Maintenance Task Group Meeting

September 8th, 2015
John Messenger

Maintenance
September 8, 2015 Agenda

- Patents and Guidelines
- Attendees
- Status
- New Maintenance items
  - There are none
- Existing Maintenance items
  - SC6
  - 802.1Q-2014
  - 802.1AX
  - 802.1AS
  - 802.1AB
  - 802.1AC
  - Security
- Comment resolution
  - 802.1Q-2014-Cor1/D1.0
  - 802.1AB-Rev/D1.0.
- Draft review – 802.1AX-2014-Cor1
- SC6 status

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 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 14 and 15 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.

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(Optional to be shown)

Participants, Patents, and Duty to Inform

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

- **Participants [Note: Quoted text excerpted from IEEE-SA Standards Board Bylaws subclause 6.2]:**
  - **"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**
  - **"Should inform the IEEE (or cause the IEEE to be informed)" of the identity of "any other holders of 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**
- **Early identification of holders of potential Essential Patent Claims is strongly encouraged**
- **No duty to perform a patent search**

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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/develop/policies/bylaws/sect6-7.html#6

IEEE-SA Standards Board Operations Manual

http://standards.ieee.org/develop/policies/opman/sect6.html#6.3

Material about the patent policy is available at

http://standards.ieee.org/about/sasb/patcom/materials.html

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

This slide set is available at https://development.standards.ieee.org/myproject/Public/mytools/mob/slideset.ppt

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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

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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.

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July 14, 2015 Attendees

- Farkas, Janos; Finn, Norman; Garner, Geoffrey; Gravel, Mark; Gunther, Craig; Haddock, Stephen; Holness, Marc; Hsieh, Tien Yuan; Jeffree, Anthony; Korhonen, Jouni; McBeath, Tom; Messenger, John; Parsons, Glenn; Randall, Karen; Romascanu, Dan; Rouyer, Jessy; Steiner, Wilfried

Status Update

- 802.1Q-2014-Cor1/D1.0 was out for Sponsor ballot
  - 2 comments. Comment resolution this week.
- 802.1AB-Rev/D1.0 Sponsor ballot closes Sep 11th.
  - 11 comments so far. Comment resolution this week if possible.
- 802.1AC-Rev/D2.2 was out for WG recirc ballot
  - 1 comment. Comment resolution this week in TSN, then go to sponsor ballot.
  - MEC done, pool formed.
- 802.1AS-Cor2 was approved for forwarding to RevCom in July.
  - This has not yet been forwarded to RevCom
- 802.1AS-Rev/D1.0 was out for TG ballot before the July meeting
  - Comment resolution continuing this week in TSN.
- 802.1AX-2014-Cor1/D0.1 editor's draft exists
  - Draft review this week in Maintenance
  - WG ballot to be held before November meeting

Status Update

Detailed Totals	Summary Totals
A = 0	Ready for ballot = 3
B = 3	Balloting = 17
CB = 7	Approved = 0
CE = 0	Awaiting clarification = 7
E = 0	Errata = 0
F = 0	To be categorised = 0
I = 0	Review by Technical experts = 5
J = 19	Withdrawn = 0
P = 95	Rejected = 19
R = 0	Published = 95
S = 0	
T = 5	Total = 146
V = 17	
W = 0	
Errors = 0	
	Open = 32
Total = 146	

SC6 items

- See status at the end of this presentation.
- No additional actions at this meeting

802.1Q-2014 items

- Items below are addressed in the current draft of 802.1Q-2014/Cor-1
  - 0145: 802.1Q Definitions for the IEEE8021-FQTSS-MIB module – balloting
  - 0132: Bit numbering in Annex D – balloting
  - 0137: Encoding of congestion notification PDUs – balloting
  - 0148: SPT BPDU mandatory – balloting
  - 0150: SRP Endstation requirements – balloting
  - 0152: 802.1Q/802.1AB/802.1AX Link Aggregation TLVs and Managed Objects – balloting
- Other items
  - 0158: SRP: Proposed changes to allow use of VLAN 1 – tech experts review

802.1AX-2014 items

- Items to be addressed in a new corrigendum
  - 0163: Multiple aggregators and IPL failure – ready
  - 0151: Bit numbering error in 802.1AX – ready
- Other items
  - 0146: Reintroduced errors in IEEE8023-LAG-MIB – disposition?
- Review 802.1AX-2014-Cor1/D0.1 in this meeting
- Perform WG ballot following this meeting.

802.1AS items

- 0140: 802.1AS asCapable Hair Trigger – tech experts review
- 0061: 802.1AS variable names – ongoing
- 0117: PICS items for Pdelay – balloting in AS-Rev
- 0135: Pdelay_Req message storm – balloting in Cor-2
- 0138: Too many sync messages – balloting in AS-Rev
- 0159: PortSyncSyncSend State Machine priority1 – balloting in AS-Rev
- 0161: Minor errors and typos in 802.1AS FSMs – balloting in AS-Rev
- Other items: check database. Note "802.1AS" and "IEEE 802.1AS"

802.1AB items

- These comments are not included in 802.1AB-Rev
- 0153: 802.1AB PortAutoNegAdvertisedCap objects are the wrong size – needs action to develop solution!
  - Did Dan Romascanu put a comment in on this?

802.1AC items

- 0141: 802.1AC items to be removed from Q – waiting
- 0125: move material from 802.1Q to 802.1AC – balloting in AC-Rev

802.1 Security items

- 0165: Authenticator PACP state machine – tech experts review
- 0136: 802.1X incorporation of HKDF – long term waiting for Sec TG
- 0154: 802.1X MIB ieee8021XPaePortAuthenticatorEnable and ieee8021XPaePortSupplicantEnable – waiting for Sec TG
- 0155: 802.1X MIB ieee8021XAuthPaeReAuthEnabled – waiting for Sec TG
- 0156: 802.1X MIB ieee8021XAuthenticatorTable – rejected
- 0157: 802.1X MIB typo in ieee8021XEapolStartFramesTx – waiting for Sec TG

BALLOT RESOLUTION

- 802.1Q-2014-Cor1/D1.0
- 802.1AB-Rev/D1.0.

EXISTING MAINTENANCE ITEMS

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?).
  - 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.
  - An initial .1ASbt draft is available. However, as this is a significant change, the editor will do this last.
- Latest Status: Change Text - Ballot

Maintenance Item – 0115
correctionField (Integer64)

- Submission: Geoffrey M. Garner – June 2013

- Issues:
  - Table 11-5 indicates that for messageType Pdelay_Req, the value of the correctionField contains corrections for fractional ns. This is not correct in 802.1AS. In general in IEEE 1588, the only way that fractional ns corrections can be included in the correctionField of Pdelay_Req is if there are end-to-end transparent clocks present that timestamp with fractional ns precision. However, 802.1AS does not allow (and does not describe) end-to-end transparent clocks, and therefore fractional ns cannot be present in the Pdelay_Req correctionField.

Proposed Resolution:
  - Remove Pdelay_Req from the messageType column of row 2 (not including the table header) of Table 11-5.

- Discussion:

  - Proposal agreed.

  - Included in draft D0.1 of 802.1ASbt

  - Balloting in 802.1AS-Rev

Maintenance Item – 0116

- Submission: Geoffrey M. Garner – June 2013

- Issues:

    – Subclause 9.5.9.4 of IEEE 1588 - 2008 indicates that the correctionField of the Sync message shall be zero in the case of a two-step clock. In addition, Table 21 of 1588 says that the correctionField of Announce and Signaling messages (and management messages, but these are not used in 802.1AS) is zero. Finally, subclause 11.4.3. of IEEE 1588-2008 indicates that the correction field of the Pdelay_Req message is set to zero by the Pdelay requestor. It was intended that the correctionField of Sync, Announce, Signaling, and Pdelay_Req in 802.1AS should be zero, since the correctionField of these messages is not used (in the case of Sync, it is because the clocks are two-step). However, Table 11-5 of 802.1AS does not indicate that the correctionField is zero for these messageTypes.

- Proposed Resolution:

    – Add a row to Table 5 of 802.1AS indicating that the correctionField is zero for Sync, Announce, Signaling, and Pdelay_Req.

- Discussion:

    - Proposal agreed.

    - Included in draft D0.1 of 802.1ASbt

    - Balloting in 802.1AS-Rev

Maintenance Item – 0117

- Submission: Geoffrey M. Garner – June 2013

- Issues:

  - As a result of comments against P802.1AS-Cor-1/D3.0 (the initial sponsor ballot version), the mandatory requirements on residence time and Pdelay turnaround time, in B.2.2 and B.2.3, respectively, were changed to recommendations (i.e., "shall" was changed to "should" in both subclauses). The comment resolution indicated that the necessary changes would be made to the PICS. However, inspection of Annex A indicated that there are no PICS entries for these items. Further inspection indicated that these items were referenced only in Annex E, which means that the only PICS reference is for CSN (because there was a respective PICS entry for the Annex E references). But, these items also apply to fullduplex Ethernet, and therefore respective references are needed for clause 11. Note that a PICS entry or reference for clause 11 is needed for B.2.4 (measurement of rate ratio) also.

- Proposed Resolution:

  - Add respective references to B.2.2 and B.2.4, in clause 10; and B.2.3 in clause 11, add respective PICS entries for B.2.4

  - Make necessary changes for PICS entry for the Annex E reference to these sub clauses.

- Discussion:

  - Proposal updated and agreed.

  - Included in 802.1ASbt/D0.2. Actually all in Clause 10 rather than 11.

Maintenance Item – 0118

- Submission: Geoffrey M. Garner – June 2013

- Issues:

  - In the label of the vertical axis of the plot of Figure B.2, Allan Deviation (ADEV) should be dimensionless, i.e., it does not have units of time. Note that Table B.2, on p.247, is correct; it is only the label in the plot that is incorrect.

- Proposed Resolution:

  - Change the label of the vertical axis of Figure B.2 from "ADEV (ns)" to "ADEV".

- Discussion:

  - Proposal agreed.

  - Included in draft D0.1 of 802.1ASbt

  - Balloting in 802.1AS-Rev

Maintenance Item – 0119

- Submission: Geoffrey M. Garner – June 2013

- Issues:
  - Inspection of the PortAnnounceInformation state machine in Figure 10-13 of 802.1AS indicated that if the current GM downgrades (e.g., due to its losing its connection to GPS and going into holdover) and sends an Announce message that reflects the new, downgraded, clockClass and/or clockAccuracy (and/or any other clock attributes), the new information is not immediately used (i.e., the function updateRolesTree() is not immediately invoked, which is roughly equivalent to the BMCA not being immediately invoked (this is analogous to not immediately causing the state decision algorithm and dataset comparison algorithm of IEEE 1588 to be invoked)). Instead, the new information is not used until Announce receipt timeout occurs. This behavior was not intended in 802.1AS, and also is not consistent with the default BMCA of IEEE 1588.

- Discussion:
  - The current GM downgrades, the new information actually IS used immediately. In 10.3.5, it indicates that the message priority vector is superior to the portPriorityVector of the port if, and only if, the messagePriorityVector is better than the portPriorityVector, or the Announce message has been transmitted from the same master time-aware system and MasterPort as the portPriorityVector. The key is the 2nd part referring to the Announce message being transmitted from the same port.
  - Editor has already made editorial change to ASbt D0.2 in 10.3.11.2.1 to remind the reader of this, and to point to 10.3.5.
  - Balloting in 802.1AS-Rev

Maintenance Item – 0120

- Submission: Geoffrey M. Garner – June 2013

- Issues:
  - The current MDSyncReceiveSM state machine, of Figure 11-6/802.1AS requires waiting for a Follow_Up message for a time equal to one mean Sync interval. If the next Sync arrives slightly early, before the expiration of this Sync interval, the next Sync will be ignored because the state machine will still be waiting for Follow_Up. If the Sync after that arrives slightly late, it also will be considered lost, and sync receipt timeout will occur.

- Proposed Resolution:
  - The exact fix is not decided at present, though the fix described above is one possibility. In any case, the MDSyncReceiveSM state machine will be modified so that this behavior does not occur.

- Discussion:
  - Proposal by Geoff Garner was reviewed in TSN http://www.ieee802.org/1/files/public/docs2013/as-garner-sync-receipt-timeout-issue-0713-v01.pdf
  - Included in draft D0.1 of 802.1ASbt
  - Balloting in 802.1AS-Rev

Maintenance Item – 0122

- Submission: Tony Jeffree – July 2013
- Issues:
  - In 802.1BA, clause 6.7.2
  - b) The implementation shall be capable of declaring the MSRP attributes associated with a single stream; i.e., a single Talker declaration, and registering the MSRP attributes associated with the Listener declaration(s) that result from that Talker declaration (see 3.5.1.2 and 3.5.1.3 of IEEE Std 802.1Q).
- Proposed Resolution:
  - The references in bullet b) should be to 35.1.2 and 35.1.3
- Discussion:

  - Proposal agreed, ready for ballot
  - This editorial is not critical enough for a corrigendum, target for next update of 802.1BA

Maintenance Item – 0125

- Submission: John Messenger – September 2013

- Issues:
  - The definition of the ISS belongs in 802.1AC rather than 802.1Q. 802.1AC-2012 was based on text from 802.1Q-2011. Since then, amendments have made changes to the ISS and these have been incorporated into 802.1Q. This is probably wrong, and material should be moved from 802.1Q to 802.1AC. There may be a problem with 802.1Qbp as well.

- Proposed Resolution:
  - Some items have been added back into 6.6 ISS and 6.7 of 802.1Q
    - 6.6.1 Stream Reservation Protocol (SRP) Domain status parameters
    - 6.6.2 Control primitives and parameters
    - 6.6.3 EVB status parameters
  - 6.7.1 Support of the Internal Sublayer Service by IEEE Std 802.3 (CSMA/CD)
  - Do we want to remove this into 802.1AC?

- Discussion:
  - Move 6.6.2 to clause 11 of .1AC (as part of .1AC-rev) (done: 11.4), retain in Q until AC published
  - Move 6.7.1 to clause 12 of .1AC (as part of .1AC-rev) (done: end of 12.1), retain in Q until AC published
  - Move 6.6.1 & 6.6.3 to more suitable places in .1Q (included in current.1Q-rev draft) (done)
  - Ballotting in ~~802.1Q-Rev (published) and~~ 802.1AC-Rev

Maintenance Item – 0132

- Submission: Norm Finn – March 2014

- Issues:
  - Table D-3 is wrong. It numbers the bits 0-7, and Figure D-7 numbers them 1-8. This is not a major problem; most readers should be able to detect the blunder and do the right thing.
  - However, this TLV is now documented in three places: ‹ 802.1AB-2009, exactly as in 802.1Q-REV D2.0 ‹ 802.1Q-2012, exactly as in 802.1Q-REV D2.0 ‹ P802.1AX-REV, corrected and extended. This standard is starting sponsor ballot.

- Proposed Resolution:
  - Delete section D.2.7 and renumber the remaining sections of Annex D.2. Replace all references to D.2.7 in the document with the corresponding references to 802.1AX-REV Annex F.1.
  - Check knock-on effects in the rest of the document (e.g., MIB)

- Discussion:
  - Agreed
    - Decided to not align Table D-2 with numbering convention
  - Balloting in 802.1Q-2014/Cor-1
  - See 0152

Maintenance Item – 0135

- Submission: Bob Noseworthy – May 2014

- Issues:
  - 802.1AS-2011 clause 11.2.5 possible Pdelay_Req message storm

- Proposed Resolution:
  - Remove the requirement to send a new Pdelay_Req immediately after entry to the RESET state.

- Discussion:
  - Issue agreed
  - Solution adopted from original maintenance request
  - Balloting in 802.1AS-Cor2.

Maintenance Item – 0136

- Submission: Mick Seaman – May 2014

- Issues:
  - 802.1X clause 6.2.1 possible incorporation of HKDF (RFC 5869)

- Proposed Resolution:
  - Add or substitute the RFC 5868 (HKDF) for the current KDF.
  - Placeholder for future discussion rather than a recommended change.

- Discussion:

  - Evaluation performed by Security TG – this only needs to be added if there's a future non-compatible change in this area.

Maintenance Item – 0137/139

- Submission: Pat Thaler – May 2014

- Issues:
  - 802.1Q-2011 clause 32, 33: Encoding of congestion notification PDUs
  - Polarity of cnmQOffset defined differently in different places
  - Interoperable implementation not possible

- Revised Proposed Resolution:
  - In 32.14.4 e), change:
    - "and the CNM's cnmQOffset field (33.4.5) is negative," to
    - "and the CNM's cnmQOffset field (33.4.5) is positive"
  - In 33.4.5 change:
    - "The two's-complement signed integer value of the transmitting CP's cpQOffset (32.8.7) in units of 64 octets." to
    - "The two's-complement signed integer value of - cpQOffset (32.8.7) of the transmitting CP in units of 64 octets."
  - The effect of these changes is that cnmQOffset is positive when the current queue is longer than the queue setpoint (i.e. positive indicates congestion.

- Discussion:

  - Proposed text developed on the email reflector and accepted.

  - Balloting in 802.1Q-2014/Cor-1

Maintenance Item – 0138

- Submission: Bob Noseworthy – May 2014

- Issues:
  - 802.1AS-2011 clause 10.2.11, Figure 10-8 : Sync messages can be sent more often than intended
  - Might overload partner

- Proposed Resolution:
  - Remove the 0.5* from the exit condition expression, OR
  - favour waiting for incoming Sync messages (this solution chosen)

- Discussion:
  - Issue agreed
  - Solution developed in TSN (proposer's final choice (1.3 / 0.7)) – documented in Annex Z of 802.1ASbt/D0.5
  - Balloting in 802.1AS-Rev

Maintenance Item – 0140

- Submission: Bob Noseworthy – July 2014

- Issues:
  - 802.1AS-2011 clause 11 – asCapable Hair Trigger
  - Numerous scenarios wherein asCapable, once set TRUE, can immediately be set FALSE with little or no delay.

- Proposed Resolution:
  - Increase hysteresis
  - asCapable could be set to FALSE only if 3 faults are detected in a row

- Discussion:
  - Agreed to be an issue
  - Included in Annex Z of 802.1ASbt but no solution developed

Maintenance Item – 0141

- Submission: John Messenger – July 2014

- Issues:
  - Item 0125 copied ISS functions from 802.1Q-2011 to 802.1AC-Rev.
  - Once 802.1AC-Rev is approved, we need to remove them from Q

- Proposed Resolution:
  - Delete 802.1Q 6.6.1 and 6.7.1
  - Fix up references as documented in maintenance request.

- Discussion:
  - Propose to fix this in next maintenance of 802.1Q

Maintenance Item – 0145

- Submission: Tony Jeffree – October 2014

- Issues:
  - 802.1Q subcluse 17.7.12
  - the ETS code point needs adding to the textual convention IEEE8021FqtssTxSelectionAlgorithmIDValue

- Proposed Resolution:
  - Include an enumerated value for this, and change the "reserved" values, as shown:
    - 2: Enhanced Transmission Selection algorithm
    - 3-255: Reserved for future standardization.

- Discussion:
  - Balloting in 802.1Q-2014/Cor-1.

Maintenance Item – 0146

- Submission: John Messenger/Mark van Tol – November 2014
- Issues:
  - 802.1AXbk rebased its MIB on the 802.3ad version
  - This may have reintroduced errors from that version
- Proposed Resolution:
  - Change the value range of all 6 "Priority" objects of dot3adAggPortTable from (0..255) to (0..65535).
  - Change the OID for the MIB from
    - { iso(1) member-body(2) us(840) 802dot3(10006) snmpmibs(300) 43 }
  - To
    - { iso(1) member-body(2) us(840) ieee802dot3(10006) snmpmibs(300) 43 }
- Discussion:
  - Existence of a problem is agreed
  - Change is not allowed per SMI rules. Object must be deprecated, but given the OID issue, the entire MIB must be deprecated and re-rooted.
  - Solution needs to be developed.
  - Target 802.1AX-2014-Cor1?

Maintenance Item – 0148

- Submission: Janos Farkas – November 2014

- Issues:
  - SPB-2 says SPT BPDU exchange is mandatory
  - However the required information exchange can be achieved using IS-IS

- Proposed Resolution:
  - In A.37, change SPB-2 to "Encode, decode, and validate IS-IS Hello PDUs or SPT BPDUs for the Agreement Protocol (AP) and support AP logic in IS-IS?"

- Discussion:
  - Agreed. Balloting in 802.1Q-2014/Cor-1

Maintenance Item – 0150

- Submission: Levi Pearson – November 2014

- Issues:
  - SRP Endstation requirements duplicated from SRP Bridge requirements and are not relevant to endstations
  - Clarify endstation generation of TalkerFailed

- Proposed Resolution:
  - Strike SRP-11 and SRP-12 from the PICS for SRP end station behavior.
  - Further discussion should probably take place to either eliminate the possibility of sending Talker Failed from an end station or to completely specify how a Talker end station uses the Talker Failed attribute.

- Discussion:
  - Discuss in TSN proposed resolution: http://www.ieee802.org/1/files/public/docs2015/cc-cgunther-maint-150-0115-v01.pdf
  - Balloting in 802.1Q-2014/Cor-1

Maintenance Item – 0151

- Submission: Kenneth Williams – November 2014

- Issues:
  - 802.1AX bit numbering reference error
  - Bit position reference is incorrect in text which describes counting/indexing method.

- Proposed Resolution:
  - Replace 'seventeenth' with 'sixteenth' in sentence which read:
  - "... of the second octet are assigned the value of the ninth through seventeenth bits ..."

- Discussion:
  - Issue and proposed solution agreed. Awaiting suitable amendment or revision.
  - Include in 802.1AX-2014/Cor-1

Maintenance Item – 0152

- Submission: Tony Jeffree – January 2015

- Issues:
  - Previous maintenance request (#132) calls for the removal of D2.7 (Link Agg TLVs) from 802.1Q as these are also documented in 802.1AX-REV. However:
  - The TLVs are documented in AX-REV but the related managed objects in the 802.1AB MIB extension are still documented in 802.1Q
  - The MIB object in Q that represents the link agg capability/status (Table F-1 in AX-REV) make use of a textual convention taken from 802.1AB which no longer corresponds to the current definition of the field.

- Proposed Resolution:
  - Various alternative possibilities:
    - Fix the textual convention in AB to match Table F-1.
    - Write a new textual convention in the extension MIB in Q-2014 Cor-1 that corresponds to Table F-1 and use that in the object defs in Q., or
    - Deprecate the objects in Q (via Q-2014-Cor-1) and write a (very short) extension MIB to go in AX-REV.

- Discussion:
  - Problem agreed. Panos and Tony recommend option 2.
  - Agree to proceed with option 2. Balloting in 802.1Q-2014/Cor-1.

Maintenance Item – 0153

- Submission: Raphael Garti – January 2015

- Issues:
  - 802.1AB PortAutoNegAdvertisedCap objects are the wrong size

- Proposed Resolution:
  - Make changes to the MIB detailed in the request

- Discussion:
  - John emailed Howard Frazier (copy Glenn) to confirm issues – no reply
  - Need to deprecate MIB objects and add new ones with correct syntax
  - Need to include in .1AB-REV. Dan Romascanu will enter a sponsor ballot comment on 802.1AB-Rev and we will draw attention of anyone else knowledgeable on MIBs.

Maintenance Item – 0154

- Submission: Raphael Garti – January 2015

- Issues:
  - 802.1X-2010 PAE MIB definitions
  - ieee8021XPaePortAuthenticatorEnable and ieee8021XPaePortSupplicantEnable

- Proposed Resolution:
  - Make changes to the MIB detailed in the request

- Discussion:
  - Refer items 154-157 to Security Task Group for review
  - Status in http://www.ieee802.org/1/private/email2/msg22740.html
  - Need a vehicle. Can we use 802.1Xck?

Maintenance Item – 0155

- Submission: Raphael Garti – January 2015

- Issues:
  - 802.1X-2010 PAE MIB definitions
  - ieee8021XAuthPaeReAuthEnabled should not always return FALSE

- Proposed Resolution:
  - Omit the requirement to always return false.
  - Make changes to the MIB detailed in the request

- Discussion:
  - Refer to Security Task Group for review
  - Change provisionally agreed – need a vehicle.
  - Status in http://www.ieee802.org/1/private/email2/msg22740.html

Maintenance Item – 0157

- Submission: Raphael Garti – January 2015

- Issues:
  - 802.1X-2010 PAE MIB definitions
  - Typo in description of ieee8021XEapolStartFramesTx

- Proposed Resolution:
  - Change description from "counts the number of *received* frames". Should be *transmitted*.
  - Make changes to the MIB detailed in the request

- Discussion:
  - Refer to Security Task Group for review
  - Provisionally agreed
  - Target 802.1Xck
  - Status in http://www.ieee802.org/1/private/email2/msg22740.html

Maintenance Item – 0158

- Submission: Norman Finn – January 2015

- Issues:
  - SRP: Proposed changes to allow use of VLAN 1

- Proposed Resolution:
  - Add the core/not variables to Clauses 12 and 17.
  - Mention this in a NOTE 4 in 8.8.2
  - Add explanatory why/how text somewhere in Clause 35
  - Add a "shall" clause to 35.1.4 saying that the Static VLAN Registration Entry for transmitting the SR_PVID tagged/untagged changes when the core port status changes.

- Discussion:
  - Discuss in TSN and Interworking

Maintenance Item – 0159

- Submission: Bob Noseworthy – 26 February 2015

- Issues:
    - 802.1AS PortSyncSyncSend State Machine
    - PortSyncSyncSend SM (Fig 10-8) does not behave as intended if the device was grandmaster and then has priority1 set to 255

- Proposed Resolution:
    - Introduce a new variable systemIdentityChange
    - Change behaviour of PortSyncSyncSend State Machine

- Discussion:
    - TSN has developed a resolution which is included in 801.1AS-Rev/D0.9 – balloting

Maintenance Item – 0161

- Submission: Geoffrey M. Garner – 7 May 2015

- Issues:
  - Minor errors and typos in 802.1AS FSMs for 802.11 links

  - Proposed Resolution:

  - Change them as proposed.
    - Master state machine (Figure 12-3)
    - Slave state machine (Figure 12-4)

- Discussion:
  - No impact on existing networks because the existing spec could not possibly work: The errors need to be fixed because the master state machines as is would produce incorrect results and the slave state machine would not work due to the unmatched parentheses. An implementer using the state machines would at least have to fix the unmatched parentheses; if the implementer did not fix the other errors, the time transport would clearly be incorrect and noticeable due to (a) the missing conversion factors, and (b) computations either using indication primitive parameters corresponding to the wrong Timing Measurement Frames or not being performed at all.
  - Balloting in 802.1AS-Rev

Maintenance Item – 0162

- Submission: Raphael Garti – 12 May 2015

- Issues:
    - Writeability of certain 802.1AE-2006 MIB variables

    - Proposed Resolution:
    - Change writeability of certain items depending on whether they're used in conjunction with 802.1X

- Discussion:
    - Refer to Security Task Group

Maintenance Item – 0163

- Submission: Stephen Haddock – 18 May 2015
- Issues: 802.1AX-2014
  - When a DRNI portal is created, it is critical for the LACP partner of the portal to be configured with one and only one aggregator using the same key value as the ports connected to the DRNI portal. Failure to do this will result in a loop if the IPL in the Portal fails. The necessity of this configuration for loop-free fault recovery is not mentioned anywhere in the document.
  - Proposed Resolution:
  - Add an explanatory paragraph to the end of 9.3.2 (prior to 9.3.2.1) or in Clause 6:
    - The operation of the DR Function state machines and Control Protocol specified in the following sections assures that if a loss of connectivity via the IPL results in a Portal System being unable to communicate with other Portal Systems in the Portal, those Portal Systems will used different key values in LACPDUs exchanged on the Aggregation Links attached to the Portal Systems. This prevents Aggregation Links attached to Portal Systems that cannot communicate via an IPL from being selected for the same LAG. It is possible that these Aggregation Links could become operational in separate LAGs, however, potentially creating a communication loop through the LACP partner of the Portal Systems. To prevent this loop it is essential that the LACP partner of the DRNI Portal be configured such that there is one and only one Aggregator with the same key value as the Aggregation Ports connected to the DRNI Portal.
  - Discussion:
    - Agreed. Urgent issue will require a corrigendum. 802.1AX-2014/Cor-1
    - NOTE: Panos suggests this is already addressed in 9.4.3, but this doesn't cover the case of a legacy dual-homed LAG station.

Maintenance Item – 0165

- Submission: Poddobny Yuri – 16 June 2015
- Issues: 802.1X-2010
  - The subject of revision is the Authenticator PACP state machine, shown at Figure 8-7. If authenticator state machine is currently in AUTHENTICATING state. Authenticator is sending EAPoL message to Supplicant, but Supplicant doesn't respond. In this case after eapTimeout the state machine will increment auth.retryCount and will return again to AUTHENTICATING. When retryMax will be reached - the state machine will go to UNAUTHENTICATED state, will clear auth.retryCount and will forever circulate like this as long as Supplicant doesn't respond.
  - Proposed Resolution:
    - When retryMax will be reached - the state machine will go to HELD state.
  - Discussion:
    - Refer to Security Task Group

NEW MAINTENANCE ITEMS

JTC1 SC6 STATUS

ISO/IEC JTC1 SC6 Status

- PSDO agreement in place to allow progress of IEEE standards in ISO/IEC
- EC JTC1 standing committee is administering the process for IEEE 802 Standards
  - 802.1, 802.3, 802.11, 802.22
- 802.1 has previously agreed to submit its standards to SC6
  - Most standards and their amendments
  - Currently phasing in approvals
  - Motion required per standard
    - To forward sponsor ballot draft for comment
    - To submit approved standard for PSDO approval

802.1 Stds for SC6 approval (1/2)

- PSDO approved
  - 802.1AE — FDIS passed Oct 2013, cmnts liaised Jan 2014
  - 802.1X — FDIS passed Oct 2013, cmnts liaised Jan 2014
  - 802.1AS (Time synch) — FDIS passed Dec 2013, cmnts liaised May 2014
  - 802.1AB (LLDP) — FDIS passed Dec 2013, cmnts liaised May 2014
  - 802.1AR (Secure device ID) — FDIS passed Dec 2013, cmnts liaised May 2014
  - 802.1AEbn-2011 — ISO/IEC 8802-1AE:2015/Amd 1 (Apr 2015)
  - 802.1AEbw-2013 — ISO/IEC 8802-1AE:2015/Amd 2 (Apr 2015)
- PSDO in process (FDIS)
  - 802.1Xbx — FDIS ballot closes Jan 28th, 2016
  - 802.1Q-2014 — FDIS ballot closes Sep 20th, 2015
  - 802.1AX-2014 — FDIS ballot closes Nov 20th, 2015
  - 802 — FDIS ballot closes Nov 2nd, 2015
- PSDO in process (Pre-ballot)
  - 802.1BA-2011 (AVB systems) — 60-day ballot closes Sep 23rd, 2015
  - 802.1BR-2012 (Port extender) — 60-day ballot closes Sep 23rd, 2015

802.1 Stds for SC6 approval (2/2)

- For "Information"
- To be submitted now (802.1 work in progress)
  - 802.1Qca   – send as information to SC6
  - 802.1Qbu   – send as information to SC6
  - 802.1Qbv   – send as information to SC6
- To be submitted when ready (802.1 work in progress)
  - 802.1AC   – send as information to SC6, at sponsor ballot time
  - 802.1Qbz   – send as information to SC6, at sponsor ballot time
- Next to send?