

Maintenance Task Group Meetings

November 13, 2012

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November 15 Agenda

- Patents
- Status
- AB-Cor1 Ballot Resolution - Tony
- Existing Maintenance items
- New Maintenance items

Instructions for the WG Chair

The IEEE-SA strongly recommends that at each WG meeting the chair or a designee:

- Show slides #1 through #4 of this presentation
- Advise the WG attendees that:
 - The IEEE's patent policy is consistent with the ANSI patent policy and is described in Clause 6 of the *IEEE-SA Standards Board Bylaws*;
 - Early identification of patent claims which may be essential for the use of standards under development is strongly encouraged;
 - There may be Essential Patent Claims of which the IEEE is not aware. Additionally, neither the IEEE, the WG, nor the WG chair can ensure the accuracy or completeness of any assurance or whether any such assurance is, in fact, of a Patent Claim that is essential for the use of the standard under development.
- Instruct the WG Secretary to record in the minutes of the relevant WG meeting:
 - That the foregoing information was provided and that slides 1 through 4 (and this slide 0, if applicable) were shown;
 - That the chair or designee provided an opportunity for participants to identify patent claim(s)/patent application claim(s) and/or the holder of patent claim(s)/patent application claim(s) of which the participant is personally aware and that may be essential for the use of that standard
 - Any responses that were given, specifically the patent claim(s)/patent application claim(s) and/or the holder of the patent claim(s)/patent application claim(s) that were identified (if any) and by whom.
- The WG Chair shall ensure that a request is made to any identified holders of potential essential patent claim(s) to complete and submit a Letter of Assurance.
- It is recommended that the WG chair review the guidance in *IEEE-SA Standards Board Operations Manual* 6.3.5 and in FAQs 12 and 12a on inclusion of potential Essential Patent Claims by incorporation or by reference.

Note: WG includes Working Groups, Task Groups, and other standards-developing committees with a PAR approved by the IEEE-SA Standards Board.

Participants, Patents, and Duty to Inform

All participants in this meeting have certain obligations under the IEEE-SA Patent Policy. Participants:

- “Shall inform the IEEE (or cause the IEEE to be informed)” of the identity of each “holder of any potential Essential Patent Claims of which they are personally aware” if the claims are owned or controlled by the participant or the entity the participant is from, employed by, or otherwise represents
 - “Personal awareness” means that the participant “is personally aware that the holder may have a potential Essential Patent Claim,” even if the participant is not personally aware of the specific patents or patent claims
- “Should inform the IEEE (or cause the IEEE to be informed)” of the identity of “any other holders of such potential Essential Patent Claims” (that is, third parties that are not affiliated with the participant, with the participant’s employer, or with anyone else that the participant is from or otherwise represents)
- The above does not apply if the patent claim is already the subject of an Accepted Letter of Assurance that applies to the proposed standard(s) under consideration by this group

Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2

- Early identification of holders of potential Essential Patent Claims is strongly encouraged
- No duty to perform a patent search

Patent Related Links

All participants should be familiar with their obligations under the IEEE-SA Policies & Procedures for standards development.

Patent Policy is stated in these sources:

IEEE-SA Standards Boards Bylaws

<http://standards.ieee.org/guides/bylaws/sect6-7.html#6>

IEEE-SA Standards Board Operations Manual

<http://standards.ieee.org/guides/opman/sect6.html#6.3>

Material about the patent policy is available at

<http://standards.ieee.org/board/pat/pat-material.html>

If you have questions, contact the IEEE-SA Standards Board Patent Committee Administrator at patcom@ieee.org or visit <http://standards.ieee.org/board/pat/index.html>

This slide set is available at <http://standards.ieee.org/board/pat/pat-slideset.ppt>

Call for Potentially Essential Patents

- If anyone in this meeting is personally aware of the holder of any patent claims that are potentially essential to implementation of the proposed standard(s) under consideration by this group and that are not already the subject of an Accepted Letter of Assurance:
 - Either speak up now or
 - Provide the chair of this group with the identity of the holder(s) of any and all such claims as soon as possible or
 - Cause an LOA to be submitted

Other Guidelines for IEEE WG Meetings

- **All IEEE-SA standards meetings shall be conducted in compliance with all applicable laws, including antitrust and competition laws.**
 - **Don't discuss the interpretation, validity, or essentiality of patents/patent claims.**
 - **Don't discuss specific license rates, terms, or conditions.**
 - Relative costs, including licensing costs of essential patent claims, of different technical approaches may be discussed in standards development meetings.
 - Technical considerations remain primary focus
 - **Don't discuss or engage in the fixing of product prices, allocation of customers, or division of sales markets.**
 - **Don't discuss the status or substance of ongoing or threatened litigation.**
 - **Don't be silent if inappropriate topics are discussed ... do formally object.**

See *IEEE-SA Standards Board Operations Manual*, clause 5.3.10 and "Promoting Competition and Innovation: What You Need to Know about the IEEE Standards Association's Antitrust and Competition Policy" for more details.

Status Update

- Maintenance web site update in progress
- 28 new items (all .1AS) received since September
- Q-Cor2 approved by SASB
- AB-Cor Working Group Ballot concluded
- AS-Cor Working Group Ballot concluded

<u>Detailed Totals</u>	<u>Summary Totals</u>
<u>Detailed Totals</u>	<u>Summary Totals</u>
A = 15	Ready for ballot = 33
B = 33	Balloting = 5
CB = 0	Approved = 15
CE = 0	Awaiting clarification = 0
E = 0	Errata = 0
F = 0	To be categorised = 0
I = 0	Review by Technical experts = 11
J = 11	Withdrawn = 0
P = 3	Rejected = 11
R = 0	Published = 3
S = 0	
T = 11	Total = 78
V = 5	
W = 0	
Errors = 0	
Total = 78	Open = 64

EXISTING MAINTENANCE ITEMS

Maintenance Item – 0005

Missing enable for Link Aggregation TLV

- Submission: Pat Thaler – June 2011
- Issues:
 - When LinkAgg TLV was moved into 802.1 MIB, the enable was not included
 - Error in table D-5 for IldpV2Xdot1ConfigPortVlanTable. Reference and MIB text don't agree
 - Missing security considerations in D.4.4 for Congestion Notification
- Latest Status: Ready for Ballot
 - Waiting for a revision of 802.1AX to fix. PAR agreed to be modified
 - New maintenance item 0009 submitted to address sending LLDP on physical links
- Discussion
 - .1AXrev editor will ensure this comment is included for discussion
 - Subsequent resolution will be handled in the .1AXrev task group.

Maintenance Item – 0006

Corrigendum items for .1AS

- Submission: Geoff Garner – June 2011
- Issues:
 - Various
 - Actively being worked at a TG item
- Latest Status: Balloting
- Discussion
 - AS-Cor-1 in WG ballot.
 - AVB TG is keeping track of the bugs that need fixing in AS-Cor-1.

Maintenance Item – 0008

MVRP cut-and-paste errors



- Submission: Craig Gunther – August 2011
- Issues:
 - MVPR1 and MVPR2 PICs items were pasted from MMRP items and remain incorrect
- Latest Status
 - “MVRP” change was made in Qbg, but references (10.8 & 11.2) were not changed
- Discussion
 - MVRP change published in 802.1Qbg
 - Change references in Q-REV

Maintenance Item – 0009

Disambiguating LLDP over Link Aggregations

- Submission: Jeffrey Lynch – September 2011
- Issues:
 - It is unclear how LLDP should operate over an aggregation
 - It is currently not possible to determine at the receiver if the LLDP frames were sent from a peer at the physical link or at the aggregate
- Latest Status: Received
 - Discussed at Nanjing Interim and at Atlanta Plenary - <http://www.ieee802.org/1/files/public/docs2011/maint-lynch-LLDP-over-LAG-0920-v1.pdf>
 - We desire to have the ability to send/receive at the physical layer – can be done in AXbq.
 - Agreed to workout the technical details in AXbq – prefer a TPMR type Y to send/receive
 - Preferred to define new TLVs or new bits, thus modifying existing TLVs – prefer to wait for AX revision to fix MIBs and TLVs
 - Included as comment for AX-Rev to address.
- Discussion
 - To be discussed as part of AX-Rev. Subsequent resolution will be handled there.
 - In current draft

Maintenance Item – 0011

No recommended priority to traffic class mappings for credit-based shaper in table 8-4

- Submission: Christian Boiger– September 2011
- Issues:
 - Text recommends classes 5 and 6 for SR classes A & B, but should be 3 and 2.
 - Table references are wrong
- Proposed Resolution:
 - Balloted in Q-Cor-2
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0012

Missing MEP/MHF icons in fig 26-2

- Submission: Steve Haddock – September 2011
- Issues:
 - Visio source used for figures has a problem including MEP/MHF icons.
- Proposed Resolution:
 - Balloted in Q-Cor-2
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0013

MRP address for MSRP does not exist

- Submission: Christian Boiger– October 2011
- Issues:
 - MSRP uses Nearest Bridge address, but text indicates there is a specific MRP application in Table 10-1 for this – there is not.
- Proposed Resolution:
 - Balloted in Q-Cor-2
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0014

LLDP TLV error processing

- Submission: Paul Congdon, Pat Thaler – Nov 2011
- Issues:
 - 802.1AB text is not clear whether you discard entire LLDPDUs if an optional TLV is in error or simply discard the TLV.
- Proposed Resolution:
 - Make it clear that you only discard the TLV if the error is in an optional TLV, but the PDU if the error is in the mandatory TLVs
- Discussion
 - New maintenance item 0027 includes this fix and additional clarification.
 - Included in 802.1AB Cor ballot

Maintenance Item – 0015

Clause number issue impacts PICS

- Submission: Craig Gunther – Nov 2011
- Issues:
 - A new clause 35.2.5 was inserted pushing other clauses up in numbering, but several old references in PICS were not adjusted.
- Proposed Resolution:
 - Balloted in Q-Cor-2
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0017

Typos in PICS

- Submission: Craig Gunther – Nov 2011
- Issues:
 - SRP is sometimes transposed to SPR in PICS
- Proposed Resolution:
 - Balloted in Q-Cor-2
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0018

Incorrect figure reference

- Submission: Steve Haddock– Nov 2011
- Issues:
 - Figure reference incorrect
- Proposed Resolution:
 - Change Figure 6-4 to Figure 26-2
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0019

Incorrect Link Aggregation figure for bridges

- Submission: Steve Haddock– Nov 2011
- Issues:
 - Link aggregation diagram is show as a shim between MSAPs, but this doesn't work for bridge architecture
 - Similar issue was addressed in 802.1AC ballot comment.
- Proposed Resolution:
 - Change Figure 6-3 usage of MSAP to SAP.
 - Delete MAC service line
 - Change 802.3 MAC to MAC
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0020

Inconsistent text when NumberOfValues is zero

- Submission: Rich Newpol – Dec 2011
- Issues:
 - In Q-2011, if NumberOfValues is zero then the ThreePackedEvents vector is not included, but BNF appears to imply NumberOfValues must not be zero and vector always included.
- Proposed Resolution:
 - Fix BNF to indicate ThreePackedEvents vector is optional
 - Clearly state what happens when NumberOfValues is zero. In 10.8.2.8
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0021

TC must be configured for ETS to specify bandwidth

- Submission: Anoop Ghanwani – Jan 2012
- Issues:
 - Qaz does not make it clear that you can only configure bandwidth when the TC is configured for ETS.
 - Invalid TLVs should be discarded and stated in D2.9
- Proposed Resolution:
 - Indicated that the TC table must have values of 0 if the TC is not configured for ETS.
- Discussion
 - Since the Q-Cor-2 is by necessity having to address items that are amendments to Q-Rev, it is conceivable that we can incorporate a small change to address this item. Anoop has proposed the following text to the end of Clause D.2.9.7

NOTE--While it is intended that only TCs configured for ETS will have a bandwidth value associated with them, it is possible, during configuration changes, to have situations where a TC is not configured for ETS but has a non-zero TCBandwidth percentage. In this case, the sum of all the TCBandwidth percentages must still be 100, but the TC bandwidth percentages of the non-ETS TCs would effectively be unused bandwidth and reallocated to the ETS TCs.

- Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0022

MSTP MIB issues

- Submission: Ben Mack-Crane – Jan 2012
- Issues:
 - MSTP MIB is out of sync with revision of clause 13 of 802.1Q-2011
 - enableBPDUTx default is not consistent with ieee8021MstpCistPortEnableBPDURx in 23.5.10 and 23.5.11
- Proposed Resolution:
 - Change DEFVAL to true for the objects. See attached MIB.
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0024

Typos in 6.1.4 and 6.1.6

- Submission: John Messenger – Jan 2012
- Issues:
 - Space inserted in OperPointToPointMAC in 6.1.4
 - Identification miss spelled in 6.1.6
- Proposed Resolution:
 - Fix
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0025

Table for learned B-MAC addresses in PIP

- Submission: Maarten Vissers – Feb 2012
- Issues:
 - Use of the enableConnetionIdentifier parameter implies that the PIP must hold a table of addresses referenced by the connection_identifier, but no such table is described anywhere in the text.
- Proposed Resolution:
 - Specify in 6.10 that the PIP contains a table and provide specifics detailed in maintenance request
 - Specify in 6.10.1 that a learning process stores the values
 - Specify in 6.10.2 that the table is used to find the B-DA value
- Discussion
 - How the connection_identifier value is used to obtain the B-MAC address is really implementation specific. There was a specific comment during the development of this to make sure the connection_identifier was an indirect reference to the actual MAC address and not explicit. This also allows the connection_identifier to contain other values for other port types (e.g. Port Extension). There was and is a strong desire to NOT have a learning/ageing function for this capability, so no additional table is required. Given this, we really don't have a problem here, but a clarification could be helpful and two proposals are on the table; Make the connection_identifier explicitly a MAC address for CBPs or insert a note that indicates this is implementation specific and in the case of a 1:1 mapping does not require any learning/ageing and can be stored in the existing FDB.
 - Steve Haddock proposes a note option -- seems safest. Consider the following for Q-Cor-2
 - Option2: insert a note to the effect that, "the connection_identifier is a 1:1 mapping to the DA MAC and does not require learning or ageing"
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0027

End of LLDPDU TLV error handling

- Submission: Paul Congdon – Feb 2012
- Issues:
 - Text is unclear how to handle error cases around the End of LLDPDU TLV. It is a mandatory TLV, but we appear to accept the PDU if it isn't present.
- Proposed Resolution:
 - Two choices: always discard the PDU if the TLV is not present, or update all the places (6.6.1, 9.2.7.7.2) where we describe criteria for discarding the frame.
 - Proposed resolution in maintenance request assumes we try to salvage the PDU whenever possible.
- Discussion
 - Group discussed choices to resolve this. One easy way is to make the TLV optional instead of mandatory. It already is effectively optional since it isn't validated on receipt, though we stress it must be present on transmit. The other option is to clearly document the current situation which is the intent of the proposed resolution in the maintenance item. Agreed to use the existing approach.
 - Included in draft 802.1AB Cor

Maintenance Item – 0029

Missing T-Component creation text and enumeration

- Submission: Ben Mack-Crane – Feb 2012
- Issues:
 - T-Component creation and its enumeration in the MIB were never added.
- Proposed Resolution:
 - Add clause 17.5.2.x to describe T-Component creation
 - Add enumeration in MIB.
- Discussion
 - Propose inclusion to next draft of Q-Cor-2. There is, however, a ripple effect as there is no text on how to create a T-Component port as well. Ben will propose some text for Tony to review at the plenary and to incorporate into the next draft.
 - The T-Component create is actually more complex and needs more study. We could create the MIB enumeration which is most important. Leave the part in 17.5.2.x about port creation undone, but add the simple sub-clause that mentions component creation and there is nothing specific needed (e.g. use B-component as an example).
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0031

Typo on MA_UNITDATA.x in 6.1.1

- Submission: Panagiotis Saltsidis – March 2012
- Issues:
 - M_UNITDATA.x should be MA_UNITDATA.x in 6.1.1. Two occurrences of this in the diagram.
- Proposed Resolution:
 - Fix it
- Discussion
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0032

System Capabilities TLV

- Submission: Eric Multanen– March 2012
- Issues:
 - In figure 8-10, the TLV information string length field indicates that it should contain the value '4', but the actual length of the TLV information string, as shown in the figure, is '5'.
- Proposed Resolution:
 - The length should be 4. Revise figure 8-10 by removing the chassis ID subtype field.
- Latest status:
 - Included in 802.1AB Cor1

Maintenance Item – 0033

Inconsistency of text for updtDigest()

- Submission: Mick Seaman – April 2012
- Issues:
 - In .1aq 13.29.32 updtDigest() the agreeND variable is stated to be the value of the Discarded Agreement Number (DAN), *transmitted *in SPT BPDU and SPB Hello PDUs. Elsewhere in .1aq agreeND is a *received* DAN value.
 - Additionally in 13.29.32 updtDigest(), the agreedND variable is used as the *received* DAN, but is stated to be the *transmitted* DAN value in 13.27.12 and in 13.29.28 txRstp()
- Proposed Resolution:
 - In clause 13.29.32 updtDigest():
 - replace "Updates agreeDigest, agreeN, and agreedND" with "Updates agreeDigest and agreeN".
 - Replace all five occurrences of "agreeND" with "agreedND",
 - Replace all four occurrences of "agreedND" with "agreeND"
 - Agree to include in Q-Cor-2
- Latest status:
 - Q-Cor-2-d2-0 approved by SASB

Maintenance Item – 0034

System Capabilities TLV (same as 0032)

- Submission: U Arunkumar– June 2012
- Issues:
 - In Figure 8-10, the TLV Information String length is shown as 4 but the TLV Information String shows 3 fields and a total of 5 octets.
 - the chassis ID subtype field has crept into this diagram during the revision - this field does not appear in the 2005
- Proposed Resolution:
 - The length should be 4. Revise figure 8-10 by removing the chassis ID subtype field.
 - Add clarification to clause 6.7 on usage
- Latest status:
 - Included in to 802.1AB Cor1

Maintenance Item – 0036

MEPactive

- Submission: Weiyang Cheng – June 2012
- Issues:
 - Clause 20.9.1 (MEPactive): "Administrative state of the MEP A Boolean indicating the administrative state of the MEP. True indicates that the MEP is to function normally, and false that it is to cease functioning"
 - Administrative or operational state
- Proposed Resolution:
 - Reword to make administrative clear
- Discussion:
 - MEPactive regulates all of the MEP state machines in parallel with BEGIN. There is not much opportunity for foul ups that would make an operational and an administrative pair for MEP active that would not be visible from the ieee8021CfmConfigErrorListTable.
 - The MEPactive variable controls all of the MEP state machines by holding them in the reset condition. The current description is adequate to convey the meaning of the variable. It does not appear that the suggested text has a significantly different meaning than the current text of 20.9.1 or the dot1agCfmMepActive MIB object.
 - Add a note to end of 20.9.1 explaining why an Operational state is not needed.
 - NOTE--MEPactive controls the BEGIN input to the MEP state machines. Therefore, for any MEP that has been completely configured, it is as much an indication of the operative state of the MEP as a control over that state.
 - Include in Q-REV

Maintenance Item – 0038

user priority

- Submission: Ben Mack-Crane – July 2012
- Issues:
 - In reviewing 802.1AC some editorial issues were noted in text that is also included in 802.1Q-2011. The same editorial corrections should be made in 802.1Q unless the affected text is removed in favor of maintaining a single copy in 802.1AC.
- Proposed Resolution:
 - 6.1.2 Replace ", but include all of" with "(but include all of)".
 - 6.7.1 Replace "Default User Priority" with "Default Priority".
 - 6.7.2 Replace "user_priority" with "priority" (two occurrences).
 - 6.7.2 Replace "Default_User_Priority" with "Default Priority".
 - 6.7.4.1.1 Replace "user_priority" with "priority".
 - 6.7.4.2.1 Replace "user_priority" with "priority".
 - There are additional instances of “user priority” that could be replaced with “priority” in clauses 12.13.3.3.3 b), 12.13.3.4.2 d), and C.3.3.1 and Figure G-1.
- Discussion
 - The intent is that 6.1 and 6.7 will be removed from 802.1Q as part of the alignment with 802.1AC, so only the additional instances will need to be changed to “user priority”
 - Target for 802.1Q revision

Maintenance Item – 0041

SRP title

- Submission: Tony Jeffree – August 2012
- Issues:
 - Clause 35 is titled "Stream Registration Protocol"
- Proposed Resolution:
 - Change title to "Stream Reservation Protocol"
- Discussion
 - Agreed.
 - Target for 802.1Q-REV

Maintenance Item – 0042

MRP Attribute Propagation

- Submission: Bob Noseworthy – August 2012
- Issues:
 - Propagation of an attribute through the network follows the active topology of the Spanning Tree Instance associated with that attribute.
 - The wording of 10.3, if strictly followed, does not necessarily achieve this goal. One result is that it could allow for declarations to be propagated from blocked ports.
- Proposed Resolution:
 - " For a given MRP application and MAP Context (10.3.1), and for the set of Ports that are in a Forwarding state as defined by that MAP Context: "
becomes
 - " For a given MRP application and MAP Context (10.3.1), and for the set of Ports that are in a Forwarding state as defined by that MAP Context, and for the set of attributes associated with that MAP Context: "
- Discussion
 - Mick Seaman will review the MRP set and report back on recommendation

Maintenance Item – 0043

MRPDU transmission actions

- Submission: Bob Noseworthy – August 2012
- Issues:
 - 10.6.7.1 conflicts with 10.3.e
- Proposed Resolution:
 - Change to
 - " 10.7.6.1 MRPDU transmission actions Unless stated otherwise in these action definitions, MRPDU transmission as a result of the operation of a state machine in a Bridge occurs only through the Port associated with that state machine.
- Discussion: reject
 - There appears to be no conflict given the introduction “unless stated otherwise” and the suggested conflict falls into this case. The action definitions are part of the state machine.
 - Mick Seaman will review the MRP set and report back on recommendation

Maintenance Item – 0044

Applicant State Machine

- Submission: Bob Noseworthy – August 2012
- Issues:
 - it is unclear when to consider the Applicant and Registrar state machines as ‘discarded’.
- Proposed Resolution:
 - Insert a new note 9 before MRP design notes to Table 10-3 (applied to the intersections of STATE columns VO, AO, QO & EVENTS “rLv! || rLA! || Re-declare!”): “This state transition is ignored if responding to rLA! and the Registrar state machine associated with this attribute value is MT.”
 - Insert a new note 10 before MRP design notes to Table 10-3 (applied to the intersections of STATE columns VO, AO, QO and EVENTS txLA! and txLAF!): “This state transition is ignored if the Registrar state machine associated with this attribute value is MT.”
- Discussion
 - Mick Seaman will review the MRP set and report back on recommendation

Maintenance Item – 0045

Flush!

- Submission: Bob Noseworthy – August 2012
- Issues:
 - The current behavior of the Registrar state table (Table 10-4) results in the permanent registration of the associated attribute, as the MRP application is never made aware of the Registrar's state change.
- Proposed Resolution:
 - Regarding Table 10-4, state "IN", event "Flush!":
 - Replace "MT" with " Lv MT "
- Discussion
 - This was discussed in 802.1ak D7.0 PDIS comment 45 (Nov 2006)
 - REJECT: As this is an efficiency issue this kind of change needs more detailed study.
 - Panos suggest that he believes the “Lv” may have been deleted by accident
 - Mick Seaman will review the MRP set and report back on recommendation

Maintenance Item – 0047

Registrar Administrative Controls

- Submission: Bob Noseworthy – August 2012
- Issues:
 - The propagation of statically set VLANs is implied, but no mechanism is defined to actually propagate such information.
 - Specifically, simply being in the "IN" state of the Registrar state machine does not trigger an indication to the MVRP Application.
- Proposed Resolution:
 - Change last paragraph of 10.7.2 to:
 - If the value of this parameter is 'Registration Fixed', In and JoinIn messages are sent. If the value of this parameter is 'Registration Forbidden', Empty or JoinEmpty messages are sent.
- Discussion
 - Mick Seaman will review the MRP set and report back on recommendation

Maintenance Item – 0048

Use of "new" declaration capability

- Submission: Bob Noseworthy – August 2012
- Issues:
 - 11.2.5 should more clearly state what information will be removed when a new indication is received.
- Proposed Resolution:
 - Clarify that only the "Dynamic Filtering Entry" is affected.
 - Change the last paragraph of 11.2.5 to
 - When any MVRP declaration marked as “new” is received on a given Port, either as a result of receiving an MVRPDU from the attached LAN (MAD_Join.indication), or as a result of receiving a request from MAP or the MVRP Application (MAD_Join.request), any Dynamic Filtering Entries in the filtering database for that Port and for the VID corresponding to the attribute value in the MAD_Join primitive are removed.
- Discussion
 - Mick Seaman will review the MRP set and report back on recommendation

Maintenance Item – 0049

MAP context for MSRP

- Submission: Bob Noseworthy – August 2012
- Issues:
 - This is unclear as no part of 35.2.4 references spanning trees.
- Proposed Resolution:
 - Change: "The Declarations are filtered according to the state of the spanning tree, as described in 35.2.4."
 - to
 - "The Declarations are filtered according to the requirements of 35.2.4 and its subclauses and according to the state of the spanning tree per 35.1.3.1."
- Discussion
 - Agreed.
 - Target for 802.1Q-REV

Maintenance Item – 0050

MSRP Requirements

- Submission: Bob Noseworthy – August 2012
- Issues:
 - Clause 5.4.4 requires MSRP to make use of the MAP operation specified in 10.3.1; however, clause 10.3 points to 35.2.4, which simply indicates its different from 10.3
 - 5.4.4, 10.3, and 35.2.4 must be made consistent.
 - Currently, there is no MAP behavior defined for how new or non-new attributes are propagated or what to do when tcDetected occurs.
- Proposed Resolution:
 - Remove the conflict between 5.4.4 and 10.3/35.2.4.
- Discussion
 - **Accept the Proposed Resolution in Principle, but use an entirely different approach:**
 - Clause 10.3, page 157
 - The MRP Attribute Propagation (MAP) function enables propagation of attributes registered on Bridge Ports across the network to other participants. Each MRP application specifies the operation of the MAP function. This subclause specifies the operation of the MAP function for the MMRP application, the MVRP application (11.2.1) and the MSRP application (35.2). In addition, clause 35.2.4 specifies additional MSRP attribute processing rules that modify the MAP function defined below.
 - Clause 35.2.4, page 1129
 - This clause describes
 - » Rules for combining and propagating Listener attributes toward the associated Talker,
 - » How MSRP adjusts the Talker and Listener attributes before propagating them.
 - Unless stated otherwise, Talker and Listener attributes are propagated as described in 10.3.
 - In principle, the MAP performs MSRP Attribute Propagation when any of the following conditions occur:
 - Change bar version in minutes (<http://www.ieee802.org/1/files/public/maint/2012-11-maintenance.pdf>)
 - Target for 802.1Q-REV

Maintenance Item – 0051

Failure Information

- Submission: Bob Noseworthy – August 2012
- Issues:
 - No information is conveyed identifying the Bridge Port.
- Proposed Resolution:
 - strike "and Bridge Port" from 35.2.2.8.7
- Discussion
 - Agreed.
 - Target for 802.1Q-REV

Maintenance Item – 0052

streamAge

- Submission: Bob Noseworthy – August 2012
- Issues:
 - The goal -- Stream age starts when the stream starts forwarding, not when the entry is first made to the DRE (Dynamic Reservations Entries)
- Proposed Resolution:
 - 35.2.1.4(c) proposed language (below)
 - streamAge: A per-stream 32-bit unsigned value used to represent the time, in seconds, since the control element for the associated port most recently became forwarding in the Dynamic Reservation Entry (8.8.7) corresponding to the stream's destination_address. This value is used when determining which streams have been configured the longest. Streams with a numerically larger streamAge are considered to be configured earlier than other streams, and therefore carry a higher implicit importance."
- Discussion
 - **Insert “per-port” back into the Proposed Resolution:**
 - c) **streamAge:** A per-port per-stream 32-bit unsigned value used to represent the time, in seconds, since the control element for the associated port most recently became forwarding in the Dynamic Reservations Entries (8.8.7) corresponding to the stream's destination_address. This value is used when determining which streams have been configured the longest. Streams with a numerically larger *streamAge* are considered to be configured earlier than other streams, and therefore carry a higher implicit importance.
 - Target for 802.1Q-REV

Maintenance Item – 0053

streamAge MIB

- Submission: Bob Noseworthy – August 2012
- Issues:
 - The first sentence of the DESCRIPTION of ieee8021SrpReservationStreamAge is sufficient to allow for Endstations (Talkers or Listeners) or Bridges to set the value however the implementation determines endstation stream age, and via 35.2.1.4c for Bridges.
- Proposed Resolution:
 - Replace DESCRIPTION of with (i.e, delete last two sentences):
 - "The number of seconds since the reservation was established on this port."
- Discussion
 - **Accept the Proposed Resolution as-is:**
 - **Clause 17.7.14, page 841**
 - "The number of seconds since the reservation was established on this port."
 - Target for 802.1Qrev

Maintenance Item – 0054

MAP context for MSRP

- Submission: Bob Noseworthy – August 2012
- Issues:
 - No statement is made regarding whether MSRPDUs are tagged in MST environments.
- Proposed Resolution:
 - In 35.2.4, replace:
 - “All MSRPDUs sent and received by MSRP Participants in SST Bridges are transmitted as untagged frames.”
 - with:
 - “All MSRPDUs sent and received by MSRP Participants in SST or MST Bridges are transmitted as untagged frames.”
- Discussion
 - **Accept the Proposed Resolution in Principle, but use this wording:**
 - Clause 35.2.4.5, page 1133
 - All MSRPDUs are transmitted as untagged frames.
 - Target for 802.1Qrev

Maintenance Item – 0055

MSRP Attribute propagation

- Submission: Bob Noseworthy – August 2012
- Issues:
 - MSRP does not define any further action to take upon receipt of 'new'.
 - It is desirable to explicitly state any action desired, or none if no action is desired (which is presumed in this case).
- Proposed Resolution:
 - Add a subclause after the current 35.2.6 and before 35.2.7 similar to 10.12.3 defined as:
 - 35.2.6 Use of "new" declaration capability
 - MSRP does not make use of the 'new' declaration capability.
- Discussion
 - Agreed in Principle, see resolution to item 0050
 - Target for 802.1Qrev

Maintenance Item – 0056

MSRP MAP

- Submission: Bob Noseworthy – August 2012
- Issues:
 - MSRP MAP functionality is currently not clearly defined.
- Proposed Resolution:
 - Replace :
 - "a) A MAD_Join.indication adds a new attribute to MAD (with the new parameter, 10.2, set to TRUE);"
 - with:
 - a) A MAD_Join.indication adds a new attribute to MAD;"
 - b) A MAD_Join.indication is received with the 'new' parameter, 10.2, set to TRUE;"
- Discussion
 - Agreed in Principle, see resolution to item 0050
 - Target for 802.1Qrev

Maintenance Item – 0057

MRP Attribute propagation

- Submission: Bob Noseworthy – August 2012
- Issues:
 - The existing text is unclear as to which "Port" is referenced in 10.3.a "If the value of tcDetected for the Port..." as it could refer to either:
 - "received by MAP from a given Port" (the ingress Port)
 - "each other Port" (egress Ports)
- Proposed Resolution:
 - Change to
 - "If the value of tcDetected for the given Port..."
- Discussion
 - This is editorial, but provisionally agree to make the change.
 - Mick Seaman will review the MRP set and report back on recommendation

NEW MAINTENANCE ITEMS

Maintenance Item – 0058

Request 58

- Submission: Paul Woods – October 2012
- Issues:
 - 6.3.3.8: offsetScaledLogVariance is shown as UInteger16, but does not match what is shown in Table 14-1, where it is shown as Integer16
- Discussion:
 - It should be UInteger16; tables 14-1 and 14-3 must be changed. In addition, the corresponding MIB variables have datatype Integer32 (pp. 186 and 196). It is not clear (to the main editor) if this is because there are no Integer16 or UInteger16 datatypes for MIBs. In addition, in the description field for the MIB variable on p.186, the default value is written as 410016. The '16' would be a subscript, to indicate base 16. It is realized that that subscripts are not possible in the MIB code; should this be indicated some other way (e.g., 4100 (hex) or 0x4100 -- Question for the clause 15 clause editor).
 - Editor will check if a change is needed for the MIB
 - Accept and incorporate in P802.1AS-Cor-1

Maintenance Item – 0059

Request 59

- Submission: Paul Woods – October 2012
- Issues:
 - 10.2.2.2.1: Last sentence of the first paragraph says SiteSync computes the rate ratio, but I think that it's done in PortSyncSyncReceive.
- Proposed Resolution:
- Discussion:
 - Agree; should say 'PortSyncSyncReceive state machine'.
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0060

Request 60

- Submission: Paul Woods – October 2012
- Issues:
 - 10.2.4.6: There are inconsistencies between this section and 14.6.10 and Table 14-6. If the entries in 14.6.10 and Table 14-6 were named `scaledNeighborRaitRatio` it would match the description and data type
- Proposed Resolution:
- Discussion:
 - It is agreed there is confusion because the managed object and internal variable have the same name, while the former is a scaled version of the latter. Should we change the name of the managed object to `'scaledNeighborRateRatio'`? Note that we would then have to change the name of the corresponding MIB object.
 - Reject

Maintenance Item – 0061

Request 61

- Submission: Paul Woods – October 2012
- Issues:
 - 10.2.6.1.1: The name rcvdPSSync is used in 10.2.11.1.1 and 10.2.12.1.1 for different variables, which is confusing.
- Discussion:
 - It is true that fundamentally local variables in different functions or state machines can have the same name; however, it would be helpful to the user if the names of different variables were different. For example, this would facilitate searching for all instances of a variable.
 - If we do rename variables so that variables in different functions or state machines have different names, how should we pick the new names (e.g., append the numbers 1, 2, ... to each name that is a different variable?). Also, should this change go in the corrigendum or in 802.1ASbt (since it actually is not fixing something that is incorrect; rather, it is improving the document)?
 - Technical review – is this appropriate for .1ASbt?

Maintenance Item – 0062

Request 62

- Submission: Paul Woods – October 2012
- Issues:
 - Figure 10-11 and 10.3.11.2.1 a): Use of msgPriority and msgStepsRemoved where the actual names are messagePriority and messageStepsRemoved, respectively.
- Proposed Resolution:
- Discussion:
 - Agree. Figure 10-11 and subclause 10.3.11.2.1 should be changed ('msg' changed to 'message').
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0063

Request 63

- Submission: Paul Woods – October 2012
- Issues:
 - 10.3.5: This part is confusing, especially when trying to figure out what applies for a simple end-point device.
- Proposed Resolution:
- Discussion:
 - Note that 10.3.5 (and the BMCA formalism here) follows the corresponding RSTP sections and formalism in 802.1Q-2011 and 802.1D-2004 (i.e., 17.5 and 17.6 of 802.1D-2004; 13.8 and 13.9 of 802.1Q-2011).
 - Reject

Maintenance Item – 0064

Request 64

- Submission: Paul Woods – October 2012
- Issues:
 - Figure 10-13: In the entry condition to INFERIOR_MASTER_OR_OTHER_PORT the reference to InferiorDesignatedInfo should be InferiorMasterInfo.
- Proposed Resolution:
- Discussion:
 - Agreed (the 'Designated' is RSTP terminology; this was a copy and paste error)
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0065

Request 65

- Submission: Paul Woods – October 2012
- Issues:
 - Figure 10-13: In the UPDATE state, it seems that "reselect = TRUE" is missing.
- Discussion:
 - Note that a similar 'reselect = TRUE' is not present in the corresponding state in Figure 13-20/802.1Q-2011 or Figure 17-18/802.1D-2004.
 - The commenter has not explained why 'reselect = TRUE' should be added. We believe the state machine is correct as is.
 - Reject

Maintenance Item – 0066

Request 66

- Submission: Paul Woods – October 2012
- Issues:
 - Figure 10-13: State DISABLED sets announceReceiptTimeoutTime to currentTime. This ensures that 14.7.10 announceReceiptTimeoutCount will increment when AGED is entered from DISABLED. Should there be a qualification on the counter to only count when entering from CURRENT? Or maybe DISABLED should set announceReceiptTimeoutTime to currentTime plus announceReceiptTimeoutInterval?
- Discussion:
 - Agree; It seems we should not increment the counter when entering the AGED state from DISABLED, as there has not been an Announce receipt timeout in this case. Should have the qualification on the counter (the first suggestion).
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0067

Request 67

- Submission: Paul Woods – October 2012
- Issues:
 - 10.3.12.1.4: the description of `updtRolesTree()` is confusing---needs some diagrams
- Proposed Resolution:
- Discussion:
 - There are no such diagrams in 802.1D-2004 or 802.1Q-2011.
 - Reject

Maintenance Item – 0068

Request 68

- Submission: Paul Woods – October 2012
- Issues:
 - Table 8-1: octet[1] is in wrong column
- Proposed Resolution:
- Discussion:
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0069

Request 69

- Submission: Paul Woods – October 2012
- Issues:
 - 10.3.12.1.4 d): only makes sense if components three and four are swapped
- Discussion:
 - This is already incorporated in P802.1AS-Cor-1

Maintenance Item – 0070

Request 70

- Submission: Paul Woods – October 2012
- Issues:
 - 10.3.12.1.4 i): Typo in the word clocklentity
- Proposed Resolution:
 - Should be clockIdentity
- Discussion:
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0071

Request 71

- Submission: Paul Woods – October 2012
- Issues:
 - 10.2.6.2.1: rcvdPSSyncIndPtr is a typo;
- Proposed Resolution:
 - Should be rcvdPSSyncPtr.
- Discussion:
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0072

Request 72

- Submission: Paul Woods – October 2012
- Issues:
 - 11.1.3: Typo in page 104, line 2, the i on rateRatio_i should be subscripted.
- Discussion:
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0073

Request 73

- Submission: Paul Woods – October 2012
- Issues:
 - 11.1.3: Typo in page 102, paragraph 2, line 3, "...send a Sync message..."
Proposed Resolution:
 - “send” should be “sends”
- Discussion:
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0074

Request 74

- Submission: Paul Woods – October 2012
- Issues:
 - 11.2.13.2.1 i): Follow Up message TLV does not have lastGmFreqChange element. The description is confusing. It's clarified a little in 11.4.4.3.9.
- Proposed Resolution:
- Discussion:
 - Agree. It should say "lastGmFreqChange is set equal to the scaledLastGmFreqChange of the most recently received Follow_Up message, multiplied by 2^{41} ."
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0075

Request 75

- Submission: Paul Woods – October 2012
- Issues:
 - The variable name `rcvdMDTimestampReceive` appears in 11.2.14.1.3, 11.2.15.1.7, and 11.2.16.1.2 but each instance has a different meaning. Should be globals with unique names to allow setting from hardware layer.
- Discussion:
 - Initial response: Disagree. The variables in the state machines here are local, and therefore can have the same names. This does not dictate an implementation; an implementation can use globals if desired.
 - However, regardless of whether the variables are local or global, using different names might be more helpful to the user; see item 0061.
 - Reject; no change is needed.

Maintenance Item – 0076

Request 76

- Submission: Paul Woods – October 2012
- Issues:
 - 11.2.15.2.3 b) "...whose date type is...", date should be data
- Proposed Resolution:
- Discussion:
 - Agree.
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0077

Request 77

- Submission: Paul Woods – October 2012
- Issues:
 - Figure 11-6: In state WAITING_FOR_FOLLOW_UP, the equation for `upstreamSyncInterval` is missing the 10^9 factor.
- Proposed Resolution:
- Discussion:
 - Agree; this will be added to the state machine.
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0078

Request 78

- Submission: Paul Woods – October 2012
- Issues:
 - Under 11.2.15.3 in NOTE and in Figure 11-8, state INITIAL_SEND_PDELAY_REQ, the label pdelayRateRatio seems to be called neighborRateRatio elsewhere in the document (such as in WAITING_FOR_PDELAY_INTERVAL_TIMER in the same diagram).
- Proposed Resolution:
- Discussion:
 - Agree; 'pdelayRateRatio' should be 'neighborRateRatio'.
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0079

Request 79

- Submission: Paul Woods – October 2012
- Issues:
 - Figure 11-8: In MDPdelayReq state machine, state RESET, it seems to need to clear rcvdPdelayResp because otherwise the check performed in state WAITING_FOR_PDELAY_RESP could occur repeatedly on the old (bad) message.
- Proposed Resolution:
- Discussion:
 - Agree
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0080

Request 80

- Submission: Paul Woods – October 2012
- Issues:
 - 11.4.2.3 "flags" should not be capitalized.
- Proposed Resolution:
- Discussion:
 - Agree; also should be capitalized in 10.5.2.2.6.
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0081

Request 81

- Submission: Paul Woods – October 2012
- Issues:
 - Table 14-6: Typo in Name column,
- Proposed Resolution:
- Discussion:
 - `syncReceiptTimoutTimeInterval` should be `syncReceiptTimeoutTimeInterval`.
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0082

Request 82

- Submission: Paul Woods – October 2012
- Issues:
 - 14.7.9 and 14.7.10 conditions for counting timeouts are swapped with each other.
- Proposed Resolution:
- Discussion:
 - Agreed
 - Incorporate in P802.1AS-Cor-1

Maintenance Item – 0083

Request 83

- Submission: Paul Woods – October 2012
- Issues:
 - PICS MDFDPP-2 doesn't apply to receiver-only endpoint system.
- Discussion:
 - Note that 802.1AS does not currently define “listener only” systems. Instead, it indicates that a time-aware system may or may not be grandmaster-capable. But, a time-aware system that is not grandmaster capable may have more than one port.
 - It appears that, when the commenter talks about a "listener-only" system, the commenter is referring to a time-aware system that is not grandmaster-capable and has only one port. It is true that for this case some of the requirements are not applicable. However, 802.1AS does not specifically consider this special case. IEEE 1588 does talk about "slave-only" clocks, and in 1588 these have just one port, but that is because 1588 has not introduced the notion of a boundary clock that is not GM-capable but has many ports. (The fact that 802.1AS has introduced such a device is ok because 802.1AS uses an alternate BMCA, not the 1588 default BMCA.) The question here is whether 802.1AS should specifically distinguish the requirements for single-port devices that are not grandmaster-capable.
 - In any case, this could certainly be addressed, though it belongs in 802.1ASbt (i.e., the amendment) rather than the corrigendum. This is not a bug fix.
 - Since the other AVB standards do talk about “listener-only” systems, it could be helpful, and more friendly, to the user if 802.1AS also described this case
 - Defer, Technical review of possible feature addition to P802.1ASbt

Maintenance Item – 0084

Request 84

- Submission: Paul Woods – October 2012
- Issues:
 - General: There needs to be more clarity about what parts can be omitted for a one-port, listener-only endpoint. For instance, in Figure 10-2, I believe that PortSyncSyncSend and MDSyncSend are not needed in that case (although PortSyncSyncReceive then needs to handle an action that PortSyncSyncSend performs).
- Proposed Resolution:
- Discussion:
 - This is related to item 0083.
 - Defer, Technical review of possible feature addition to P802.1ASbt

Maintenance Item – 0085

Request 85

- Submission: Paul Woods – October 2012
- Issues:
 - General: There are no priorities assigned to paths leading out of states.
 - Are all paths mutually exclusive?
- Proposed Resolution:
- Discussion:
 - The exit paths are intended to be mutually exclusive. Note that 802.1 state machines seem to not use explicit priorities; instead, Annex D (state machine notation; taken from other 802.1 standards) describes how it is determined which exit path is taken when all the procedures within a state are completed.
 - The different paths are intended to be mutually exclusive; no change is needed.
 - Reject