IEEE P802.11  
Wireless LANs

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Abstract

Minutes of the IEEE 802.11 ARC Standing Committee held 17-18 September 2013, in Nanjing, China.

**Tuesday, 17 September 2013 –** Joint session with TGak

Agenda is in the TGak agenda deck: 11-13/0953r5.

The TGak Chair made the call for Patents. There was no response.

The Chairs reviewed the agenda. No changes were suggested.

The TGak Chair announced that **TGak is making a call for a Technical Editor**. Anyone with interest, please let him know.

Discussion on 11-13/1055, on a **proposal for Tag Stacking Change**:

* This document presents the problem: 802.11 calls for LLC (802.2) formatted MSDUs, but other networks (most notably 802.3) use a T/L (type or length) format. This presentation is from Norm Finn, in 802.1Qbz, to resolve this, by doing the translation only one tag at a time, so the outermost tag remains LLC on 802.11 (and therefore will be understandable by any node needing to translate it) and all other tags are T/L (and, again, will be understood by any node needing to process them).
* The hardest problem is when considering new tags being used/defined, with unknown length to any intermediate nodes that would have to translate to/from T/L and LLC.
* Per the request made during Monday’s opening plenary, we are asking the membership if anyone does stacked LLC headers/tags over 802.11, where this change would invalidate the existing implementation.
* Also discussed the alternative proposal of requiring that all 11ak links use T/L, and all non-11ak 802.11 links use LLC (on all tags, not just the first tag). This restricts the problem to the non-11ak translation point, which is (by definition) the same translation we have today at Portal/AP, and we have solution for that (802.1H).
* Considered a modified 11-13/1055, simplified to ask the question in the mid-week plenary. Just have three slides: present the gist of the problem, and that we have to change something, then, ask the question. Provide pointers to the details. Leave it at that. Wordsmithed this proposal into 11-13/1210.
* Captured the alternative proposal in 11-13/1216.

**Revision to 802.1AC text** (clause 12 section on convergence of 802.11 to 802.1 concepts):

* Question: Is this text (in 802.1AC) normative? It appears so, because it doesn’t say otherwise.
* Then, is it appropriate for the 802.11-specific mapping to even be in 802.1AC? It seems it creates a maintenance problem for 802.1, and puts normative 802.11 behavior out of our document and PICS.
* Proposed text from Norm has been posted on 802.11 Mentor: <https://mentor.ieee.org/802.11/dcn/13/11-13-1171-00-00ak-suggested-text-for-p802-1ac-rev-clause-12.pdf>
* Need to get 802.11 experts to review this. Suggest we discuss it in ARC, tomorrow.

Recess ARC SC until Wednesday AM1. Recess TGak until Thursday AM1.

**Wednesday, 18 September 2013**

Agenda deck is 11-13/0949r2.

The Chair made the call for Patents. There was no response.

The Chair reviewed the agenda. No changes were suggested.

The Minutes of the July 2013 session, were approved as posted (11-13/930r0). Thanks again to Mike Montemurro for filling in!

The Chair noted that Dave Bagby has resigned as Vice Chair. We give our sincere thanks to Dave for all his work over many years of support of 802.11. As a result, the **ARC SC is making a call for Vice Chair.**  Any volunteers interested should please post a nomination (self-nominations are fine) on the reflector.

**IETF/802 coordination, lead by Dorothy Stanley (Aruba Networks).**

* RFC4441:
  + No significant progress on this since the previous meeting, due to other priorities. But, the plan is to pick this back up soon. The IETF is working on the section about their processes, trying to find the right balance between enough information being included, but still manage the duplication with other documents that describe their processes.
  + The next revision is expected at our November meeting.
* CAPWAP:
  + This work is being considered by the Ops area working group
  + 2 documents are under consideration for extensions: one for 802.11n support, one on the way a local MAC or split MAC is described which could lead to a hybrid concept.
  + IEEE 802.11WG will be asked to review these when they are ready.
* RADEXT:
  + Changes here are in working group last call.

**802 Overview and Architecture**

* We are still addressing the Draft 1.6 ballot.
* James Gilb (802 O&A Editor) presented his revised draft, and asked the group for review of the 802.11 sections (especially B.2) and areas on which we had comments.
* The B.2 changes look good.
* Shouldn’t we mention mesh as an architectural option for 802.11, in our Annex B.2 discussion? Maybe we can craft something quickly, based on 802.11-2012 section 4. Several volunteers to work on this off-line. If we can get it to James this week, he can still get it in.
* On review of our other comments and changes made, raised a concern about the approach to the term ‘station’. We’ll continue as is, with an agreement that while 802.11 defines the term ‘station’ differently, we really use the term ‘STA’ much more often and can live with the difference. We might want to consider clarifying that this difference exists, though. Members will consider this off-line.
* Also discussed the use of the word ‘backbone’ and whether this should be a defined term in the O&A. Made some editorial change suggestions to James. We’ll review this again in the next ballot round.

**802.11 TGak (“Enhancements For Transit Links Within Bridged Networks”) and 802.1Qbz on “802.11 bridging” update.**

* Donald Eastlake, 802.11 TGak Chair, reported informally on the status
* The discussion currently is focused on the challenge of LLC format MSDUs versus type/length format. Those interested in this discussion should attend the TGak session Thursday AM1.

**OmniRAN**

* Mike Montemurro is acting as OmniRAN Chair this week, and reported that they are working on their PAR and 5C for November.
* At this time, no work for 802.11 (or, probably for 802 in general) is expected.

**IEEE 1588 revision**

* Mark Hamilton is monitoring the revision project for IEEE 1588. They are including an explicit goal of working on the mapping of IEEE 1588 (and 802.1AS) to wireless networks, and 802.11 in particular.
* At this time, they are focused on other activities, and haven’t started on the wireless mappings part, so no work for 802.11 yet.

**AP/DS/Portal architecture**

* No presentations or discussion this session.

**802.1AC revision**

* Part of the 802.1AC revision includes reviewing subclause 12.2 (under new numbering proposal) which describes how 802.11 and 802.1 MAC Service concepts map.
* Norm Finn has proposed new text, basically a complete rewrite of this section ([**http://www.ieee802.org/1/files/public/docs2013/acrev-nfinn-new-802-11-text-0813-v02.pdf**](http://www.ieee802.org/1/files/public/docs2013/acrev-nfinn-new-802-11-text-0813-v02.pdf)**)**
* While this material does seem to be a big improvement, we had discussion about whether this material should be in an 802.1 document, or should be carried within 802.11.
* Another aspect of the question just above, is to ask how 802.1 can write this section now, without 11ak work completed (which will add and change this mapping significantly), or will this section have to have a major overhaul once 11ak is done. It seems like a maintenance problem for 802.1 to carry this text.
* Volunteers are requested to help review Norm’s proposed text. This is technically dense material, and we want to make sure it’s right. Note that 802.1AC’s definition of the MAC Service is a bit different from 802.11’s definition, so that needs to be explained clearly and carefully.

**Future**: ARC meets ad hoc but seems to always have plenty to discuss. One slot planned at November meeting. If anyone has agenda topics, contact the Chair (Mark Hamilton).

One **teleconference** will be needed to prepare comments on the next 802 O&A ballot. The timing of that can’t be determined until we know when the ballot we happen. This teleconference will be scheduled with 10 days’ notice, as soon as the timing is known.

No other business. Adjourned.