IEEE 802.1 Interim Meeting
September 2011, Nanjing

802.1 Meeting Minutes, 19-22 September 2011

Attendees

Last Name	First Name	Middle Name	Affiliation
Alon	Zehavit		Nokia Siemens Networks
Ashwood-Smith	Peter		Huawei Technologies Co. Ltd
Boiger	Christian		Hochschule Deggendorf - University, Hirschmann Automation & Control
Bottorff	Paul		Hewlett-Packard Development Company, L.P.
Bragg	Nigel		Ciena Corporation
Chang	Xin		Huawei Technologies Co. Ltd
Congdon	Paul		Hewlett-Packard Development Company, L.P.
DeSanti	Claudio		Cisco Systems, Inc.
Eastlake, 3rd	Donald		Huawei Technologies Co. Ltd
Farkas	Janos		Ericsson
Fedyk	Donald		ALCATEL-LUCENT
Finn	Norman		Cisco Systems, Inc.
Gray	Eric		Ericsson AB
GU	Yingjie		Huawei Technologies Co. Ltd
guo	zhui		Interworking
Haddock	Stephen		Haddock Consulting LLC
hai	yu		ZTE
Jeffree	Anthony		HP, Broadcom
Joy	Lejin		Harman International
Kamath	Daya		BNT
Kim	Yongbum		Broadcom Corporation
Klein	Philippe		Broadcom Corporation
Krause	Michael		Hewlett-Packard Development Company, L.P.
Li	Yizhou		Huawei Technologies Co. Ltd
Lynch	Jeff		IBM
Mack-Crane	Thomas		Huawei Technologies Co. Ltd
Messenger	John		ADVA Optical Networking Ltd.
Multanen	Eric		Intel Corporation
Olsen	David		HARMAN INTERNATIONAL INDUSTRIES, INCORPORATED
Parsons	Glenn		Ericsson AB
Pearson	Mark		Hewlett-Packard Development Company, L.P.
Qiang	Haixia		ZTE Corporation
Raeber	Rene		Cisco Systems, Inc.
Roese	Josef		Deutsche Telekom AG
Rouyer	Jessy		ALCATEL-LUCENT
Sajassi	Ali		Cisco Systems, Inc.
Saltsidis	Panagiotis		Ericsson AB

Shao	Hong		ZTE Corporation
Sultan	Robert		Huawei Technologies Co. Ltd
Teener	Michael	Johas	Broadcom Corporation
Thaler	Patricia		Broadcom Corporation
Ting	Ao		ZTE Corporation
Vissers	Maarten		Huawei Technologies Co. Ltd
Wei	Yuehua		ZTE Corporation
Xiao	Min		ZTE Corporation

Task Group Minutes

Interworking minutes

Monday, 19 September

Meeting called to order at 9:00am.

Stephen Haddock presented patent policy slides. No response to the call for patents.

Stephen Haddock presented the preliminary agenda for the week. See:
- http://www.ieee802.org/1/files/public/docs2011/admin-interworking-agenda-0911-v01.pdf

802.1AXbq DRNI: Norm Finn gave a summary of the issues discussed on conference calls since the San Francisco plenary. Two presentations were given on the issue of MEP placement in the DRNI model, one by Stephen Haddock and one by Maarten Vissers:
- http://ieee802.org/1/files/public/docs2011/axbq-haddock-intra-das-link-0711-v01.ppt
- http://ieee802.org/1/files/public/docs2011/axbq-vissers-drni-examples-das-and-mep-position-a3-0911-v00.pptx

Break at 12:40pm for lunch.

Afternoon session called to order at 2:00pm.

802.1Qbf Segment Protection: Bob Sultan presented a ballot summary and conducted comment resolution on the Sponsor Ballot for 802.1Qbf-d1.4 Infrastructure Segment Protection.
- http://ieee802.org/1/files/public/docs2011/bf-sultan-ballot-summary-0911-v01.pdf
- http://www.ieee802.org/1/files/private/bf-drafts/d1/802-1bf-d1-4-dis-v00.pdf

802.1AXbq DRNI: Norm presented a revised version of Figure 7-4 based on discussions during the conference calls.

802.1aq SPB: Don Fedyk presented an editor's report and conducted comment resolution on the Working Group recirculation ballot for 802.1aq-d4.2 Shortest Path Bridging. Numerous minor changes were flagged to be placed in a cover letter for Sponsor Ballot.
- http://www.ieee802.org/1/files/public/docs2011/aq-fedyk-SPB-Ballot-summary-0911-v1.pdf
- http://ieee802.org/1/files/private/aq-drafts/d4/802-1aq-d4-2-dis-0911-v1.pdf

Adjourn at 6:30pm.

Tuesday, 20 September

Meeting called to order at 9:10am.

Stephen Haddock gave the call for patents. There was no response to the call for patents.

802.1aq SPB: Don Fedyk concluded comment resolution on the Working Group recirculation ballot for 802.1aq-d4.2 Shortest Path Bridging.

Adjourn at 12:00 pm.

(There was a joint meeting of Interworking, Audio-Video Bridging and Data Center Bridging Task Groups in the afternoon of September 20.)

Wednesday, 21 September

Meeting called to order at 9:00am.

Stephen Haddock presented patent policy slides. No response to the call for patents.

802.1AXbk LACP Addressing: John Messenger presented an editor's report and conducted comment resolution on the Working Group recirculation ballot for 802.1AXbk-d1.2 LACP Addressing.
- http://ieee802.org/1/files/public/docs2011/axbk-messenger-editor-report-0911-v01.pdf
- http://ieee802.org/1/files/private/axbk-drafts/d1/802-1AXbk-d1-2-dis-v2.pdf

Break at 11:50am for lunch.

Afternoon session called to order at 1:30pm.
802.1Qbp ECMP: Ben Mack-Crane gave an overview of off-line and conference call discussions since draft D0.0 of 802.1Qbp SPBM Equal Cost Multi-Path. Ben, Ali Sajassi, and Yuehua Wei (Corona) gave presentations regarding multicast spreading, local hashing, and loopback:
- http://ieee802.org/1/files/public/docs2011/bp-mackcrane-editor-notes-0911.pdf
- http://ieee802.org/1/files/public/docs2011/bp-mackcrane-multicast-spreading-0911.pdf
- http://ieee802.org/1/files/public/docs2011/bp-sajassi-local-hashing-0911-v01.pptx
- http://www.ieee802.org/1/files/public/docs2011/bp-weiyh-loopback-0911-v00.pdf

Liaison: Maarten Vissers gave a presentation related to the ITU liaison regarding E-OTN (ols 277) and the liaison response sent to the ITU following the Santa Fe meeting and subsequent email ballot, and is a revision of the presentation he began at the San Francisco meeting:
- http://www.ieee802.org/1/files/public/docs2011/new-vissers-alternative-ec-type-2-solution-0911-v01.pptx

Adjourn at 5:45pm.

Thursday, 22 September

The Interworking Task Group completed all agenda items by the end of the day on September 21, however several people were interested in continuing some informal discussions on DRNI on September 22.

As it turned out, a significant number of people convened at 10:00am.

Given the size of the group we did the usual call for patents (there was no response to the call) and ran the discussion much as an ordinary meeting.

Although there were no formal presentations, there were slides shown by Stephen Haddock and Maarten Vissers as a works in progress that may result in future presentations. Discussions continued until 12:30pm, and again after lunch from 1:30 to 3:00pm.

DCB Minutes

Monday, 19 September, AM

Pat showed the patent slides and asked if anyone wanted to make a tatement about potentially essential patents. There was no response.

Pat reminded everyone to record their attendance. There was some discussion of issues with the network and available connection options.

Tony Jeffree conducted comment resolution for P802.1Qbg until lunch.

The resolution version (D1.7) is available at:

- http://www.ieee802.org/1/files/private/bg-drafts/d1/802-1qbg-d1-7.pdf

Initial proposed resolutions are available at:

- http://www.ieee802.org/1/files/private/bg-drafts/d1/802-1Qbg-D1-7-pdis-v1.pdf

Monday, 19 September, PM
Pat reminded everyone that we were still in an official IEEE meeting and the patent policy had been reviewed earlier in the day. Again, there was no response to the call for patents.

Tony continued comment resolution, completing comment resolution for P802.1Qbg just in time for the break.

Proposed resolutions at the end of the day are available at:
http://www.ieee802.org/1/files/private/bg-drafts/d1/802-1Qbg-D1-7-pdis-v2.pdf

Claudio started comment resolution on Joe's behalf (Joe Pelissier was at home as a result of a medical emergency) for P802.1BR.

The resolution version (D2.2) - in final draft and change-bar versions - is available at:

- http://www.ieee802.org/1/files/private/br-drafts/d2/802-1BR-d2-2.pdf
- http://www.ieee802.org/1/files/private/br-drafts/d2/802-1BR-d2-2-cb.pdf

Initial proposed resolutions are available at:
- http://www.ieee802.org/1/files/private/br-drafts/d2/802-1BR-D2-2-pdis.pdf

At a convenient stopping place, we discontinued comment resolution and
Pat reviewed the schedule for Tuesday.

Proposed resolutions at the end of the day are available at:
- http://www.ieee802.org/1/files/private/br-drafts/d2/802-1BR-D2-2-pdis-v1.pdf

Tuesday, 20 September, AM

Pat reviewed IEEE policies and reminded people that we were still at an
official IEEE 802.1 meeting. There was no response to the patent call.

Claudio continued comment resolution for P802.1BR. We took a long
break to allow Joe time to complete a presentation for Claudio to give.

The presentation is available at:
- http://www.ieee802.org/1/files/public/docs2011/br-pelissier-pevdp-thoughts-0911.pdf

Claudio presented Joe's presentation (starting at 11:00 AM) and received
feedback from the room. Claudio then committed to discussing the feed
back he received with Joe and getting back to the group with results from
this in the morning.

Tuesday, 20 September, PM

Joint meeting, Interworking/DCB/AVB

Michael Johas Teener (MJT) started the joint meeting by reminding everyone that this is still an
official IEEE 802.1 meeting and applicable policies apply. There was no response to the patent
call.

Yongbum Kim did a presentation of the requirements for automotive backbone bridging:
- http://www.ieee802.org/1/files/public/docs2011/new-avb-nakamura-automotive-backbone-requirements-0907-v02.pdf

He then went on to discuss the PAR and 5C for the project to address these requirements.

Phillipe Klein then did a presentation on multipath stream selection:

- http://www.ieee802.org/1/files/public/docs2011/phkl-srp-stream-path-selection-0911-v01.pptx

There was a lot of discussion about the problem Phillipe described. Phillipe felt that the home network was not the place that one could sell a shortest-path-bridging solution. Others felt the problem may not be well enough understood to make this sort of statement.

There were questions about convergence and network efficiency, as well as whether or not it is possible that this approach might result in not being able to allow a path when it is in fact provable that one or more acceptable paths should exist.

The conversation finally ended, and we began the joint DCB/Interworking meeting.

P802.1Qbg/P802.1BR comment resolution

Tony fired off a discussion on Glenn's comment on the MIB portion of P802.1Qbg. How do we resolve the issue of how to provide both a MIB for compilation checking and a document that only provides what is actually being changed. Further complicating the issue is when it is the case that existing MIB documents do not themselves already compile.

There is a related problem with P802.1BR

For P802.1BR, the MIB in question is the LLDP MIB extensions for 802.1Q.

On the last issue, there seemed to be convergence on going ahead and making just the changes needed for the project and pointing to the maintenance (TT numbers?) process indicate that the existing MIB issue is a known maintenance issue and possibly where and when the issue will be addressed. This would allow for comment resolutions that just say "known problem see <...>" for existing MIB compilation bugs.

We discussed a number of different approaches. Claudio will document the resolution for P802.1BR in an update to the proposed resolutions at:

- http://www.ieee802.org/1/files/private/br-drafts/d2/802-1BR-D2-2-pdis-v2.pdf

Tony needs to reflect on the issues with P802.1Qbg, and discuss them off-line with Glenn some more. We will talk about this further on Wednesday.

Jeff Lynch gave a presentation on disambiguating LLDP over aggregated links. The presentation can be found at:

- http://www.ieee802.org/1/files/public/docs2011/maint-lynch-LLDP-over-LAG-0920-v1.pdf

There was a lot of discussion on the proposal and concerns about the correct way to document next steps. Proposals include opening a new PAR for at least two of the existing standards (e.g. - 802.1AX, 802.1Q and potentially 802.1Qaj), or trying to do this using existing PARs, potentially a piece at a time.

One possible solution - discussed during the meeting - would be to modify a TLV in 802.1Q to include a(t least one) bit to indicate whether or not an LLDP message is meant to be addressed to the physical or the aggregate link, modify 802.1AX to indicate that (for at least LLDP frames - and possibly any frame that might be addressed to both the aggregate and the physical port) frames should be delivered to both the physical and the aggregate links.

Wednesday, 21 September, AM

Pat reminded everyne of the IEEE policies and asked if anyone wished to respond to the call for patents. There was no response.

Tony Jeffree spent a few minutes closing on one last issue involving a comment from Anoop Ghanwani on P802.1Qbg. See the final comment dispositions at:

- http://www.ieee802.org/1/files/private/bg-drafts/d1/802-1Qbg-D1-7-dis.pdf

Claudio setup a conference line to allow us to discuss a presentation Joe put together on remaining issues with comment resolution for P802.1BR.

The presentation is at:

- http://www.ieee802.org/1/files/public/docs2011/br-pelissier-VDPscalability-0911.pdf

There was a lot of resistance to Joe's proposal. Many people felt that the gain was far from suffiicent to justify the change. Claudio suggested that we might have a conference call to further discuss the issues - after Joe does a few page write-up on exactly what the changes would be.

Folks in the room felt that - while we could do this - there does not seem to be anything to gain from doing so. The proposal is straight-forward, there is little to no confusion as to what would

be involved, and there would (if anything) be fewer people participating in such a conference call than were in the room at this meeting - so it is unlikely that there would be a significant change.

In order to help Joe decide what to do, Pat conducted a straw poll as to what the sense of the room was relative to make the proposed changes. Results were:

For - 3, Against - 7, Abstain - 2

There were 18 people in the room at the time.

Joe indicated that he is considering withdrawing the comment, based on the above results. He wants to verify that he has not missed some argument that might change the way folks currently are reacting to the proposal.

Pat asked Claudio to put up the comment database so that we could make some sort of decision as to how to resolve the actual comment(s) related to the proposal.

After further discussion, Joe agreed to withdraw his comment, to allow us to complete the comment resolutions (and post a final comment dispositions).

To see the final comment resolutions for P802.1BR, see:

- http://www.ieee802.org/1/files/private/br-drafts/d2/802-1BR-D2-2-dis.pdf

Joe had one additional comment concerning an expectation that ECP would use an address determined by the higher layer. This does not currently seem to be supported in P802.1Qbg. Pat proposed sending a comment+resolution to Tony (in E-Mail), once we have had a chance to review it after the break.

We reviewed the comment and suggested remedy after the break, and Pat sent the E-Mail to Tony. This should be reflected in the final comment resolutions for P802.1Qbg.

DCB Meeting adjourned.

AVB Meeting Minutes

Monday, 19 September, AM

Patent Policy Reviewed - MJT

Agenda Review - MJT

1588 and 802.1as synergies: Challenges and Opportunities – MJT

Monday, 19 September, PM

AS Corrigendum review – Yong
- http://www.ieee802.org/1/files/public/docs2011/as-garner-kim-802-1-AS-corrections-0511-v5.pdf

SRP Stream MultPath Selection – Philipe

Tuesday, 20 September, AM

Preparation for joint 802.1 meeting
- Request name change from AVB to Time Sensitive Networking
- Preemption – Yong Kim
- Multipath – Philippe Klein

Requirements for Redundancy in Industrial Networks – Christian
- http://www.ieee802.org/1/files/public/docs2011/new-avb-boiger-kleineberg-industrial-redundancy-requirements-0911.pdf

Tuesday, 20 September, PM

Joint Meeting with 802.1
- Host Announcement from January Interim host
- Possible AVB name change discussion
- IEEE 802.1 Pre-emption and Fragmentation – Yong Kim
  - http://www.ieee802.org/1/files/public/docs2011/new-avb-kim-8021-8023-Preemption-Reasons-for-its-needs-09711-v01.pdf
  - http://www.ieee802.org/1/files/public/docs2011/new-avb-kim-8021-8023-Preemption-Problem-Statements-0911-v04.pdf
- IEEE 802.1 Draft PAR and 5C for Pre-emption and Fragmentation review – Yong Kim
  - http://www.ieee802.org/1/files/public/docs2011/new-avb-kim-8021-Preemption-DRAFT-PAR-5C-0911-v05.pdf
- SRP Multipath Stream Selection – Philippe
  - http://www.ieee802.org/1/files/public/docs2011/phkl-srp-stream-path-selection-0911-v01.pptx

Wednesday, 21 September, AM

Gen 2 Assumptions – Dave Olsen
- Assignment of names to assumptions
- http://www.ieee802.org/1/files/public/docs2011/avb-dolsen-gen2-assumptions-0911-v6.pdf

Wednesday, 21 September, PM

Gen 2 Assumptions (continued) – Dave Olsen

Maintenance Task Group
There was a meeting via conference call on 14 September. See slides at:

- http://www.ieee802.org/1/files/public/docs2011/maint-congdon-session-0911-v2.pdf

Meeting Materials

Contributions uploaded since July, 2011:
- August –
http://www.ieee802.org/1/files/public/docs2011/admin-yizhou-nanjing-travelling-tips-0823-v1.pdf
http://www.ieee802.org/1/files/public/docs2011/axbq-nfinn-drni-model-alts-0811-v01.pdf
http://www.ieee802.org/1/files/public/docs2011/axbq-vissers-drni-examples-das-position-a3-0811-v00.pptx
http://www.ieee802.org/1/files/public/docs2011/axbq-vissers-drni-examples-das-position-a3-0811-v01.pptx
http://www.ieee802.org/1/files/public/docs2011/bg-kamath-channelid-text-0811-v1.pdf
http://www.ieee802.org/1/files/public/docs2011/bg-mackcrane-VDP-state-machines-1108-v01.pdf
http://www.ieee802.org/1/files/public/docs2011/bg-mackcrane-VDP-state-machines-1108.pdf
http://www.ieee802.org/1/files/public/docs2011/bp-mackcrane-multicast-spreading-0811.pdf
http://www.ieee802.org/1/files/public/docs2011/br-pelissier-ExtAddress-0811.pdf
http://www.ieee802.org/1/files/public/docs2011/br-pelissier-ExtECIDs-0811.pdf
http://www.ieee802.org/1/files/public/docs2011/br-pelissier-ReplyToSender-0811.pdf

- September -
http://www.ieee802.org/1/files/public/docs2011/maint-congdon-session-0911-v1.pdf
http://www.ieee802.org/1/files/public/docs2011/maint-congdon-session-0911-v2.pdf
http://www.ieee802.org/1/files/public/docs2011/new-avb-nakamura-automotive-backbone-requirements-0907-v02.pdf
http://www.ieee802.org/1/files/public/docs2011/AXbq-tinga-DLAG-sublayer-0811-V00.pptx
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http://www.ieee802.org/1/files/public/docs2011/new-avb-kim-8021-8023-Preemption-Reasons-for-its-needs-09711-v01.pdf
http://www.ieee802.org/1/files/public/docs2011/new-avb-kim-8021-Preemption-DRAFT-PAR-5C-0911-v05.pdf
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