Maintenance Task Group Hybrid Meeting

Jan 16, 2023

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REMINDER: Introduction Material

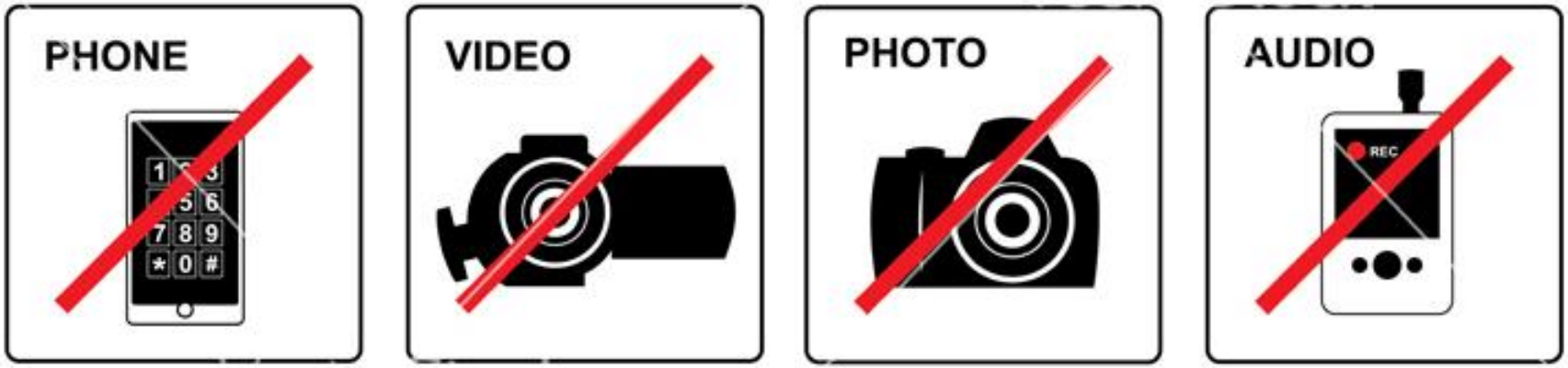
- The following information was made available before this meeting:
  - The IEEE Policy slides,
  - The IEEE SA Copyright and Participation Policies
- The information is part of “MEETING INTRODUCTION” at: https://www.ieee802.org/1/files/public/templates/admin-TG-intro-0721-v01.pdf

WAYS TO INFORM IEEE

- **Cause an LOA to be submitted to the IEEE SA (patcom@ieee.org); 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**
- **Speak up now and respond to this 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, please respond at this time by providing relevant information to the WG Chair

DECORUM

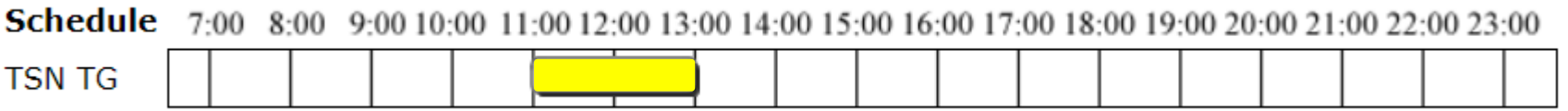


- Press (i.e., anyone reporting publicly on this meeting) are to announce their presence (5.3.3.3 of SASB Operations Manual)
- Video/Audio recording by participants is prohibited (5.3.3.2 of SASB Operations Manual)
- Photography by permission only (5.3.3.2 of SASB Ops Manual)
- Cell phone ringers off please

ATTENDANCE

Please record your attendance in IMAT at https://imat.ieee.org

- This requires a free IEEE Account.
- Please create one only if you do not yet have an IEEE Account.



Please record your attendance for an active meeting (denoted by a yellow bar) by clicking on the yellow bar. Once your attendance has been recorded, the yellow bar changes to a green bar.

The data from IMAT is used as the meeting participant list.

- Please promptly email your affiliation to the minute taker if you are unable to record your attendance in IMAT.

ELECTRONIC MEETING GUIDELINES

Please mute yourself when you are not speaking

Please put yourself into the queue “at the mic” via the Chat, e.g.: “+q” / “-q”

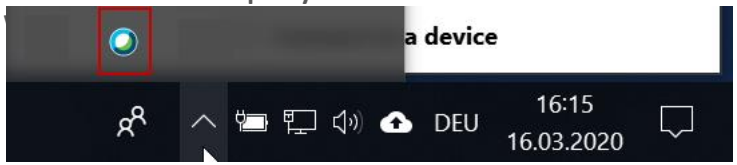
Please provide your information

- First and last names
- Affiliation, after your last name, e.g., in brackets
- (may provide them in the Chat window)

Changing your data in Webex

Step 1

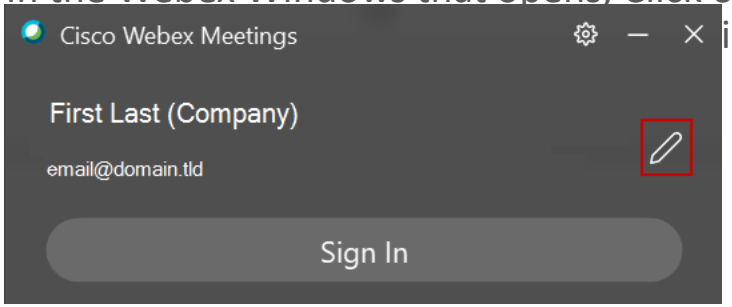
- Go to the "Display hidden icons" arrow in the



- Right-click on the Webex icon and select "Open Cisco Webex Meetings”

Step 2

- In the Webex Windows that opens, Click on the ion



IEEE SA STANDARDS ASSOCIATION

IEEE

(*) May need to Exit Webex via the cog wheel and restart the desktop Webex app to see the pencil icon.

Maintenance Task Group Meeting
January 16, 2022 – 9AM ET
Agenda

https://1.ieee802.org/january-2023-interim-session-maintenance-tg-agenda/#Agenda_Monday_8211_16th_January_2023_9AM_ET

P802.1CS/Cor1 PAR modification

Project Title

Original Project Title

- **2.1 Project Title:** IEEE Standard for Local and Metropolitan Area Networks--Link-local Registration Protocol - Corrigendum 1:Corrections to YANG Data Model

Proposed New Project Title

- **2.1 Project Title:** IEEE Standard for Local and Metropolitan Area Networks--Link-local Registration Protocol - Corrigendum 1:Corrections to Management Modules and Protocol Encoding

P802.1CS/Cor1 PAR modification

Scope

- Original Scope:

  "Correct errors in the YANG module"

- Scope update needed to address additional maintenance requests
  - 0348: ieee8021LrpTcMIB OID duplicate assignment
  - 0349: ieee8021LrpMIB OID duplicate assignment
  - 0351: 802.1CS-2020 YANG is not attached and does not validate
  - 0355: Decoding issues with LRP TCP Discovery TLV
- Proposed New Scope

  "Correct errors identified in the YANG module, SNMP MIB and TLV encoding."

P802.1CS/Cor1 PAR modification

Need

- Original Need

  The IEEE 802.1 maintenance activity has identified a small number of corrections to the YANG data model that are needed in order to correct technical and/or editorial errors. The corrigendum will correct these errors.

- Proposed new Need

  The IEEE 802.1 maintenance activity has identified a small number of corrections to the YANG data model, Simple Network Management Protocol (SNMP) SNMP MIB and Link Layer Discovery Protocol (LLDP) type-length-value (TLV) specifications.

P802.1CS/Cor1 PAR modification

Additional Explanatory Notes

Add to Additional Explanatory Notes

- #5.5 Corrections to the YANG module include attaching a valid YANG module to the standard with an updated revision statement. Corrections to the SNMP MIB include replacing the duplicate OID with a unique OID and deleting unnecessary text from the description of the address field of the LLDP TLV. Corrections to the LLDP TLV encoding include a clear indication in text and an informative note that a second address field can only be included when it is last field of the TLV.

Draft P802.1CS/Cor1 PAR modification

- https://www.ieee802.org/1/files/public/docs2023/maint-draft-cs-2020-cor1-PAR-modification-0123-v01.pdf

Not discussed

- The following slides were not presented during the initial meeting of the maintenance TG

ISO/IEC JTC1 SC6 STATUS
January 2023

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, 802.15, 802.16, 802.21, 802.22
- IEEE 802.1 has previously agreed to submit its standards to SC6
  - Most standards and their amendments (note – not sending Recommended Practices)
  - Motion required per standard
    - To forward IEEE SA Ballot draft for information and comment
    - To submit approved standard for PSDO approval
  - Procedure for Corrigenda: one 90 day ballot and three questions.

IEEE 802.1 Stds for SC6 approval

- For adoption: PSDO in process (FDIS ballots)
  - IEEE 802.1CBdb (FRER: Ext Stream ID Fns) - Nov 2021 motion to send for adoption; CIB approved June 22. FDIS open/closes 16 Jan 2023
  - IEEE 802.1CBcv (FRER: YANG) - Nov 2021 motion to send for adoption CIB approved June 22. FDIS open/closes 16 Jan 2023
  - IEEE 802.1ACct (Support for IEEE Std 802.15.3) - Nov 2021 motion; CIB passed 10 April 2022 with 1 cmt; Resp sent July 2022; FDIS ballot open; closes 24 Mar 2023
  - IEEE 802.1BA-Rev (AVB Systems) - Nov 21 motion; CIB passed 24 Jun 22 (6N17847) w 1 cmt Resp sent July 2022; FDIS ballot open; closes 24 Mar 2023
  - IEEE 802.1AS-2020/Cor 1 - Nov 2021 motion; DCOR ballot closed 23 Aug 22 China NB cmt (6N17841) – resp rvwed 11/22; sent 12/22
- For adoption: PSDO in process (60-day Committee Internal Ballots)
  - IEEE 802.1ABcu (YANG Data Model) - Nov 2021 motion; CIB passed July 22 (6N17845) no cmts; wait for FDIS to open (appx 22 Nov)
  - IEEE 802.1ABdh (Multi-frame PDUs) - Nov 2021 motion; CIB passed July 22 (6N17848) no cmts: wait for FDIS to open (appx 22 Nov)
  - IEEE P802.1Q-Rev (Bridges & Bridged NWs) - motion Nov 2021 to send for adoption when pub Pub Jan 2023; expect standard to be sent soon.
  - IEEE P802.1Qcz (Congestion Isolation) - D1.2 sent for info 26 Aug 2020; Nov 20 motion to send when pub (waiting for Q-Rev publication)
- Standards that are under Systematic Review in ISO/IEC JTC1
  - 802.1AB-2017 (Stn+MAC connective) - closed/reaffirmed 2 December 2022

IEEE 802.1 Stds for SC6 approval

- Approved draft standards sent for information (next step: send for adoption when published)
  - IEEE P802.1Q-Rev-2022(Bridges & Bridged Nws) - motion Nov 2020 – SA ballot in Sep 2021, sent 22 Sept 2021 noting amendments included
  - P802.1Qcz (Congestion Isolation) - D1.2 sent for info 26 Aug 2020; Nov 2020 motion to send when pub (waiting for Q-Rev publication)
  - P802.1Qcr (Asynchronous Traffic Shaping) - motion July 2020 – D2.3 sent 26 Aug 2020; not send for adoption since rolled into Q-Rev
  - P802.1Qcx (YANG for Conn Fault Mgmt) - motion Jul 2019 – D2 sent for info 21 Jan 20; not send for adoption since rolled into Q-Rev.
- For information: send draft standards when SA ballot starts
  - P802.1AEdk (MACsec Privacy Protection) - motion Jul 2022 – D2.1 sent for info 2 Sep 22
  - P802f (YANG Data Model for Ethertypes) - motion Jul 2022
  - P802.1Qcw (YANG for Traffic, Preemption, etc) - motion Jul 2022 – D2 sent for info 21 Dec 22
  - P802.1Qcj (Auto Attch to PBB services) - motion Nov 2022 – D2 sent for info 20 Dec 22

IEEE 802.1 Standards – PSDO Approved (1/4)

- PSDO approved: 42 completed
  - 802.1AE-2006 (MAC Security) - FDIS passed Oct 2013, cmts liaised Jan 2014 Systematic Rvw – (re)confirmed March 2019. No further action required.
  - 802.1X-2010 (Port-Based NW Acc Cntrl) - FDIS passed Oct 2013, cmts liaised Jan 2014 Systematic Rvw – (re)confirmed March 2019 No further action required.
  - 802.1AS-2011 (Time synch) - FDIS passed Dec 2013, cmts liaised May 2014 Systematic Rvw – (re)confirmed June 2019. No further action required.
  - 802-2014 (Overview and Architecture) - FDIS passed Nov 2015, cmts liaised Jan 2016 Systematic Rvw – (re)confirmed March 2021 No further action required.
  - 802.1AB-2009 (LLDP) - FDIS passed Dec 2013, cmts liaised May 2014 Systematic Rvw – (re)confirmed Dec 2022. No further action required.
  - 802.1AR-2009 (Secure device ID) - FDIS passed Dec 2013, cmts 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)
  - 802.1AX-2014 - FDIS passed Nov 2015; no comments
  - 802.1Xbx-2014 - FDIS passed Dec 2015; cmts liaised 20 April
  - 802.1Q-2014 - FDIS passed Jan 2016; cmts liaised 20 April

IEEE 802.1 Standards – PSDO Approved (2/4)

- PSDO approved (cont'd)
  - 802.1BA-2011 (AVB systems) - FDIS passed August 2016; no comments Systematic Rvw – (re)confirmed March 2022 No further action required.
  - 802.1BR-2012 (Port extender) - FDIS passed August 2016; no comments Systematic Rvw – (re)confirmed March 2022 No further action required.
  - 802.1AB-2016 (Stn & MAC Conn Disc) - FDIS passed 4/17; Cmt resp liaised Jul 2017
  - 802.1Qbv-2015 (Enhs for Sch Traffic) - FDIS passed 4/17; Cmt resp liaised Jul 2017
  - 802.1Qca-2015 (Path Control & Reserv) - FDIS passed 4/17; Cmt resp liaised Jul 2017
  - 802.1Q-2014/Cor 1-2015 - FDIS passed 4/17; Cmt resp liaised Jul 2017 published Oct 2017
  - 802.1Qbu-2016 (Frame Preemption) - FDIS passed Oct 2017; no cmts; pub Nov 2017
  - 802.1Qbz-2016 (Enh to Bridging 802.11) - FDIS passed Oct 2017; no cmts; pub Nov 2017
  - 802.1Qcd (Application VLAN TLV) - FDIS passed Dec 2017 – no cmts; pub Jan 2018
  - 802.1AX-2014/Cor1-2017 - 90-day Cor FDIS passed Jul 2017; no cmts published Sep 2018
  - 802.1AC-2016 (MAC Svc Def) - FDIS passed 3/2018 – cmt resps sent Apr 2018 published Apr 2018
  - 802d-2017 (URN Namespace) - FDIS passed 3/2018; no cmts; pub Apr 2018

IEEE 802.1 Standards – PSDO Approved (3/4)

- PSDO approved (cont'd)
  - 802.1CB (Frame Repl & Elim for Reliability) - FDIS passed Dec 2018; no cmts
  - 802.1Qch (Cyclic Queuing & Fwding) - FDIS passed Jan 2019; no cmts
  - 802.1Qci (Per stream filtering & policing) - FDIS passed Jan 2019; no cmts
  - 802.1AEcg-2017 (EDE devices) - FDIS passed Aug 2018 w/cmt from China; cmt resps sent Jan 2019; published Oct 2018
  - IEEE 802.1AC-2016/Cor 1 (LLC encaps) - 90-day COR FDIS passed Mar 2019; no cmts
  - IEEE 802c (Local MAC Address Usage) - FDIS passed Dec 2018 w/cmt from China; cmt resps approved March 2019; sent 1 May 2019
  - IEEE 802.1CM (Time Sens N/W fronthaul) - pre-ballot passed Oct 2018 w no cmts; FDIS ballot passed June 2019; no cmts
  - IEEE 802.1AR-2018 (Secure DevID) - FDIS ballot passed Nov 2019 w/cmt; cmt resps rvw Mar 2020; sent Apr 2020; published.
  - IEEE 802.1Q-2018 (Bridges & Br Nws) - FDIS ballot passed May 2020 w/cmt; cmt resp rvw May 2020; sent 2 June 2020
  - IEEE 802.1AE-2018 (MAC security) - FDIS passed with cmts; cmt resp sent 7/20; pub is ISO/IEC/IEEE 8802-1AE:2020 (Ed2)
  - IEEE 802.1Xck (802.1X YANG model) - FDIS passed; cmt resp 7/20 sent, Nov 2020: pub is ISO/IEC/IEEE 8802-1X:2013/Amd2-2020
  - IEEE 802.1AE-2018/Cor1 (MAC Sec Cor1) ISO/IEC/IEEE 8802-1AE:2020/COR 1:2021 - DCOR ballot passed 13 Jan 2021; no cmts; ISO/IEC publication June 2021

IEEE 802.1 Standards – PSDO Approved (4/4)

- PSDO approved (cont'd)
  - IEEE 802.1Qcp (Bridges YANG) ISO/IEC/IEEE 8802-1Q:2020/Amd 2:2021 -FDIS passed Jul 21; no cmts; published 9/21
  - IEEE 802.1Qcy (VDP extension) ISO/IEC/IEEE 8802-1Q:2020/Amd 3:2021 - FDIS passed Jul 21; no cmts; published 9/21
  - IEEE 802.1AX-2020 (Link Agg) ISO/IEC/IEEE 8802-1AX:2021 - FDIS passed Jul 21; no cmts; published 9/21
  - IEEE 802.1Qcc (Stream Res Protocol) (ISO/IEC/IEEE 8802-1Q:2020/Amd 31 (Ed 2)) - FDIS passed; cmt resp 11/21, sent Jan 2022
  - IEEE 802.1CMde (Enh Fronthaul Profiles) (ISO/IEC/IEEE 8802-1CM:2019/Amd 1) - FDIS passed; cmt resp 11/21, sent Jan 2022
  - IEEE 802.1AS-2020 (Timing & Synchn) (ISO/IEC/IEEE 8802-1AS:2021 (Ed 2)) - FDIS passed; cmt resp 11/21, sent Jan 2022
  - IEEE 802.1X-2020 (Port Based Nw AC) (ISO/IEC/IEEE 8802-1X:2021) - FDIS passed; cmt resp 3/22, sent Mar 2022
  - IEEE 802.1CS (Link-local Reg Protocol) (ISO/IEC/IEEE 8802-1CS:2022) - FDIS passed June 22; no cmts; published 7/22

New Maintenance Requests

- 0352: “when” statements in augments should use derived-from-or-self
- 0353: update to yang 1.1 so “when” statements in augments can use derived-from-or-self
- 0354: Clarify the difference responsible entities in the Request Response message exchange for Fully Centralized w.r.t. other models

Existing Maintenance Requests

NOTE: Address request with contributions first

- 0242: IEEE Std 802.1Qcp-2018: Collected YANG issues – Johannes Specht
- 0248: Managed objects for ECP in 802.1Q-2018 – Norman Finn
- 0314: network media and PHY – Johannes Specht
- 0324: Use of Tick in List Execute state machine (802.1Q) – Max Turner
- 0340: Misleading details on ATS MaxResidenceTime – Max Turner
- 0342: StreamID, StreamID Group, StreamID TLV – Max Turner – Contribution
- 0343: Handling of stream_handle in Active Stream – Max Turner
- 0344: Handling of R-TAG in IP Stream Identification – Max Turner – Contribution – Norm Finn