IEEE P802.11
Wireless LANs

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| 11ak Telecon Minutes 20131028 |
| Date: 2013-11-04 |
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Abstract

This document contains the meeting minutes of the IEEE 802.11ak TGak Group teleconference on 2013-10-28.

Teleconference from 05:00 pm EST to 06:00 pm EST

October 28, 2013

Chaired by Norm Finn (Cisco), 802.1Qbz Chair.

Notes taken by Yan Zhuang and Norman Finn, edited by Donald Eastlake.

[802.11ak Chair Donald Eastlake was unable to be on the call due to travel.]

Norman Finn called to order

Call for patents by Norman Finn: No response.

Norman Finn (Cisco Systems) represented document **13-0952r2** **“Stacking Tags in LLC Media”**

The presentation is to show the current tag situation in LLC media and also proposed two tag solutions, while during this call, it mainly focused on one of the solutions.

**Discussions** **on slide 17**: the one translation per tag or media change

From E2 to E1, bridges on the way should translate the first tag from LLC to L/T while adding new tag in LLC format. That is, every bridge should be a tag editor and will have to add or remove tag. In this solution, all have to do is translating one LLC to L/T each hop.

Comments: The problem is that B3 may not know the tag so it has no idea of how to deal with it. If we make all nodes in the diagram as wireled nodes while leave E1 and E2 as wireless nodes. That is to say, B5 as an AP can have such function supported nowadays.

Norman: the B4 can be B3’s station as a non-AP station. B3 and B5 can be APs and associated with B4 at the same time.

Comments: Does E1 have the knowledge of the path supporting this function?

Answer: no.

Mark Hamilton represented document **13-1216r0** “**Tag Solution – Proposal 2**”.

This presentation is to propose a tag solution.

Comments: this solution introduces a new kind of frame type. It’s just between the end stations, while bridges don’t know it.

Answers: is that a problem today? Yes. So we just solve problems that while introducing bridge functions into 11ak but don’t solve existing problems.

Philippe: it seems a good solution.

Norm: the worry is that TRILL can use current link, which means it works well with current links. How about this kind of link? Another thing is the normal 802.11 is LLC media, just a bit nervous, it seems like to be L/T link.

Philippe: it looks like making this L/T link not a LLC, while the L/T link is wireless. However, this L/T link works just as a wired one.

Norman: the MSDU nowadays is LLC encoded. Is everybody comfortable that the 11ak link is L/T link? Not so comfortable with that.

Philippe: it can be a functional way of 11ak link.

Norman: what if B3 and B4 is not 11ak link?

Mark: it should be 11ak link.

Philippe: yes, cuz they are bridges.

Norman: what if B5 is TRILL bridge?

Mark: does that work today? I don’t know.

Norman: we can have several tags. If there is a tag in LLC between Q tag and data, the problem between B5 and E2 is that there is a tag between Q tag and data, while B5 doesn’t know it.

Question: does that a problem existing today?

Answer: yes, but nobody uses it now.

Norman: also, in this solution, we cannot add tags to end-to-end stations, because bridges don’t know the tag and cannot find out the data and translate it from LLC to L/T. What I’d like to suggest for the old stuff is asking people to consider if there is any other tags over the data.

Mark: it’s not the 11ak problem, it’s the problem existing today. So if people have solved that, and we will embed it into 11ak. 802.11 should be LLC, but 11ak is a new thing so we’d use it as L/T.

Philippe: from wired to wireless, the conversion should be made today in AP, but maybe it’s more complicated here.

Comments: certainly, B5 does and it’s an AP today.

**Consensus at meeting was that:**

 A. 802.11ak will use Length/Type for all elements of frame except, perhaps the first.

 B. We will discuss in Dallas, hopefully with ASIC designers present, whether it would be easy to use Length/Type for all parts of an 802.11ak frame, or whether it is better to leave the very first part as LLC.

 C. The existing rule for 802.11 for tag stacking, that all elements are LLC, will remain for non-802.11ak uses. This seems to mean that APs will have to be updated when new tags are introduced.

 D. 802.1 can define a new means for LLC media, where after-the-first element is Length/Type, if it wants to.

Call for Any other Business.

 None

Adjourn at 5:59am.

**Attendees:**

Bruce

Dan Romascanu (Avaya)

David Goodall (Broadcom)

Ed Reuss

Jeremy Touve

Kevin Stanton

Mark Hamilton (Polycom)

Mingguang Xu

Mitsuru Iwaoka (Yokogawa Electric Co.)

Norman Finn (Cisco)

Philippe Klein (Broadcom)

Yan Zhuang (Huawei)