

Maintenance Task Group Meetings

March 19, 2013

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March 19 Agenda

- Patents
- Status
- AB-Cor1 Ballot Resolution - Tony
- Existing Maintenance items
 - TSN items - 61
 - EVB items (discuss in DCB TF)
old: 91, 92, 93 new: 101, 102, 105, 106, 107
 - LLDP VID : 88, 89, 90
- New Maintenance items
 - MSTP MIB: 96, 97, 98, 99, 100
 - EVB & TEIPS MIB: 104
 - M_UNITDATA: 103
- ISO/IEC JTC1 SC6 submissions

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
- 12 new items (.1Qbg & .1Q) received since January
- AB-Cor Sponsor Group Ballot concluded
- AS-Cor Sponsor Group Ballot concluded

| <u>Detailed Totals</u> | <u>Summary Totals</u> |
|------------------------|---------------------------------|
| <u>Detailed Totals</u> | <u>Summary Totals</u> |
| A = 0 | Ready for ballot = 24 |
| B = 24 | Balloting = 24 |
| CB = 1 | Approved = 0 |
| CE = 0 | Awaiting clarification = 1 |
| E = 0 | Errata = 0 |
| F = 0 | To be categorised = 9 |
| I = 0 | Review by Technical experts = 6 |
| J = 14 | Withdrawn = 0 |
| P = 18 | Rejected = 14 |
| R = 9 | Published = 18 |
| S = 0 | |
| T = 6 | Total = 96 |
| V = 24 | |
| W = 0 | |
| Errors = 0 | |
| Total = 96 | 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.

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: Ready for Ballot
 - 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
- Discussion
 - In current draft of AX-Rev. Subsequent resolution will be handled there.

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 – 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 – 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 – 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”
 - Include in 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.
 - Include in 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
 - The proposed text says exactly the same thing as the existing text (how could we possibly discussing attributes for another context, doesn't make sense). However the change is clearly harmless and acceptable.
 - Include in 802.1Q-REV

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:
 - Agree. The offending (clearly wrong) text about transmitting only if the Port was in a Forwarding state was the result of incorrectly accepting a ballot comment at some stage in the process. It is very clear that if the MAP Context no longer provides connectivity between points A and B and an attribute registration was previously being forwarded from A to B, then the registration has to be explicitly withdrawn by B sending a Leave (or some equivalent action).
 - Include in 802.1Q-REV

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 notes that he believes the “Lv” was deleted by accident
 - Mick Seaman proposes to accept
 - Agree. Include in 802.1Q-REV

Maintenance Item – 0046

Initiating VLAN membership declaration

- Submission: Bob Noseworthy – August 2012
- Issues:
 - The last paragraph of 11.2.3.2.1 describes behavior on receipt of ES_DEREGISTER_VLAN_MEMBER but the last line refers improperly to ES_REGISTER_VLAN_MEMBER
- Proposed Resolution:
 - Change ES_REGISTER_VLAN_MEMBER occurring in last line of 11.2.3.2.1 to ES_DEREGISTER_VLAN_MEMBER.
- Discussion
 - Agree.
 - Include in 802.1Q-REV

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:
 - Alternative proposal is to change last paragraph of 10.7.2 to:
 - When an Attribute value is first set to 'Registration Fixed', a MAD_Join.indication primitive is issued to the MAD Service User, indicating the Attribute instance. When an Attribute value is first set to 'Registration Forbidden', a MAD_Leave.indication primitive is issued to the MAD Service User, indicating the Attribute instance. When an Attribute value is set back to 'Normal Registration', the associated Registrar and Applicant state machines act as though a rLv! (10.7.5.17) occurred.
 - 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
 - Agree. Favour the alternative suggestion because otherwise some considerable attention would have to be addressed to defining "first" in "When ... first" to include cases where BEGIN has been asserted and/or machines reinitialized
 - Include in 802.1Q-REV

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
 - Agree
 - Include in 802.1Q-REV

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.
 - Include in 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>)
 - Include in 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.
 - Include in 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.
 - Include in 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."
 - Include in 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.
 - Include in 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
 - Include in 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
 - Include in 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. Agreed.
 - Include in 802.1Q-REV

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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?).
 - This is actually not fixing something that is incorrect; rather, it is improving the document, so it belongs in .1ASbt
 - The practice in 802.1 is to use unique names even for local variables. As a result, it is recommended to implement this improvement in .1ASbt
- Latest Status: Change Text - Ballot

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.
- 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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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.
- Discussion:
 - Agreed (the 'Designated' is RSTP terminology; this was a copy and paste error)
 - Incorporate in P802.1AS-Cor-1
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

Maintenance Item – 0072

Request 72

- Submission: Paul Woods – October 2012
- Issues:
 - 11.1.3: Typo in page 104, line 2, the i on rateRatioi should be subscripted.
- Discussion:
 - Incorporate in P802.1AS-Cor-1
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

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
- Latest Status: Balloting
 - Included in AS-Cor-1-d2-1

Maintenance Item – 0086

EVB TLV

- Submission: Sung Hyuk Byun – November 2012
- Issues:
 - The explanations of TLV values R(D.2.13.5), RTE(D.2.13.6), RWD(D.2.13.8) and RKA (D.2.13.9) do not clearly specify which value (local or operational value) should be sent by EVB Bridge and EVB station.
 - And, in D.2.13.8, ROL setting for RWD in EVB Bridge is not described clearly. Only the EVB station action on ROL is specified.
 - In D.2.13.9, ROL setting for RKA in EVB station is not clearly described, too. Only the EVB Bridge action on ROL is specified.
 - These could lead many incompatible EVB implementations by different interpretation of the standard.
 - According to the email discussion in 802.1 mailing list after reporting this issue, it is clear that the original intent is using of local value for all R, RTE, RWD and RKA in transmitting EVB TLV.
 - ROLs for RWD and RKA seemed to be introduced to notify peer node which proposed value is used in operation by the sending node, remote or local. Thus it might be more useful if both EVB Bridge and EVB station set OLs for RWD and RKA with the flag indicating which value (remote or local) is used at each sending node.
- Proposed Resolution: 802.1Qbg
 - See PDF document for detailed Proposed Resolution
- Discussion:
 - Agreed. This was already discussed on the mailing list and the resolution is consistent with that discussion.
 - Target for 802.1Q-REV

Maintenance Item – 0087

Definitions for the IEEE8021-CFM MIB module

- Submission: Stephen Haddock – November 2012
- Issues:
 - A liaison received from the MEF called attention to some ambiguity in determining how a LTM transmission is initiated by management. The text in the MIB says it is initiated "in a manner similar to that described for LBM transmission", but LBM transmission is initiated by a writing a non-zero value to the dot1agCfmMepTransmitLbmMessages object, but there is no similar object for LTM.
 - LTM transmission should be initiated by a write to the dot1agCfmMepTransmitLtmFlags object.
- Proposed Resolution:
 - See PDF document for detailed Proposed Resolution
- Discussion:
 - Agreed
 - Target for 802.1Q-REV

Maintenance Item – 0088

IEEE 802.1 Organizationally Specific TLVs

- Submission: Tony Jeffree (Submitted on behalf of David Law) – December 2012
- Issues:
 - In the original specification of the Port and Protocol VLAN ID TLV found in Figure F-2 of IEEE Std 802.1AB-2005, the bits in the 'flag' field are numbered 0 to 7 with bit 0 reserved, the 'supported' bit in bit 1, the 'enabled' bit in bit 2, and bits 3 to 7 are reserved. Looking at Figure D-2 of IEEE Std 802.1Q-2011 the bits in the 'flag' field are now numbered 1 to 8, but the 'supported' bit is still in bit 1, the 'enabled' bit is still in bit 2, and now bits 3 to 8 are reserved. It appears the position of the 'supported' and 'enabled' bits in the octet have changed, which doesn't seem to be correct. The version shown in 802.1Q looks to be the same as the version published in 802.1AB-2009.
 - This seems to have happened as a result of an attempt to align the bit numbering in AB to be consistent with bit numbering usage in 802.1Q; however, there is at least one other instance in 802.1Q-2011 of bit numbering starting at 0 (see Figure D-7).
- Proposed Resolution:
 - Need to discuss what to do about Figure D-2 - the two TLV definitions (AB-2005 vs AB-2009/Q-2011) are clearly different.
 - Ideally, 802.1Q should be fixed so that bit numbering is consistent everywhere.
- Discussion:
 - Technical review completed. The position should not have changed
 - Agree to change back to original spec in 802.1AB-2005
 - Target for 802.1Qrev

Maintenance Item – 0089

IEEE 802.1Q TLV VID length

- Submission: Tony Jeffree (Submitted on behalf of David Law) – December 2012
- Issues:
 - Annex D.2.5 'VID Usage Digest TLV' of IEEE Std 802.1Q-2011 states that 'The value of the VID Usage Digest is obtained by applying the CRC32 function (IEEE Std 802.3-2008,4.2.10) to a VID Usage Table having a fixed length of 128 octets.' and that 'A bit of the VID Usage Table contains the value PBB-TE-USAGE (binary 1) if the corresponding element of the MST Configuration Table (8.9.1) contains the value PBB-TE MSTID (hex FFE) and otherwise contains the value NON-PBB-TE-USAGE (binary 0)'. Subclause 12.12.3 'The MST Configuration Table' of IEEE Std 802.1Q-2011 however states 'The MST Configuration Table is modeled as a fixed table of 4096 elements, as described in 13.7.'. If the MST Configuration Table is modelled as a fixed table of 4096 elements, how can the VID Usage Table, which seems to have to contain one bit for each element of the MST Configuration Table, contain only 128 bytes, which is 1024 bits. Should the VID Usage Table have a fixed length of 512 bytes so that there are 4096 bits to match the number of entries in the MST Configuration Table?
- Proposed Resolution:
 - Clarification seems to be needed.
- Discussion:
 - Technical review complete
 - The point is correct:
 - Clause D.2.5 page 1217
 - In 3rd line from bottom, change 128 to 512.
 - Clause D.2.5.1 page 1218
 - In 2nd line of paragraph, change 128 to 512.
 - Target for .1Qrev

Maintenance Item – 0090

IEEE 802.1AB LLDP TLVs

- Submission: Tony Jeffree (Submitted on behalf of David Law) – December 2012
- Issues:
 - I have a question in relation to the MIB entries that seem to be defined with wrong indexes in IEEE Std 802.1AB-2009. For example, `lldpV2Xdot1RemManVidEntry` describes the management VLAN ID of a specified neighbour. However, `lldpV2RemIndex` is not included by the indexes. The same bug exists on the `lldpV2Xdot1RemVidUsageDigestEntry`.
- Proposed Resolution:
 - Include `lldpV2RemIndex` in the indexes for these two objects.
- Discussion:
 - Agree. Changes required to Annex D of 802.1Q (which was moved from 802.1AB-2009):
 - Clause E.10.3 Table E.5 page 137:
 - Add "`lldpv2Xdot1RemIndex | (Table index)`" as the next-to-last entry under `lldpV2Xdot1RemVidUsageDigestTable`, ahead of `lldpV2Xdot1RemVidUsageDigest`
 - Add "`lldpv2Xdot1RemIndex | (Table index)`" as the next-to-last entry under `lldpV2Xdot1RemManVidTable`, ahead of `lldpV2Xdot1RemManVid`
 - Clause E.10.5 page 157:
 - Add `lldpv2Xdot1RemIndex` as the last INDEX in `lldpV2Xdot1RemVidUsageDigestEntry`.
 - Clause E.10.5 page 158:
 - Add `lldpv2Xdot1RemIndex` as the last INDEX in `lldpV2Xdot1RemManVidEntry`.
 - This requires deprecating the old `lldpV2Xdot1RemVidUsageDigestTable` and `lldpV2Xdot1RemManVidTable` and creating new ones, which of course, is a more extensive change. This note just records what the document should have said.
 - Target for 802.1Qrev

Maintenance Item – 0091

VDP state machine variables and parameters

- Submission: Sung Hyuk Byun– December 2012
- Issues:
 - The toutKeepAlive variable is only used at EVB Bridge, but the original text states that this is used by both station and Bridge.
 - In 41.5.5.9, respWaitDelay is defined as follows:
$$\text{respWaitDelay} = 1.5 \times (2^{\text{urpVdpResourceWaitDelay}} + (2 \times \text{ecpOperMaxTries} + 1) \times 2^{\text{ecpOperAckTimerInit}})$$
and the default value of respWaitDelay is stated as about 11.6s.
 - But, the ecpOperAckTimerInit is the operational value of ackTimerInit (D.2.13.6) which is defined as $10 \times 2^{\text{RTE}}$ microsec, so it cannot be a exponent value. Actually, no system variable is defined for operational RTE.
 - The original intent of the respWaitDelay definition seems to be as follows:
$$\text{respWaitDelay} = 1.5 \times (\text{resourceWaitDelay} + (2 \times \text{ecpOperMaxTries} + 1) \times \text{ecpOperAckTimerInit})$$
 - And, resourceWaitDelay = $10 \times 2^{\text{urpVdpResourceWaitDelay}}$ (D.2.13.8), not $2^{\text{urpVdpResourceWaitDelay}}$
 - The above corrected definition of respWaitDelay yields the default value of 17.4s, not 11.6s in original text.
- Proposed Resolution: 802.1Qbg
 - See PDF document for detailed Proposed Resolution
- Discussion:
 - The proposed solution does not clean up all the loose ends. It is clear that we used units of usec in the MIB for these variables but it should be state machine ticks of 10 usec.
 - Alignment is needed between clause 41, 43, 12, 17, and D.2.
 - The resolution is described in the following slides. Paul Bottorff will provide exact changes.
 - Target for 801.Qrev

Maintenance Item #91 - resolution

| Ref Table | Clause 12 Object | Unit | Clause 17 Object | Unit | State Machine | Unit |
|-----------|------------------------------------|-----------|----------------------------------------------------------------------------|----------|----------------------------|---------|
| 12-17 | evbSysEcpDfltAckTimerInit | Timer Exp | ieee8021BridgeEvbSysEcpAckTimer (?ieee8021BridgeEvbSysEcpDfltAckTimerInit) | U32 usec | | |
| | evbSysVdpDfltRsrcWaitDelay | Timer Exp | ieee8021BridgeEvbSysVdpDfltRsrcWaitDelay | U32 usec | | |
| | evbSysVdpDfltReinitKeepAlive | Timer Exp | ieee8021BridgeEvbSysVdpDfltReinitKeepAlive | U32 usec | | |
| 12-19 | sbpVdpOperRsrcWaitDelay | Timer Exp | ieee8021BridgeEvbSbpVdpOperRsrcWaitDelay | U32 usec | resourceWaitDelay 41.5.5.7 | 10 usec |
| | sbpVdpOperReinitKeepAlive | Timer Exp | ieee8021BridgeEvbSbpVdpOperReinitKeepAlive | U32 usec | toutKeepAlive 41.5.5.13 | 10 usec |
| 12-26 | urpVdpOperRsrcWaitDelay | Timer Exp | ieee8021BridgeEvbURPVdpOperRsrcWaitDelay | U32 usec | respWaitDelay 41.5.5.9 | 10 usec |
| | urpVdpOperReinitKeepAlive | Timer Exp | ieee8021BridgeEvbURPVdpOperReinitKeepAlive | U32 usec | reinitKeepAlive 41.5.5.5 | 10 usec |
| 12-26 | ecpOperAckTimerInit | Timer Exp | ieee8021BridgeEvbEcpOperAckTimerInit | U32 usec | ackTimer 43.3.6.1 | 10 usec |
| | ieee8021BridgeEvbEcpOperMaxRetries | U[0..7] | ieee8021BridgeEvbEcpOperMaxRetries | U32 | maxRetries 43.3.7.3 | 10 usec |

- Units in 41/43, Annex D, CL12, CL17 are different
 - Timer Exp: This is the power of 2 passed in the EVB TLV
 - 10 usec: This is the timer unit used in the state machines (VDP, ECP timer tic)
 - Usec: This is the unit currently specified in the SNMP MIB/Annex D
- Recommend Timer Exp for CL12/CL17 and 10usec for 41/43/AnnexD

Resolutions for #91 clause 17

- First correct clause 17 by changing all the following timer_exp
 - ieee8021BridgeEvbSysEcpAckTimer
 - (should be named ieee8021BridgeEvbSysEcpDfltAckTimerInit)
 - ieee8021BridgeEvbSysVdpDfltRsrcWaitDelay
 - ieee8021BridgeEvbSysVdpDfltReinitKeepAlive
 - ieee8021BridgeEvbSbpVdpOperRsrcWaitDelay
 - ieee8021BridgeEvbSbpVdpOperReinitKeepAlive
 - ieee8021BridgeEvbURPVdpOperRsrcWaitDelay
 - ieee8021BridgeEvbURPVdpOperReinitKeepAlive
 - ieee8021BridgeEvbEcpOperAckTimerInit
 - ieee8021BridgeEvbEcpOperMaxRetries
- Need to deprecate (including tables) and re-name all these (i.e. add Exp suffix).
- SNMP unit unsigned32 (0..31)

Resolution for #91 annex D

- Annex D.2.13.6, D.2.13.8, D.2.13.9 need to be changed to exclude the 10x factor when setting the ECP and VDP timer initialization values to match the VDP and ECP timer units of 10 usec.
- For D.2.13.6 remove the 10x in the equation changing the units to “VDP timer tics”. Also change the last sentence to “...greater of 8 (2.56ms) and local value for RTE is used.”
- For D.2.13.8 remove the 10x in the equation changing the units to “VDP timer tics”.
- For D.2.13.9 remove the 10x in the equation changing the units to “VDP timer tics”.

Resolution for #91 clause 41

- Since VDP timers have a resolution of 10 usec (41.5.4) the variables toutKeepAlive (41.5.5.12) and respWaitDelay (41.5.5.9) should be in units of time tic (10 usec), and the equations should not include the 10x multiplier. Need to add units of “timer tics” to the two equations.
- Replace respWaitDelay equation with
 - $\text{respWaitDelay} = 1.5 \times (\text{resourceWaitDelay} + (2 \times \text{ecpOperMaxTries} + 1) \times \text{ecpOperAckTimerInit}) \text{ tics}$
 - Replace the default value with 17.4 seconds
- Replace toutKeepAlive equation with
 - $\text{toutKeepAlive} = 1.5 \times (\text{reinitKeepAlive} + (2 \times \text{ecpOperMaxTries} + 1) \times \text{ecpOperAckTimerInit}) \text{ tics}$
 - Replace the default value with 17.4 seconds

Maintenance Item – 0092

Bridge VDP State Machine

- Submission: Sung Hyuk Byun – December 2012
- Issues:
 - In Figure 41-8 Bridge VDP state machine, WAIT_STATION_CMD state include following equation : $vsiState = operCmd.Model$; But, there is no definition of $operCmd.Model$ in the standard.
 - $operCmd.Model$ should be a mistyping of $operCmd.TLVtype$
- Proposed Resolution: 802.1Qbg
 - Change the following equation at WAIT_STATION_CMD state of Figure 41.8, Clause 41.5.2 $vsiState = operCmd.Model$ with $vsiState = operCmd.TLVtype$
- Discussion:
 - Agree
 - Target for 802.1Qrev

Maintenance Item – 0093

ECP State Machine Variables

- Submission: Kodirov Nodir and Sung Hyuk Byun – January 2013
- Issues:
 - The R field of EVB TLV is the maxRetries value for ECP state machine (43.3.7.4).
 - Most system variables for R are named with "maxRetries" suffix, but some variables are named with "maxTries", and the ECP Tx state machine (43.3.4) is designed with "maxTries" in mind.
 - For example, in the ECP Tx state machine, ECPDU can be sent maximum 3 times when "maxRetries = 3", although ECPDU should be sent up to 4 times (1 + maxRetries). Also, if "maxRetries = 0" (which is valid value for R) and no ack was received, state transition from "transmitECPDU" fails.
 - So, the ECP Tx state machine should be modified to correctly reflect the meaning of "maxRetries". Additionally, several system variables such as evbSysEcpDfltMaxTries (Table 12-17 and Table 12-18 of 12.26.1), ecpAdminMaxTries (Table 12-18 of 12.26.1) and ecpOperMaxTries (12.27.1, 41.5.5.9, 41.5.5.13, 43.3.7.4) need to be changed with "MaxRetries" concept.
- Proposed Resolution: 802.1Qbg
 - See PDF document for detailed Proposed Resolution
- Discussion:
 - Agree with resolutions 2-5, but do not change state machine as suggested. Instead simply change the following aspects
 - `ackTimer == 0 && (retries < maxRetries)` to `ackTimer == 0 && (retries <= maxRetries)`
 - `ackTimer == 0 && (retries == maxRetries)` to `ackTimer == 0 && (retries > maxRetries)`
 - Paul will provide revised state machine and detailed object changes.
 - Target for 802.1Qrev

Maintenance Item – 0094

Definitions for the IEEE8021-CFM MIB module

- Submission: Andreas Meier – January 2013
- Issues:
 - Dot1agCfmMaintAssocNameType is not SMIv2 compliant
- Proposed Resolution:
 - Replace “ICCformat” with “iccFormat”
- Discussion:
 - Agree.
 - Change the label into:
 - iccFormat(32) ICC-based format as specified in ITU-T Y.1731
 - Note: change the occurrence of the same label in the DESCRIPTION clause of the Dot1agCfmMaintAssocNameType TC and update the REVISION date of the MIB as well.
 - Target for 802.1Q-REV

NEW MAINTENANCE ITEMS

Maintenance Item – 0096

Definitions for the IEEE8021-CFM MIB module

- Submission: Raphael Garti – January 2013
- Issues:
 - ieee8021MstpFidToMstiV2Table (pages 740,741) is indexed by: INDEX { ieee8021MstpFidToMstiV2ComponentId, ieee8021MstpFidToMstV2Fid }. The second object, ieee8021MstpFidToMstV2Fid, does not exist.
- Proposed Resolution:
 - INDEX { ieee8021MstpFidToMstiV2ComponentId, ieee8021MstpFidToMstV2Fid} should be replaced with: INDEX { ieee8021MstpFidToMstiV2ComponentId, ieee8021MstpFidToMstiV2Fid
- Discussion:
 - Agree
 - Target for 802.1Qrev

Maintenance Item – 0097

Definitions for the IEEE8021-MSTP MIB module, State machine timers and Performance parameter management

- Submission: Raphael Garti – January 2013
- Issues:
 - The default TX hold count parameter should be 6 according to 802.1D-2004 (table 17-1) and 802.1Q-2012-Ed (table 13-5), but 3 according to the DEFVAL clause of `ieee8021SpanningTreeRstpTxHoldCount` (page 652 in 802.1Q-2012-Ed).
- Proposed Resolution:
 - Either change the default of Transmit Hold Count to 3 in 802.1D-2004 (table 17-1) and 802.1Q-2012-Ed (table 13-5), or change the DEFVAL clause of `ieee8021SpanningTreeRstpTxHoldCount` to 6.
- Discussion:
 - This was 3 in 802.1w (Table 17-5) and then `dot1dStpTxHoldCount` of RFC 4318, of which `ieee8021SpanningTreeRstpTxHoldCount` is a direct derivation per 802.1Q (Table 17-5). It changed to 6 in 802.1D-2004
 - Change to 6 in MIB and change reference to 802.1Q.
 - Target for 802.1Qrev

Maintenance Item – 0098

Definitions for the IEEE8021-MSTP MIB module

- Submission: Raphael Garti – January 2013
- Issues:
 - The description of most of the MSTP MIB tables contains the phrase “... instance of ieee8021SpanningTreeVersion (from the IEEE8021-SPANNING-TREE-MIB) has a value of mstp(2)”, whereas mstp in that object equals 3, not 2: ieee8021SpanningTreeVersion OBJECT-TYPE SYNTAXINTEGER { stp(0), rstp(2), mstp(3) }
- Proposed Resolution:
 - Replace each table DESCRIPTION clause that contains the phrase “... instance of ieee8021SpanningTreeVersion (from the IEEE8021-SPANNING-TREE-MIB) has a value of mstp(2)”, with: “... instance of ieee8021SpanningTreeVersion (from the IEEE8021-SPANNING-TREE-MIB) has a value of mstp(3)”
- Discussion:
 - Agree
 - Target for 802.1Qrev

Maintenance Item – 0099

Definitions for the IEEE8021-MSTP MIB Module, AdminEdge

- Submission: Raphael Garti – January 2013
- Issues:
 - The default admin edge parameter is recommended to be false to 13.27.1, but true according to the DEFVAL clause of `ieee8021MstpCistPortAdminEdgePort` (page 733)
- Proposed Resolution:
 - Either change the recommendation in 13.27.1 to true, or change the DEFVAL clause of `ieee8021MstpCistPortAdminEdge` to false.
- Discussion:
 - The REFERENCE for this in the MIB is to 802.1D 17.13.1 which provides no guidance on default values. The revised 802.1Q clause 13 is the appropriate reference
 - Accept – change DEFVAL to false and update the reference
 - Target for 802.1Qrev

Maintenance Item – 00100

Definitions for the IEEE8021-MSTP MIB Module

- Submission: Raphael Garti – January 2013
- Issues:
 - In MSTP, all VLANs are assigned to the CIST by default and users may assign VLANs to other MST instances. The `ieee8021MstpFidToMstiV2Table` is read-writable, but it is indexed by filtering database (FID), rather than VLAN.
 - FID to VLAN allocation is done via `ieee8021QBridgeVlanCurrentTable`, which is a (partially) dynamic table. A user cannot configure the VLANs to MAST instance mapping, if the FID to VLAN mapping is created dynamically, or if a VLAN was not assigned an FID yet.
- Proposed Resolution:
 - Change the MAX-ACCESS clause of `ieee8021MstpVids0`, `ieee8021MstpVids1`, `ieee8021MstpVids2`, `ieee8021MstpVids3` (pages 729, 730) to read-create, and use them for VLAN-to-MST mapping, regardless of VLAN-to-FID mappings.
 - A similar solution is to change the MAX-ACCESS clause of `ieee8021MstpVlanV2MstId` to read-write, but this is inconvenient if you have to map a many VLANs, since `ieee8021MstpVlanV2Table` contains one per VLAN
- Discussion:
 - There is a mismatch between clause 8, clause 12 (has more than 8) and clause 17 (differ from 12)
 - We need to at least add a VID-to-FID table to MIB, and deprecate the constraints. But alignment is needed. Panos will provide text changes...
 - Target for 802.1Qrev

Maintenance Item – 0101

Management Protocol

- Submission: Paul Bottorff – January 2013
- Issues:
 - The ieee8021BridgeEvbVSIMgrID16 object defines an octet string object with size 1, with a reference to subclause 41.1.3 ‘VSI Manager ID’. However this subclause states that ‘The value 0 means ... indicating that the Bridge should select a default value. Any other value is interpreted as an IPv6 address, as defined in IETF RFC 4291.’ In addition the ‘VSI Mgr ID’ field in the VSI manager ID TLV is defined as 16 octets. This seems to imply the object size should be 16 bytes
- Proposed Resolution:
 - ieee8021BridgeEvbVSIMgrID size should be 16 octets not 1 octet. Need to deprecate MIB object and define a new object in the same row.
 - Deprecate ieee8021BridgeEvbVSIMgrID and define a new object call ieee8021BridgeEvbVSIMgrID16 with string size 16. Also update the table 17-26 with the new ieee8021BridgeEvbVSIMgrID16.
- Discussion:
 - Agree
 - Target for 802.1Q-rev

Maintenance Item – 0102

CDCP configuration variables

- Submission: Soomyung Pahk – January 2013
- Issues:
 - In clause 42.4.14, RemoteVersion variable is explained as one of CDCP configuration variables, but RemoteVersion variable is not used in CDCP or any other part of EVB standard.
 - By tracking the draft documents of 802.1Qbg, we found that the RemoteVersion variable was introduced in the initial EVB proposal document for CDCP, but not used anymore in the final EVB standard.
- Proposed Resolution:
 - Remove clause 42.4.14 RemoteVersion.
 - And, change the clause number of “42.4.15 schState” to “42.4.14 schState”
- Discussion:
 - Agree
 - Target for 802.1Q-rev

Maintenance Item – 0103

Support of the ISS for attachment to a Provider Bridge Network and Support of the ISS by additional technologies

- Submission: Philippe Klein– January 2013
- Issues:
 - 6.13 – Type: Incorrect primitive name in the sentence: “When Service Access Priority Selection is enabled, the mac_service_data_unit in each M_UNIDATA.request is priority-tagged with an S-VLAN tag header ...” M_UNIDATA must be replaced with M_UNITDATA
 - 6.15 – Type: Incorrect primitive name in the sentence: “The technology is responsible for invoking an M_UNITDATA.indication with appropriate parameters (6.6) for each received frame,...” M_UNIDATA must be replaced with M_UNITDATA
- Proposed Resolution:
 - 6.13 – “When Service Access Priority Selection is enabled, the mac_service_data_unit in each M_UNITDATA. Request is priority-tagged with an S-VLAN tag header...”
 - 6.15 – “The technology is responsible for invoking an M_UNITDATA.indication with appropriate parameters (6.6) for each received frame...”
- Discussion:
 - Agree.
 - Target for 802.1Q-rev

Maintenance Item – 0104

Definitions for the IEEE8021-TEIPS MIB Module

- Submission: Ben Mack-Crane – January 2013
- Issues:
 - 802.1Qbf and 802.1Qbg have used the same MIB number { ieee802dot1mibs 24 }.
- Proposed Resolution:
 - The IEEE8021-TEIPS MIB module should use { ieee802dot1mibs 27 } according to the OID allocation table maintained by the WG chair
- Discussion:
 - This is an unfortunate error. However, there are few, if any, implementations of this MIB module so the change should be limited to this module as suggested
 - Change OID root (e.g., to 27) and rename module name and tables/objects (e.g., include v2 in prefix)
 - Include name of old tables at the beginning of the MIB module indicating they are deprecated with a strong warning that they are not to be used.
 - Change all usages in remainder of clause 17 to new object names
 - Target for 802.1Q-rev

Maintenance Item – 0105

Management Protocol

- Submission: Paul Bottorff – January 2013
- Issues:
 - 'partial (2)', and 'vlanOnly (3)?', however the reference for this object is subclause 41.2.8 'Filter Info format' which states 'The Filter Info formats defined by this standard are shown in Table 41-6.'. Table 41-6 however defines values of 'VID (41.2.9.1) 0x01', 'MAC/VID (41.2.9.2) 0x02', 'GroupID/VID (41.2.9.3) 0x03' and 'GroupID/MAC/VID (41.2.9.4) 0x04' which don't match the object vales.
- Proposed Resolution:
 - The value list should match Table 41-6.
 - Deprecate ieee8021BridgeEvbVSIMvFormat object and add a new object VSIMvFormat4 with values VID(1), MAC-VID(2), GroupID-VID(3), GroupID-MAC-VID(4).
- Discussion:
 - Agree in Principle. Call new object ieee8021BridgeEvbVSIFilterFormat with values VID(1), MAC-VID(2), GroupID-VID(3), GroupID-MAC-VID(4).
 - Target for 802.1Q-rev

Maintenance Item – 0106

Management Protocol

- Submission: Paul Bottorff – January 2013
- Issues:
 - The description for the ieee8021BridgeEvbVDPCounterDiscontinuity object is 'The time (in hundredths of a second) since the last counter discontinuity.' and while I assume it is either associated with, or derived from, ifCounterDiscontinuityTime there appears to be no further definition of this object and there is no reference subclause.
- Proposed Resolution:
 - The discontinuity referred to is ieee8021BridgeEvbVsiDbTable entry creations which can occur at any time since these entries can be created and destroyed dynamically along with the VDP machine instances. The timer which may have a discontinuity is the ieee8021BridgeEvbVSItimeSinceCreate.
 - Some text should be added to the ieee8021BridgeEvbVDPCounterDiscontinuity indicating that it is set when the ieee8021BridgeEvbVSIEntry is created. For instance update "The time (in hundredths of a second) since the last counter discontinuity" with " The time (in hundredths of a second) since the ieee8021BridgeEvbVsiTable row was created."
 - In addition, the ieee8021BridgeEvbCounterDiscontinuity should be included in table 17-26.
- Discussion:
 - Change ieee8021BridgeEvbVDPCounterDiscontinuity DESCRIPTION to
 - The time (in hundredths of a second) since the last counter discontinuity for any of the counters in the row.
 - Target to 802.1Qrev

Maintenance Item – 0107

Management Protocol

- Submission: Paul Bottorff – January 2013
- Issues:
 - Clause 12 specifies object called evbSysEcpDfltAckTimerInit and evbSysEcpDfltMaxTries. however clause 17 references objects by the names ieee8021BridgeEvbSysEcpAckTimer and ieee8021BridgeEvbSysEcpMaxTries in table 17-26 and ieee8021BridgeEvbSysEcpMaxRetries in the MIB text. These names should be aligned and MaxTries should be relaced with MaxRetries.
- Proposed Resolution:
 - Replace evbSysEcpDftlMaxTries in clause 12 and table 12-17 with evbSysEcpDfltMaxRetries.
 - Replace ieee8021BridgeEvbSysEcpAckTimer and ieee8021BridgeEvbSysEcpMaxTries in table 17-26 with ieee8021BridgeEvbSysEcpDfltAckTimerInit and ieee8021BridgeEvbSysEcpDfltMaxRetries.
 - Deprecate ieee8021BridgeEvbSysEcpAckTimer and ieee8021BridgeEvbSysEcpMaxRetries from the SNMP MIB and add new replacement objects called ieee8021BridgeEvbSysEcpDfltAckTimerInit and ieee8021BridgeEvbSysEcpDfltMaxRetries.
- Discussion:
 - Agree with table changes (first is already in #93), but do not accept third proposal (deprecate objects). Instead point add the following note in the DESCRIPTION for these objects:
 - ieee8021BridgeEvbSysEcpAckTimer and ieee8021BridgeEvbSysEcpMaxRetries refer to EvbSysEcpDfltAckTimerInit and EvbSysEcpDfltMaxRetries in Clause 12.
 - Target for 802.1Qrev

ISO/IEC JTC1 SC6 submissions

JTC1 update

- 802.1X, 802.1AE already in process
 - ISO/IEC/IEEE 8802-1X
 - ISO/IEC/IEEE 8802-1AE
- Proposed process for 802.1 receiving their SC6 comments (i.e., through the maintenance process)
 - <https://mentor.ieee.org/802.11/dcn/12/11-12-1454-04-0jtc-proposal-for-sc6-contribution-process.pptx>
- What documents will we send next to JTC1 and in what order?
- Update of the SC6 document status based on the previous point -- slide 28 of
 - <https://mentor.ieee.org/802.11/dcn/13/11-13-0305-01-0jtc-agenda-for-marc-2013-in-orlando.pptx>

Submission order of 802.1 standards to ISO/IEC

- Now
 - 802.1AS (Time synch)
 - 802.1AB (LLDP)
 - 802.1AR (Secure device ID)
 - 802.1BA (AVB systems)
- After revision completes
 - 802 (O&A)
 - 802.1AX (Link Agg)
 - 802.1Q
 - 802.1AC (MAC service)
 - 802.1BR (Port extender)
- Ongoing
 - Revisions, Amendments & Corrigenda
 - Once they reach sponsor ballot
 - Perhaps notice at last WG ballot cycle...

Updated dispositions for various ISO/IEC 8802 standards

| Project | Number | Year | Name | Recommendation |
|----------|---------|------|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 05.01.00 | 8802-1 | 2011 | SPECIFIC LANS Overview | Retain. IEEE 802 will provide a replacement based upon the revision of 802 O&A (anticipated in 2014) |
| 05.01.01 | 8802-1 | - | SPECIFIC LANS Cooperative agreement with IEEE 802 | <u>Cancel</u> project. Delete the draft. |
| 05.02.00 | 8802-2 | 1998 | SPECIFIC LANS Logical Link Control 90.93 | Retain in <u>stabilized</u> state |
| 05.03.00 | 8802-3 | 2000 | SPECIFIC LANS CSMA/CD Edn. 6 | Retain. Will be superseded as soon the next revision of IEEE 802.3 is ratified by ISO/IEC. |
| 05.05.00 | 8802-5 | 1998 | SPECIFIC LANS Token Ring. Edn.3 | Retain in <u>stabilized</u> state |
| 05.11.00 | 8802-11 | 2005 | LANS. Wireless MAC/PHY specifications Edn. 2 | Retain. Will be superseded as soon the next revision of IEEE 802.11 is ratified by ISO/IEC |
| 05.21.01 | 11802-1 | 2005 | LAN GUIDELINES LLC Addresses | <u>Withdraw</u> standard. This has been transferred to the IEEE Registration Authority. The registry will be referenced in the revision of 8802-1 |
| 05.22.01 | 11802-2 | 2005 | LAN GUIDELINES Standard group MAC addresses | <u>Withdraw</u> standard. This has been transferred to the IEEE Registration Authority. The registry will be referenced in the revision of 8802-1 |
| 05.25.00 | 11802-5 | 1997 | Media Access Control (MAC) Bridging of Ethernet v2.0 in Local Area Network | Retain in <u>stabilized</u> state. |
| 05.31.00 | 15802-1 | 1995 | COMMON LANS MAC service | Retain. IEEE 802 will provide a replacement based upon 802.1AC (anticipated in 2014) |
| 05.33.00 | 15802-3 | 1998 | COMMON LANS MAC bridges | Retain. IEEE 802 will provide a replacement based upon the revision of 802.1Q (anticipated in 2014) |