Change to local or universal MAC address.

C: Can you use any for universal MAC address? You can say it’s a universal MAC address.

------------------------------------------no objection ----------------------

CID 3090

C: The resolution is same to CID3077.

C: I think in the comment, you should explain there is an option that the device uses universal MAC addresses.

C: Do we need to explain that in the square?

A: I don't think so. It’s an assigned MAC address.

C: CID3090 is revised as shown in the screen, any consensus---, seem none, good.

------------------------------------------no objection ----------------------

Q: Only 1 minute left, do you want to keep on going?

Q: Please post the revised presentation and I will catch up and update the spreadsheet.

**Other business**

Q: May I request recording in the meeting minutes the need to revisit CID3082?

A: Yes.

**Meeting adjourned at 11:30 a.m. ET.**

**Attendee information**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbh | 6/4 | Ansley, Carol | Cox Communications Inc. |
| TGbh | 6/4 | DeLaOlivaDelgado, Antonio | InterDigital, Inc. |
| TGbh | 6/4 | Harkins, Daniel | Hewlett Packard Enterprise (Aruba Networks) |
| TGbh | 6/4 | Li, Weiyi | Spreadtrum Communication USA, Inc |
| TGbh | 6/4 | McCann, Stephen | Huawei Technologies Co., Ltd |
| TGbh | 6/4 | Montemurro, Michael | Huawei Technologies Co., Ltd |
| TGbh | 6/4 | Mutgan, Okan | Nokia |
| TGbh | 6/4 | Smith, Graham | SRT Wireless |
| TGbh | 6/4 | Smith, Luther | Cable Television Laboratories Inc. (CableLabs) |
| TGbh | 6/4 | Yang, Jay | ZTE Corporation |
| TGbh | 6/4 | Yee, Peter | NSA-CSD |