Minutes IEEE P802.11  
Wireless LANs

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| IEEE 802.11 TGbh Meeting Minutes, February 22, 2022  Randomized and Changing MAC addresses (RCM) | | | | |
| Date: 2022-22-02 | | | | |
| Author(s): | | | | |
| Name | Affiliation | Address | Phone | email |
| Graham SMITH | SR Technologies | Sunrise, Florida |  | gsmith@srtrl.com |
|  |  |  |  |  |

Abstract

This document contains the minutes of the IEEE 802.11bh telecom Interim meeting February 22, 2022.

Note: Highlighted text are action items.

Q- proceeds a question asked at the meeting

A- proceeds an answer

C- proceeds a comment

**Meeting Feb 22, 2022 9.00 to 11.00 ET**

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

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

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

**Secretary: Graham Smith (SRT Wireless)**

**Editor: Carol Ansley (Cox)**

**The teleconference was called to order by Chair 9.03 hrs. EDT,**

Agenda slide deck 11-22/0358r1

1. **Policies and procedures were presented by the chair. (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 reminders
* Policies, duty to inform, participation rules
* Organization topics (see Backup slides)
* Issues Tracking updates/status: [11-21/0332r30](https://mentor.ieee.org/802.11/dcn/21/11-21-0332-30-00bh-issues-tracking.docx)
* Way forward on solutions
  + Any further discussion on analysis documents? ([11-22/0296r6](https://mentor.ieee.org/802.11/dcn/22/11-22-0157-00-00bh-mac-address-designation-maad.pptx), [11-22/0343r0](https://mentor.ieee.org/802.11/dcn/22/11-22-0157-00-00bh-mac-address-designation-maad.pptx))
  + Any further discussion on Straw Polls (next slides)?
  + Straw Polls
* Contributions:
  + [11-22/0360r0](https://mentor.ieee.org/802.11/dcn/22/11-22-0360-00-00bh-the-identification-issue-in-pre-association.pptx): Identification issue in pre-association (Jay Yang)
* Review of Issues Tracking uncovered items (margin comments, etc.)
* Next meetings: Mar 3 19:00 ET, March plenary (4 meetings)

Any comments?

C – Contribution 22/0360 is not ready please delete from Agenda.

A - OK

C – Can we still add Use cases?

A – Yes, no formal shut off has been agreed to

Any objections to agenda? - None

Agenda accepted.

Chair noted that the timeline is still off track but hopefully D0.1 for March 2022. Hopefully straw polls will aid the timeline.

C – Will we address the WBA use cases document at some time and respond?

A – Looking for direction before responding, but yes should still be on the agenda so we do not lose it

1. **Issues Tracking document**

Now Rev 30 is latest posted. Mostly just update of submissions. Any comments? None

1. **Straw Polls**

Analysis documents 22/0296 and 22/0343 provide complete list.

Any points or discussion? None.

Proposal is for each proposal (9 main proposals, on previous slide):

* + “How much priority do you put on continuing work on this proposal?”
  + Answer choices: High/Medium/Low

Note: No option for Abstain. Advised either do not vote or put Medium as a “placeholder” if not familiar with method.

C – Is this direction, and we still have further discussion?

A – Yes, this is a guide to having further discussion on the proposals.

C – For example, pre-association support, some do, some do not, so what is our direction for this?

A – You should choose proposals that support the direction you feel the group should go.

C – OK, this is only a high level selection?

A – We kept going in circles before, made decision to look at specific solutions and then make choices. Want to avoid high level discussions again.

C – Yes agree, we need to make some decisions otherwise will keep going round and round.

C - Can we add the Straw poll slides into 22/0296 document?

A – Will do, post meeting.

Chair – OK to proceed?

C – Suggest the slide is displayed and author gives a 30 second elevator pitch.

A – Agreed

For each proposal, prior to the poll, the Proposal description slide, as included in 22/0296, was displayed and author gave a quick description. In some cases questions were asked.

**#1 - Signature-based Method**

Q – Identifier is public or private key?

A – AP uses public key to identify STA

Poll: H 2:M 7: L 12 (5 No vote)

**#2 - IRMA**

Poll: H 4: M 8: L 8 (6 No vote)

**#3 Client ID**

C – Action frame could accept ID from network. Either STA or Network.

A – Not seen a proposal on that line, not how described.

C – MAC Address of Data frame could be used for address?

A – ID is associated with the MAC address when action frames exchanged. Cannot change MAC Address during association, so no need to change for data frames.

C – No need to put this in data frame. That would require a whole new protocol change.

A – That is a TGbi discussion to change MAC Address when associated.

Poll: H 6: M 8: L 7 (5 No vote)

**#4 – Transient STA ID**

Poll: H 3: M 4: L 13 (6 No vote)

**#5 – Secure Device ID**

C – Uses same ID across all networks?

A – Can do but up to device. Idea is to prevent snooping. Can change ID per network.

C – What is the device identifier?

A – Anything it wants. Many proposals do not define what the ID is.

C –Have to create an ID.

A – Could use an embedded ID (e.g. a phone).

Poll: H 1: M 2: L 15 (6 No vote)

**#6 – Opaque device ID**

C - How does this differ from the Network Generated Device ID?

A – This is informative example. Up to AP on how to generate the IDs. Basically the same. Other is an implementation of this.

Poll: H 8: M 5: L 8 (2 No vote)

**#7 – STA Generated Device ID**

C – Difference to (Last) is that the STA generates the ID

Poll: H 7: M 7: L 5 (4 No vote)

**#8 - MAAD**

C – AP allocates MAC Address. Different Address for each AP?

A – AP/network is in control and allocates the MAC Address.

Poll: H 8: M 6: L 8 (1 No vote)

**#9 – Network Generated device ID**

C – Text that could be used to generate the Opaque ID scheme.

C – Are we voting on the same proposal?

A – These are text changes on how to send the opaque but says nothing about what the ID is. Does not say how to send to STA.

Poll: H 9: M 3: L 9 (4 No vote)

Comments on the results?

C – General comment on proposals. Some use association response frame to send ID, which is not encrypted.

A – No, they are encrypted over-the-air.

C – Normally exchanged over the 4 W HS. Other situation for inclusion in association is for FILS which is secure, so in this case always encrypted.

**Polls End**

Chair – Will look at results and look for a direction.

1. **AOB**

Chair, still need to look into WBA.

Anything else? Note next meeting.

**Out of agenda**

**Meeting adjoined at 10.30 ET.**

**Attendance**

|  |  |  |  |
| --- | --- | --- | --- |
| Breakout | Timestamp | Name | Affiliation |
| TGbh | 2/22 | Andersdotter, Amelia | Sky UK group |
| TGbh | 2/22 | baron, stephane | Canon Research Centre France |
| TGbh | 2/22 | Hamilton, Mark | Ruckus/CommScope |
| TGbh | 2/22 | Harkins, Daniel | Hewlett Packard Enterprise (Aruba Networks) |
| TGbh | 2/22 | Huang, Po-Kai | Intel Corporation |
| TGbh | 2/22 | Kain, Carl | USDoT; Noblis Inc. |
| TGbh | 2/22 | Kneckt, Jarkko | Apple, Inc. |
| TGbh | 2/22 | Levy, Joseph | InterDigital, Inc. |
| TGbh | 2/22 | Lu, Liuming | Guangdong OPPO Mobile Telecommunications Corp.,Ltd |
| TGbh | 2/22 | Lumbatis, Kurt | CommScope, Inc. |
| TGbh | 2/22 | Mutgan, Okan | Nokia |
| TGbh | 2/22 | Orr, Stephen | Cisco Systems, Inc. |
| TGbh | 2/22 | Sevin, Julien | Canon Research Centre France |
| TGbh | 2/22 | Smith, Graham | SRT Wireless |
| TGbh | 2/22 | Smith, Luther | CableLabs |
| TGbh | 2/22 | Stanley, Dorothy | Hewlett Packard Enterprise |
| TGbh | 2/22 | Torab Jahromi, Payam | Facebook |
| TGbh | 2/22 | Yang, Jay | Nokia |
| TGbh | 2/22 | Yee, Peter | NSA-CSD |